

COLORADO Department of Transportation

Colorado National Electric Vehicle Infrastructure (NEVI) Plan

2023 Update



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Introduction

The Colorado National Electric Vehicle Infrastructure Plan (NEVI Plan) was developed over the course of 2022 and updated in 2023 in partnership between the Colorado Department of Transportation (CDOT) and the Colorado Energy Office (CEO) and with the input and engagement from a broad range of stakeholders. It establishes the State of Colorado's approach to the investment of an estimated \$57 million over the next five years using new federal funds included in the Infrastructure Investment and Jobs Act (IIJA) with the intent of building a national network of electric vehicle (EV) fast-charging stations. The NEVI Plan is a framework that will be further developed, refined, and adjusted in future months and years to account for changes in technology, the EV market, national and state policy, and other areas that may impact the future landscape. Colorado intends to manage these changes in concert with federal, state, and local partners as well as the broad array of private, public, and nonprofit stakeholders who have collaborated to build the state's current EV charging network and associated programs.

The State of Colorado has long supported the deployment of EVs and other zero-emission vehicles (ZEVs) across multiple vehicle classes as a means of reducing the environmental impacts of the transportation sector and achieving its state greenhouse gas (GHG) reduction targets in the process. Experts agree that the availability of publicly-accessible EV charging is a critical supporting element that must be in place before widespread EV adoption can occur, and as a result, Colorado state agencies, local governments, nonprofits, and the private sector have been collaborating to fund, construct, and operate more than 1,500 Level 2 and DC Fast-Chargers (DCFC) across the state over the course of the past decade. The addition of new NEVI funding to these existing resources will allow Colorado to target remaining gaps in the network, especially those in rural and disproportionately impacted communities, while upgrading existing chargers in need of greater capacity and addressing the growing demand for charging in the parts of the state that already see higher EV adoption and usage. It will also help lay the groundwork for future charging projects focused on medium- and heavy-duty commercial users.

The NEVI Program presents an opportunity for Colorado to redouble its existing efforts in EV charging deployment while offering new and enhanced support to rural and disproportionately impacted communities facing the greatest barriers to equitable transportation electrification. In doing so, it will not only extend the charging network to new areas of the state, but also bring with it new opportunities and benefits for Coloradans as we work to build a more just and sustainable mobility future for all.

Development and Adoption Timeline of the State NEVI Plan

CDOT and CEO jointly developed the State of Colorado's original NEVI Plan over the course of 2022. The NEVI Plan was submitted on July 29, 2022 and was approved by the Joint Office of Energy & Transportation (Joint Office) in September 2022. CDOT and CEO executed the interagency agreement (IAA) in late 2022 and began planning for the implementation of the NEVI Plan. Below is a brief summary of plan development, program development, and future implementation milestones as anticipated at this time. All future dates are estimates and subject to changing conditions.

November 15, 2021

• Infrastructure Investment & Jobs Act (IIJA) signed into law

February 10, 2022



- Alternative Fuel Corridors Round 6 Request for Nominations and 90 Day NEVI Program Guidance issued
- Stakeholder engagement begins as staff share key NEVI Program details with interested and impacted parties

March - May, 2022

- Development of Round 6 Alternative Fuel Corridor nominations
- Staff analyze existing and potential future corridor designations, identifying gaps and opportunities to support NEVI Program focus areas

May 13, 2022

- Round 6 Alternative Fuel Corridor nominations due
- Colorado nominates 6 additional corridors for EV designation

May - July, 2022

- Stakeholder engagement and drafting of Colorado NEVI Plan
- Staff employ online meetings, in-person events, online surveys, a recorded webinar, and two public online meetings to share information with stakeholders, solicit public input, identify state priorities and strategies, and revise the draft NEVI Plan prior to submission

June 22, 2022

• FHWA releases the Notice of Proposed Rulemaking (NPRM) for the NEVI Program

July 5, 2022

• Colorado receives confirmation that its 6 nominated EV corridors have been designated

July 29, 2022

• Colorado NEVI Plan submitted to the Joint Office

September 14, 2022

• NEVI Plan approved by the Joint Office.

November 2022 - February 2023

• Execution of CDOT-CEO interagency agreement (IAA) for program management, finalization of grant program criteria and initial RFA, stakeholder outreach on upcoming grant opportunities

March 2023

• Solicitation published

May - July 2023

• Review, scoring, and selection of initial project proposals



June 21, 2023

• Colorado nominates five additional corridors for corridor designation in Round 7

August 2023 (anticipated)

- Submission of updated NEVI plan for 2023
- Announcement of conditional project selections

Fall 2023

- Initial round of awards and development of agreements
- Release of first of two FY 24 funding rounds

Fall/Winter 2023

• Agreements executed and implementation begins

Following the initial round of grant solicitation and award, Colorado anticipates repeating the cycle on a semi-annual basis as additional funds become available in future federal fiscal years. CDOT, CEO, and partner agency staff will also consider future opportunities to adjust the timing, frequency, and focus of future solicitations to best meet the needs of stakeholders and the traveling public.

State Agency Coordination

The State of Colorado has a long and fruitful history of interagency collaboration in support of the alternative fuels and electric vehicle sector that will be leveraged to ensure the successful deployment of NEVI funds. Since 2014, CDOT has partnered with the Colorado Energy Office (CEO) and Regional Air Quality Council (RAQC) to develop and implement the Charge Ahead Colorado (CAC) Program, which funds Level 2 and DC Fast-Charging installations statewide. As of July 2023, more than 3,000 chargers have been installed using CAC funds, with hosts ranging from local governments and private businesses to school districts, electric utilities, multifamily housing developments, community nonprofits, state agencies, automotive dealerships, and state and national parks, among others.

This foundation of interagency partnership was strengthened and expanded in 2017 as CDOT, CEO, and RAQC partnered with the Colorado Department of Public Health and Environment (CDPHE) to develop and implement the state's Volkswagen Settlement Beneficiary Mitigation Plan (BMP), which allocated approximately \$67.8 million across funding programs focused on EV charging, zero-emission truck and shuttle bus grants, and support for transit electrification across Colorado. In the ensuing years, the four partner agencies have awarded more than \$50 million of the state's overall \$68.7 million allocation, meeting regularly to align application deadlines, match requirements, scoring criteria, project siting, and data collection and reporting.

A combination of Settlement and state funding allowed for Colorado's next EV program offering, the DC Fast-Charging Corridors Program released by the CEO in 2018. This program awarded \$10.33 million via a request for application (RFA) to construct highway-oriented DC fast-charging at 34 locations across major corridors in Colorado, with the goal of making EV travel possible across every region of the state. Implementation of this program over multiple years required extensive coordination between CDOT, CEO, the private sector developer, utilities, and dozens of site hosts on topics ranging from environmental clearances to highway signage. The processes and institutional relationships built as part of the DC Fast-Charging (DCFC) Corridors Program were further refined for the development and implementation



of the similar DC Fast-Charging (DCFC) Plazas Program that followed in 2020 as a means of supporting projects serving high-mileage taxi and Transportation Network Company (TNC) fleets, as well as those without access to home charging, in denser, urban environments. This program was expanded in 2021 to include all parts of the state, and the majority of proposals submitted in the Fall 2021 funding round were located outside the Denver Metro Area.

Most recently, CDOT and CEO have expanded their interagency partnerships to work with additional state agencies. For instance, since 2020 the Colorado Tourism Office (CTO) has been closely engaged in the management and promotion of the Electrified Byways and Tourism Program, which is focused on deploying Level 2 and DC fast-charging infrastructure in rural areas as a means of local economic development and improved rural EV access. Both agencies have also provided technical support to Colorado Parks and Wildlife (CPW) in their ongoing partnership with Rivian to deploy public Level 2 charging at all 43 state parks in Colorado. Since 2021, all Colorado state agencies have been closely engaged in Governor Polis's effort to electrify the state fleet through a \$5 million investment in charging infrastructure at state government facilities.

CDOT established an interagency agreement (IAA) with CEO in late 2023 where CEO will administer the NEVI funds while CDOT will support in the implementation process as well as ensure the program will adhere to NEVI guidelines. On March 8th, CEO released the Notice of Funding Opportunity (NOFO) for its DCFC Plazas Program in which NEVI funding is incorporated. Round 1 of the NEVI Program closed on May 5, 2023. Colorado received more than 40 applications seeking more than \$100 million in grant funding for projects across the state. CEO anticipates award announcements for Round 1 in August 2023.

Public Engagement

Colorado's stakeholder engagement process for the development of the NEVI Plan was based on a strong foundation from previous statewide planning efforts. CDOT, CEO, and their partner agencies have carried out extensive stakeholder engagement over the past several years to develop a number of planning documents related to sustainable transportation, EV charging, climate change mitigation, and other related topics. These include the <u>Colorado Electric Vehicle Plan</u> (2023 and 2020), <u>Colorado Greenhouse Gas</u> <u>Pollution Reduction Roadmap</u> (2021), <u>Colorado Transit Zero-Emission Vehicle Roadmap</u> (2021), <u>Colorado Clean Truck Strategy</u> (2022), and <u>Colorado EV Equity Study (2022)</u>, among others. In all of the above cases, Colorado state agencies sought to engage a wide spectrum of public, private, nonprofit, and other stakeholders to ensure that the plans themselves, and the policies and programs that resulted from them, reflected the needs and priorities of all Coloradans.

The <u>Colorado NEVI Plan website</u> serves as a primary source for both the public and stakeholders. The website hosts a plethora of resources including an overview of NEVI, engagement milestones, plan updates, and upcoming meetings as well as previous webinar slides. In addition, the website provides an opportunity for the public to stay engaged with the planning and implementation process by joining the mailing list or providing comments or feedback related to the deployment of EV infrastructure in Colorado. The website also hosts the addition of two new resources for stakeholders and the general public - a NEVI Project Partners Directory and the NEVI Project Planning Resource Map.

- **NEVI (DCFC) Plazas Partnering Directory:** CDOT developed a submission form and compiled a list of partners that includes prospective applicants, hosting communities, and other relevant stakeholders who express their desire to install, own, operate, and maintain EVSE in their respective communities. This partner list enables stakeholders to make partner connections for EV charging station projects.
- NEVI Project Planning Resource Map: Per NEVI guideline, the installation of EVSE is



mandated for every 50 miles along the designated corridor and within one-mile of an exit, and each station must have at least four ports of 150 kW each. This map was created to help potential applicants be aware of where the gaps are. The Planning Resource map shows segments of the designated corridors where it is fully NEVI compliant, segments of where the charging gap is and segments that need upgrading. The map also shows whether the existing DCFC stations are NEVI compliant or non NEVI compliant and includes a layer for disproportionately impacted communities.

In preparation for the required annual update of the state's NEVI Plan, CDOT released a public survey soliciting feedback on the 2022 NEVI Plan and the implementation process via the DCFC Plazas Program. The survey opened at the beginning of July and the commenting period closed on July 21, 2023. Questions included how the state can strengthen the Plan and the implementation process as well as metrics to measure Justice40 benefits. The state obtained 32 responses. Given the low response rate, CDOT will keep the survey open so the public can provide comments throughout the year.

Staff participation in community events during NEVI planning highlighted some knowledge gaps related to public charging, as some members of the public are not familiar with the available charging options and the range and variety of EVs on the market. Continuous outreach and the iterative development of new educational materials and engagement tools can help to increase awareness and public understanding of EVs and the state's charging network. In the past year, CDOT and CEO have developed new programs and leveraged existing programs to increase engagement with EVs and to create more access to EV education and awareness. The state conducted engagement efforts via existing programs, including Colorado's newly established Interagency Outreach and Engagement group and CEO's ReCharge Colorado program and existing tribal working group, and expanded engagement efforts by deepening relationships with the state's Clean Cities coalitions. New programs established include the E-Mobility Education and Awareness grant program, Community Advisory Groups, and a statewide EV education and awareness campaign. Colorado believes that bridging this knowledge gap will increase Coloradans' confidence in transportation electrification, and therefore spur greater EV adoption in future years. The state will continue to engage with service providers to gain perspective on potential locations for charging sites, along with the best approaches for site selection, site host recruitment, and overcoming barriers for station implementation. Refer to Appendix C. NEVI Community Engagement Outcome Report for a list of activities and engagement efforts between August 2022 to July 2023.

Plan Vision and Goals

The State of Colorado has established ambitious targets for transportation electrification that align closely with the vision of the NEVI Program. The state's prior <u>Colorado Electric Vehicle Plan</u> (2020), established a light-duty vehicle target of 940,000 EVs on the road by 2030 with a vision of full electrification of the state light-duty fleet by 2050. Similarly, the plan identified a target of 1,000 transit zero-emission vehicles (ZEVs) deployed by 2030 as an interim step towards a fully zero-emission transit fleet by 2050. Recently, the <u>Colorado Clean Truck Strategy</u> (2022) established an additional target of 35,000 medium- and heavy-duty ZEVs in the state by 2030, as part of a path towards 100 percent of MHD vehicle sales by 2045, and eventually, an entirely zero-emission vehicle fleet across all weight classes. The State of Colorado released the <u>2023 EV Plan update</u> in March 2023 with the vision of a large-scale transition of Colorado's transportation system to ZEVs. This includes increasing the market share of light duty electric vehicles to nearly 100% by 2050, transitioning 100% of medium- and heavy-duty vehicles to zero emissions vehicles, and expanding adoption of electric micromobility and shared options. This vision also focuses on expanding access to, and benefits of, this transition to all Coloradans and businesses, especially those in disproportionately impacted and rural communities.

For Colorado to succeed in attaining these targets, a robust statewide charging network will be vital.



In addition to the EV and ZEV targets above, the State of Colorado has a broader vision for decarbonizing the entire state economy as defined in the <u>Colorado Greenhouse Gas Pollution Reduction Roadmap</u> (GHG Roadmap). This document defines pathways to achieving interim statewide GHG reduction targets of 26 percent by 2025, 50 percent by 2030, and 90 percent by 2050 – all from a 2005 baseline. In May 2023, the Colorado legislature approved the <u>Greenhouse Gas Emission Reduction Measures (SB23-16)</u> updating Colorado's GHG reduction targets, adding interim targets for 2035, 2040, and 2045, while increasing existing 2050 targets from 90 percent below 2005 levels to 100 percent. Given that the transportation sector is the single largest contributor to GHG emissions in Colorado and that transportation electrification is identified as one of the most significant tools to decarbonize the sector, the implementation of the GHG Roadmap will be difficult to realize without significant progress in the development of the statewide EV charging network. The state is currently in the process of updating the GHG Roadmap to reflect progress to date and anticipates releasing an updated version in January 2024, including the next set of near-term actions that the state will be taking to achieve the GHG targets.

The goal of this Colorado NEVI Plan is therefore to leverage new federal funding against existing state programs, policies, and campaigns to significantly expand access to DC fast-charging across Colorado. NEVI funding will be primarily targeted on filling existing gaps in the statewide fast-charging network, particularly those in rural and disproportionately impacted communities, thereby extending EV access and opportunities to a greater number and broader variety of Coloradans. In some such cases, funding for operational support may be considered to ensure that new charging locations remain economically viable as initially low charging demand rises to meet infrastructure supply. A secondary focus of Colorado's NEVI Program will be the expansion of existing DC fast-charging locations along federally-designated corridors to achieve the NEVI standard of at least four 150 kW chargers per location. Currently, CEO's corridor program requires installation of two or four chargers capable of providing 150 kW through power-sharing between two chargers, but each of these corridor sites is future-proofed to ensure that expanding the number and power of chargers is a cost-effective strategy in building out Colorado's designed corridors. Thus, many of Colorado's existing corridor stations will need to expand in order to meet the new NEVI standards. Finally, Colorado will provide funding to those locations where infrastructure exists today but in quantities insufficient to meet the needs of a growing market. In identifying and supporting projects in the above categories, Colorado will seek to ensure that, whenever possible, the siting, physical layout, and overall electrical capacity of funded charging locations is amenable to the needs of future medium- and heavy-duty vehicle drivers, as well as light-duty vehicles towing trailers.

All locations in Colorado that are ineligible for NEVI funding due to their distance from a designated corridor, as well as those sites that are better suited for Level 2 charging and/or fewer or lower-power DC fast-charging stations, will continue to be addressed using state, Volkswagen Settlement, and Community Access Enterprise (CAE) funding. These mutually supportive funding streams will ensure that a broad range of grant options are available to communities and businesses across the state, and combined with additional planning, regulatory, educational, and workforce development efforts already underway, will help accelerate Colorado's transition to an equitable and effective zero-emission vehicle transition in the coming years.

Contracting

Over the past decade, the State of Colorado has successfully managed multiple EV charging and alternative fueling grant programs across state agencies, employing a variety of contracting approaches. Over time, these strategies have been adapted and refined to increase efficiency and better meet the needs of applicants, agency staff, and the traveling public. The development of new NEVI-funded programs will



allow Colorado to build on this strong foundation while offering additional opportunities for innovation and effective scaling of existing grant programs in the coming years. One example is CEO's recent investment in grants management software to make it easier to issue and evaluate grant applications and to manage funded grants, along with adding transparency to the application process.

In the past, a common element of EV grant programs in Colorado has been the leading role that CEO has played in program design, administration, and evaluation. Regardless of the original source of federal, state, or other funds, Colorado has used interagency agreements (IAAs) to sub-allocate charging- or fueling-related portions of larger programs to CEO to manage on the state's behalf. For instance, the Colorado Department of Public Health and Environment (CDPHE) is the state's lead agency for managing its Volkswagen Settlement allocation but established an IAA so that CEO could distribute those funds through the existing Charge Ahead Colorado and DC Fast-Charging Corridors programs. More recently, CDOT employed an IAA with CEO to fund grants that support the electrification of Colorado's 26 Scenic and Historic Byways in a program that is likewise managed by the CEO rather than CDOT. All programs operate on a reimbursement basis, with CEO staff processing requests for completed projects for the review, approval, and reimbursement by the funding agency.

In these and other examples, the funding agency remains responsible for compliance with regulatory requirements and maintains close and constant involvement in all steps of program design and implementation. The advantage of this approach is that grant applicants, local communities, and industry stakeholders are able to establish a consistent, ongoing relationship with CEO, its staff, procedures, webpages, and program "brands" over multiple years while CEO develops expertise in the electric vehicle market and in developing and refining grant programs. Based on this experience and the positive feedback that it has generated from project partners over the years, CDOT decided to continue this approach in managing Colorado's allocation of NEVI funds by developing an IAA with CEO to incorporate NEVI funds into CEO's DCFC Plazas Program and updated the program guideline to align with federal guidance as well as stakeholder needs.

Once the necessary IAAs have been established, CDOT will work with CEO and other partner agencies to allocate NEVI funding to projects in the following areas:

- 1. Construction of new charging locations within identified charging gaps along Colorado's federally designated Alternative Fuel Corridors, prioritizing those locations serving disproportionately-impacted communities.
- 2. Expansion of existing charging stations along Colorado's federally designated Alternative Fuel Corridors by adding additional chargers and increasing power as required by NEVI standards, with an initial focus on stations that experience high utilization.
- 3. Construction of additional charging locations in areas where charging infrastructure already exists but is insufficient to meet the growing EV market demand.
- 4. Construction of charging infrastructure to support the electrification of the medium and heavy duty vehicle market.

CDOT, CEO, and other partner agencies will continue to collaborate on program development and design as well as refine the scoring and selection of proposed projects to ensure that they align with federal, state, and stakeholder goals and priorities. Upon project selection, CEO will establish individual project agreements with each grantee and be responsible for monitoring the scope, schedule, and budget of the project through completion. Project agreements will incorporate all NEVI standards and requirements, and CDOT will provide oversight, guidance, and support for CEO in applying these agreement terms. Additionally, CDOT will play a leading role in requirements related to highway signage, environmental clearances, and other topic areas where CDOT has greater expertise.



In summary, Colorado plans to adapt and evolve its existing interagency approach, which has proven successful for a variety of programs over the years, to efficiently integrate new NEVI funding into the state's broader ecosystem of EV support.

Existing and Future Conditions Analysis

Colorado is the 8th largest state by area and the 21st in population, but it consistently ranks higher in multiple metrics related to EV infrastructure, vehicle adoption, and supportive policy landscape. This places the state in a prime position to leverage the investment of NEVI funding against existing state programs and policies and to accelerate its progress towards statewide transportation electrification goals over the next five years and beyond.

As of July 18, 2023, there were 86,017 electric vehicles registered in Colorado. Of that total, 61,148 were battery electric vehicles (BEVs) and 24,869 were plug-in hybrid electric vehicles (PHEVs). In Colorado, there are 15.03 EVs per 1,000 people and, as of July 2023, EVs accounted for 10.52 percent of registrations for new cars and light-duty trucks statewide. EV registration data is tracked and reported monthly on EValuateCO, CEO's EV dashboard, located at:

https://energyoffice.colorado.gov/zero-emission-vehicles/evs-in-colorado-dashboard.

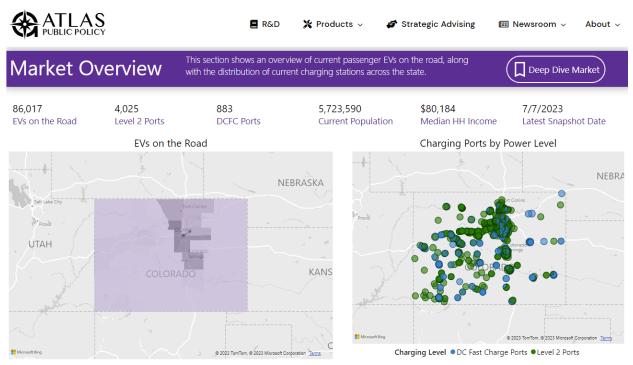


Figure 1: EValuateCO registration and EVSE dashboard.

In recent years, the State of Colorado has taken active steps to increase the number and variety of EVs available on the market. In November 2018, the Colorado Air Quality Control Commission (AQCC) adopted the Low Emission Vehicle (LEV) standard, which establishes more stringent emission requirements for new light-duty and medium-duty motor vehicles sold in Colorado beginning with model year 2022. In August 2019, the AQCC adopted the Zero Emission Vehicle (ZEV) standard, which requires individual automakers to make an increasing percentage of light-duty zero-emission vehicles available for sale in Colorado – at least 5 percent in model year 2023 and more than 6 percent in model



year 2025. In April 2023, the AQCC adopted the Advanced Clean Trucks (ACT) and Heavy-Duty Omnibus Rule, which require automakers to meet minimum sales percentages for medium- and heavy-duty ZEVs starting in model year 2027, and also to drastically reduce NOx emissions from new heavy-duty diesel vehicles sold in Colorado. Additionally, the State published a notice of rulemaking to consider the adoption of the Advanced Clean Cars II (ACC II) rule in July 2023. This regulation would require auto manufacturers to sell an increasing percentage of EVs over time and would require manufacturers to sell about 80% electric vehicles by 2032. State agency staff will continue to review and analyze additional regulatory tools that will help advance our EV goals as technologies and markets continue to develop.

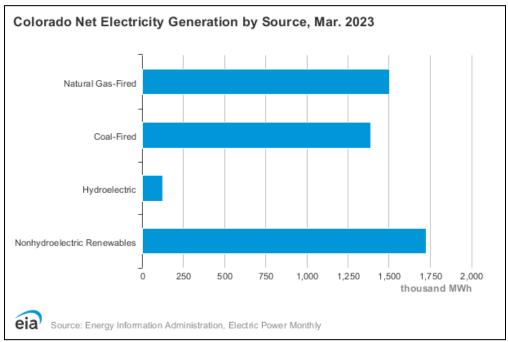


Figure 2: Colorado net electricity generation by source

Access to vehicles is only one part of the equation when it comes to greater EV adoption – the ability to power those vehicles through the electric grid is equally vital. Currently, Colorado's electricity is generated by a mix of renewable and non-renewable sources, with approximately 36 percent coming from wind and solar, 29 percent from coal, 32 percent from natural gas, and the remaining 3 percent generated by hydropower. The prevalence of renewable sources on the grid is a relatively recent phenomenon, with their contribution to the state's electricity mix more than tripling since 2010 according to the <u>US Energy</u> Information Administration (EIA).

This trend is expected to continue based on a combination of market forces, state regulations, and commitments from major electric utility providers to reduce carbon emissions, retire coal generation, and achieve carbon neutrality in the coming decades. In fact, the six electric utilities that operate 99 percent of the fossil fuel power plants in Colorado have committed to reduce emissions by at least 80 percent by 2030. The Xcel Energy Clean Power Plan approved by the Colorado Public Utilities Commission (CPUC) requires that the last coal generation plant in Colorado will be retired by January 1, 2031. The decarbonization of the electricity grid provides direct benefits to Coloradans by reducing the emissions produced by the utility sector, and it also presents a unique opportunity for the transportation sector to lessen its own impact through the electrification of vehicles. Unlike other vehicles on the road, EVs deployed in Colorado today will actually become cleaner over their lifetime as the carbon intensity of electricity continues to decline.



Clean Energy Progress in Colorado

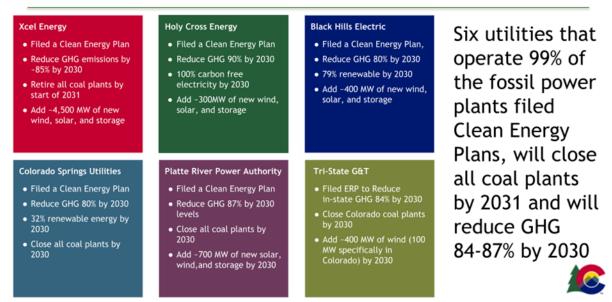


Figure 3: Major electric utility clean energy commitments in Colorado

While the generation of electricity is becoming more renewable and less carbon intensive, individual electric utilities are simultaneously modernizing their distribution systems, rate schedules, policies, incentives, and even staffing to better align with the new frontier of transportation electrification. Colorado is home to a total of 53 electric utilities — 22 rural cooperative utilities (co-ops), 29 municipal owned utilities ("munis"), and two investor-owned utilities (IOUs). The IOUs, Xcel Energy (Xcel) and Black Hills Energy (Black Hills), are for-profit monopolies regulated by the Colorado Public Utilities Commission (CPUC) that collectively provide 53 percent of Colorado's retail electricity.

In 2019, Senate Bill 19-077 (SB19-077) authorized the ownership of electric vehicle charging infrastructure by electric utilities and created a regulatory requirement for filing transportation electrification plans every three years for a portfolio including new rates, electric vehicle charging facilities, electric vehicle make-ready infrastructure investment, and income-qualified programs. As a result of the bill, Xcel and Black Hills created transportation electrification plans (TEPs) valued at more than \$100 million combined, each designed to offer a range of new service offerings to customers to support widespread and affordable vehicle electrification. In May 2023, both utilities filed TEPs for the years 2024-2026. While not yet approved, Xcel's plan includes expanded investments in make ready, alternate proposals for utility owned and third party DC fast-chargers, equipment rebates, and distribution infrastructure while Black Hills focuses primarily on infrastructure rebates. A number of other utilities, while not required by SB19-077 to develop TEPs, have voluntarily established incentives and customer support for the planning, installation, and operation of EV charging in private, public, and fleet environments. CEO, CDOT, and their partner agencies will continue to work with electric utilities across the state to understand, prepare for, and participate in this significant transition. This includes potential planning for a larger, more robust, and more flexible grid that will be able to meet the increased demand from widespread vehicle electrification while maintaining reliability and resiliency in the face of increasing threats from extreme heat and cold, floods, wildfires, and cyber attacks.



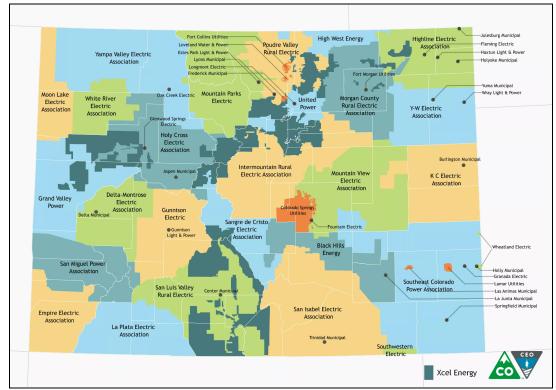


Figure 4: Colorado Electric Utilities

State Geography, Terrain, and Climate

Colorado has made significant progress in facilitating EV adoption over the past decade and is frequently cited as a national leader in this regard, however the state faces a number of geographic and climate characteristics that can present challenges for policymakers, project developers, and individual travelers. Most obviously, Colorado has a mountainous landscape, with the highest average elevation of any state – 6,800 feet above sea level. Dozens of individual peaks climb above 14,000 feet, while the highest paved road in the US (Mt. Evans Scenic Byway - 14,130 ft.), highest mountain pass over the Continental Divide (Independence Pass - 12,095 ft.), and highest point on the Interstate System (Eisenhower-Johnson Memorial Tunnel - 11,158 ft.) are all located in Colorado. This extreme terrain results in steep grades for travelers who are ascending and descending along the highway, which may exacerbate feelings of range anxiety but can also increase the benefits of EVs' regenerative braking technology. Extreme temperature swings and rapidly changing precipitation, on both a seasonal and daily basis, can also make trip planning less predictable than in other parts of the country – another factor which may give new EV users pause but can be mitigated through improving battery technology and a greater diffusion of fast-charging facilities across the state.

While Colorado is justly famous for its mountains, almost 40 percent of the state's landmass is taken up by the Eastern Plains that stretch from the urbanized Front Range eastward to the borders of Nebraska, Kansas, and Oklahoma. Smaller towns and cities dot the landscape, connected by long stretches of Interstates and highways that serve a higher percentage of agricultural and commercial freight vehicles than in other parts of the state. These long distances, combined with wide temperature ranges and unpredictable weather, can dissuade travelers from using EVs. The Eastern Plains currently see very low levels of EV adoption and also present fewer potential locations to host charging installation. NEVI-funded projects in these communities may require higher incentive levels or operational support in



order to offset lower anticipated utilization in early years of the program.

Between the mountains and the plains sit the cities of the Front Range, home to approximately 86 percent of the state's population and connected by I-25 from Wyoming to New Mexico. This dense and fast-growing metro area has a very different set of challenges for EV adoption, such as lower-income communities unable to purchase or lease the most commonly-available EV models and a larger number of apartment and condo residents without access to affordable home charging. Many urban and suburban residents who commute short distances in their daily lives may nonetheless travel long distances for weekend recreation or other in-state or regional trips, making EV range and access to convenient fast-charging a point of consideration in their vehicle selection.

Unfortunately, climate change is also contributing to these challenges via rising summer temperatures, increasing wildfire risk, and worsening ground-level ozone. Changes in temperature and precipitation are expected to result in a 50 percent decline in snowpack, which is the state's main water source, and in the process, runoff from melting snow could lead to more frequent and severe flooding in the future. While the electrification of the transportation system is one of many efforts by the State of Colorado to mitigate the impacts of human behavior on the climate, this work will be made more challenging by the effects of climate change that are already leaving their mark on Colorado's landscape today.

State Travel Patterns, Land Use, Public Transportation Needs, and Freight Needs

Travel Patterns

Current and future travel patterns are important considerations in any transportation planning process, but especially significant when considering the quickly-evolving technology and market for EVs. Currently in Colorado, the greatest commuter travel flows are to, from, and within the Denver Metropolitan Area. There are also significant travel patterns between Larimer, Weld and Adams counties to the North; Teller, El Paso, Pueblo, and Fremont counties to the South; and Pitkin, Eagle, Garfield, and Mesa counties to the West. In the <u>Statewide Transportation Plan (2045)</u> it's stated that the mean travel time to work in Colorado is 25.9 minutes, one minute less than the national average. However, Colorado is a fast-growing state and highway congestion is a major concern for efficiency, safety, and environmental quality across the Front Range and other parts of the state.

Colorado's population growth and economic expansion is expected to continue for the foreseeable future, and this growth may place significant strain on existing transportation infrastructure. The amount of travel per person (as expressed in vehicle miles traveled per capita) is expected to remain flat over time. However, because of an increase in population, total travel and associated transportation demand will increase. In 2015, total annual vehicle miles traveled (AVMT) on Colorado state highways and local roads reached 50.4 billion, with 74.7 billion expected by 2045. Traffic growth in Colorado is forecasted to result in a 48.1 percent increase in traffic between 2015 and 2045, according to the <u>Statewide Transportation</u> <u>Plan (2045)</u>. This growth, given Colorado's already congested roadways and largely constrained geography, is likely to result in increased traffic congestion and diminishing air quality over time. While the electrification of transportation can help mitigate some negative impacts on air quality, growth in overall VMT will offset some of these, and EVs alone do nothing to help address congestion.

In 2021, the CDOT Transportation Commission adopted the <u>GHG Transportation Planning Standard</u>, which requires CDOT and its five partner MPOs to determine the total pollution and greenhouse gas emission increase or decrease expected from all future transportation projects included in a statewide or regional plan and take steps to ensure that greenhouse gas emission levels do not exceed set reduction amounts. In 2022, the accompanying Policy Directive 1610 was approved, which provides an additional compliance mechanism for CDOT and the five MPOs to meet the GHG reduction levels through



mitigation. In September 2022, the Transportation Commission voted to approve CDOT's newly updated 10 Year Plan, which showed compliance with the GHG reduction levels required by the GHG Transportation Planning Standard. The Commission also voted via resolution to accept DRCOG and NFRMPO's GHG Transportation Reports, which showed compliance with the GHG reduction levels as well. The planning documents of PPACG, PACOG, and GVMPO will be subject to the GHG Transportation Planning Standard next. This policy is one of several elements of the transportation section of the Colorado GHG Pollution Reduction Roadmap, and is expected to improve quality of life and air quality across Colorado by encouraging projects that add sidewalks, build "complete streets," and increase transit options.

In addition to local commuters and other daily travel patterns, tourism in Colorado is a major consideration in regards to transportation planning. The Colorado Tourism Office (CTO) maintains daily data from Transportation Security Administration (TSA) airport checkpoints, which indicate a consistent increase in visitors to Colorado (apart from the impacts of the COVID-19 pandemic in 2020) over the past vears. Even in 2020. Colorado still welcomed 74.1 million visitors who supported an estimated 149,500 jobs via \$15.5 billion in direct traveler spending. It is critical for Colorado's economy that visitors are able to get to and from the state and move within it safely and efficiently, regardless of their mode of travel. With that said, Strategic Marketing and Research Insights found that a growing number of travelers are selecting their recreational destinations based on their sustainability practices. Colorado's ongoing effort to electrify all 26 of its Scenic and Historic Byways, fund charging installations at hotels, ski resorts, and rural tourist destinations, and work with major airports and rental car companies to give visitors more vehicle options upon arrival will all contribute to establishing the state as a destination of choice for those seeking to minimize the impacts of their travel on the natural environment. While the primary benefits of Colorado's NEVI Program investments will accrue to those who live, work, and travel in the state on a daily basis, many of these same charging locations will also serve the needs of visitors, creating indirect economic benefits for the state.

Land Use

As explained in the <u>Statewide Transportation Plan (2045)</u>, local governments are responsible for land use decisions in Colorado. CDOT participates in land use discussions since these decisions affect statewide transportation infrastructure demands. The siting of distribution centers and schools in rural and suburban areas is a good example of how land use can affect transportation patterns, and therefore ongoing costs for maintenance and operations. Distribution centers generate a large amount of traffic related to the movement of goods and commuting workers. Schools are also significant generators of activity, potentially leading to issues of congestion and safety that CDOT and local governments must consequently address.

CDOT recognizes that state highways are vitally important to meeting the mobility needs of the public and that Colorado's quality of life and economic health depends on the safe and efficient interregional and interstate movement of people and goods. Within current land use patterns and transportation networks, Colorado's population and economic growth are leading to more trips and more VMT on already crowded roadways. The VMT generated by critical institutions and business locations like schools, community centers, shopping and entertainment districts, business parks, and distribution centers depends on how they are sited in relation to existing transportation options and the residences of workers. When located far from existing transportation facilities, these facilities induce demand for travel. The resulting increase in VMT and traffic congestion can have a negative impact on human health, the economy, and the environment.

In planning for the broader electrification of the statewide transportation system, it is important to account for the ways in which existing and future land use development patterns may make EV charging more or



less accessible to communities. The siting of charging infrastructure along existing travel corridors and at destinations with conducive dwell times, for instance Level 2 chargers at workplaces and DC fast-chargers at retail establishments, will help to make charging more convenient for travelers and potentially more financially beneficial for site hosts. Given the need to provide increased power supply for DC fast-charging, siting chargers near existing development should also generally make projects more cost effective. There may also be situations in which greenfield development in less-developed areas is justifiable, but CDOT, CEO, and stakeholders should remain cautious of funding projects that indirectly encourage sprawling development and higher VMT – even if that VMT is zero-emission. In keeping with this broader VMT-reduction approach, CDOT will also seek opportunities to align NEVI Program investments with transportation demand management (TDM) strategies, including support for electric vanpools and other low- and zero-emission services.

Public Transportation Needs

As of 2022, public EV attention both nationally and in Colorado has been focused largely on light-duty passenger vehicles, but the transit community has long been a leader in the push towards low- and zero-emission mobility. While the great majority of transit vehicles operating today are powered by diesel or gasoline internal combustion engines, nevertheless their overall impact on reducing VMT per capita and providing access for those who cannot or choose not to drive is hugely positive in terms of air quality, climate change mitigation, equity, and economic development. With that said, a number of transit agencies in Colorado are seeking to improve their contribution even further by beginning the transition to zero-emission transit fleets. As of July 2023, there are more than 71 battery electric transit vehicles operating across Colorado, with another 30 or more in earlier stages of procurement and delivery. The State of Colorado has a goal of deploying at least 1,000 transit ZEVs by 2030 on the path to a 100 percent ZEV transit fleet by 2050, and the strategies and financial resources necessary to achieve these targets are explored in the <u>Colorado Transit Zero-Emission Vehicle Roadmap</u> completed in 2021.

Through a combination of ongoing stakeholder engagement and research into national best practices, CDOT has found that most transit agencies prefer to charge or fuel their ZEVs "behind the fence" at their own facilities, rather than employing public-facing facilities used by other fleets and travelers. As a result, Colorado anticipates that relatively few NEVI-funded projects will be developed specifically with transit agency users in mind and that these needs will continue to be met via existing state, Volkswagen Settlement, and Clean Transit Enterprise (CTE) grant programs. Regardless of this expectation, CDOT and CEO will remain open to proposals for NEVI-funded projects that incorporate transit vehicle charging needs as a primary or secondary focus, particularly in rural areas with lower anticipated utilization by personal automobiles and more common use of vans and shuttle buses for fixed-route or demand-response transit services.

Freight and Supply Chain Needs

Colorado businesses are active participants in the national and global economies, exporting nearly \$8.3 billion in goods to destinations around the world as of 2018 according to the <u>United States Trade</u> <u>Representatives</u>. Colorado also receives freight shipments from around the world, transporting food, goods, and raw materials to communities across the state that could not be fully sustainable otherwise. The multimodal freight network is what enables these businesses and communities to thrive, and the disruptions to that global system that Coloradans have witnessed over the past several years due to the global pandemic and supply chain issues have only reinforced its importance to their everyday lives. Nonetheless, MHD vehicles in Colorado contribute 22 percent of on-road GHG emissions despite representing less than 10 percent of total vehicles. They also are estimated to produce 30 percent of on-road Nitrogen Oxide (NOx) emissions and 40 percent of on-road Particulate Matter (PM) emissions in Colorado, so it is vital to address the environmental and health impacts of these vehicles while maintaining the benefits that they provide to society. This is especially important given the significant



geographic correlation between areas of high truck traffic and those neighborhoods in which members of disproportionately impacted communities reside. As a result of this overlap, as well as other environmental justice issues, DI communities are exposed to significantly worse air quality and higher rates of asthma and other public health issues than the population at large. The need to act on MHD emissions is therefore an issue of equity, as well as one of environmental sustainability.

In 2022, Colorado finalized a multi-year data analysis, stakeholder engagement, and policy development effort that culminated in the release of the Colorado Clean Truck Strategy (2022). This document identifies a wide range of regulatory actions, incentives, procurement policies, and other strategies intended to support the transition of MHD vehicles to zero-emission options and achieve the State's target of 35,000 MHD ZEVs on the road by 2030. In the development of this document, many industry stakeholders identified the cost and accessibility of EV charging as a primary barrier for their companies' deployment of electric MHD vehicles – particularly for those fleets that either do not have access to, or cannot rely predominantly on, "behind-the-fence" depot-style charging and instead travel long distances across the Intermountain West or the entire United States. Even for those organizations whose vehicles return to the same base each night with the capability to install depot charging, the high upfront cost of retrofitting a major facility to support EV charging for MHD vehicles can be daunting. Based on this stakeholder feedback, CDOT and CEO are working with companies, utilities, and local communities to support the adoption of zero-emission MHD vehicles and the deployment of charging infrastructure at project locations that are amenable to facilitating MHD vehicle charging, either exclusively, or in addition to light-duty passenger vehicle charging. This includes infrastructure both along major highway corridors, as well as at fleet depots, and in denser areas with multiple fleets in close proximity (such as the I-270 corridor). This latter approach will potentially offer an opportunity for commercial fleets to pilot the usage of MHD ZEVs and to access needed charging at a relatively low level of upfront investment and then use that experience to inform future facility designs and modifications to enable more widespread MHD EV adoption. In support of these efforts, the Colorado Energy Office has been conducting a MHD charging study, identified as a near term action in the Clean Truck Strategy, to estimate the quantity, power, location, and cost of MHD charging needed in the state to achieve the goal of 35,000 MHD ZEVs on the road by 2030. This study has directly informed the development and recent launch of the Colorado Energy Office's Fleet Zero-Emission Resource Opportunity (Fleet-ZERO), one of the first statewide grant programs specifically designed to support the widespread deployment of fleet and MHD vehicle charging. This work, along with Colorado's Fleet-ZERO program, will serve as key solutions to addressing the cost and accessibility barriers of MHD charging deployment, and NEVI funding will play a critical role in supporting these types of projects; therefore, accelerating the broader zero-emission MHD transition in Colorado.

Alternative Fuel Corridor Networks

Colorado state agencies, including CDOT, have been working to support EV charging for nearly a decade as a means of advancing broader statewide goals of sustainability, mobility, and equity. During this period there has been an increased focus on the importance of fast-charging corridors, which are considered critical for building traveler confidence and making EV usage more accessible in rural areas that are less likely to be served by the private sector in the immediate future. Interest in the topic began with the release of the CEO's 2015 Electric Vehicle Market Implementation Study, which recommended the development of a "Colorado Electric Highway". This seemingly simple idea has grown over many years to constitute a central pillar of the State of Colorado's EV strategy, as reflected in both planning and infrastructure investments.

In 2016, Round 1 of the FHWA Alternative Fuel Corridor designation program inspired Colorado to begin defining its top priorities for Interstate and highway electrification, resulting in 16 nominations. Although



only I-25, I-70, and I-76 were awarded designation at that time, CDOT and its state agency partners have submitted additional nominations in subsequent rounds of the program and, as a result, by early 2022 the entirety of US 50 and US 285 as well as portions of US 40 and US 160 were designated as priority corridors in Colorado. In May 2022, CDOT nominated six additional corridors in Round 6 of the program. These routes – I-270, US 34, US 36, US 287, US 385, and US 550 – were selected because they fill geographic gaps and enhance network redundancy in the Eastern, Western, and Northern areas of the state. They also serve predominantly rural and disproportionately impacted communities, both of which are major focus areas for the NEVI Program. In early July 2022, the FHWA announced its Round 6 alternative fuel corridor designations, which included all six of Colorado's 2022 nominations. After the FHWA announced its request for nominations for Round 7 in May 2023, CDOT nominated 5 additional corridors including I-225, US 40 (I-70 Intersection), US 40 (US 287 Intersection to US 385 Intersection), US 24, and SH 82. These nominations continue to prioritize EV equity while expanding further into urban areas.

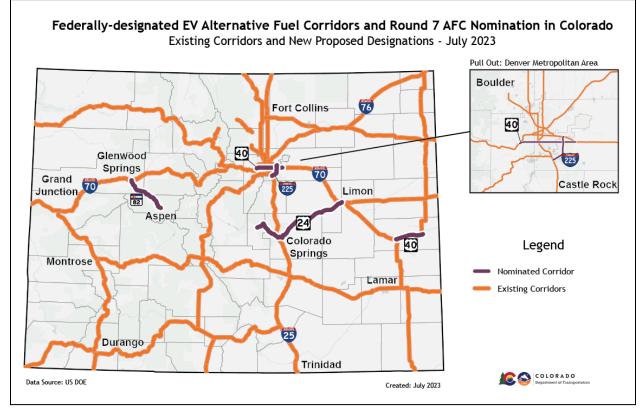


Figure 5: Federally-designated EV Alternative Fuel Corridors and Round 7 AFC Nomination in Colorado

In preparation for a corridor offering and building on the EV Market Implementation Study, CDOT and CEO provided support to the City and County of Denver's "<u>Opportunities for Vehicle Electrification in</u> the Denver Metro Area and Across Colorado" study which included an analysis of DC fast-charging, as well as NREL's "<u>Electric Vehicles in Colorado</u>: Anticipating Consumer Demand for Direct Current Fast Charging" analysis which looked at ideal station placement based on CDOT traffic data and EV battery ranges. Using data from the NREL analysis, CEO then worked with graduate students from the University of Colorado to incorporate additional considerations for station placement including elevation and population centers. Collectively, these analyses were used to identify 34 communities along major highways and Interstates for station siting.



In spring 2018, CEO released a competitive RFA and awarded ChargePoint a \$10.3 million contract to fully build out the locations identified in the analyses and plans described above. ChargePoint has since identified local site hosts, designed and managed the project implementation, and has (as of July 2023) opened 31 of 34 locations to the public. The 3 remaining sites are anticipated to be completed by Q1 2024. Each site is required to have two or four chargers, capable of providing 150 kW for each pair of stations. Each site has the electrical capacity and pre-wiring required to double the number of chargers and increase the charging rate to 350 kW per pair by adding additional power modules. While these locations do not currently meet the minimum charger and power level standards of the NEVI Program, the future-proofing required during initial installation may result in a more cost-effective way in which to direct NEVI-funded upgrades.



Colorado DCFC Corridors Program

Figure 6: DC Fast-Charging Corridors Program progress as of July 2023

In addition to the DC Fast-Charging Corridors Program referenced above, Colorado has also seen continued progress towards corridor electrification through private investment (largely along the Interstates) and smaller, targeted grant awards through the Charge Ahead Colorado Program and Electrified Byways and Tourism Program. This latter effort was launched in 2020 with the goal of making EV travel possible along all 26 of Colorado's Scenic and Historic Byways and to and from other recreational and tourist destinations. Increased EV charging along these routes (both DCFC and Level 2) has benefits for local economies catering to visitors, but also makes EV charging more accessible to local users who might otherwise have few public chargers in their area for years to come. This innovative program has garnered national attention in publications such as <u>AFAR</u>, <u>Travel & Leisure</u>, <u>Lonely Planet</u>, and the <u>New York Times</u>, and it continues to see strong local demand from participants across Colorado seeking to extend the advantages of EV charging to their neighborhoods and businesses.



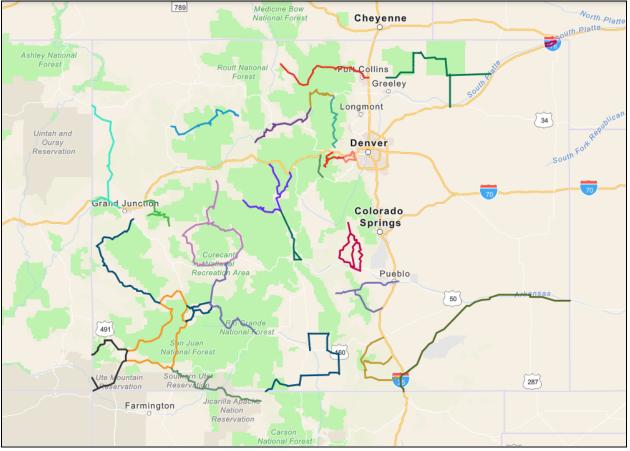


Figure 7: Colorado Scenic and Historic Byways

In spite of the EV charging investment programs outlined above, the majority of Colorado's designated corridors are still classified as Corridor Pending, due to significant 50+ mile gaps between publicly-available charging stations. Ongoing state investments through the DCFC Corridors Program and others, coupled with new NEVI funding, will be instrumental in addressing remaining gaps and meeting the enhanced NEVI standards that most of Colorado's current fast-charging deployments do not achieve. Currently, none of Colorado's thirteen designated corridors are classified as Corridor Ready in their entirety, although some sections of I-25, I-70, I-76, and US 50 are.



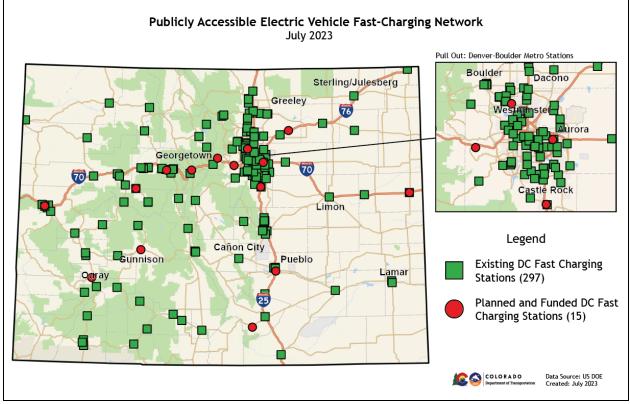


Figure 8: Publicly accessible EV charging network in Colorado as of July 2023

Existing Locations of Charging Infrastructure Along AFCs

As of July 2023, there are 26 stations along existing designated Alternative Fuel Corridors that meet the NEVI standard of being within one mile of the highway and hosting at least four chargers with 150 kW power levels. Many additional stations are located within one mile of the highway, but do not meet the plug number or power requirement, and could therefore be upgraded using NEVI funding in the future. A complete list of stations within 1 mile of designated corridors and including a count of plug type and power level is located in Appendix A. Station data was gathered from the Alternative Fuels Data Center (https://afdc.energy.gov/).

Table 1: Existing Charging Infrastructure Summary	

Colorado DCFC Sites Within 1-Mile of Alternative Fuel Corridors				
<u>Route</u>	<u>Total DCFC</u>	<u>NEVI-Compliant DCFC</u>		
I-25	36	10		
I-70	37	6		
<i>I</i> -76	5	1		
I-270	1	1		



Total	182	26
US 550	17	0
US 385	1	0
US 287	15	2
US 285	4	1
US 160	10	0
US 50	20	0
US 40	9	0
US 36	17	4
US 34	10	1

Publicly Accessible Electric Vehicle Fast-Charging Network

Within 1 Mile of Alternative Fuel Corridor (AFC) - Gap Analysis



Figure 9: Current status of existing NEVI-compliant and NEVI non-compliant DCFCs along Colorado alternative fuel corridors as of July 2023



Known Risks and Challenges

Through past charging infrastructure programs, Colorado has identified known risks and challenges to project implementation that could impede swift progress towards its charging infrastructure goals. These challenges include equipment supply chain delays, Buy America compliance, grid capacity and constraints, and availability of site hosts and matching funds.

The lead times for critical equipment are currently extended and may delay energization of NEVI-funded charging stations unless supply chain constraints are alleviated. For example, as of July 2023, projects requiring new transformers are being quoted at 18 months or more for delivery. Smaller pieces of equipment, like meter cans, are also currently delayed by multiple months. The DCFC equipment itself, though also supply constrained, is currently not a major impediment given the other issues that have arisen within the project scope, though that could change with the release of NEVI funding across the country. As a result, Colorado anticipates approximately 24 months for the typical project to be completed.

Stipulations associated with Buy America compliance also present known challenges for timely project completion and available supply. Colorado supports measures intended to encourage domestic manufacturing of electric vehicle supply equipment (EVSE) and related technologies, but also notes that there have historically been inconsistent interpretations of which EVSE suppliers, if any, qualify as Buy America compliant. Even if multiple compliant suppliers are identified by the Joint Office, increased demand fueled by the nationwide infusion of NEVI funding may significantly reduce available supply in the early years of the program. In order to offset these impacts, a temporary waiver process or other exemption mechanism may be needed to allow for NEVI-funded projects to proceed as onshoring of EVSE production takes place. In any case, CDOT and CEO will ensure that implementation of the NEVI Program in Colorado abides by all Buy America requirements, in line with current and future guidance from the Joint Office.

In certain locations, particularly rural areas of the state, grid capacity may be a constraint that limits opportunities for installing the required number of 150 kW stations to reach the NEVI standard. Projects of this scale represent a significant load that will be challenging in some areas. An additional challenge throughout much of Colorado is a lack of cellular coverage, which can limit the data connectivity from charging stations. In both of these cases, creative solutions and the use of innovative grid-edge, off-grid, mobile, or other charging systems may be required to continually power and collect data from stations in certain remote locations. In the past, CEO and CDOT have investigated the potential for grant-funded strategic deployment of such technologies through the Feasibility Study of DCFC + BESS in Colorado completed in early 2022, and the NEVI Program may present an opportunity to implement them for the first time in Colorado.

Additionally, identifying site hosts and securing matching funds may potentially present a challenge given the scale of projects required to meet the NEVI standard and the funding required to complete them. In areas where high utilization is present, private capital will be readily available, but in more outlying areas of the state, where high utilization may be several years off, securing site host matching funds could present a challenge in the near term. In such cases, Colorado will consider options to offer greater operational and maintenance funding or state grant funds, as appropriate, to offset low utilization and attract more interest from potential site hosts. Alternatively, Colorado may propose to fund some sites with fewer than four chargers initially, with the expectation that sites will expand to meet the NEVI requirement within a set period of time.



EV Charging Infrastructure Deployment

Colorado has a long history of developing and administering charging infrastructure grant programs. Starting in 2013, CEO and RAQC launched Charge Ahead Colorado, which provided grants for Level 2 and DCFC stations in locations that give Coloradans the confidence to do their daily driving in electric vehicles. Other programs have followed – for example the DCFC Corridors Program and DCFC Plazas Program – each designed to address other aspects of the market, such as high-speed charging along Colorado's major transportation corridors and in urban areas for those without access to home charging.

In general, Colorado's charging market has grown organically through competitive applications to CEO's grant programs. In some cases, CEO has identified preferred locations, as with the DCFC Corridors Program, or in the case of including two locations at Denver International Airport as part of the DCFC Plazas program.

Colorado anticipates employing a similar approach as it programs NEVI funding to meet the following priorities:

1. Construction of new charging locations within identified charging gaps along Colorado's federally designated Alternative Fuel Corridors, prioritizing those locations serving disproportionately-impacted communities.

Despite significant investments by the state and private operators, there are areas along the federally-designated Alternative Fuel Corridors that still lack DCFC. CDOT and CEO will work with partner agencies and other stakeholders to identify charging gaps, particularly those located in disproportionately impacted communities. These locations will be designated in RFAs as preferred or required locations and, where appropriate, proposals for these locations will be prioritized over proposals for other sites.

2. Expansion of existing charging stations along Colorado's federally designated Alternative Fuel Corridors by adding additional chargers and increasing power as required by NEVI standards.

As noted above, there are a number of stations along Colorado's federally designated Alternative Fuel Corridors that do not currently meet NEVI requirements but may be cost-effectively upgraded by adding chargers and power modules. Many of these sites were future-proofed as part of the DCFC Corridors Program by upsizing transformers, including additional conduit and wiring, and installing mounting pads at the time of original construction. CEO will prioritize the expansion of sites along Interstates and other designated corridors that serve disproportionately impacted communities, as well as those that provide access to high-visitation tourist destinations, where upgrades can be made cost-effectively to bring into compliance with NEVI requirements.

3. Construction of additional charging locations in areas where charging infrastructure already exists but is insufficient to meet the growing EV market demand.

Colorado's EV market is rapidly expanding, with the EV share of new vehicle sales surpassing 10 percent over the last several months. Expansion of charging infrastructure in the Denver Metro area, other population centers, and near recreational destinations will be needed to accommodate growth of the market and maintain a positive user experience for travelers looking for available chargers away from home.

4. Construction of charging infrastructure to support the electrification of the medium and heavy



duty vehicle market.

While research and engagement with commercial freight and delivery fleets indicates that there is a general industry preference for "behind-the-fence" depot charging, there is still likely to be a significant need for medium- and heavy-duty vehicles to charge at publicly-available stations as vehicle capabilities and fleet adoption rates advance. CDOT and CEO will work with stakeholders to identify strategies for project prioritization, site design, and operational support for locations intended to serve multiple MHD fleets or a combination of MHD and light-duty users. Additionally, as part of a near-term action item from the Colorado Clean Truck Strategy is for CEO to conduct a statewide planning study for MHD fleet charging. This study identified the quantity, type, and location of charging infrastructure needed to support ZEV truck adoption goals. CDOT and CEO will utilize the results of the study to help guide the future development of budgets, program guidelines, and priority locations for MHD charging investments using NEVI and state funds.

The four focus areas identified above align with a recent independent analysis of Colorado's current EV charging needs and the overall gap between current charger availability and anticipated future demand. In February 2021, CEO released an analysis completed by the International Council on Clean Transportation (ICCT) called "Colorado Charging Infrastructure Needs to Reach Electric Vehicle Goals." This analysis looked at the number, type, and distribution of charging infrastructure needed to meet the state's EV goals and included a county-by-county analysis for Level 2 and DCFC. By and large, the counties showing the greatest DCFC gaps overlap closely with Colorado's nationally-designated Alternative Fuel Corridors. In particular, I-25, I-70, US 34, US 36, and the northern section of US 287 cross the nine counties with the highest gap between current chargers and future charging needs. In contrast, nearly half of the counties in Colorado have estimated gaps of ten or fewer DCFCs, but these are also the areas presenting some of the greatest grid and market challenges. Counties with smaller but potentially more difficult charging gaps are served by Alternative Fuels Corridors such as US 40, US 50, US 285, US 385, and the southern section of US 287. In all of these cases, NEVI funding will be instrumental in meeting future EV charging demand, while existing state grant programs will ensure access to Level 2 and off-corridor DCFC charging in all parts of the state.

Funding Sources

Colorado anticipates that in the majority of cases, the 20 percent required match for NEVI-funded projects will be provided by the developer or site host responsible for proposing, implementing, and operating the charging facility. Where appropriate, CEO will require that applicants bring more than 20 percent match to the project. For instance, in the first round of Plazas funding, CEO required a 50 percent match for projects proposed for the Metro Area where there's a stronger business case for charging and a smaller incentive is needed to stimulate investment. For each tier of funding, CEO establishes a cap in order to keep costs contained and extend the amount of funding available. There may be cases in which the State of Colorado allows grantees to use other state funding to offset some portion of the required match. In particular, CDOT and CEO will explore options to use state funding to provide some match relief for projects located in disproportionately impacted communities. Colorado is fortunate to have multiple funding sources available in addition to federal NEVI dollars, which include:

Colorado Electric Vehicle Fund

In Colorado, EV drivers pay an additional fee of \$50 when they register their vehicle, which goes up each year by a fixed amount or a percentage that is consistent with inflation. Of this fee, \$30 goes to the Highway Users Tax Fund (HUTF) to offset lost gas tax revenues, while \$20 goes to the EV Fund which is administered by CEO and used to provide grants through the Charge Ahead Colorado Program. Starting



in FY23, this fee will increase by \$4 for fully electric vehicles and \$3 for PHEVs, and it will continue to increase each year through FY32 in order to keep pace with inflation.

Colorado Highway Users Tax Fund (HUTF)

Since 2019, following the creation of CDOT's Office of Innovative Mobility (OIM), the Transportation Commission (TC) of Colorado has reviewed and approved annual budgets to fund OIM activities for the upcoming state fiscal year. In each of the subsequent fiscal years, the TC has approved \$1.5 million in Highway Users Tax Fund (HUTF) dollars to support the Electrified Byways and Tourism Program, which funds Level 2 and DCFC projects that facilitate rural EV tourism and local economic development. If approved by the TC, future awardees of this program could potentially leverage state dollars against NEVI funding, provided that the project falls within the geographic eligibility for NEVI and is designed to meet the more stringent NEVI standard.

Community Access Enterprise (CAE)

This Enterprise was created in 2021 as part of SB21-260 and is funded through a retail delivery fee. Revenues generated by the fee may be used by the enterprise's Board of Directors to fund programs that support EV charging for light-, medium-, or heavy-duty vehicles, hydrogen fueling stations, or eBikes and EVs for low- and moderate-income Coloradans. According to the <u>Community Access Enterprise 10 Year</u> <u>Plan</u>, between \$6.9 and \$10.4 million will be allocated for DCFC corridor and plaza charging in the first three years of the Enterprise, and these dollars could be utilized as a partial or full match for NEVI funding if allowed by the Board.

Volkswagen Settlement Trust (VW Settlement)

The State of Colorado received \$68.7 million from the national Volkswagen Settlement, of which \$10.3 million was allocated to electric vehicle charging infrastructure through CEO's DCFC Corridor Program, DCFC Plazas Program, and Charge Ahead Colorado (CAC) Program. Colorado's <u>Beneficiary Mitigation</u> <u>Plan</u> outlines the programs and strategies to reduce transportation emissions with this source of funding.

Infrastructure Considerations

CDOT and CEO have identified more than 50 geographic zones along Colorado's 13 designated Alternative Fuel Corridors that represent gaps in the state's current NEVI-compliant DCFC network. The table below summarizes these potential NEVI investment areas, the local electric utilities, and whether the project is likely to require construction of a new charging location or the upgrade of an existing one. All zones listed on the table are general, and Colorado will remain open to alternative proposals for project locations, costs, and timing based on stakeholder and applicant input over the course of the implementation of the NEVI Program. While the State of Colorado will seek to prioritize projects based on their anticipated benefits and ability to close major charging gaps, no NEVI-eligible project will be excluded from consideration. Rather, CDOT and CEO staff will look to communities, project applicants, and the traveling public to define areas of greatest need and guide the state's implementation moving forward.

Project costs associated with DCFC deployments can be considerable and tend to vary due to a number of factors, including the power output of the charging stations installed, access to existing power supply, duration of warranties and networking fees committed upfront, the need for line extensions, and opportunities to offset additional costs through utility make-ready programs and other funding sources. Colorado anticipates that project costs for new NEVI-compliant sites will range from approximately \$300,000 to \$700,000 per location, depending on the variables outlined above. Project costs will be driven by equipment selection and power capabilities. Sites selecting a mix of higher powered stations, including



ultra-fast DCFC, may incur costs beyond these estimates. Recently, additional cost impacts have been observed as a result of inflation, which could continue to drive up the average project costs.

CEO anticipates to fund over 30 locations for Round 1 with over 20 locations using NEVI funds and another 10 or more locations through state funding.

<u>Table 2</u>: Identified gaps in the NEVI-compliant DCFC charging network along designated alternative fuel corridors in Colorado and potential gaps filled via Round 1 DCFC Plazas awards

Current Gaps in the NEVI-Compliant DCFC Charging Network				
<u>Route</u>	<u>Geographic Zone</u>	<u>Electric Utility</u>	<u>New or</u> Upgrade?	Anticipated Conditional <u>Award</u> (Round 1)
I-25	Wellington - Wyoming Border	Poudre Valley REA	New	New
I-25	Pueblo - Trinidad	San Isabel Electric Association	New	New
I-70	Utah Border - Grand Junction	Grand Valley Power / Xcel Energy	New	New
I-70	Grand Junction - Rifle	Grand Valley Power / Xcel Energy	New	New
I-70	Aurora - Flagler	CORE Electric Cooperative / Mountain View Electric Association	New	New
I-70	Flagler - Kansas Border	KC Electric Association	New	New
I-76	Commerce City - Fort Morgan	United Power / Morgan County REA	New or Upgrade	
I-76	Fort Morgan - Julesburg	Highline Electric Association	New	
I-270	Commerce City - Denver	Xcel Energy	New	
US 34	Granby - Grand Lake	Mountain Parks Electric	New or Upgrade	
US 34	Loveland - Kersey	Poudre Valley REA	New or Upgrade	
US 34	Kersey - Fort Morgan	Poudre Valley REA / Morgan County REA	New or Upgrade	



US 36	Lyons - Estes Park	Poudre Valley REA / Town of Lyons / Town of Estes Park	New or Upgrade	New
US 40	Dinosaur - Craig	Moon Lake Electric Association / Yampa Valley Electric Association	New or Upgrade	New
US 40	Craig - Steamboat Springs	Yampa Valley Electric Association	New or Upgrade	Upgrade
US 40	Steamboat Springs - Kremmling	Yampa Valley Electric Association / Mountain Parks Electric Association	New or Upgrade	Upgrade
US 40	Kremmling - Idaho Springs	Mountain Parks Electric Association / Xcel Energy	New or Upgrade	New
US 50	Montrose - Gunnison	Delta Montrose Electric Association / City of Gunnison	New or Upgrade	
US 50	Gunnison - Salida	Gunnison County Electric Association / Xcel Energy	New or Upgrade	
US 50	Salida - Cañon City	Xcel Energy / Sangre de Cristo Electric Association / Black Hills Energy	New or Upgrade	
US 50	Cañon City - Pueblo	Black Hills Energy / San Isabel Electric Association	New or Upgrade	
US 50	Pueblo - Fowler	Black Hills Energy	New	
US 50	Fowler - Las Animas	Black Hills Energy / Southeast Colorado Power Association / City of Las Animas	New or Upgrade	
US 50	Las Animas - Lamar	City of Las Animas / Southeast Colorado Power Association / City of Lamar	New or Upgrade	
US 50	Lamar - Kansas Border	Southeast Colorado Power Association	New	New
US 160	New Mexico Border - Cortez	Empire Electric Association	New	New
US 160	Cortez - Durango	Empire Electric Association / La Plata Electric Association	New or Upgrade	New



US 160	Durango - Bayfield	La Plata Electric Association	New	New
US 160	Bayfield - Pagosa Springs	La Plata Electric Association	New	New
US 160	Pagosa - South Fork	La Plata Electric Association / San Luis Valley REC	New or Upgrade	
US 160	South Fork - Alamosa	San Luis Valley REC / Xcel Energy	New or Upgrade	
US 160	Alamosa - Fort Garland	Xcel Energy	New	
US 160	Fort Garland - Walsenburg	Xcel Energy / San Isabel Electric Association	New	
US 285	Englewood - Bailey	CORE Electric Cooperative	New or Upgrade	
US 285	Bailey - Fairplay	CORE Electric Cooperative / Xcel Energy	New or Upgrade	
US 285	Fairplay - Buena Vista	CORE Electric Cooperative	New or Upgrade	
US 285	Buena Vista - Poncha Springs / Salida	Sangre de Cristo Electric Association / Xcel Energy	New or Upgrade	New
US 285	Poncha Springs / Salida - Saguache	Xcel Energy / San Luis Valley REC	New	New
US 285	Saguache - Monte Vista	San Luis Valley REC	New	
US 285	Alamosa - New Mexico Border	Xcel Energy / San Luis Valley REC	New or Upgrade	
US 287	Wyoming Border - Ft. Collins	Poudre Valley REA	New or Upgrade	New
US 287	Fort Collins - Longmont	City of Fort Collins / Poudre Valley REA / City of Longmont	New or Upgrade	
US 287	Kit Carson - Lamar	KC Electric Association / Southeast Colorado Power Association	New	New
US 287	Lamar - Springfield	Southeast Colorado Power Association / City of Lamar	New	New



US 287	Springfield - Oklahoma Border	Southeast Colorado Power Association / City of Springfield	New	New
US 385	Julesburg - Holyoke	Highline Electric Association	New	
US 385	Holyoke - Wray	Y-W Electric Association	New	New
US 385	Wray - Burlington	Y-W Electric Association / KC Electric Association	New	New
US 385	Burlington - Cheyenne Wells	KC Electric Association	New	New
US 550	Montrose - Ouray	Delta Montrose Electric Association / San Miguel Power Association	New or Upgrade	
US 550	Ouray - Purgatory	San Miguel Power Association	New or Upgrade	
US 550	Purgatory - New Mexico Border	La Plata Electric Association	New or Upgrade	New



Upgrades of Corridor Pending Designations to Corridor Ready Designations



Publicly Accessible Electric Vehicle Fast-Charging Network Within 1 Mile of Alternative Fuel Corridor (AFC) - Gap Analysis

Figure 10: Current status of existing NEVI-compliant and NEVI non-compliant alternative fuel corridors as of July 2023

The first priority for Colorado's NEVI Program implementation will focus on filling major charging gaps along its four designated Interstates through the construction of new NEVI-compliant charging locations and upgrade of existing, non-compliant sites. Initial analysis indicates that there are at least nine such gaps along I-25, I-70, I-76, and I-270. In reviewing applications for new NEVI-compliant charging projects, strong preference will be given to those located within and supported by residents of disproportionately impacted communities identified using the Justice40, EnviroScreen, and Colorado EV Equity Plan mapping tools. Initial analysis indicates that in at least four of the nine identified Interstate gaps there are strong opportunities to fund projects located in disproportionately impacted communities and CDOT and CEO will work with community members and developers to encourage proposals from these areas



NEVI - Interstate Gap Analysis

DCFC Within 1 Mile of Alternative Fuel Corridor (AFC)

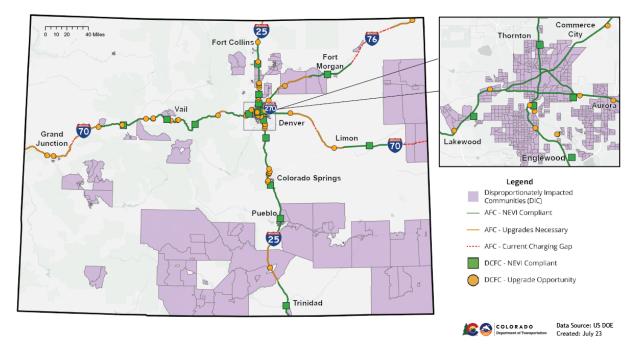


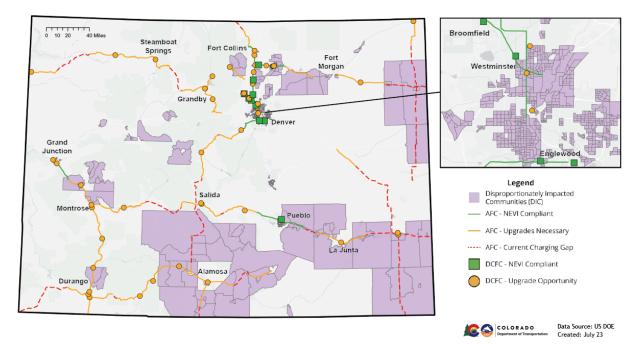
Figure 11: Current status of existing NEVI-compliant and NEVI non-compliant DCFCs along Colorado interstate alternative fuel corridors as of July 2023

The second priority for Colorado's NEVI Program implementation will focus on filling charging gaps along the state's nine designated US highways through the construction of new NEVI-compliant charging locations and upgrade of existing, non-compliant sites. Initial analysis indicates that there are more than 40 such gaps along US 34, US 36, US 40, US 50, US 160, US 285, US 287, US 385, and US 550. As with projects along designated Interstate corridors, in reviewing applications for new NEVI-compliant charging projects along US highways, a strong preference will be given to those located within and supported by residents of disproportionately impacted communities. CDOT and CEO staff will work to analyze identified gaps to determine how many of them present the opportunity to site projects in disproportionately impacted communities and will work with community members and developers to encourage proposals from these areas.



NEVI - US Highway Gap Analysis

DCFC Within 1 Mile of Alternative Fuel Corridor (AFC)



<u>Figure 12</u>: Current status of existing NEVI-compliant and NEVI non-compliant DCFCs along Colorado highways alternative fuel corridors as of July 2023

The third priority for Colorado's NEVI Program implementation will be to invest NEVI funds in augmenting fully built-out corridors with additional station construction or upgrades intended to meet growing charging demand that can support both highway travelers and local residents who may not have home charging access. These areas will be identified based on usage rates at existing DCFC locations, vehicle registration rates, and input from community and industry stakeholders. Funding will also be made available to MHD-specific charging projects in areas where current and anticipated demand justifies such investments.

Increases of Capacity / Redundancy Along Existing AFCs

While a major national focus of the NEVI Program is to fund projects filling 50-mile charging gaps along designated corridors, it will also be important to consider future demand in areas with anticipated high utilization. Therefore, CDOT and CEO will require grantees to future-proof project sites by installing additional conduit, transformer capacity, and physical space for expansion when utilization makes this necessary. Colorado will also consider requiring or incentivizing grantees to construct new or upgraded charging locations to surpass the NEVI standard in terms of number and power level of chargers in order to keep pace with anticipated future demand and advances in charging speed for future vehicles coming to market.

Freight and Commercial Vehicle Considerations

While the NEVI Program is intended to support regional and interstate travel by light-duty passenger vehicles, the ZEV market for MHD vehicles is also developing quickly, so it is critical to incorporate



program policies and project requirements that facilitate the use of new and upgraded charging locations by a variety of future users, including commercial vehicles. This has become more important as the Colorado AQCC adopted the Advanced Clean Truck (ACT) rule which will require manufacturers of MHD vehicles to sell an increasing share of zero-emission vehicles over time starting in model year 2027. In order to support the future utility of NEVI-funded stations for a wide variety of users, Colorado will consider tools to encourage future-proofing of project locations, power levels, and site design to facilitate future commercial users. This approach may include funding projects co-located at truck stops and intermodal hubs, requiring pull-through designs suitable to trucks, vans, and trailers, and incentivizing site charging capacities beyond the NEVI standard to ease future upgrades to 350kW and beyond.

Public Transportation Considerations

Transit agencies throughout Colorado have been proactive in beginning to transition their fleets to zero emission options through a combination of state, Federal, and Volkswagen Settlement grants. The State of Colorado is actively working to support transit agencies in their planning, procurement, deployment, and performance tracking for transit ZEV projects and expects the number of transit ZEVs to grow from the 67 currently operating in the state to achieve the target of 1,000 by 2030 as expressed in the <u>Transit ZEV</u> <u>Roadmap</u>. While stakeholder engagement and best practice research indicate that most transit agencies prefer to charge in depots overnight, there may be some situations in which transit agencies can benefit from public opportunity charging for vans and shuttle buses. This may especially be the case at park and ride facilities or other high-volume destinations such as universities, hospitals, and airports. Colorado will explore options to require or incentivize transit charging accommodations at specific projects in which such a need is identified in partnership with local communities and transit providers.

In May 2023, CDOT's Division of Transit & Rail (DTR) issued a Notice of Funding Availability (NOFA) which includes a call for application for the first round of Clean Transit Enterprise (CTE) funding for ZEV Transition Planning Grants. There is more than \$1.2 million available for this grant and CDOT actively encourages transit agencies to complete a fleet transition plan to be competitive for federal and state funding. The funding round closed on July 21, 2023 and staff is currently reviewing and scoring applications. Funding in the Vehicle, Charging, and Facility Modifications categories is anticipated to be released in the Fall as part of the DTR Capital call for projects.

State, Regional, and Local Policy

Generally speaking, Colorado has a very supportive policy environment for EV adoption, including the construction and operation of DCFC locations. Through the Colorado Electric Vehicle Coalition (CEVC), the State of Colorado coordinates with regional planning organizations, county and municipal governments, and other key stakeholders to support the development and implementation of streamlined permitting, supportive zoning, and EV-friendly building codes across the state. HB23-1233 was passed in May 2023, further bolstering the efforts of the CEVC by requiring the state electrical board and local governments to support the implementation of EV infrastructure where necessary, among other requirements and authorizations. Colorado will continue to work with interested parties in making project development more efficient and cost effective in order to deliver the maximum benefits from the NEVI Program.

Implementation

CDOT has experience in supporting the deployment of EV charging stations through close collaboration with CEO in the Charge Ahead Colorado (CAC), DC Fast-Charging Corridors, and DC Fast-Charging



Plazas programs, and the best practices developed through these past efforts will be applied to implementation of the NEVI Program. As such, CDOT will incorporate all NEVI funding into the DCFC Plazas program. Similarly, the State of Colorado does not seek to own or operate EV charging stations outside of its own fleet facilities, but rather will contract with third parties through a competitive process. Selected vendors will be required to share data with the State in order to measure the effectiveness of the program and to maximize efficiency over the lifetime of the charging sites. To maximize participation in rural and disproportionately impacted communities, ongoing outreach and engagement with EV charging providers, utilities, potential site hosts, and related stakeholders will be conducted to ensure that charging installations meet local community needs in addition to those of statewide and interstate travelers.

Strategies for EVSE Operations & Maintenance

Electric vehicle charging operations are complex, with uptime being a critical challenge for EVSE providers. Providers will need to know about any issues with charging operations in real-time to prevent lost revenue and avoid unsatisfactory driver experiences. To minimize downtime, a real-time operational feed for charging operations should be made available for the public that includes current availability of chargers and parking spaces. Contracts will include minimum requirements for operations and maintenance, including achieving a network uptime of 97 percent or greater, and grantees will be required to meet all Federal and state requirements. CDOT and CEO will also investigate whether service level agreements (SLAs) between equipment providers and site operators are a viable tool for supporting station reliability, and develop future program guidance accordingly. Ultimately, grantees will be responsible for station maintenance and repair, and for ensuring that resources are available to conduct regular inspections and diagnose problems in a timely manner throughout the five-year NEVI operational period. Recognizing that uptime is just one metric for measuring performance, Colorado will also consider developing separate metrics for customer satisfaction to be integrated into grantee reporting requirements.

Strategies for Identifying Electric Vehicle Charger Service Providers and Station Owners

CDOT and CEO will select vendors through a competitive solicitation process. The state will establish a robust process to solicit and evaluate vendor proposals, including criteria that support projects in disproportionately impacted communities, projects in rural areas, and site design elements that support MHD vehicle usage and future expandability. Colorado will seek to award multiple vendors in the early years of the program as a means of evaluating the equipment performance, customer service, and technology features over time. User feedback and case studies will be used as a means of improving subsequent phases of Colorado's NEVI Program. CDOT and CEO will offer additional solicitations in late 2023 and in 2024. Programmatic updates and adjustments will be made to ensure the program is responsive to an evolving market.

Strategies for EVSE Data Collection & Sharing

CDOT and CEO will collect data on the usage of the EV charging stations for performance measurement and report to the Joint Office on a quarterly and annual basis to measure program progress. In order to enable data sharing with third parties, selected vendors will be required to provide real-time availability of each plug through an open API. At a minimum, the data collected will include:

- Charging station location
- Connector type
- Power level



- Availability status
- Charging station uptime
- Pricing
- ADA accessibility

Contracts with vendors will also include requirements to provide anonymized usage data. This data will help CDOT and CEO understand the utilization of charging infrastructure in Colorado, help the state identify where more infrastructure might be needed, and quantify the air quality and emissions benefits of current and potential future investments. Wherever possible, data collection requirements and reporting cadence will be aligned with federal standards and other states to minimize the burden on grantees and produce consistent and comparable results to support data analysis and inform programmatic improvements.

The Joint Office of Energy and Transportation (Joint Office) will be releasing the EV-Charging Analytics and Reporting Tool (EV-ChART) in early 2024. EV-ChART is a web-based centralized hub for submitting EV charging infrastructure data under 23 CFR 680.112. The goal of this tool is to provide a streamlined data submission process and an integrated set of analytics tools, connect to other data sources, and empower data sharing and access among stakeholders, including the public. Colorado will consider participating in the pilot group of EV-ChART users and assist with refinement of the functionality and user experience of the tool. This tool will allow vendors to submit data directly to the Joint Office and allow the state to gain access to the dashboard which will be shared with the public.

Strategies to Address Resilience and Emergency Evacuation

Maintaining and strengthening the resilience of the state transportation system in the face of both natural and human-caused disasters has been a growing area of focus for CDOT and other state agencies for nearly a decade. Since 2013, Colorado has experienced major flooding, increasingly frequent and destructive wildfires, rockfall, avalanches, ransomware cyber attacks, and a global pandemic. Each of these events created sudden and unpredictable impacts on Colorado's transportation network that required a short-term, reactive response but also inspired staff and leadership to consider long-term, proactive approaches to mitigating future risks. One result of this is the creation of the <u>CDOT Resilience Program</u>.

The deployment of EV charging infrastructure across the state and country will create new opportunities for mobility, sustainability, and economic development, but it will also create new areas of risk. As the electrical grid becomes more closely integrated with the transportation system, disruptions occurring in one system may more quickly spread to the other. Increased reliance on electricity as a fuel may expose CDOT, fleet managers, transit agencies, and the general public to risks that they formerly did not have to consider and currently have little ability to address. Likewise, those who manage the electric grid and respond to unexpected incidents may not yet fully comprehend the implications that their decisions will have in the transportation sector. Overall, more understanding and points of connection will need to be built between the utility and transportation communities to effectively manage this new landscape.

In Colorado, CDOT <u>Policy Directive 1905.0 "Building Resilience into Transportation Infrastructure and</u> <u>Operations</u>" directs the Department to incorporate resilience into strategic decisions about transportation assets and operations. To accomplish this goal, staff have developed a 4R framework for evaluating individual assets or entire systems in terms of their Robustness, Redundancy, Resourcefulness, and Rapidity, a process which helps staff to identify the actions they can take to mitigate risk in each of these areas. CDOT also developed an Asset Resiliency Mapping Tool that overlays current transportation assets and future project locations with geospatial data on a number of risk factors, such as 100- and 500-year flood plains, wildfire risk, avalanche paths, geohazard areas, and more. This tool can be used to quickly determine whether a proposed project falls within one or more risk zones, and if so, whether the risk can



be mitigated in that location or lessened by selecting an alternative site. In the case of the NEVI Program, this will allow the State to work with private or public sector partners on siting charging infrastructure in areas with less probability of future disruption.

Another lens developed by CDOT staff for considering transportation resiliency in project selection is <u>criticality</u>, which shifts the focus from a specific asset or location to the system level. Criticality is a multifactor score that assesses the importance of a given asset to the functioning of the transportation system as a whole. Segments of highway or individual assets with high criticality scores therefore represent key points in which localized failure can have much broader impacts. The six, equally-weighted criteria that contribute to the criticality score are Average Annual Daily Traffic (AADT), American Association of State Highway and Transportation Officials (AASHTO) Roadway Classification, Freight Value per Ton, Tourism Dollars Generated, Social Vulnerability Index (SoVI), and System Redundancy. Each criterion is scored on a scale of one to five to determine the overall Criticality score, which seeks to represent the severity of potential impacts on a given roadway segment in terms of local residents, other Colorado travelers, tourists, and the freight industry.

In the case of the NEVI Program, these are all important considerations, and System Redundancy may be especially relevant given the still-partial buildout of the state DC fast-charging network. Road closures in Colorado can result in detours that can add hundreds of miles and several hours to a more direct trip. While these are frustrating to any traveler, EV users may face additional barriers if the identified alternative route does not have adequate fast-charging to support them. Therefore, the State of Colorado will work to incorporate the Criticality metric and, more broadly, the concept of charging network redundancy into NEVI project selection processes. They will be aided in this by the Detour Identication Tool and Risk & Resiliency Project Scoring Tool, both developed by CDOT staff. Overall the integration of NEVI projects, and EV charging projects more generally, into Colorado's broader transportation resiliency framework will ensure that EV users are able to adapt to changing roadway conditions as easily as other travelers, encouraging safe and seamless electric mobility for all Coloradans.

Strategies to Promote Strong Labor, Safety, Training, and Installation Standards

Colorado has been engaged in the topic of workforce development for the zero-emission vehicle market for several years now, based in large part on feedback from stakeholders and fleet managers concerned about a potential lack of trained ZEV mechanics and EVSE technicians. Since 2021, CDOT has collaborated with staff from CEO, CDPHE, the Colorado Department of Labor & Employment (CDLE), and other relevant stakeholders to host a ZEV Workforce Development working group to explore and act on these topics. Some initial outcomes include the ongoing development of an EV and Hybrid Automotive Technician certificate program to be offered by the Colorado Community College System (CCCS) and the scoping of a Medium- and Heavy-Duty ZEV Workforce Needs Analysis to be conducted by the Colorado Workforce Development Council (CWDC). In November 2022, CDOT released the NOFA for a state-funded grant program to support new ZEV workforce development projects. The purpose of the grant is to develop the skills and talent necessary to meet the changing demands of an electrified transportation sector by funding innovative workforce projects across the state. The first round of the ZEV Workforce Development grants were awarded in February 2023, providing \$750,332 to eight projects around Colorado. CDOT will continue supporting this program and will explore opportunities to leverage NEVI funding against these dollars to maximize overall impact.

For the NEVI Program, CDOT may add certification, training plans, and workforce safety commitments as a criteria for vendor evaluation in the selection process. Selected vendors will be required to comply with local codes, OSHA safety standards, the National Electric Code and other safety and training requirements and best practices. Although labor and workforce training will typically be provided by



vendors themselves, in order to ensure that Colorado's workforce is prepared to install and maintain EV infrastructure safely, effectively, and equitably, the state will seek input from workforce development groups, community colleges, and other relevant stakeholders in monitoring and evaluating current labor, safety, training, and installation standards over time. This effort will include identifying gaps in training for Colorado's workforce and working collectively to address them. Quarterly workforce training and certification reports may be required to help the state understand the current status of workforce needs.

Civil Rights

In implementing the NEVI Program, CDOT will work with CEO and grantees to ensure full compliance with Title VI of the Civil Rights Act of 1964 (Title VI) and the Americans with Disabilities Act (ADA).

Title VI

Title VI prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. As described in CDOT's Policy Directive 604.0 on Non-Discrimination, CDOT is committed to achieving full compliance with Title VI and all related non-discrimination laws. As part of the directive, CDOT has developed a Limited English Proficiency (LEP) Plan to improve access to services for Coloradoans with limited English proficiency.

ADA Compliance

ADA prohibits discrimination against individuals with disabilities in all areas of public life. Projects completed through State of Colorado programs will be required to incorporate accessible design standards to ensure that charging is available and accessible to all drivers. Colorado's current accessibility design guidance states that 5 percent of parking stalls (and no fewer than one parking stall) must adhere to the accessible design standard put forth by the U.S. Access Board. On July 21, 2022 the U.S. Access Board released Design Recommendations for Accessible Electric Vehicle Charging Stations, which reviews existing requirements and new recommendations for making EV chargers accessible to all users. Colorado will continue to update and refine its accessibility design standards in keeping with developing federal guidance and feedback from stakeholders and the general public to ensure that all Coloradans have safe and convenient access to EV charging across the state.

Equity Considerations

One of the most cited barriers to EV adoption is a lack of available EV charging infrastructure, and this issue is especially prevalent for those who do not own their own home or who reside in multifamily housing, since these individuals are less likely to have a dedicated parking space or access to shared EV charging equipment. For those without home charging, the availability of public charging stations, particularly DC fast chargers, is critical for enabling EV ownership. That said, access to charging infrastructure is just one barrier to EV usage, so CDOT and CEO will continue to work with their partners and stakeholders to develop a holistic set of strategies to increase access for those living in disproportionately impacted communities. Ensuring that low-income and disproportionately impacted groups have equitable access to the benefits of electrified mobility is fundamental to accelerating EV adoption in the state and building a more just mobility future.

In 2021, Governor Polis signed House Bill 21-1266 (HB21-1266), the Environmental Justice Act, into law and established the Environmental Justice Action Task Force (EJATF). The Environmental Justice Act commits to strengthening environmental justice and prioritizes reducing environmental health disparities in disproportionately impacted communities. This task force consists of state officials and leaders from environmental justice organizations to develop guidance and outreach tools in most impacted



communities. In November 2022, the task force published its <u>final recommendations</u> to advise state agencies on best practices for engaging disproportionately impacted communities and to strengthen our work in environmental justice efforts. These recommendations include strengthening the voices of tribal nations in Colorado, offering new models of community engagement, and incentivizing community members for their expertise. Additionally, CDPHE as the leading agency to execute these recommendations will adopt a program for centralized Environmental Equity and Cumulative Impacts Analyses (EECIA) as outlined in the EJATF action items. This equity and impact assessment will be created and updated by independent third-party consultants or academic institutions. All state agencies that make decisions that impact the environment are highly encouraged to use and implement the equity analyses program for decision making, including in permitting, rulemaking, and funding decisions.

CDOT will prioritize the following recommendations from the Environmental Justice Act Task Force as they are related to to the NEVI Program:

- As CDPHE Environmental Justice Staff takes on the lead role in coordinating EJ efforts across agencies, CDOT will coordinate with them and other state agencies to combine outreach efforts. This action will help prevent overburdening communities.
- CDOT will provide updates to state agencies' staff members on NEVI Program updates and other electrification efforts in the state.
- CDOT will use Environmental Equity & Cumulative Impacts Analyses (EECIA) to identify and co-create Justice40 metrics and impact assessment with communities for the NEVI Program.
- CDOT will share relevant data and collaborate on mapping efforts, specifically through the NEVI Project Planning Resource Map and the EV Equity Dashboard and Prioritization Tool.
- CDOT will use the updated definition of Disproportionately Impacted Community recommended by the task force. As new definitions and criteria continue to be developed by different state agencies, CDOT will add these layers to CEO's Enhanced Incentive Screening Tool. This tool shows enhanced incentives for Income Qualified (IQ) projects and Disproportionately Impacted (DI) communities based on address.
- CDOT will refer to recommended best practices, including capacity building, participation incentives, improved accessibility, culturally sensitive messaging, and removal of language barriers, for community engagement efforts where possible.

Hence, programs and policies that support EV equity are already under development in Colorado, as the state is committed to centering equity in all of its transportation electrification programs. In addition to following recommendations from the Environmental Justice Act Task Force, CDOT will conduct outreach efforts and activities to encourage greater program benefits and participation by underrepresented groups including minority, women, disabled, low-income, and rural communities. Understanding the challenges and needs of these communities is critical and CDOT will work with community leaders to provide the necessary opportunities to engage and provide input in the siting, design, and operation of charging locations funded through the NEVI Program.

Colorado's approach to promoting equitable NEVI Program outcomes will continue to evolve over time as individual participants' understanding grows and new processes are developed and refined. As community needs and mobility technologies change, regularly revisiting the process and its outcomes will be vital. Hence, outreach and engagement strategies will be part of an iterative process to ensure that local concerns are being addressed, funded projects are directly benefiting DI communities, and new opportunities are being created for individuals who wish to participate in the electrified mobility economy in Colorado.



Identification and Outreach to Disadvantaged Communities (DACs) in the State

In keeping with the NEVI Guidance provided by the Joint Office, CDOT and CEO will use the Electric Vehicle Charging Justice40 Mapping tool created by Argonne National Laboratory to identify disadvantaged communities (DACs) in the state and prioritize the investment of NEVI funds in these areas.

Aligning with other efforts in Colorado, CDOT will supplement DAC identification with state-developed equity tools. Through the Colorado EV Equity Study, CEO developed the EV Equity Dashboard and prioritization tool to help identify priority areas based on socioeconomic and transportation factors. Similarly, the <u>EnviroScreen</u> tool developed by CDPHE summarizes data at the census block group level, categorizing communities based on important characteristics such as geographic, socioeconomic, and health-related factors. CDPHE is also currently developing an interactive environmental justice mapping tool that meets the state Environmental Justice Act's definition of disproportionately impacted communities based on demographic factors. These tools will be used to complement the Federally-mandated Justice40 Mapping Tool to help identify DAC and Justice40 communities.

In 2021, the Governor signed Senate Bill 21-260 which established more than \$5 billion over ten years toward Colorado's transportation system. This included more than \$730 million toward transportation electrification, allocated through three new enterprises - the Clean Transit Enterprise established at CDOT, Community Access Enterprise established at CEO, and Clean Fleet Enterprise established at CDPHE. Together these enterprises held more than a dozen stakeholder meetings in the Spring of 2022 for the purposes of developing their 10 year enterprise plans which outline how each enterprise will use its revenue to execute its business purpose. Several of these meetings were specifically focused on equity, and some of the key takeaways from the meetings included:

- Importance of coordination between different stakeholders
- Maximize statewide air quality benefits while also considering public health, economic development, and GHG reductions in disproportionately impacted communities
- Focus on filling gaps not met by other programs

Building upon learnings from previous engagement efforts, CDOT identified the following target groups to help guide Justice40 and DAC initiatives:

- Low-income individuals
- People of color
- Individuals with disabilities
- Older adults
- Linguistically isolated communities
- Rural communities
- Environmental justice advocacy groups
- Workforce development organizations
- Public transit organizations

Best practices identified in the EV Equity Study indicate that equitable transportation electrification can only be achieved by being mindful that certain communities have unique and substantial obstacles in adopting electrification, whether driven by historical treatment, adverse environmental impacts, or socioeconomic factors. It is also critical that outreach and engagement with these groups occurs using relevant language and cultural context. CDOT and CEO will strive to make participation in the NEVI Program development and implementation culturally and linguistically accessible, relatable, and appropriate for the public. As such, CDOT will work to provide interpretation and translation of program



materials in other languages as requested by community partners. Colorado will also seek opportunities to identify and employ innovative stakeholder engagement tools, including options for compensating community members for their time spent in planning activities and integrating community participation into the project scoping and selection process. Finally, CDOT and CEO staff will seek to collaborate with local communities to define the metrics used to measure community benefit and then track and report these accordingly to ensure that expectations are met over the course of project development and implementation.

Process to Identify, Quantify, and Measure Benefits to DACs

Colorado's NEVI Plan implementation will ensure that at least 40 percent of the benefits of NEVI funding accrue to DACs, including individuals with disabilities, rural residents, and people characterized as being underserved as outlined by the Justice40 Initiative in Executive Order 14008 and the NEVI guidance.

As part of the Colorado EV Equity Study, CEO developed an eight-step process toolkit that can be used to help support equitable outcomes in transportation electrification projects. The process includes engaging with stakeholders, defining goals and outcomes, identifying assets and deficiencies, incorporating community-grounded indicators, modifying program design based on feedback, reviewing progress with the community, evaluating program effectiveness, and reporting back to the community. These processes will assist the state in reaching middle-income buyers and DACs to achieve EV adoption goals and GHG reduction targets. CDOT and CEO will follow this toolkit to work with DACs in identifying and quantifying benefits of the NEVI Program.

CDOT is committed to measuring the benefits of the NEVI Program by utilizing both quantitative and qualitative indicators that will be developed based on community needs and prioritizations. For example, on the most direct level, measuring DAC benefits may include quantifying the amount and percentage of NEVI funding invested within the boundaries of Justice40 areas, but other qualitative metrics such as education and outreach activities may also be tracked as a means of measuring trust-building or increased employment opportunities within the community. CDOT and CEO will remain open to additional benefit measurement recommendations from partner communities and also work to integrate evolving national standards established by the Joint Office for continued improvement in measuring the benefits of the NEVI Program in Colorado.

NEVI Plan Benefits to DACs

The anticipated benefits of Colorado's NEVI Plan include both direct benefits such as the number and dollar value of infrastructure projects located within Justice40 boundaries, as well as indirect benefits such as clean energy job creation related to infrastructure installation and maintenance. NEVI funds can also be used for job training which could provide upward mobility for residents of DACs.

In an effort to advance Justice40 initiatives, the DCFC Plazas Grant Program, in which NEVI funding is incorporated, provides additional incentives and reduces match requirements for qualified projects in disproportionately impacted communities. The program also provides preferential scoring for projects incorporating innovative strategies to address equity and community engagement. In early July 2023, CDOT released a survey soliciting feedback from the public regarding questions related to the NEVI Plan and the DCFC Plazas Program. Two of the survey questions were directly related to Justice40, requesting public input on what metrics the state should use to track benefits and suggested some key benefits. Below are some benefits that CDOT and the public identified and potential metrics.



Benefits Category	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Increase clean energy job pipeline and job training for individuals from DACs	 Number of ZEV Workforce development grants awarded Number of people in DAC trained through ZEV workforce development grants Program
Increase transportation access in DACs	 Number of chargers places in DAC communities Qualitative survey on ease of access to different modes of transport in DACs
Enable EV ownership and corresponding operating cost savings in DACs	• EV registration in DACs
Increase funding for clean energy projects in DACs	• Number of clean energy projects funded in DACs
Enhance community energy resiliency, decarbonization, and diversification	• TBD
Decrease transportation costs in DACs	• TBD
Decrease exposure to pollutants and environmental burdens in DACs	• Quantify GHG emissions reductions in DACs



Minimize gentrification-induced displacement resulting from new EV charging infrastructure.	 Number of outreach and education programs in DACs to prevent gentrification-induced displacement resulting from new EV charging infrastructure Qualitative survey on community's acceptance of EV infrastructure
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CDOT will continue to co-create and track Justice40 metrics with community members in order to measure progress on reducing environmental and health impacts in the community as well as measure the economic benefits of the program.

Labor and Workforce Considerations

In May 2019, Governor Polis released the <u>Roadmap to 100% Renewable Energy by 2040 and Bold</u> <u>Climate Action</u> with a goal of establishing Colorado as a leader in the clean energy economy, including high-quality education and training, high-paying jobs, and protecting Colorado's environment.

According to the <u>Clean Jobs Colorado 2021 Report</u> produced by E2, the energy sector is described as one of Colorado's largest employers, accounting for about 150,000 workers in jobs in nearly every county in the state. Colorado employment projections for EV charger installation, maintenance, and repair have an average growth rate of 1.63 percent over ten years (2020-2030), and currently these occupations have an estimated 12,094 annual openings. In 2021,the passage of House Bill 21-1149 (HB21-1149) authorized the creation of an Energy Sector Career Pathway to be integrated into the state's educational support platform, called <u>My Colorado Journey</u>.

As EV adoption grows and the build-out of charging infrastructure increases, the demand for an in-state EV workforce and associated training programs will increase as well. Having a coordinated workforce development plan is key to ensuring Coloradans are prepared for new and in-demand jobs and empowered to participate in the continued economic growth of the state. In order to remain ahead of this industry shift, CDOT created a ZEV Workforce Development group to address the training and skill sets needed for this transition. Since May 2021, CDOT has been working with partner agencies and key stakeholder groups (including Colorado Department of Labor and Employment, Colorado Department of Higher Education, Colorado Department of Public Health and the Environment, Colorado Department of Local Affairs, Colorado Energy Office, Colorado Community College System, automotive dealerships, automotive repair shops, and fleet managers) to determine what kind of programmatic and financial support is needed in order to develop a robust electric vehicle workforce in Colorado. As needs and opportunities are identified, State of Colorado staff will assess where and when NEVI funding may play a useful role in addressing them.

Electrical workers, maintenance technicians, and installers will be needed to serve this new industry. In June 2022, the Joint Office released proposed minimum standards for EV charging that emphasize strong workforce standards such as the Electric Vehicle Infrastructure Training Program (EVITP) to increase the safety and reliability of chargers while creating and supporting good-paying, highly-skilled union jobs in communities across the country. Currently there are <u>17 EVITP</u> certified contractors in Colorado and CDOT will continue working with its partners to promote EVITP training and certification opportunities, as well as other pathways for participation in the emerging ZEV economy. Training and upskilling will build quality jobs for women, people of color, and underserved workers including those from rural and



tribal communities. In order to support an equitable landscape of opportunity for this developing workforce, CDOT will prioritize support to DACs in anticipated future grant programs to support training opportunities, apprenticeship programs, equipment purchases, and scholarships.

In an effort to advance the state goal and to proactively address ZEV Workforce development needs, CDOT developed the Zero Emission Vehicle (ZEV) Workforce Development Grant to support workforce training and development focused on ZEVs, ZEV infrastructure, and ZEV-related commercial technologies. The purpose of this grant is to develop the skills and talent necessary to meet the changing demands of the transportation electrification sector. This grant addresses multiple challenges that Colorado and the wider mobility and electrification industry are facing: talent shortages, gap in new skillsets, and the growing need for training due to technology advances. In February 2023, CDOT announced the awardees for the first round of the ZEV Workforce Development grants investing \$750,332 to eight projects around Colorado. To ensure an inclusive, equitable, and accessible workforce transition, projects were evaluated based on equity, local impact, and how it benefits disproportionately impacted communities. The state agencies will continue to fund supportive services to boost workforce recruitment, training, and retention and specifically in rural and tribal communities.

In order to understand the scale, impact, and type of jobs needed to meet Colorado's ZEV goals and to develop a strategy in addressing the skills gap in workforce, CDOT is partnering with the Colorado Department of Labor and Environment (CDLE) and the Colorado Workforce Development Council (CWDC) to conduct a statewide ZEV workforce needs analysis. The analysis will forecast the workforce supply and demand in Colorado's ZEV market, as well as identify gaps in the workforce capacity, skills, education, geographic distribution, age, diversity, and wages. To ensure an equitable workforce transition, the study will include opportunities in upskilling and building quality jobs for women, people of color, and underserved communities.

In addition to adhering to the NEVI Guidance, CDOT and CEO will evaluate and incorporate other workforce policies as suitable. The State of Colorado may require or incentivize the inclusion of workforce impact assessments as part of project proposals and will explore the option of integrating Community Benefit Agreements (CBAs) into grantee contracts as a means of encouraging community hiring and workforce development.

Cybersecurity

In order to maintain a reliable EV charging ecosystem that protects consumers and the national electricity grid, grant awardees must secure connected EV charging infrastructure against possible cyberattacks. This includes, but is not limited to, protecting physical charging infrastructure, the EV Charging Station Management System (EVCS) and web applications from unauthorized physical or remote access. Grant awardees are required to comply with NIST 800 (<u>https://csrc.nist.gov/publications/sp800</u>) series standards before, during, and after completion of NEVI station construction or a comparable cybersecurity standard to ensure protection of the charging stations and users.

NEVI grant recipients will be required to protect against and actively monitor for:

- Firmware manipulation
- Billing manipulation
- Bot recruitment and network proxy
- Denial of Service (DoS) attacks
- Charging data/record theft
- Personally identifiable information leakage
- Payment fraud



• Demand-supply manipulation attacks (synchronized charging demand/discharge supply disruption)

Applicants for NEVI funding managed by the State of Colorado will be required to submit a cybersecurity plan detailing their approach to this threat as well as how they will respond to potential incidents, including reporting to the State of Colorado if and when such events occur. Grantees will be expected to maintain and update their cybersecurity plans over the life of the program and, upon request, demonstrate that it remains effective and is being followed to ensure that the NEVI investment and interests of the traveling public are being protected.

Program Evaluation

Historically, projects funded through State of Colorado grant programs have been required to report data for a period of between five and ten years via one of two avenues – either in writing at six month reporting intervals, or through direct read-only data access to the charging stations themselves. This data has been critical to Colorado agency staff as they seek to measure program benefit, identify sites with high utilization for potential expansion, and quantify air quality benefits based on usage. For projects funded via the NEVI Program, Colorado will continue the practice of collecting data from site hosts and incorporate this as a requirement in all grantee agreements established as a part of this program. Since 2021, Colorado has posted reports to an aggregated dashboard of charging station and electric vehicle data called <u>EValuate CO</u> at six month intervals, and CEO staff will continue this practice as NEVI-funded projects become operational in future years.

Discretionary Exceptions

The ability for Colorado to seek discretionary exceptions to the standard NEVI requirements on spacing between infrastructure deployments and distance from a designated corridor may be an important tool given the geographic, economic, and demographic realities in the American West. Many states, including Colorado, include US highway and Interstate routes that serve as critical regional connections but simultaneously have low population density and few communities able to host the type of robust charging facility that NEVI standards require. Attempting to cite major projects in these areas will likely result in high cost, low-usage deployments of infrastructure that can better serve public charging needs elsewhere. The exception process will help to prevent situations in which meeting the exact letter of the NEVI Program guidance fails to support the actual spirit and larger intent of the program.

Colorado received applications for more than 900 EV chargers spread across the entirety of the state, including some of the more rural corridors on the Eastern Plains. Given the strong responses, CEO and CDOT intend to allow the market to respond over multiple funding rounds before making any decisions regarding exceptions for the 50-mile spacing requirement.

Separate from the 50-mile spacing requirement along a designated corridor, there are likely to be several areas in Colorado — especially on the Eastern Plains — in which the distance between an Interstate or highway exit and the closest inhabited community is greater than the 1-mile distance required by the NEVI Program. For instance, the City of Julesburg is located along I-76, beyond an existing NEVI-compliant station in Fort Morgan and close to the Colorado-Nebraska border. As such it presents a natural stopping point for travelers, but the distance between the highway exit and the town itself is more than two miles. Several other communities such as Iliff, Crook, Sedgwick, and Ovid are similarly oriented a short distance from the closest I-76 exit. While some of these communities have areas of commercial development directly adjacent to the highway interchange, others do not, and therefore Colorado may need to submit future discretionary exceptions in order to develop projects that serve these rural



communities.

It is likely that in the process of implementing NEVI-funded programs Colorado will identify other cases in which discretionary exemptions are merited, and agency staff will work with stakeholders and the public to prepare and submit requests for exemptions for consideration by the Joint Office as they arise. However, in the first year of NEVI Program implementation, the State of Colorado will seek to address statewide charging needs without the use of discretionary exemptions. The successes and challenges of this approach will subsequently inform future deployments and help to identify those areas in which discretionary exemptions and other flexible approaches may be merited in future years of the program.

Conclusion

The State of Colorado has been working for many years to support the widespread electrification of the statewide transportation system, and the NEVI Program presents a valuable opportunity to accelerate this progress while broadening EV accessibility to a more diverse set of communities and individuals across the state. The infusion of federal funding with the new NEVI flexibilities to upgrade existing charging locations, support operational expenses for up to five years, and integrate battery storage and renewable energy components, among others, will support a more robust and universal charging network for Coloradans and visitors alike. CDOT, CEO, and other partner agencies are excited to collaborate with stakeholders and the traveling public to develop NEVI-funded programs and offerings that address the unique challenges and opportunities in all Colorado communities as together we build a safe, healthy, and sustainable mobility future for our state and our nation.



Appendix A: Existing DCFCs in Colorado

State EV Location ID	Charger Level (L2, DCFC)	Route	Station Name	Street Address	City	Number of Chargin g Ports	EV Network
121792	DCFC	I-25	Walmart 962 - Trinidad, CO	2921 Toupal Drive	Trinidad	4	Electrify America
235540	DCFC	US-16 0	DMC EV DMC LVL 3 22KWH	1200 Carbon Jct	Durango	1	ChargePoint Network
257794	DCFC	US-16 0	CENTENNIAL PARK PAGOSA SPGS PL1	San Juan River Walk	Pagosa Springs	1	ChargePoint Network
257795	DCFC	US-16 0	CENTENNIAL PARK PAGOSA SPGS PL2	San Juan River Walk	Pagosa Springs	1	ChargePoint Network
259753	DCFC	US-55 0	CITY OF DURANGO DURANGO PL2	250 West 8th Street	Durango	1	ChargePoint Network
259752	DCFC	US-55 0	CITY OF DURANGO DURANGO PL1	250 West 8th Street	Durango	1	ChargePoint Network
231051	DCFC	US-55 0	Durango Outdoor Exchange	3677 Main Ave	Durango	2	EV Connect
196379	DCFC	US-16 0	HION NETWORK ALAMOSA DC2	610 State Ave	Alamosa	1	ChargePoint Network
259824	DCFC	US-16 0	HION NETWORK ALAMOSA PL1	610 State Avenue	Alamosa	1	ChargePoint Network
259825	DCFC	US-16 0	HION NETWORK ALAMOSA PL2	610 State Avenue	Alamosa	1	ChargePoint Network
196303	DCFC	US-16 0	HION NETWORK ALAMOSA DC1	610 State Ave	Alamosa	1	ChargePoint Network
191393	DCFC	US-16 0	WCSA LEVEL 3 ESP250	USFS-391	Pagosa Springs	1	ChargePoint Network
116918	L2,	US-16	San Luis Valley	3625 US	Monte	2, 1	EV Connect

Existing Locations of DCFC Charging Infrastructure



	DCFC	0	Rural Electric Cooperative	Highway 160 W	Vista		
261725	DCFC	US-55 0	PURGATORY PURGATORY PL1	1 Skier Place	Durango	1	ChargePoint Network
261726	DCFC	US-55 0	PURGATORY PURGATORY PL2	1 Skier Place	Durango	1	ChargePoint Network
225701	L2, DCFC	I-25	George's Drive Inn	564 US Highway 85/87	Walsenb urg	2, 1	Non-Networ ked
229066	L2, DCFC	I-25	George's Drive Inn	564 US-84	Walsenb urg	2,1	Non-Networ ked
182045	DCFC	US-16 0	JRM DEL NORTE FAST	595 Columbia Ave	Del Norte	1	ChargePoint Network
260253	DCFC	I-25	CircleK - Colorado City, CA	8950 S I-25	Colorado City	4	CIRCLE_K
260208	DCFC	I-25	SIEA Colorado City	Exit 74 8900, I-25	Colorado City	2	ZEFNET
192875	DCFC	US-50	HION NETWORK LA JUNTA DC2	5 Walmart Way	La Junta	1	ChargePoint Network
255465	DCFC	US-50	HION NETWORK LA JUNTA PL2	5 Walmart Way	La Junta	1	ChargePoint Network
255464	DCFC	US-50	HION NETWORK LA JUNTA PL1	5 Walmart Way	La Junta	1	ChargePoint Network
213326	DCFC	US-50	HION NETWORK LA JUNTA DC1	5 Walmart Way	La Junta	1	ChargePoint Network
260039	DCFC	US-55 0	HION NETWORK OURAY PL2	1230 Main Street	Ouray	1	ChargePoint Network
260040	DCFC	US-55 0	HION NETWORK OURAY PL1	1230 Main Street	Ouray	1	ChargePoint Network
224658	DCFC	US-55 0	HION NETWORK OURAY DC2	1230 Main Street	Ouray	1	ChargePoint Network
186032	DCFC	US-55 0	HION NETWORK OURAY DC1	1230 Main Street	Ouray	1	ChargePoint Network



252179	DCFC	US-28 7	HION NETWORK LAMAR DC2	109 E Beech St	Lamar	1	ChargePoint Network
256392	DCFC	US-28 7	HION NETWORK LAMAR PL1	109 East Beech Street	Lamar	1	ChargePoint Network
252180	DCFC	US-28 7	HION NETWORK LAMAR DC1	109 E Beech St	Lamar	1	ChargePoint Network
256393	DCFC	US-28 7	HION NETWORK LAMAR PL2	109 East Beech Street	Lamar	1	ChargePoint Network
238046	L2, DCFC	US-50	Tri County Ford	7240 HWY 50	Lamar	1, 2	Blink Network
216459	DCFC	I-25	7-ELEVEN PUEBLO 32990PUEBLO DC2	3522 N Elizabeth St	Pueblo	1	ChargePoint Network
216412	DCFC	I-25	7-ELEVEN PUEBLO 32990PUEBLO DC1	3522 N Elizabeth St	Pueblo	1	ChargePoint Network
46545	DCFC	US-50	Dave Solon Nissan	2525 W US Highway 50	Pueblo	1, 1	Non-Networ ked
123686	DCFC	I-25	Sam's Club 6549 - Pueblo, CO	412 Eagleridge Blvd.	Pueblo	4	Electrify America
257137	DCFC	US-50	HION NETWORK CANON CITY PL1	403 Royal Gorge Boulevard	Cañon City	1	ChargePoint Network
227786	DCFC	US-50	HION NETWORK CANON CITY DC2	420 Main St	Cañon City	1	ChargePoint Network
227785	DCFC	US-50	HION NETWORK CANON CITY DC1	420 Main St	Cañon City	1	ChargePoint Network
257138	DCFC	US-50	HION NETWORK CANON CITY PL2	403 Royal Gorge Boulevard	Cañon City	1	ChargePoint Network
238310	DCFC	US-55 0	3480 Wolverine Drive	3480 Wolverine	Montrose	1	RIVIAN_AD VENTURE



			(US-T7P-VTA-2B)	Drive			
238305	DCFC	US-55 0	3480 Wolverine Drive (US-T7P-VTA-2A)	3480 Wolverine Drive	Montrose	1	RIVIAN_AD VENTURE
238309	DCFC	US-55 0	3480 Wolverine Drive (US-T7P-VTA-1C)	3480 Wolverine Drive	Montrose	1	RIVIAN_AD VENTURE
238366	DCFC	US-55 0	3480 Wolverine Drive (US-T7P-VTA-1B)	3480 Wolverine Drive	Montrose	1	RIVIAN_AD VENTURE
238365	DCFC	US-55 0	3480 Wolverine Drive (US-T7P-VTA-1A)	3480 Wolverine Drive	Montrose	1	RIVIAN_AD VENTURE
238306	DCFC	US-55 0	3480 Wolverine Drive (US-T7P-VTA-2C)	3480 Wolverine Drive	Montrose	1	RIVIAN_AD VENTURE
229427	DCFC	US-50	GCEA EV STATION CPE250TEST	16171 CO-92	Gunniso n	1	ChargePoint Network
259954	DCFC	US-55 0	MONTROSE EV 1 MONTROSE PL2	533 N 1st St	Montrose	1	ChargePoint Network
259953	DCFC	US-55 0	MONTROSE EV 1 MONTROSE PL1	533 N 1st St	Montrose	1	ChargePoint Network
259010	DCFC	US-50	ES1 SALIDA PL1	1 County Road 105	Salida	1	ChargePoint Network
259011	DCFC	US-50	ES1 SALIDA PL2	1 County Road 105	Salida	1	ChargePoint Network
236815	DCFC	US-50	232 G Street (US-64B-78H-1A)	232 G Street	Salida	1	RIVIAN_AD VENTURE
236816	DCFC	US-50	232 G Street (US-64B-78H-1B)	232 G Street	Salida	1	RIVIAN_AD VENTURE
236817	DCFC	US-50	232 G Street (US-64B-78H-2A)	232 G Street	Salida	1	RIVIAN_AD VENTURE
236818	DCFC	US-50	232 G Street (US-64B-78H-2B)	232 G Street	Salida	1	RIVIAN_AD VENTURE



123453	DCFC	US-50	City of Delta	111 West 3rd St	Delta	1	EV Connect
121777	DCFC	I-25	Sam's Club 8272 (Fountain, CO)	4385 Venetucci Blvd.	Fountain	6	Electrify America
213970	L2, DCFC	I-25	Phil Long mEV Outlet	1338 Motor City Dr	Colorado Springs	8, 3	EVGATEWA Y
213944	L2, DCFC	I-25	Phil Long Kia	1020 Motor City Dr	Colorado Springs	2, 2	EVGATEWA Y
188005	DCFC	I-25	SPRINGS UTIL CITY PARKING 01	130 S Nevada Ave	Colorado Springs	1	ChargePoint Network
46528	L2, DCFC	I-25	Woodmen Nissan	6840 Vincent Dr	Colorado Springs	1, 1	Non-Networ ked
228072	L2, DCFC	I-25	REI	1376 E Woodmen Rd	Colorado Springs	1, 1	eVgo Network
260189	DCFC	I-25	GPM INVESTMENTS 4590 DC1	8105 N Academy Blvd	Colorado Springs	1	ChargePoint Network
260188	DCFC	I-25	GPM INVESTMENTS 4590 DC2	8105 N Academy Blvd	Colorado Springs	1	ChargePoint Network
202675	DCFC	I-25	MMVW CHARGER DC WALLBOX	1580 Auto Mall Loop	Colorado Springs	1	ChargePoint Network
231112	DCFC	I-25	DC CORRIDOR MCFAST CHARGE 1	1245 Interquest Pkwy	Colorado Springs	1	ChargePoint Network
231111	DCFC	I-25	DC CORRIDOR MCFAST CHARGE 2	1245 Interquest Pkwy	Colorado Springs	1	ChargePoint Network
224674	DCFC	US-50	RED ROCK KIA RRK STATION 1	2980 US-50	Grand Junction	1	ChargePoint Network
99432	DCFC	US-50	Mesa County Public Library	502 Ouray Ave	Grand Junction	1	Non-Networ ked
118890	DCFC	I-70	STOP N SAVE	723 Horizon	Grand	1	ChargePoint



			723 HORIZON DC1	Dr	Junction		Network
233506	DCFC	I-70	RRAG STATION 2	2162 Highway 6 and 50	Grand Junction	1	ChargePoint Network
233507	DCFC	I-70	RRAG HYUNDAI STATION	2154 US-50	Grand Junction	1	ChargePoint Network
257263	DCFC	US-28 5	DC CORRIDOR FAIRPLAY PL2	901 Main Street	Fairplay	1	ChargePoint Network
257262	DCFC	US-28 5	DC CORRIDOR FAIRPLAY PL1	901 Main Street	Fairplay	1	ChargePoint Network
218523	DCFC	I-70	HION NETWORK LIMON DC2	250 Main St	Limon	1	ChargePoint Network
256186	DCFC	I-70	HION NETWORK LIMON PL1	250 Main Street	Limon	1	ChargePoint Network
256187	DCFC	I-70	HION NETWORK LIMON PL2	250 Main Street	Limon	1	ChargePoint Network
218522	DCFC	I-70	HION NETWORK LIMON DC1	250Main St	Limon	1	ChargePoint Network
262650	DCFC	I-70	HION NETWORK BURLINGTON PL2	122 South Lincoln Street	Burlingto n	1	ChargePoint Network
262649	DCFC	I-70	HION NETWORK BURLINGTON PL1	122 South Lincoln Street	Burlingto n	1	ChargePoint Network
194917	DCFC	I-25	Target T1326 (Castle Rock, CO)	5010 Founders Pkwy	Castle Rock	4	Electrify America
260925	DCFC	I-70	KUM & GO RIFLE PL4	705 Taugenbaug h Boulevard	Rifle	1	ChargePoint Network
260924	DCFC	I-70	KUM & GO RIFLE PL3	705 Taugenbaug h Boulevard	Rifle	1	ChargePoint Network
260923	DCFC	I-70	KUM & GO RIFLE PL2	705 Taugenbaug	Rifle	1	ChargePoint Network



				h Boulevard			
260922	DCFC	I-70	KUM & GO RIFLE PL1	705 Taugenbaug h Boulevard	Rifle	1	ChargePoint Network
259323	DCFC	US-28 5	CONIFER CONIFER PL1	27171 Main Street	Conifer	1	ChargePoint Network
259324	DCFC	US-28 5	CONIFER CONIFER PL2	27171 Main Street	Conifer	1	ChargePoint Network
173990	DCFC	I-25	RAMPART RANGE LONE TREE DCFC	10003 Commons St	Lone Tree	1	ChargePoint Network
146646	DCFC	I-70	Target T2029 - Glenwood Springs, CO	110 W. Meadows Dr.	Glenwoo d Springs	4	Electrify America
193809	DCFC	I-70	GLENWOOD SPRING FAST CHARGER	100 Riverine Road	Glenwoo d Springs	1	ChargePoint Network
212409	DCFC	I-25	Park Meadows DCFC	8401 Park Meadows Center Dr.	Lone Tree	1	Volta
164512	DCFC	I-70	Walmart 986 - Frisco, CO	840 Summit Blvd	Frisco	4	Electrify America
170200	L2, DCFC	I-25	Target T0147- Englewood, CO	6767 S. Clinton St.	Englewo od	1, 3	Electrify America
46524	L2, DCFC	I-25	Larry H Miller Nissan - Arapahoe	10030 E Arapahoe Rd	Centenni al	2, 1	Non-Networ ked
303658	DCFC	I-70	GYPSUM SHOP & HOP 3	15 Eagle-Vail Rd	Avon	1	ChargePoint Network
205305	DCFC	I-70	TOWN OF AVON E. BENCHMAR DC2	220 E. Benchmark RD	Avon	1	ChargePoint Network
169285	DCFC	I-70	TOWN OF AVON E. BENCHMAR DC1	220 E. Benchmark RD	Avon	1	ChargePoint Network



204970	DCFC	I-70	GRAND VAIL ST1 DC STATION 1	1300 Westhaven Dr	Vail	1	ChargePoint Network
164110	DCFC	I-70	RWEPOA TOPAZ VILLAGE MARKET	34295 US-6	Edwards	1	ChargePoint Network
200449	DCFC	I-70	VAIL PARKING VAIL DC2	395 E Lionshead Cir	Vail	1	ChargePoint Network
200451	DCFC	I-70	VAIL PARKING VAIL DC3	395 E Lionshead Cir	Vail	1	ChargePoint Network
200450	DCFC	I-70	VAIL PARKING VAIL DC4	395 E Lionshead Cir	Vail	1	ChargePoint Network
214278	DCFC	I-70	East-West Resorts Edwards Station (Edwards, CO)	434 Edwards Access Rd	Edwards	4	Electrify America
184904	DCFC	I-70	GYPSUM SHOP&HOP #11	800 Highway 6	Gypsum	1	ChargePoint Network
236543	DCFC	I-70	Shop & Hop #11 - Shell	800 Highway 6	Gypsum	1	ChargePoint Network
228712	DCFC	I-25	Whole Foods Tamarac	7400 E Hampden Ave	Denver	4	eVgo Network
64699	DCFC	I-70	Eagle County	500 Broadway St	Eagle	1	Non-Networ ked
192947	DCFC	US-28 5	Kroger King Soopers 65 (Englewood, CO)	101 Englewood Pkwy	Englewo od	4	Electrify America
143259	DCFC	I-70	ECG EAGLE PNR DC 1	112 Fairgrounds Rd	Eagle	1	ChargePoint Network
189345	DCFC	I-25	EMICH VW STATION 1	350 S Santa Fe Dr	Denver	1	ChargePoint Network
260651	DCFC	I-70	ANNEX SITE GEORGETOWN	1120 Argentine St	Georgeto wn	1	ChargePoint Network



			PL3				
260654	DCFC	I-70	ANNEX SITE GEORGETOWN PL4	1120 Argentine St	Georgeto wn	1	ChargePoint Network
260653	DCFC	I-70	ANNEX SITE GEORGETOWN PL2	1120 Argentine St	Georgeto wn	1	ChargePoint Network
260652	DCFC	I-70	ANNEX SITE GEORGETOWN PL1	1120 Argentine St	Georgeto wn	1	ChargePoint Network
170335	DCFC	I-70	Colorado Mills Mall	14500 W. Colfax Ave	Lakewoo d	6	Electrify America
199132	DCFC	I-70	BDO PUBLIC BENNETT DC1	1092 Cedar Street	Bennett	1	ChargePoint Network
50066	L2, DCFC	I-25	City of Denver - Denver Performing Arts Center Garage	1055 13th St	Denver	2, 1	Non-Networ ked
227967	DCFC	I-25	Whole Foods - Union Station	1701 Wewatta St	Denver	4	eVgo Network
238822	L2, DCFC	I-25	REI Denver	1416 Platte St	Denver	1, 2	eVgo Network
190426	DCFC	I-70	Walmart 3533 - Denver, CO	7800 Smith Rd.	Denver	6	Electrify America
224620	DCFC	I-70	QT CHARGERS STATION 1	9111 E 40th Ave	Denver	1	ChargePoint Network
224591	DCFC	I-70	QT CHARGERS STATION 2	9111 E 40th Ave	Denver	1	ChargePoint Network
260071	DCFC	I-270	In-N-Out Denver 4597 N. Central park blvd	4597 Central Park Blvd	Denver	4	eVgo Network
279387	DCFC	I-70	Costco Denver (Denver, CO)	4717 Airport Way	Denver	6	Electrify America
254201	DCFC	I-70	DC CORRIDOR WHEAT RIDGE PL4	5071 Kipling Street	Wheat Ridge	1	ChargePoint Network



254200	DCFC	I-70	DC CORRIDOR WHEAT RIDGE PL3	5071 Kipling Street	Wheat Ridge	1	ChargePoint Network
254198	DCFC	I-70	DC CORRIDOR WHEAT RIDGE PL1	5071 Kipling Street	Wheat Ridge	1	ChargePoint Network
254199	DCFC	I-70	DC CORRIDOR WHEAT RIDGE PL2	5071 Kipling Street	Wheat Ridge	1	ChargePoint Network
223759	DCFC	US-28 7	7-ELEVEN, INC. 38083 WMNST DC2	7382 Federal Blvd	Westmin ster	1	ChargePoint Network
223781	DCFC	US-28 7	7-ELEVEN, INC. 38083 WMNST DC3	7382 Federal Blvd	Westmin ster	1	ChargePoint Network
223779	DCFC	US-28 7	7-ELEVEN, INC. 38083 WMNST DC1	7382 Federal Blvd	Westmin ster	1	ChargePoint Network
170299	DCFC	US-36	Westminster City Center (Westminster, CO)	9210-9440 North Sheridan Blvd	Westmin ster	4	Electrify America
298646	DCFC	I-25	Graviti Energy - Washington Plaza	9750 Washington St	Thornton	4	GRAVITI_E NERGY
169412	DCFC	I-25	Walmart 1231 (Thornton, CO)	9901 GRANT ST	Thornton	4	Electrify America
63407	L2, DCFC	US-28 7	Larry H Miller Nissan - 104	2400 W 104th Ave	Denver	1, 1	Non-Networ ked
202424	DCFC	I-76	7-ELEVEN, INC. 38351 CMRCE DC1	15200 E 120th Ave	Commer ce City	1	ChargePoint Network
202426	DCFC	I-76	7-ELEVEN, INC. 38351 CMRCE DC2	15200 E 120th Ave	Commer ce City	1	ChargePoint Network
202423	DCFC	I-76	7-ELEVEN, INC. 38351 CMRCE	15200 E 120th Ave	Commer ce City	1	ChargePoint Network



			DC4				
202428	DCFC	I-76	7-ELEVEN, INC. 38351 CMRCE DC3	15200 E 120th Ave	Commer ce City	1	ChargePoint Network
189683	DCFC	US-36	Macerich Flatiron Crossing (Broomfield, CO)	1 West Flatiron Crossing Dr	Broomfiel d	4	Electrify America
261137	DCFC	US-36	1 Flatiron Crossing (US-ME8-73R-2B)	1 Flatiron Crossing	Broomfiel d	1	RIVIAN_AD VENTURE
261136	DCFC	US-36	1 Flatiron Crossing (US-ME8-73R-2A)	1 Flatiron Crossing	Broomfiel d	1	RIVIAN_AD VENTURE
302439	DCFC	US-36	1 Flatiron Crossing (US-ME8-73R-2C)	1 Flatiron Crossing	Broomfiel d	1	RIVIAN_AD VENTURE
261135	DCFC	US-36	1 Flatiron Crossing (US-ME8-73R-1C)	1 Flatiron Crossing	Broomfiel d	1	RIVIAN_AD VENTURE
261134	DCFC	US-36	1 Flatiron Crossing (US-ME8-73R-1B)	1 Flatiron Crossing	Broomfiel d	1	RIVIAN_AD VENTURE
261133	DCFC	US-36	1 Flatiron Crossing (US-ME8-73R-1A)	1 Flatiron Crossing	Broomfiel d	1	RIVIAN_AD VENTURE
164398	DCFC	I-25	Walmart 3867 - Westminster, CO	200 W. 136th Ave	Westmin ster	3	Electrify America
169944	DCFC	US-40	TOWN OF FRASER LIONS PONDS	575 Zerex St	Fraser	1	ChargePoint Network
190099	DCFC	US-36	Target T1769 (Superior, CO)	400 Marshall Road	Superior	4	Electrify America
228749	L2, DCFC	I-25	Orchard Town Center	14697 Delaware St	Westmin ster	2, 2	eVgo Network
228460	DCFC	US-28 7	Jax Outdoor Gear Lafayette	900 S US Highway 287	Lafayette	1	eVgo Network
233318	DCFC	I-25	Larkridge Shopping Center	16521 Washington St	Thornton	6	eVgo Network
185123	DCFC	US-28 7	Walmart 1045 (Lafayette, CO)	745 US HIGHWAY	Lafayette	4	Electrify America



				287			
192270	L2, DCFC	US-36	Twenty Ninth Street Shopping Mall	1710 29th St	Boulder	1, 1	eVgo Network
200950	DCFC	US-36	Macerich Twenty Ninth Street Mall (Boulder, CO)	1776 29th St	Boulder	4	Electrify America
261285	DCFC	US-36	CSG EV BOULDER PL4	1500 Pearl St	Boulder	1	ChargePoint Network
261284	DCFC	US-36	CSG EV BOULDER PL3	1500 Pearl St	Boulder	1	ChargePoint Network
261283	DCFC	US-36	CSG EV BOULDER PL2	1500 Pearl St	Boulder	1	ChargePoint Network
261282	DCFC	US-36	CSG EV BOULDER PL1	1500 Pearl St	Boulder	1	ChargePoint Network
192469	DCFC	US-36	Whole Foods Boulder (Pearl) A1	2905 Pearl St	Boulder	2	eVgo Network
46522	L2, DCFC	US-36	Boulder Nissan	2285 28th St	Boulder	3, 1	Non-Networ ked
259758	DCFC	US-40	KUM & GO GRANBY PL2	308 West Agate Avenue	Granby	1	ChargePoint Network
259759	DCFC	US-40	KUM & GO GRANBY PL1	308 West Agate Avenue	Granby	1	ChargePoint Network
252996	DCFC	I-25	KUM & GO DACONO PL1	127 Laura Way	Dacono	1	ChargePoint Network
252995	DCFC	I-25	KUM & GO DACONO PL2	127 Laura Way	Dacono	1	ChargePoint Network
189386	DCFC	I-76	UNITED POWER KEENESBURG1	165 Market St	Keenesb urg	1	ChargePoint Network
222830	DCFC	I-25	Stapp Interstate Toyota	8019 Raspberry Wy.	Frederick	1	EV Connect
206973	DCFC	I-25	UNITED POWER	9586 E I-25	Longmon	1	ChargePoint



			CVSC DCFC	Frontage Rd	t		Network
236069	DCFC	I-25	Fowler Kia of Longmont	10258 E I-25 Frontage Rd	Longmon t	1	Non-Networ ked
46543	DCFC	US-28 7	Valley Nissan	1005 Ken Pratt Blvd	Longmon t	1, 1	Non-Networ ked
196019	DCFC	US-34	ODELLS AKRON YW LV3 ST1	276 E 1st St	Akron	1	ChargePoint Network
186161	DCFC	US-28 7	Walmart 5370 (Longmont, CO)	2514 MAIN ST	Longmon t	4	Electrify America
260718	DCFC	US-40	MOFFAT COUNTY DINOSAUR PL1	101 Stegosaurus Freeway	Dinosaur	1	ChargePoint Network
261711	DCFC	US-40	MOFFAT COUNTY DINOSAUR PL2	101 Stegosaurus Freeway	Dinosaur	1	ChargePoint Network
200746	DCFC	US-34	GRAND LAKE DCFC 1	1029 Park Ave	Grand Lake	1	ChargePoint Network
200747	DCFC	US-34	GRAND LAKE DCFC 2	1029 Park Ave	Grand Lake	1	ChargePoint Network
190445	DCFC	I-76	Walmart 5033 Fort Morgan	1300 Barlow Rd	Fort Morgan	4	Electrify America
203340	DCFC	US-28 7	BERTHOUD REC CPE250	1000 Berthoud Pkwy	Berthoud	1	ChargePoint Network
262316	DCFC	US-28 7	KUM & GO 2905	1265 Grand Market Ave	Berthoud	1	ChargePoint Network
256452	DCFC	US-36	DC CORRIDOR ESTES PARK PL2	500 Big Thompson Avenue	Estes Park	1	ChargePoint Network
254312	DCFC	US-36	DC CORRIDOR ESTES PARK PL4	500 Big Thompson Avenue	Estes Park	1	ChargePoint Network
254311	DCFC	US-36	DC CORRIDOR ESTES PARK PL3	500 Big Thompson Avenue	Estes Park	1	ChargePoint Network



255625	DCFC	US-36	DC CORRIDOR ESTES PARK PL1	500 Big Thompson Avenue	Estes Park	1	ChargePoint Network
226698	DCFC	US-34	HION NETWORK GREELEY DC1	4318 Centerplace Dr	Greeley	1	ChargePoint Network
226699	DCFC	US-34	HION NETWORK GREELEY DC2	4318 Centerplace Dr	Greeley	1	ChargePoint Network
226768	DCFC	US-34	HION NETWORK GREELEY DC3	4318 Centerplace Dr	Greeley	1	ChargePoint Network
226769	DCFC	US-34	HION NETWORK GREELEY DC4	4318 Centerplace Dr	Greeley	1	ChargePoint Network
46537	L2, DCFC	US-34	Greeley Nissan	2625 35th Ave	Greeley	1, 1	Non-Networ ked
65750	L2, DCFC	US-34	X3Energy	2323 117th Ave	Greeley	2, 2	Non-Networ ked
228461	DCFC	US-34	Jax Outdoor Gear - Loveland	950 E Eisenhower Blvd	Loveland	1	eVgo Network
190763	DCFC	US-34	Target T1178 (Loveland, CO)	1725 Rocky Mountain Ave	Loveland	4	Electrify America
256445	DCFC	I-25	XROADSHYUND AI EAST	3880 Test Dr	Loveland	1	ChargePoint Network
256864	DCFC	I-25	XROADSHYUND AI WEST	3880 Test Dr	Loveland	1	ChargePoint Network
143148	DCFC	I-25	THUNDER MTN H-D DCFAST HOG	4250 Byrd Dr	Loveland	1	ChargePoint Network
261277	DCFC	US-40	KUM & GO SB SPRINGS PL2	80 Anglers Drive	Steambo at Springs	1	ChargePoint Network
261276	DCFC	US-40	KUM & GO SB SPRINGS PL1	80 Anglers Drive	Steambo at	1	ChargePoint Network



					Springs		
261393	DCFC	US-40	KUM & GO CRAIG PL2	700 East Victory Way	Craig	1	ChargePoint Network
261392	DCFC	US-40	KUM & GO CRAIG PL1	700 East Victory Way	Craig	1	ChargePoint Network
202999	DCFC	US-28 7	MARKLEY MOTOR 1 MARKLEY GM CP2	3325 S College Ave	Fort Collins	1	ChargePoint Network
228456	DCFC	US-28 7	Fort Collins Museum of Discovery	408 Mason Ct	Fort Collins	1	eVgo Network
228450	DCFC	US-28 7	Jax Outdoor Gear	1200 N College Ave	Fort Collins	1	eVgo Network
263006	DCFC	I-25	KUM & GO WELLINGTON PL2	8150 6th Street	Wellingto n	1	ChargePoint Network
262662	DCFC	I-25	KUM & GO WELLINGTON PL3	8150 6th Street	Wellingto n	1	ChargePoint Network
262663	DCFC	I-25	KUM & GO WELLINGTON PL4	8150 6th Street	Wellingto n	1	ChargePoint Network
263005	DCFC	I-25	KUM & GO WELLINGTON PL1	8150 6th Street	Wellingto n	1	ChargePoint Network
231049	DCFC	US-38 5	Wagon Wheel Conoco	14989 US-385	Julesbur g	2	EV Connect



Appendix B: Future Stakeholder Engagement Priorities

Name of Organization	Category	Description
International Brotherhood of Electrical Workers (IBEW) Locals 12, 68, 111, 113, 667, 708, and 2159	Trade Association	The largest union representing all types of electrical workers within the U.S. and Canada. The IBEW and its employer partners jointly administer apprenticeship and training programs throughout the U.S. and Canada. Apprenticeship programs are administered on a local area level, with program offices across each District.
Colorado Association of School District Energy Managers	Advocacy	Organization promoting energy management and resource conservation in schools and throughout the state of Colorado by sharing best practices, engaging in cooperative efforts, building partnerships and skills, and learning about cutting-edge products, technologies, services, and offerings
Colorado East Community Action Agency (CECAA)	Advocacy	Organization serving low-income, disabled and senior residents of Cheyenne, Elbert, Kit Carson, and Lincoln counties in rural eastern Colorado with a holistic approach to self-sufficiency.
Colorado Health Foundation	Advocacy	Foundation working with individuals and organizations to advocate for health equity.
Colorado Latino Forum	Advocacy	Works to increase the political, social, educational and economic strength of Latinas and Latinos. Current initiatives include supporting climate justice.
Community Foundation of Northern Colorado	Advocacy	Foundation that manages and administers over 500 charitable funds and more than \$185 million in assets (June 2021). Serves Berthoud, Estes Valley, Loveland, Eastern Colorado, Fort Collins.



		1
Denver Regional Mobility Access Council (DRMAC)	Advocacy	Provides educational workshops and training to ensure various groups have access to mobility options. Workshops and training target disability etiquette for transportation providers, transportation options for human services providers, ADA coordinator training, transit advocacy, and others.
Electric Vehicles Four Corners	Advocacy	Public interest group that has hosted local information meetings and events on how to use regenerative braking, types of chargers, installing residential EVSE, extending car battery life, engaging with businesses to install EVSE, and other topics
Energy Outreach Colorado	Advocacy	Nonprofit that provides bill payment assistance, heating system repair/replacement, energy education, weatherization, and other services. Partners with the State of Colorado on the Low-Income Energy Assistance Program and others.
First Nations Development Institute	Advocacy	First Nations Development Institute improves economic conditions for Native Americans through direct financial grants, technical assistance & training, and advocacy & policy.
Globeville, Elyria-Swansea Coalition for Health & Housing Justice	Advocacy	Group of neighborhood leaders and community organizations working to advocate for resident-driven leadership, protect historically marginalized neighborhoods, preserve affordability in housing, and promote neighborhood culture.
GoEV Cities & Counties	Advocacy	Coalition led with support from CLEER, Conservation Colorado, CoPIRG, Sierra Club, and SWEEP. Resources include a policy toolkit and the GoEV Resolution (pledge to develop an EV Action Plan with the goals and implementation strategies required to transition the local transportation sector to zero-emission vehicles).
Housing Colorado	Advocacy	Statewide membership organization committed to providing advocacy,



		professional development and issue expertise for the affordable housing community.
Keystone Policy Center	Advocacy	Nonprofit whose mission is to empower leaders to overcome national and local policy conflicts. Focuses on identifying solutions in energy, environment, education, health, agriculture, emerging genetic technologies, land management, and tribal communities.
Latino Community Foundation of Colorado	Advocacy	State-based philanthropic organization led by Latinos and for Latinos. Pursues civic, economic, and cultural opportunities.
Northeast Transportation Connections (NETC)	Advocacy	Nonprofit focusing on transportation demand management (including advocacy and providing mobility options). Focuses on building sustainability at a neighborhood level. Highlights opportunities to reduce the number of single-occupant cars and trucks on the road.
Qualified Listeners	Advocacy	Veteran and family resource hub, providing a variety of services and connections to Veterans and their families. Volunteer-led organization focusing on helping Veterans and their families.
Sierra Club Colorado	Advocacy	Environmental organization dedicated to climate solutions, conservation, and movement building. Sierra Club - Denver participated in the Denver EV Action Plan.
Southern Colorado Council of Governments (SCCOG)	Advocacy	Community organization providing services to Huerfano and Las Animas Counties.
Southern Colorado Economic Development District (SCEDD)	Advocacy	Non-profit organization funded to support the economic development efforts of thirteen counties in southern Colorado including Baca, Bent, Chaffee, Crowley, Custer, Fremont, Huerfano, Kiowa, Lake, Las Animas, Otero, Pueblo, and Prowers Counties.



Western Colorado Alliance for Community Action	Advocacy	Organization dedicated to community action focused on Colorado's Western Slope.
Western Colorado EV Club	Advocacy	Fan club and advocacy group for electric vehicles and their owners in Western Colorado.
Wilderness Workshop	Advocacy	Nonprofit working to keep the White River National Forest and nearby Bureau of Land Management (BLM) lands 'as is'.
Clean Cities Coalition Network	Advocacy	Part of the U.S. Department of Energy's (DOE) Vehicle Technologies Office (VTO). Aims to support the nation's economic, environmental, and energy security by working locally to advance affordable, domestic transportation fuels, energy efficient mobility systems, and other fuel-saving technologies and practices.
Denver Public Library (DPL)	Education	Public library system of the City and County of Denver.
Denver Public Schools (DPS)	Education	Public school system in the City and County of Denver.
Denver Regional Council of Governments (DRCOG)	Local government	The Metropolitan Planning Organization (MPO) for the Denver region.
Pikes Peak Area Council of Governments (PPACG)	Local government	The Metropolitan Planning Organization (MPO) for Colorado Springs and surrounding communities. Programs include: the Area Agency on Aging, Transportation Planning, Military Impact Planning, Environmental Planning, and the Sustainability Program.
Regional Transportation District (RTD)	Local government	Transit agency serving 8 of the 12 counties in the Denver-Aurora-Boulder Combined Statistical Area in Colorado.



Summit County, Colorado	Local government	County government located in Summit County. Recognized as a GoEV County.
The Northeastern Colorado Association of Local Governments (NECALG)	Local government	Voluntary association of county and municipal governments from Logan, Morgan, Phillips, Sedgwick, Washington, and Yuma Counties.
Colorado Building & Construction Trades Council	Trade association	Comprised of 24 Craft Local Unions who represent 14 national and international Unions.
Colorado Rural Electric Association (CREA)	Trade association	Trade association for Colorado's 22 electric cooperatives and its one generation and transmission cooperative. It provides legislative services, education classes, communications resources including Colorado Country Life magazine and safety and loss control assistance.
Energy Efficiency Business Coalition (EEBC)	Trade association	Trade association of non-utility companies that provide energy efficiency, demand response, and data analytics products and services in Colorado.
Southern Ute Tribe	Tribal government	Tribal council responsible for cultural preservation, transportation, education, natural resource protection, health, housing, planning, services, and others for the Southern Ute Indian Tribe. Located in La Plata County, Archuleta County, and Montezuma Counties in Colorado.
Ute Mountain Ute Tribe	Tribal government	Tribal council responsible for government services that include cultural preservation, transportation, education, natural resource protection, health, housing, planning, and other services for the Weeminuche band of the Ute Nation of Indians. Located in the Four Corners region of the United States in Montezuma County (CO), La Plata County (CO), and San Juan County (NM).



Appendix C: Community Engagement Outcome Report - August 2022 to July 2023

This Community Engagement Outcome report highlights Colorado's community engagement efforts from August 2022 to July 2023. Key to the success of meaningful engagement are the unique outreach needs identified by each community. While developing the NEVI Plan last year, the state recognized that most communities are unfamiliar with electric vehicles (EVs) or have a misconception of the technology. In order to build out a robust and equitable charging network in Colorado, community support is crucial. The first step in gaining community support is through creating a safe space for community members to voice their hopes and concerns over EVs and EV charging infrastructure in order to understand their needs and to provide the right information to alleviate EV myths. In the past year, the Colorado Department Of Transportation (CDOT) and the Colorado Energy Office (CEO) have developed new programs and leveraged existing programs to increase engagement with EVs and to create more access to EV education and awareness. The state was able to continue engagement efforts via existing programs, including Colorado's newly established Interagency Outreach and Engagement group and CEO's ReCharge Colorado program and EV CO, Colorado's brand neutral EV education and awareness campaign, and expand engagement efforts by deepening relationships with the state's Clean Cities coalitions. New programs that support increased community engagement include the E-mobility Education and Awareness grant program, Community Advisory Groups in rural communities, and a teaming partner list for the DCFC Plazas Program.

Last year, the team identified a list of organizations to conduct outreach meetings with (as shown in **Appendix A**). However, the state quickly realized the challenge in finding the right contacts for each identified organization and getting their interest in government initiatives. Advocacy organizations and community members are more willing to provide feedback to organizations with whom they already have engagements. As such, the state pivoted outreach strategies to continuously informing regional governments to spread awareness to their communities and deepen our ties with Clean Cities coalitions and other community-based organizations. Many of CDOT's partnering organizations already have strong relationships and trust of community members, hence it's in the states best interest to provide the resources for our partners to continue to strengthen these relationships and engage with community members on <u>Colorado's NEVI Plan</u> and other electrification efforts. In accordance with the NEVI Plan, CDOT and CEO provided updates to Colorado's NEVI implementation efforts by continuously informing regional governments to spread awareness and attending events organized by community based organizations to meet community members in their own communities. **Table 1** shows the outreach activities CDOT and CEO participated in between August 2022 and July 2023.



Date	Meeting/Event	Event Type
8/13/22	La Vida Volta EV Classic cars expo community event	In-person
10/12/22	Drive Clean Colorado (DCC) Fall Connection	In-person
10/26/22	CDOT Utility & Railroad Statewide Meeting	Virtual
11/2/22	Tribal Coordination Meeting	Virtual
11/8/22	CU Boulder ASPIRE Program	In-person
12/1/22	Presentation for Staff for House Representative Diana DeGette	Virtual
12/1/22	DCFC Plazas Program Overview Meeting with Environmental Advocacy Organizations	Virtual
12/8/22	Community Access Enterprise Board Meeting	Virtual
12/22/22	DCFC Plazas Program Overview with EVSE Organizations	Virtual
1/12/23	DCFC Plazas Program Update Public Webinar	Virtual
2/7/23	Coffee @ CDOT HQ Staff Meeting	Hybrid
2/7/23	Advanced Mobility Partnership (AMP) Working Group Meeting	Virtual
2/8/23	The Future of your Transportation Public Webinar	Virtual
2/10/23	Drive Clean Colorado (DCC) Winter Connection	In-person

Table 1. Outreach Activities between August 2022 to July 2023



2/16/23	Transportation Commission (TC) Meeting	Hybrid
3/13/23 - 3/14/23	Colorado EV Scrum Workshop	In-person
3/27/23	DRCOG Transportation Advisory Committee Meeting	Virtual
4/12/23 - 4/16/23	Denver Auto Show	In-person
4/17/23	Central Front Range TPR Meeting	Virtual
4/18/23	Pikes Peak Area Council of Governments (PPACG) Meeting	Virtual
4/26/23	Southeast TPR Meeting	Virtual
4/27/23	South Central TPR Meeting	Virtual
4/29/23	Day of the Children Celebration event hosted by Amigos de Mexico (CBO)	In-person
5/18/23 - 6/27/23	Colorado Greenhouse Gas Roadmap Community Workshops	In-person (7) Virtual (1)
7/22/23	Eco-Fiesta event in Commerce City hosted by Cultivando (CBO)	In-person

Overview of selected community engagement event and lessons learned

La Vida Volta at Red Rocks Amphitheater - August 2023

This free <u>two-day family-friendly event held at Red Rocks</u> included an expo showcasing conversions of classic cars into electric vehicles and displays of the latest EVs in the market as well as exhibit booths. CDOT staff hosted a booth with information on how the state is helping transition our transportation system to a zero-emissions future. Through this event, CDOT staff were able to educate the public on electric mobility and the various state fundings available for EV adoption. The goal was to share



information about all state electrification programs and support. Some of the lessons learned in this event were the need to create bilingual materials to share with community members and that participating in existing events helps target a diverse audience.

DCFC Plazas Overview with Environmental Justice Organizations - December 1, 2022

CDOT and CEO invited environmental and advocacy organizations to receive updates on the Plazas program and gathered feedback on how the RFA can meet NEVI equity requirements. Invitations were sent out to the following organizations:

Name of organization					
Blue Green Alliance (BGA)					
Cloud City Conservation Center					
Colorado Communities for Climate Action (CC4CA)					
Community Office of Resource Efficiency (CORE)					
Conservation Colorado					
CoPIRG					
Cultivando from Commerce City					
Environmental Entrepreneurs (E2)					
Environmental Defense Fund (EDF)					
Four Corners Office for Resource Efficiency (4CORE)					
GreenLatinos					
Grid Alternatives					
Mi Familia Vota - Greeley					
Moms Clean Air Force					
National Association for the Advancement of Colored People (NAACP) Denver					
Natural Resources Defense Council (NRDC)					
Partners for a Zero Emission Vehicle Future					
Sierra Club					
Southern Ute Indian Tribe (SUIT)					
Southwest Energy Efficiency Project (SWEEP)					
Ute Mountain Ute Indian Tribe (UMUT)					
Voces Unidas de las Montañas - West Slope					
Womxn from the Mountain					
Western Resource Advocates (WRA)					

DCFC Plazas Updates Webinar with EVSE Providers - December 22, 2022

CDOT and CEO invited EVSE providers to receive updates on the Plazas program and gathered feedback on technical aspects of the RFA and challenges in meeting NEVI compliance of certain topics based on technology development. Invitations were sent out to the following organizations:



Name of organization
Autel
Blink Charging
breezEV
ChargeLab
ChargePoint
ClayDean Electric
CGRS
Cyber Switching
Denver Metro Electric Inc.
DriEV
Energy 5 D/B/A US Energy Solutions
EnviroSpark Energy Solutions Inc
EV Connect
EV Plug Pros, LLC
EV Range
EVBolt
EVE Energy Ventures Inc. D/B/A Xeal Energy
EVFY Inc.
EvGateway
EVmatch
EVoke Systems
EVPassport, Inc.
EZ EV Electric
FLO Services, USA
Green Water and Power



Intertie				
IPOWER Alliance, LLC				
Larry's Electric				
LilyPad EV*				
Livingston Energy Group, LLC				
Loop Global Inc				
Mac Electric Company Inc				
Mile High Solutions Network				
NAD Grid Corp. (dba AmpUp)				
National Car Charging*				
Oasis Charger Corporation d/b/a JuiceBar				
OK2Charge				
PowerPump				
PPC Solar				
Refuel Electric Vehicle Solutions				
Rocky Mountain Efficiency Group				
Sandbox Solar				
SemaConnect				
Skyhook Solar Corp.				
The Mobility House				
TurnOnGreen Inc.				
Verdek*				
Winn Marion*				
ZEF Energy Inc				



DCFC Plazas Program Update - Jan 12, 2023

CEO and CDOT hosted a public webinar on January 12th to share information and solicit feedback about the draft RFA from potential applicants, host communities, and other interested stakeholders. Over 150 people attended the webinar. The presentation, recording, and resources from NEVI/DCFC Plaza Program Update Webinar was sent out a week later and also made available on Colorado's NEVI webpage.

The Future of your Transportation Webinar - February 8, 2023

This <u>virtual webinar</u> was specifically designed to gather feedback from disproportionately impacted communities on CEO's Vehicle Exchange Colorado program and the state's new electric bike rebate program. It was apparent that community members were not ready to provide feedback on both programs as it was most attendees' first exposure to the topic of EVs and they had many basic questions. Spanish interpretation was provided and approximately 30 community members attended. This webinar was a collaboration with EcoArts and 9to5, who assisted with outreach and compensating community members for their time.

EV Scrum Event - March 13th - 14th, 2023

CDOT in partnership with the Harvard Kennedy School's Taubman Center for State and Local Government hosted a 1 ¹/₂ day State of Colorado's first M/HD Electric Vehicle Scrum to bring together a small group of key stakeholders and experts from across Colorado to generate solutions focused on MHD charging in rural areas. Perspectives from rural co-ops and munis as well as fleets and EVSE providers were gathered.

Denver Auto Show - April 12th - 16th, 2023

In partnership with Drive Electric Colorado, CDOT staff attended the annual <u>Denver Auto Show</u> at the Colorado Convention Center and participated at Drive Clean Colorado's EV showcase with ride-and-drive experiences and a booth providing EV education and resources. Over 1160 people received an EV experience with ride and drives in EV. Of those experiencing the ride and drive, 44% had never driven an EV before.

Day of the Children Celebration organized by Amigos de Mexico (CBO) April 29, 2023

CEO partnered with DCC and hosted a ride-and-drive event at the <u>Day of the Children Celebration</u> organized by a community based organization called Amigos de Mexico. There was a car showcase that attracted many attendees and included two EVs for test driving. However, community members were hesitant to drive the cars when they found out the cost of the vehicle. Lessons learned from that event were to take used vehicles or more affordable vehicles since cost has been a barrier expressed by community members and to provide support from Spanish speaking and bilingual staff to answer questions to monolingual speakers and community members that feel more comfortable receiving information in Spanish.



Colorado Greenhouse Gas Roadmap Community Workshops - May-June 2023

The State of Colorado is updating its climate plan, including a new set of near-term actions the state is committing to take over the next five years across all sectors of our economy. As we put together our updated plan, we held meetings in communities across the state to ensure we understand Coloradans' priorities and concerns. Transportation, including the role of electric vehicles in reducing greenhouse gas emissions, were a topic of conversation at each meeting. The state team engaged with multiple community connectors for each in-person meeting. Meetings were held in the evening at community locations including libraries, high schools, community colleges and senior centers and provided language interpretation service, dinner, childcare and Visa gift cards for participants. A statewide virtual meeting was also held via webinar. Workshops were held in the following locations:

- Montbello on May 18, 2023
- Trinidad on May 24, 2023
- Greeley on June 8, 2023
- Pueblo on June 13, 2023
- Durango on June 20, 2023
- Grand Junction on June 21, 2023
- Craig on June 22, 2023
- Virtual Statewide Webinar on June 27, 2023

This is an ongoing effort where the state will continue to build relationships with the communities stated above as well as identify more locations to be added.

Eco- Fiesta in Commerce City organized by Cultivando - July 22, 2023

CEO was one of the sponsors for the EcoFiesta and partnered with DCC to provide information on EV's and e-bikes. The event was organized by Cultivando, a CBO that focuses on providing resources and leadership development opportunities to Latinos as well as addressing environmental injustices in Commerce City and surrounding neighborhoods in Globeville, Elyria and Swansea. Attendees were most interested in the upcoming e-bike rebate program. In order to meet the community's needs, CEO opted to showcase two e-bikes over an EV showcase. DCC and CEO provided information to 65 individuals. There continues to be a high demand for translation support.

Leveraging existing programs

Interagency Engagement & Outreach Group

CEO launched an Interagency Outreach and Engagement Group in July with the goal of coordinating outreach efforts across Colorado's state government agencies with a particular focus on streamlined engagement with disproportionately impacted and energy transition communities. The group allows agencies to share best practices, avoid duplication of efforts, and establish a common framework for cross-state coordination with local government and community-based organizations.



To prevent overburdening community members with public meetings, the state agencies are coordinating efforts in outreach events so that community members are informed and notified of all climate-related efforts across all agencies and can be directed to the right staff member should they want to know more about a specific topic. Staff members across Colorado's state agencies will continue to work on building relationships with community connectors and other advocacy organizations to ensure that outreach, education, and engagement are culturally appropriate, respectful of community members' time, and anticipatory of community concerns and priorities.

EV Readiness Plans

• CEO's Local Government Electric Vehicle Readiness Planning Grants

Local governments are uniquely positioned to advance emission reduction strategies in buildings, energy generation, and transportation. Colorado's Roadmap to <u>100% Renewable Energy By 2040 and Bold</u> <u>Climate Action</u> calls for local governments to lead by example, and for the State of Colorado to support local government electric vehicle (EV) planning and investment in rural EV charging infrastructure.

In late February 2023, CEO released the first round of funding to local, county, and tribal governments and their regional partners to develop <u>EV readiness plans</u>. These plans will allow communities to establish a shared vision for EV readiness, identify key partnerships and actionable strategies needed to achieve the vision, and prepare for and encourage community adoption of electric vehicles. In May 2023, CEO awarded the City of Fort Collins, City of Pueblo, and Chaffee County to develop an EV Readiness Plan for their community.

• Xcel's Partners in Energy EV Readiness Plans

<u>Partners in Energy</u> is a program from Xcel Energy that supports the communities Xcel serves by helping them develop and implement energy plans. Each community has its own unique energy needs and priorities, and Partners in Energy services are tailored to complement each community's vision. Xcel partners with multiple communities in Colorado to assist with developing their EV Readiness and Action Plans. These plans take multiple workshops to develop and a wide range of stakeholders to better understand the region's transportation electrification needs. CDOT and CEO staff participated in many of these community workshops and provided updates on NEVI development and how each communities' plan will complement the state's NEVI Plan.

Colorado communities include the cities of Broomfield, Centennial, Englewood, Erie, Fort Collins, Lafayette, Littleton, Louisville, Minturn, Westminster, and Wheat Ridge, the counties of Jefferson, Summit, and Garfield, and the National Western Center Complex Redevelopment.

Staff will continue to participate in these workshops to better align with Colorado communities' EV action plans and build synergy between state and local jurisdiction priorities in charging infrastructure.



ReCharge Colorado Program

Since 2013, the <u>CEO ReCharge Colorado program</u> has worked to advance the adoption of EVs and installation of charging infrastructure across the state. ReCharge coaches provide coaching services for EVs and infrastructure development in every county in the state to help business owners, local governments, and consumers understand the financial, environmental, economic development, and energy security advantages of EVs. They help build local stakeholder support for EV adoption and leverage these networks to drive EV sales and participation in available funding opportunities. By working with Colorado communities, ReCharge coaches help create an ecosystem of broad support and resources necessary for a successful transition to EVs. Additionally, ReCharge coaches inform dealerships about incentives customers can utilize in the purchase of EVs, and they create and promote group buys and ride-and-drive events. The state has been leveraging this successful program to continue to educate residents across Colorado on EV benefits and the available funding opportunities to accelerate EV adoption such as the state's <u>Charge Ahead Colorado (CAC) program</u> and the <u>DCFC Plazas program</u> in which NEVI funding is incorporated. As of February 2023, the ReCharge Program hired an Equity Advisor to organize and enhance community connections and events with a focus on equity.

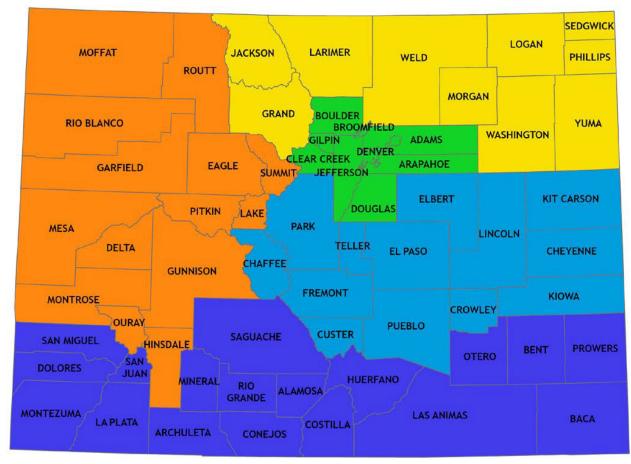


Figure 1. ReCharge Colorado Territories



During Fiscal Year 2023, Recharge coaches conducted 71 educational and outreach events and 43
ride-and-drive events and supported over 130 EV infrastructure funding applications across Colorado.

Territory	Education Events	Ride & Drives	Total	Charge Ahead Colorado Applications
4Core (Southern Colorado)	8	5	13	12
CLEER (Northwestern				
Colorado)*	12	10	22	?
NCCC (Northern Colorado)	24	11	35	62
DCC (Denver Metro)	10	7	17	25
DCC (South Central)	10	7	17	36
Equity coach (Statewide)	7	3	10	2
Total	71	43	114	137

*CLEER did not report on how many CAC applications they supported.

EV CO

Recent EV public awareness studies have pointed to the need for a local clearinghouse to drive local awareness. To that end, in November 2022, CEO in partnership with CDOT launched <u>EV CO</u>, a statewide electric vehicle education campaign that seeks to raise general awareness about EVs for all Coloradans. Specifically, it highlights the financial and environmental benefits of EVs while showcasing how an EV can fit into a Coloradans everyday routine. The campaign features a website and toolkit for EV stakeholders to share EV resources with their audiences and communities. The website highlights Colorado EV news and stories and provides detailed answers to common questions about purchase incentives and long-term savings, at-home and public charging, EV performance, and environmental benefits. The site also includes links to partner resources that connect Coloradans to EV shopper tools and dealerships. The campaign is active on various social media platforms with compelling, market-tested messaging and visuals encouraging people to visit the website to learn more.

In May 2023, EV CO unveiled a series of videos called "EV Trivia with Sarah Pribis." Filmed during the 2023 Denver Auto Show, trivia host Sarah Pribis quizzed attendees about driving electric with questions about tax credits, charging, and ownership costs. Several long- and short-format videos were produced and all the videos included Spanish captions. The videos were posted to the EV CO website and highlighted through social media channels. A quiz was also made available on the EV CO website for all Coloradans to test their EV knowledge. By providing information via creative mediums, CEO hopes to increase EV awareness and debunk EV myths for all Coloradans.

Through June 2023, EV CO's website received nearly 30,000 page views per month by nearly 20,000 unique, individual users. The state will continue to monitor and improve the EV CO's website to engage with individuals and organizations across the state to raise awareness about EVs and charging infrastructure programs.



Partnering with Clean Cities Coalitions

As part of the U.S. Department of Energy's (DOE) Vehicle Technologies Program, the <u>Clean Cities</u> <u>Coalition Network</u> advances the nation's economic, environmental, and energy security by supporting local actions to reduce the use of imported petroleum in transportation. Clean Cities is a great organization that has been around for over 30 years. Colorado has two Clean Cities organizations: <u>Drive</u> <u>Clean Colorado (DCC)</u>, formerly called Denver Metro Clean Cities Coalition, one of the first coalitions designated as part of the DOE's Clean Cities program in 1993, and <u>Save Energy Coalition</u>, formerly called Northern Colorado Clean Cities Coalition, established in 1996 to serve Northern Colorado. DCC and Save Energy Coalition are two of 75 unique Clean Cities coalitions across the U.S. that work locally to foster the nation's economic, environmental, and energy security and advance affordable, domestic transportation fuels and fuel-saving technologies and practices.

Colorado's Clean Cities coalitions have a long history and successful track record of working with local governments, nonprofits, and partner agencies and understand the intricacies of working with different communities. Both organizations are part of the ReCharge Program and have a diverse set of stakeholders including cities and municipalities, fleets, vehicle fuel providers, vehicle technology companies, manufacturers, sustainable corporations, federal and state agencies, and other industry leaders. CDOT and CEO will continue to leverage and strengthen partnerships with the Clean Cities programs as the state's "boots on the ground" operations. For example, DCC was recently awarded a CDOT grant for expanding its EV outreach and education efforts to more territories in the state where DCC will organize, promote, and host community events for the general public to receive information about all local, state, and federal initiatives on EVs and EV infrastructure with unique approaches such as an EV workshop, Ride and Drive events, basic EV and charging 101 webinars, and other methods as identified.

Creating new programs to fill the gap in engagement

NEVI Partnering List and Planning Resources Map

CDOT developed a submission form and compiled a list of partners that includes prospective applicants, hosting communities, and other relevant stakeholders who express their desire to install, own, operate, and maintain electric vehicle supply equipment (EVSE) in their respective communities. This partner list enables stakeholders to make partner connections for EV charging station projects and can be found in <u>Colorado's NEVI webpage</u>.

E-Mobility Education and Awareness Grants

In order to increase EV education and awareness among Coloradans, CDOT developed the <u>E-Mobility</u> <u>Education and Awareness Grant</u> to support e-mobility education projects that will equip Coloradans with the right information to make informed decisions and encourage the adoption of e-mobility including



electric car shares, electric bikes, and electric scooters. The first round of the E-Mobility Education and Awareness grants were awarded in February 2023, distributing \$289,567 to three projects focused on developing e-mobility education and outreach programs in Colorado, particularly in disproportionately impacted communities.

Community Advisory Committees

As a part of Justice40, The NEVI program calls for 40 percent of the overall benefits of climate and clean energy investments to flow to communities that are disadvantaged, underserved, and overburdened by pollution. The goal behind Justice40 is essential, and achieving Justice40 commitments will require effective collaboration to ensure that the community benefits being used to distribute funding and assess effectiveness meet the needs of community members. To this end, a Community Advisory Board is under development to direct engagement and dialogue with Colorado residents and co-create strategies and metrics to measure Justice40 benefits. As of July 2023, three community advisory committees have been established - one for Delta and Montrose Counties, one in Garfield County, and one in the Denver metro area. The goal is to develop cohorts of residents with whom the state can build strong relationships and who can provide feedback and input on transportation programs, particularly regarding equity issues. These communities will meet on a quarterly basis.