CITY OF Grand Junction COLORADO

REV READY FOR EVs

An Electric Vehicle Readiness Plan for Grand Junction

September 2023

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ACKNOWLEDGMENTS

Thank you to the following individuals who contributed many hours of service to developing this Electric Vehicle (EV) Readiness Plan.

The content of this plan is derived from a series of planning workshops hosted by Xcel Energy's Partners in Energy. Xcel Energy is the main electric utility serving Grand Junction. Partners in Energy is a two-year collaboration to develop and implement a community's energy goals.

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This EV Readiness Plan was funded by and developed in collaboration with Xcel Energy's Partners in Energy. Partners in Energy shall not be responsible for any content, analysis, or results if the City of Grand Junction has made modifications to the plan.

If you require assistance reading or interpreting any part of this plan document, please do not hesitate to contact the City of Grand Junction at sustainability@gjcity.org.

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GLOSSARY OF KEY TERMS

Battery Electric Vehicle (BEV): An all-electric vehicle, fueled by plugging into an external charger, that has no tailpipe emissions. Requires low maintenance costs.

E-Bike: A bicycle with an integrated electric motor used to assist or replace pedaling.

Electric vehicle (EV): A vehicle that uses an electric engine for all or part of its propulsion (including both Battery Electric Vehicles and Plug-In Hybrid Vehicles).

Electric vehicle supply equipment (EVSE): Infrastructure required to support EVs such as chargers, electrical supplies, etc.

Greenhouse Gases (GHG): Gases in the atmosphere that absorb and emit radiation and significantly contribute to climate change. The primary greenhouse gases in the earth's atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone.

Heavy-Duty vehicles: Commercial vehicles over a minimum Gross Vehicle Weight Rating (GVRW) of 8,500 lbs.

Hybrid Electric Vehicle (HEV): Vehicles containing both an electric motor and a gasoline engine. The gasoline engine powers a generator that charges the electric motor and no external battery charger is used.

Internal combustion engine (ICE): Traditional vehicle engine that uses the direct combustion of gasoline, diesel, or other fuels.

Level 1 Charging Station: Uses a standard 120-volt AC outlet and can take 8 to 12 hours to fully charge a depleted battery. Typically used in residential settings.

Level 2 Charging Station: Uses a 220-volt or 240-volt AC outlet and can fully charge a depleted battery in 4 to 6 hours. Can be used in both residential and commercial settings.

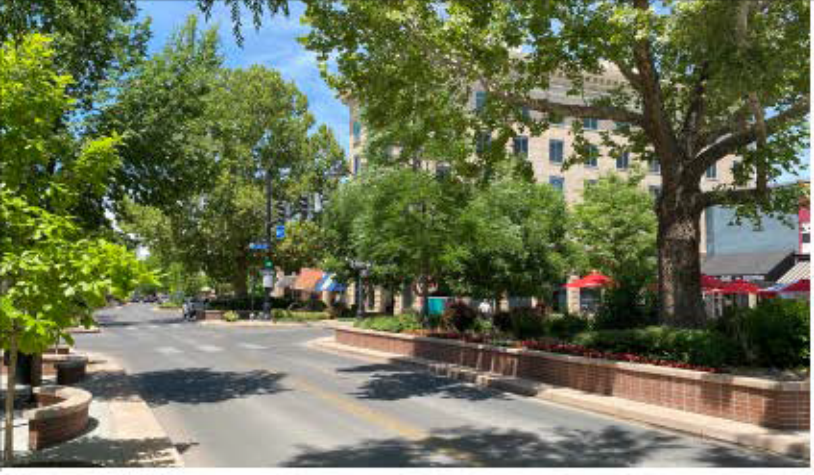
DC Fast Charging Station: Stations that can charge a battery to 80% in 20 to 30 minutes using an industrial 480-volt Direct Current (DC) outlet. Frequently used in settings where the anticipated charge time is limited (e.g., supermarket, gas station).

Light-Duty Vehicles: Passenger cars with a maximum Gross Vehicle Weight Rating (GVRW) of 8,500 lbs.

Low Speed Electric Vehicles: Electric Vehicles (see above) with a top speed of 20-25 miles per hour that has three wheels in contact with the ground, does not use handlebars to steer, and displays a VIN pursuant to state law.

Micromobility: Any small, low-speed electric-powered transportation device, including electric-assist bicycles (e-bikes), electric scooters (e-scooters), and other small, lightweight, wheeled electric-powered conveyances.

Plug-in Hybrid Electric Vehicle (PHEV/PEV): Vehicle containing both an electric motor and a gasoline engine. An external plug is used to fuel the electric motor which is used until the battery is depleted, at which point the gasoline engine takes over.



The City of Grand Junction
Electric Vehicle Readiness Plan

REV READY FOR EVs

About This Plan

Located at the crossroads of two major regional travel corridors, Grand Junction is uniquely situated to benefit from the transition to electric vehicles (EVs). Over the course of eight months in 2023, the City of Grand Junction brought together key stakeholders and residents to develop this EV Readiness Plan as an actionable roadmap to prepare the community for EVs. The plan, which was developed through Xcel Energy's Partners in Energy program, will help Grand Junction maximize the local benefits of increased EV adoption while supporting fair access and realistic opportunities across the community.

Grand Junction's EV Future

By 2030, the community could expect to see between **9,000 and 13,000 EVs** on the road according to state projections.

Increased EV adoption will be supported by and drive demand for EV charging infrastructure. By 2030, the community could need up to **270 Level 2 and 75 DC fast charging ports** to serve the increased number of EVs.

Our Energy Action Vision

"The City of Grand Junction will prepare for and maximize the benefits of widespread EV adoption. Access to electrified transportation and charging infrastructure will be affordable and inclusive so that community members, businesses, and visitors have the freedom to choose electric mobility options."

Our Strategic Priorities

To achieve this vision, the Grand Junction EV Readiness Plan is divided into three strategic focus areas:

Community Adoption

Public Charging

Fleet Electrification

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Grand Junction's EV Readiness Roadmap

To achieve Grand Junction's electric mobility vision, the EV Readiness Plan identifies key strategies within each focus area for implementation in 2023-2025 and beyond

Community Adoption (CA)

Supporting the equitable adoption of electric mobility throughout Grand Junction.

Q3 2023 - Q1 2025 Strategies

- CA-1: Launch an Electric Mobility Education Campaign
- CA-2: Engage Dealerships and Auto Shops
- CA-3: Support Electric Micromobility Adoption

Long Term Strategies

- EV Tourism Marketing, EV Connections for Commuters, EV Group Buy, Equitable EV CarShare

Public Charging (PC)

Increasing community charging access and preparing to leverage existing and upcoming funding opportunities.

Q3 2023 - Q1 2025 Strategies

- PC-1: Engage Potential Private Charging Site Hosts
- PC-2: Install Public Charging at Public Facilities
- PC-3: Implement EV Parking Enforcement and Pricing Best Practices
- PC-4: Clarify and Streamline Permitting Process for EV Charging

Long Term Strategies

- Regional Coordination for EV Infrastructure, Innovative Charging Solutions, EV Charging Accessibility, Mobility Connections, Multifamily Charging Outreach and Resources.

Fleet Electrification (FE)

Indentifying and implementing opportunities that support the electrification of municipal and other local fleets.

Q3 2023 - Q1 2025 Strategies

- FE-1: Evaluate Opportunities for Municipal Fleet Electrification
- FE-2: Provide Electric Mobility Training for City Leadership and Staff
- FE-3: Conduct EV Fleet Assessments

Long Term Strategies

- Explore Options for Transit Electrification, EV First Vehicle Replacement Policy, Regional Coordination for Fleet Electrification, and Charging

Grand Junction's EV Baseline

In June 2023, there were:

621 EVs on the road in Grand Junction

60 Level 2 charging ports

21 DC fast charging ports

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INTRODUCTION

Grand Junction has a long history of innovation and leadership. From establishing one of the nation's first fleet biogas projects in 2011 to initiating a Community Sustainability and Resiliency Plan in 2023, the City of Grand Junction ("the City") continues to address environmental challenges facing the community, to transition to clean energy, and to reinforce community resilience to change.

Located at the crossroads of two major regional travel corridors, Grand Junction is uniquely situated to benefit from the transition to electric vehicles (EVs). This Plan, developed through Xcel Energy's Partners in Energy program, builds on the community's progress to develop actionable strategies to prepare Grand Junction for increased EV adoption while supporting fair access and realistic EV opportunities across the community.

What is an EV Readiness Plan?

This EV Readiness Plan is a roadmap to strategically guide Grand Junction's action in a manner that supports equitable transportation electrification and ensures that Grand Junction is "Ready for EVs".

Preparing for increased EV adoption will require close collaboration between Xcel Energy and the City. The development of this plan was led by a core Project Management Team formed of representatives from both organizations. The City team included staff from Public Works, Communications and Engagement, and Community Development Departments, along with the City Manager's Office. The Xcel Energy team included the City's Account Manager, the community's Area Service Manager, clean transportation specialists, communications experts, and Partners in Energy community facilitators.

The goals and strategies outlined in this plan were developed collaboratively over a 9-month timeframe by the Project Management Team and an EV Action Team formed of

key local stakeholders. Over the course of three planning workshops conducted from February to June 2023, the team worked together to share information and identify opportunities specific to Grand Junction's unique characteristics. Additionally, the plan reflects input from the wider Grand Junction community, received through a series of events and engagement opportunities throughout the plan process (See Appendix A: Community Engagement Summary for details).

In developing this plan, Grand Junction joins more than 35 other Colorado communities that have developed EV and Energy Action Plans through Xcel Energy's Partners in Energy, an offering that provides resources for community energy and electric vehicle planning. Partners in Energy also supports 18 months of plan implementation in the form of marketing and communications, data tracking and analysis, mapping, program expertise, and project management.

The components of Grand Junction's EV Plan are detailed below:

Why an EV Readiness Plan: Details the reasons why Grand Junction is developing an EV Readiness Plan.

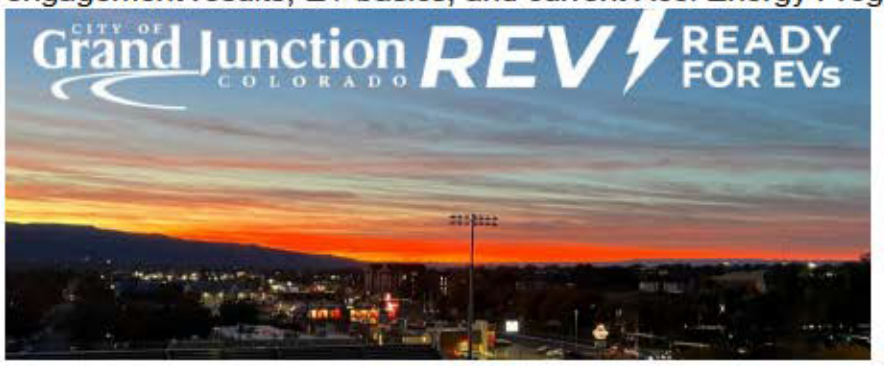
Where We Are Now: Outlines current levels of EV adoption and public charging, along with other existing efforts.

Where We Are Going: Describes Grand Junction's EV vision, projections, focus areas, and strategies.

How We Are Going To Get There: Provides a work plan for each priority EV readiness strategy, detailing key steps, metrics, roles, and available resources.

How We Stay On Course: Outlines how the City will track progress toward Grand Junction's EV vision, and how it will adapt to a changing landscape during implementation.

Appendices: Provide additional information about the planning process, engagement results, EV basics, and current Xcel Energy Programs.



WHY AN EV READINESS PLAN

Contribute to Comprehensive Plan Priorities

This EV Readiness Plan directly contributes to the City of Grand Junction's vision for "Efficient and Varied Mobility" and implementation of the 2020 Comprehensive Plan, through "anticipat[ing] and plan[ning] for the implications and opportunities associated with electric vehicles" (City of Grand Junction, 2020). This effort is one of several initiatives underway to support community transportation and resource stewardship priorities identified in the 2020 Comprehensive Plan. The focus of this EV Readiness Plan is intentionally broader than personal EVs alone and also considers other forms of electric mobility, including e-bikes and other micromobility and shared transportation options that have the potential to expand the equitable benefits of electrification.

In addition to EV planning, the City is moving forward with other sustainable transportation initiatives, including ongoing management of its biogas fleet, implementation of a Pedestrian and Bicycle Master Plan, and launching both the E-Bike to Work Ownership Program and a Shared Micromobility Pilot Program in 2023.

Prepare for increased EV adoption and leverage funding opportunities

EV adoption is increasing across Colorado including Grand Junction. More information can be found on current and projected future adoption in the **Where We Are Now** and **Where We Are Going** sections of this plan document.

Significant funding is currently available for transportation electrification in support of federal, state, and utility greenhouse gas (GHG) and EV goals. This plan identifies potentially applicable funding programs and will ensure that Grand Junction is poised to leverage opportunities and prepare the community to maximize the local benefits of increased EV adoption.

Xcel Energy Grid Capacity and Electrification

Just as Grand Junction is developing this EV Readiness Plan to prepare the community for increased EV adoption, so, Xcel Energy is preparing the electric grid for anticipated future change. Every two years or so, Xcel Energy files an Electric Resources Plan with the Colorado Public Utilities Commission that outlines anticipated growth and load changes along with how the utility will accommodate that load. Xcel Energy looks at EV growth in Colorado as part of a comprehensive plan to transition the grid, including achievement of net zero carbon emissions by 2050 while keeping service reliable and customer bills low (Aguayo, 2023).

Support equitable access to EV charging

Two major housing factors facilitate a resident's ability to convert their personal vehicle to an EV: home ownership and single-family residence. Homeowners are more likely to install EV charging because they do not need to seek permission from a separate property owner and the investment in infrastructure will likely increase the value of their property. Conversely, renters may not have permission from the homeowner to install charging infrastructure and may be reluctant to invest in improving property they do not own. Single-family residences are more likely to have personal garage space or carports to facilitate the installation of charging stations rather than relying on street parking or shared parking facilities. In Grand Junction, 62% of housing units are owner-occupied and 69% of homes are single-family detached homes, presenting a significant opportunity for home charging. This highlights the need for charging solutions to serve renters and multifamily residents and ensure that EVs are accessible for all community members (US Census Bureau, 2022).

Lower fuel and maintenance costs

While the average US household spends about 13% of their annual income on transportation costs, that percentage is approximately 22% for the average Grand Junction resident (Institute for Transportation And Development Policy, 2019) (Center for Neighborhood Technology, 2023). Low-income households make up 34% of Grand

Junction's population[1] and are disproportionately burdened by transportation costs (EPA, 2023).

Although cost savings vary based on vehicle type, driving patterns, and geographic region, the average driver spends about half as much on fuel and maintenance costs by driving an EV compared to a traditional gas-powered vehicle (Office of Energy Efficiency and Renewable Energy, 2019). The transition to EVs would result in significant savings for individual consumers and fleet operators. Over its lifetime, an EV tends to cost 50% less to own and operate as compared to a gas-powered vehicle (US DOE, 2019). Though the retail price of many EVs is still higher than that of comparable gas-powered vehicles, this gap is expected to decrease as batteries become more efficient and the used EV market develops. Additionally, federal, state, and utility incentives are available and can help to bring down the cost of EV purchase or lease below comparable gas-powered cars for some buyers. See the EVCO Tax Credit Infographic in **Appendix C: Funding Resource Details** for details (note that incentives vary by vehicle cost, type, household income, and utility).

Encouraging the use of low speed electric vehicles or micromobility devices, especially as a second vehicle, can also help lower transportation costs. For a household with two drivers, decreasing the number of vehicles needed to one and utilizing the simplicity and low cost of an e-bike has the potential to save money and improve the standard of living for Grand Junction residents, particularly those in lower income households.

Provide charging for commuters and visitors to Grand Junction

In addition to supporting EV access and charging for Grand Junction residents, the strategies in this plan support charging for those commuting into the city for work and play. Of those employed in Grand Junction, 65% commute from outside city limits (US Census Bureau, 2020). Although most EV charging occurs at home, employees of workplaces with EV charging are six times more likely to own an electric vehicle than those at workplaces without EV charging (US DOE, 2016). Supporting the adoption of EV charging to serve employees based outside of Grand Junction will therefore be important to bolstering overall EV adoption.

In addition to those commuting to work, Grand Junction sees over 1.5 million visitors each year, 52% of whom are traveling from elsewhere in Colorado (Visit Grand Junction, 2016). EV charging will be important to serve visitors and locals alike in Grand Junction's drive-centric tourism market.

Create local environmental benefits

In accordance with the 2020 Comprehensive Plan, the City of Grand Junction is developing the community's first Sustainability and Resiliency Plan. This EV Readiness

[1] The EPA EJScreen Mapper Tool defines low-income as individuals whose ratio of household income to poverty level in the past 12 months was less than 2.

Plan will prepare Grand Junction to maximize the following local environmental and resource conservation benefits of a transition to electrified transportation. In addition, the strategies in this EV Readiness Plan align with the City's recently adopted Bicycle Plan, supporting the reduction of vehicles on the road and lessening the need for future road widenings to handle increased vehicle traffic.

Improve air quality

The transportation sector produces pollutants such as particulate matter, nitrogen oxides, carbon monoxide, and volatile organic compounds which are harmful to respiratory health. All-electric vehicles produce zero tailpipe emissions and plug-in hybrids (PHEVs) produce no tailpipe emissions when operating in all-electric mode (U.S. Department of Energy, 2021). The Grand Junction Comprehensive Plan identifies the implementation of policies and efforts to "reduce air pollution from point sources as well as non-point sources, especially those related to transportation" as a priority, and transportation electrification will be a critical strategy in reducing local air pollution (City of Grand Junction, 2020).

Reduce community greenhouse gas emissions

In 2023, the City of Grand Junction created a comprehensive greenhouse gas (GHG) emissions inventory providing a snapshot of community wide GHG emissions in 2018 and 2021.

Transportation is the largest source of GHG emissions in Colorado (State of Colorado, 2021). Additionally, as shown in **Figure 1**, on-road fossil fuels account for 32% of Grand Junction's total community emissions (Lotus Engineering and Sustainability, 2023). The International Panel on Climate Change (IPCC) states that "electric vehicles powered by low-emissions electricity offer the largest decarbonization potential for land-based transport, on a life cycle basis" (IPCC, 2022). As the City moves toward community wide GHG management, transportation electrification, paired with carbon-free electricity supply, will be critical to reducing future emissions.

GHG emissions associated with electricity use in Xcel Energy's service territory will decrease in the future, further increasing the emissions gap between EVs and gas-powered vehicles. Today, Xcel Energy serves its Colorado customers with electricity that is 42% carbon-free and the utility has a goal to enable all vehicles to run on 100% carbon-free electricity by 2050 (Xcel Energy, 2022).

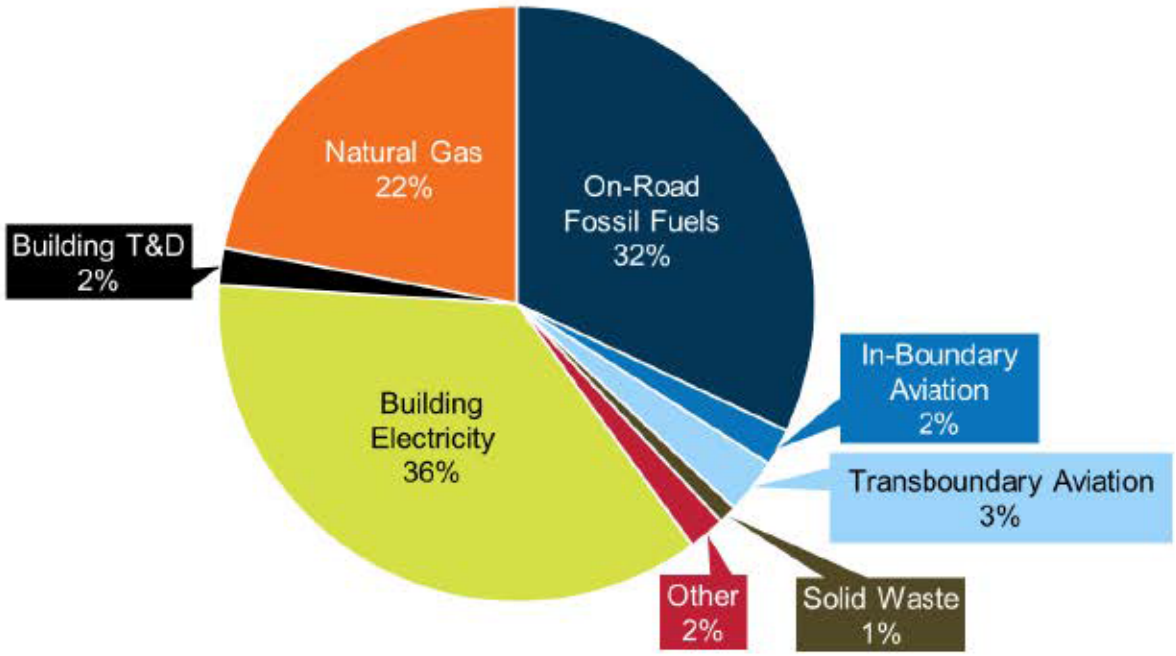


Figure 1. Grand Junction community GHG emissions by source (Lotus Engineering and Sustainability, 2023).

WHERE WE ARE NOW

Grand Junction's geography

Home to around 68,000 residents, Grand Junction is located on the Western Slope of Colorado at the crossroads of US 50 and I-70, two major regional travel corridors (**Figure 2**). The community is uniquely situated to benefit from the transition to EVs[2].

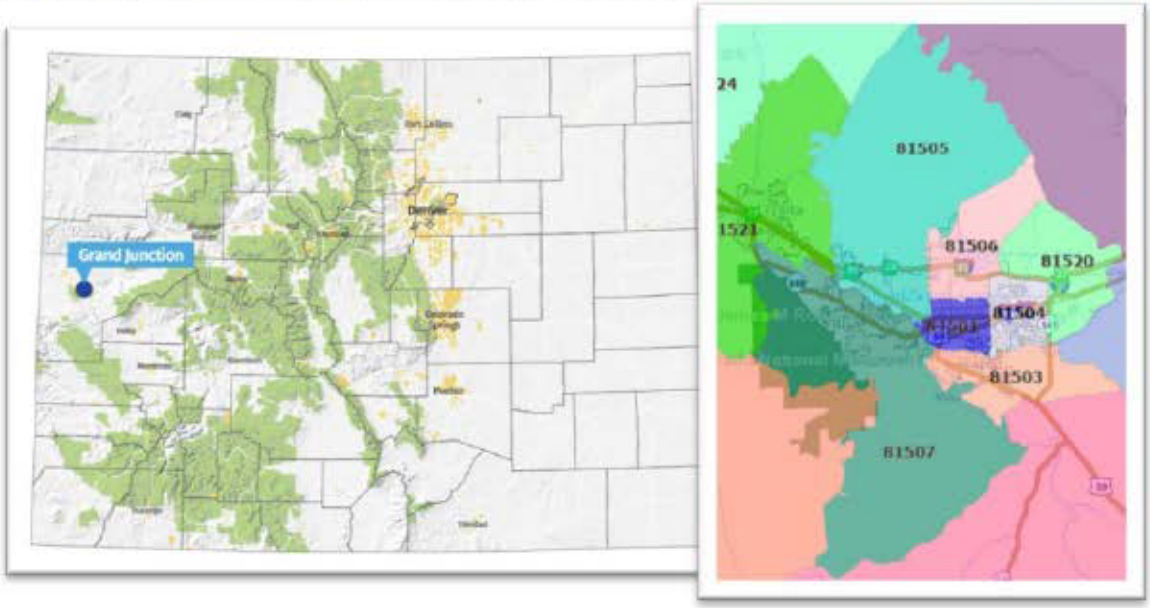


Figure 2. Grand Junction location and zip codes (City of Grand Junction, 2020) (City of Grand Junction GIS, 2023).

[2] The analysis presented in this plan document is based on Grand Junction zip codes, rather than city limits due to the availability of EV data at that scale. If EV data becomes available through the county DMV or another source, the City could consider transitioning to city limits for future analysis.

Current level of EV adoption

EV adoption is accelerating nationwide and in Colorado, as shown in Error! Reference source not found. below. In 2022, EV sales surpassed 10% of all new car sales in the state, up from just 6.5% in 2021 (State of Colorado, 2023).

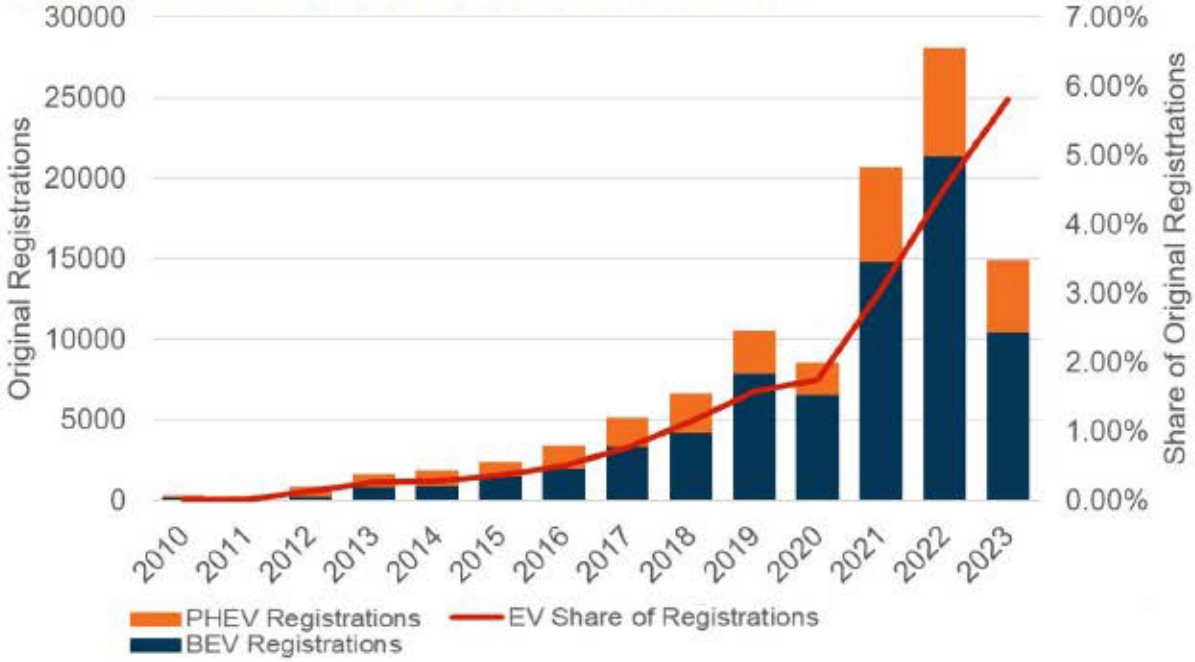


Figure 3. BEV (Battery Electric Vehicle) and Plug in Hybrid Electric Vehicle (PHEV) registrations and share of vehicle registrations in Colorado to June 2023 (Atlas Public Policy, 2023).

While EVs account for approximately 1% of light-duty vehicles on the road in Grand Junction, local adoption is also increasing. As shown in **Figure 4,** EVs increased from 81 vehicles in 2017 to 621 in June of 2023 (Atlas Public Policy, 2023).

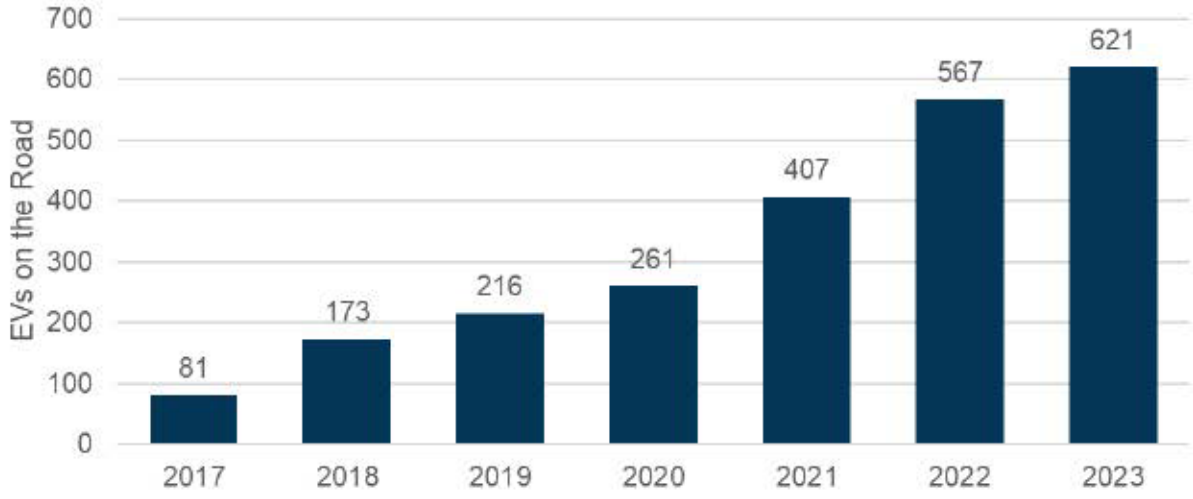


Figure 4. EVs on the road in Grand Junction Zip Codes 81501 – 81507 (Atlas Public Policy, 2023).

Existing EV charging network

Convenient and accessible public charging can support EV adoption by helping people feel more comfortable driving an EV, knowing that they will have access to charging on the go. Grand Junction has a head start on providing public charging opportunities, and the number of charging stations has increased in recent years to 60 Level 2 ports and 21 DC fast charging ports as shown in Figure 5Error! Reference source not found..

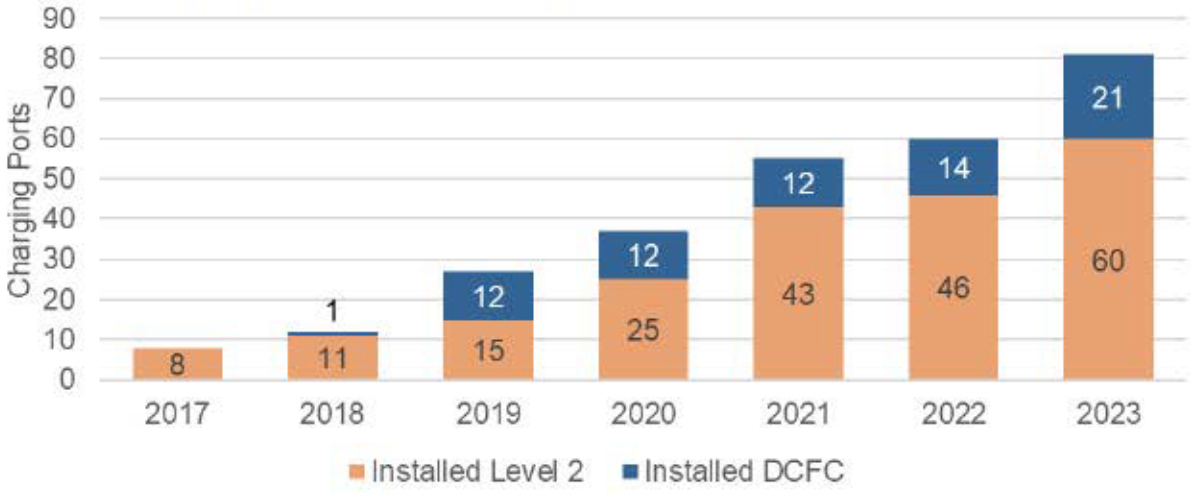


Figure 5. Number of level 2 and DC fast charging ports installed in Grand Junction to June 2023 (Atlas Public Policy, 2023).

As shown in **Figure 6**, the majority of Grand Junction's existing public charging ports are located in the downtown area or close proximity to major highways.

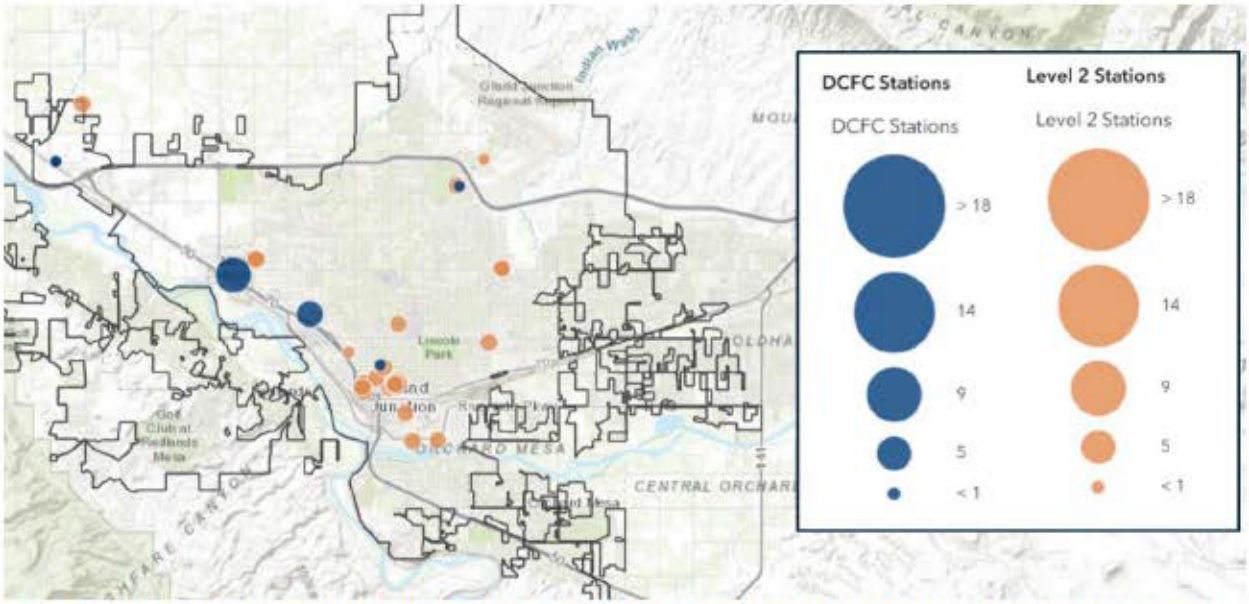


Figure 6. June 2023 distribution of existing level 2 and DC fast charging ports in Grand Junction (data adapted from (U.S. Department of Energy, 2023))

While these stations provide charging access for those traveling through Grand Junction, commuting to downtown, or using centralized amenities, there may be potential for increased charging access to serve residents to the north, south, and east of the downtown core.

Current municipal fleet efforts

The City of Grand Junction has received international attention as an early adopter of Compressed Natural Gas (CNG) fleet vehicles. Vehicles are fueled using methane gas produced at the Persigo Wastewater Treatment Facility. In 2021, the City's CNG station underwent an upgrade to increase capacity and take advantage of a growing supply of digester biogas. Currently, the equivalent of 300 gallons of gasoline is produced on-site daily, resulting in carbon emissions reduction of approximately 2.5 million pounds per year.

Additionally, at the time of plan development, the City of Grand Junction has begun to integrate EVs into the municipal fleet. As of June 2023, the City had the following vehicles:

- 2 electric passenger vehicles
- 2 electric forklifts
- 96 electric golf carts
- 4 Class 2 Ford E-Transit Cargo Vans (on order)
- 2 lawnmowers (on order)
- 1 recycling truck (on order)

Finally, in 2023, the City is participating in Xcel Energy Fleet Electrification Advisory Program which provides analysis to help fleet operators determine the best course of action for electrification. The program uses real-world data to evaluate current fleet operations and will inform the evaluation and implementation of municipal fleet electrification going forward.

Alignment with other planning efforts and programs

City of Grand Junction Greenhouse Gas Emission Inventory

In 2023, the City developed GHG inventories for 2018 and 2021. The inventory indicated that gasoline vehicles were the largest single source of emissions in Grand Junction and the report identifies vehicle electrification and multimodal transportation as key actions to reduce emissions going forward.

Grand Junction Resiliency and Sustainability Plan

In support of principles and priorities identified in the 2020 Comprehensive Plan, the City of Grand Junction began developing the community's first Resiliency and Sustainability Plan. The Plan, which is anticipated to be complete in Spring 2024, will

build on the GHG inventory and support sustainable development and conservation efforts to achieve improved public and environmental health.

E-Bike to Work Ownership Program

In 2023 the City received a $134,000 grant through the Colorado Energy Office "Community Access to Electric Bicycles" grant program. The grant created an ownership-based e-bike program to community members who live/work in two eligible areas of the city, Downtown and Horizon Drive Business District, and provided free e-bikes to those living or working in either of these areas and earning at or below 80 percent median income (AMI). The program provided 40 e-bikes to 40 participants.

Micromobility

2023 also saw the launch of a Shared Micromobility e-scooter pilot program within Grand Junction. The program is intended to:

- Diversify transportation options for residents.
- Encourage modal-shifts for short-distance trips.
- Inform infrastructure priorities with access to travel data.
- Provide first- and last-mile connectivity for transit users.
- Inform future policies.
- Understand micromobility and inform a permanent licensing permit for shared mobility businesses.

Colorado EV Plan 2023

The Colorado EV Plan 2023 is an update to the state's 2018 and 2020 plans and continues to accelerate adoption of EVs of all types in Colorado. The plan reinforces the state's existing goal of 940,000 light-duty EVs on the road by 2030 and establishes a new goal of 2.1 million on the road by 2035. These interim goals support a vision for 100% electric light-duty vehicles and 100% zero-emissions medium-duty vehicles. The plan identifies policies and programs by which to achieve these goals. It also includes a focus on personal and shared electric mobility along with cross-cutting initiatives that affect multiple parts of the transportation system.

Colorado Energy Code

In June 2022, the Energy Codes Board published the final Model Electric Ready and Solar Electric Ready Code. It specifies EV ready requirements for new residential, commercial, and multifamily properties (Colorado Energy Office, 2023).[3]

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[3] The final Model Electric Ready and Solar Electric Ready package which includes the final code language, an explanatory version with annotated notes for various sections of the code, and a final code report that outlines the statutory requirements for the code and an overview of the process and discussions of the Energy Code Board, can be found at https://energyoffice.colorado.gov/climate-energy/energy-policy/building-energy-codes/energy-code-board. Accessed on July 20, 2023.

This package must be adopted by cities and counties with building codes when they update other building codes to the 2021 International Energy Conservation Code (IECC) between July 1, 2023 and July 1, 2026.

In 2023, the state legislature passed legislation that along with other EV parking requirements, require the multifamily EV ready requirements from the Model Electric Ready Package go into effect statewide beginning March 1, 2024 (Colorado General Assembly, 2023).

WHERE WE ARE GOING

Our Vision Statement

During the planning process, the EV Action Team developed a vision statement to guide this EV Readiness Plan and Grand Junction's transportation electrification work:

The City of Grand Junction will prepare for and maximize the benefits of widespread EV adoption.

Access to electrified transportation and charging infrastructure will be affordable and inclusive so that community members, businesses, and visitors have the freedom to choose electric mobility options.

Future EV Adoption in Grand Junction

In identifying strategies to prepare for and maximize the benefits of transportation electrification, it is helpful to understand what the local and statewide EV landscape could look like.

In support of Colorado's EV goals – and considering emerging policies, programs, and technologies – the Colorado Energy Office developed scenarios projecting the number of electric vehicles anticipated on Colorado's roads by 2025 and 2030 (Colorado Energy Office, 2019). Based on the scenarios in this EV growth analysis, scaled for population and vehicle ownership rates, Grand Junction could expect to see increased EV adoption, as shown in **Figure 7**. The City will monitor EV adoption throughout the implementation of this EV Readiness Plan to understand the impact of plan strategies and inform any course adjustments needed.

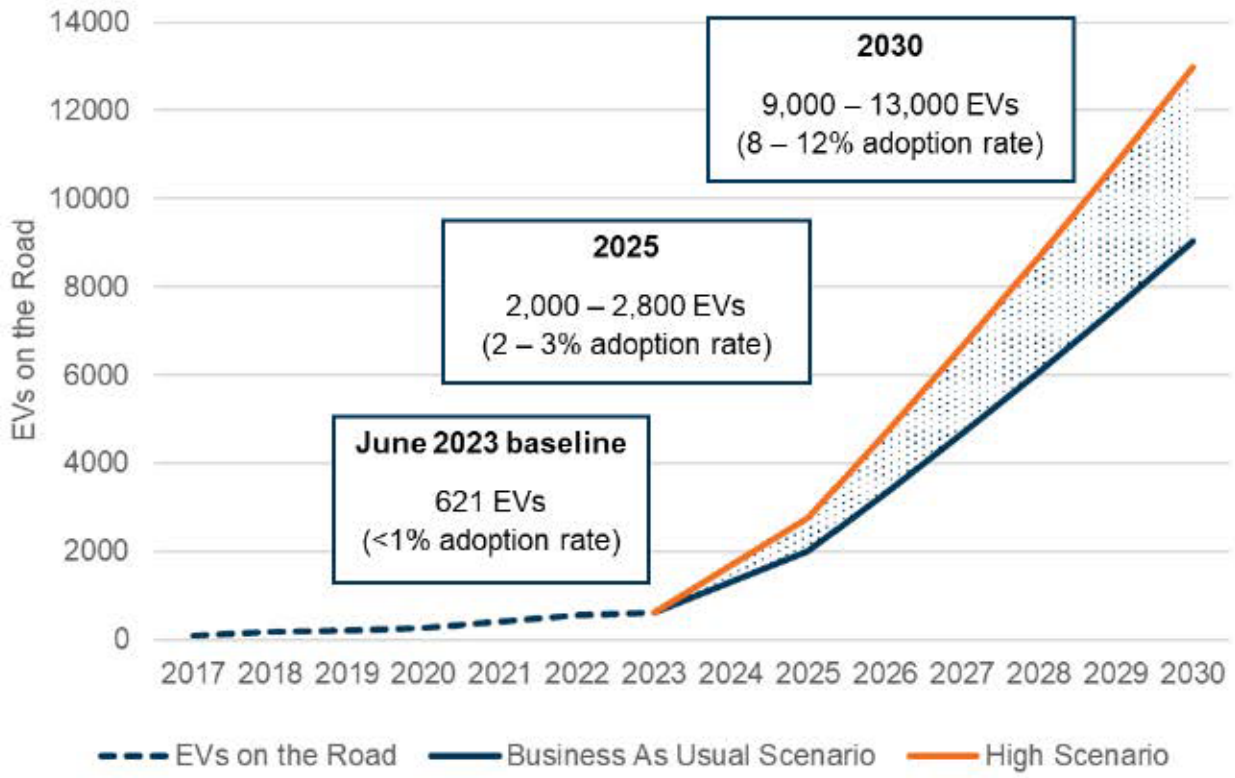

Figure 7. Projected EVs on the road in Grand Junction based on Colorado Energy Office Business as Usual (BAU) and High scenarios scaled to Grand Junction zip codes (Colorado Energy Office, 2019).

Future EV Charging Needs

As the number of EVs in Grand Junction, Colorado, and the U.S. increase, so will the demand for public charging. The number of charging ports needed to serve a community can vary based not only on the number of EVs, but also access to home charging and other factors such as demand created by highway through-traffic, in-commuters, and visitors. Additionally, installing public charging in anticipation of future demand can also facilitate an equitable transition to EVs by making charging more convenient and reliable for all residents.

A working paper prepared by the International Council on Clean Transportation estimated the charging infrastructure need to meet Colorado's EV goals. Anticipated charging needs in Grand Junction are shown in **Figure 8**.

The City will monitor the number of charging stations installed in Grand Junction throughout implementation of this EV Readiness Plan to understand the impact of plan strategies and inform any adjustments needed.

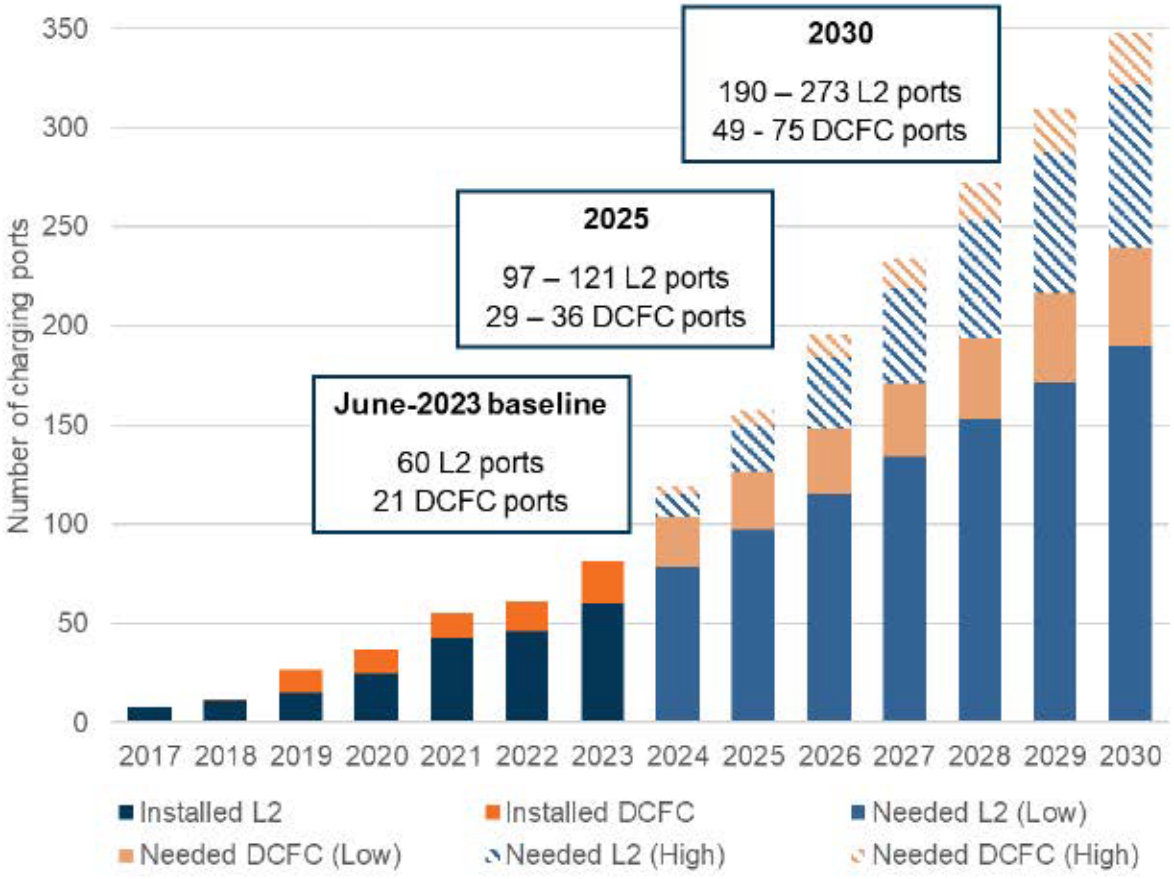

Figure 8. Projected need for charging ports based on Grand Junction's anticipated future EV adoption (linear extrapolation to meet anticipated 2030 need) (Hsu, Slowik, & Lutsey, 2021).

Focus Areas and Strategies

The EV Action Team, with input from key local stakeholders and the broader community, identified the following priority focus and strategies for implementation from Q3 2023 – Q1 2025. The EV Action Team also identified strategies for longer-term consideration and potential implementation.

Community Adoption (CA)

Supporting the equitable adoption of electric mobility throughout Grand Junction.

- **Q3 2023 - Q1 2025 Strategies**
  - CA-1: Launch an Electric Mobility Education Campaign
  - CA-2: Engage Dealerships and Auto Shops
  - CA-3: Support Electric Micromobility Adoption
- **Longer-Term Strategies**
  - EV Tourism Marketing, EV Connections for Commuters, EV Group Buy, and Equitable EV CarShare

Public Charging (PC)

Increasing community charging access and preparing to leverage existing and upcoming funding opportunities.

- **Q3 2023 - Q1 2025 Strategies**
  - PC-1: Engage Potential Private Charging Site Hosts
  - PC-2: Install Public Charging at Public Facilities
  - PC-3: Implement EV Parking Enforcement and Pricing Best Practices
  - PC-4: Clarify and Streamline Permitting Process for EV Charging
- **Longer-Term Strategies**
  - Regional Coordination for EV Infrastructure, Innovative Charging Solutions, EV Charging Accessibility, Mobility Connections, Multifamily Charging Outreach and Resources

Fleet Electrification (FE)

Identifying and implementing opportunities that support the electrification of municipal and other local fleets.

- **Q3 2023 - Q1 2025 Strategies**
  - FE-1: Evaluate Opportunities for Municipal Fleet Electrification
  - FE-2: Provide Electric Mobility Training for City Leadership and Staff
  - FE-3: Conduct EV Fleet Assessments
- **Longer-Term Strategies**
  - Explore Options for Transit Electrification, EV First Vehicle Replacement Policy, and Regional Coordination for Fleet Electrification and Charging

HOW WE ARE GOING TO GET THERE

To prepare Grand Junction to implement priority strategies, the EV Action Team developed a work plan for each strategy, identifying the audience, key action steps, roles, metrics, and available resources. The following sections provide these strategy work plans organized by the three EV readiness focus areas.

Community Adoption (CA) Focus Area

Based on projections described in the Where We Are Going section of this plan, Grand Junction could expect to see between 7,000 and 13,000 EVs on the road by 2030. Taking steps to prepare for and support this transition will enable the community to maximize the benefits of transportation electrification in an equitable manner. The priority strategies in this focus area include foundational education and engagement around electric mobility options to raise awareness of the benefits along with programs and incentives available to support EV access.

Strategy CA-1: Launch an Electric Mobility Education Campaign

This strategy was identified by the EV Action Team as foundational to many other strategies included in this plan. This sentiment was also echoed throughout much of the stakeholder and community engagement conducted by the City. The strategy will inform plan development, reflecting a need for outreach and education to residents and businesses alike to raise awareness of EV benefits and opportunities including available rebates and tax credits.

At the time of plan development, unprecedented amounts of funding were identified to support the adoption of EVs. This includes incentives for the lease or purchase of an EV and support for the installation of charging infrastructure. However, many residents and businesses may not be aware of available incentives, or how they can be stacked

together to reduce the upfront cost of ownership. This strategy, therefore, focuses on connecting residents and businesses with information and resources to support decision-making and realize the benefits of EV adoption.

In Grand Junction, 75% of residents drive alone to work (U.S. Census Bureau, 2021) and the average commute time of 16.2 minutes is well within the range of all EVs available on the market today. Additionally, since a majority of households having two or more vehicles available, there are many opportunities for residential EV adoption (U.S. Census Bureau, 2021). However, 34% of Grand Junction households have an income less than twice the federal poverty level and 22% of households have access to only one or no vehicle, meaning that a focus on lower-cost electric mobility options such as e-bikes will also be important (EPA, 2023).

Target Audience

- Residents
- Businesses
- Housing authorities
- Visitors

Metrics

- **Number of social media posts**
  - Track the number of social media posts and engagement with posts over time.
- **Engagement with EV website pages and EngageGJ**
  - Establish a baseline and monitor traffic to, and engagement with, existing and new City of Grand Junction EV pages, along with the EngageGJ platform EV project site. Include number of views/downloads for key online resources.
- **Number of Xcel Energy EV purchase rebates issued**
  - Establish a baseline and monitor change over time.
- **Number of people engaged at in-person events**

Scope and Timeline

Q3 Q4 2023

• Inventory existing information sources related to EV benefits and incentives to identify resources that could be leveraged and any potential gaps in local distribution.
• Identify existing communication channels, for example:
  ○ City channels such as websites, newsletters, and social media.
  ○ Grand Valley Power magazine.
  ○ Mesa County Libraries.
• Develop residential and business outreach plans to narrow target audience and outline key messages that will fill information gaps and outline local distribution channels.

Q1 Q2 2024

- Based on the outreach plan, develop outreach materials to reach residents and businesses using a variety of approaches, for example:
  - Downloadable fact sheet outlining EV basics, benefits, and available incentives.
  - Resources specifically aimed at businesses.
  - PowerPoint presentation that can be used at in-person community events or workshops.
  - Resources to promote existing charging stations.
  - Targeted social media posts, for example highlighting municipal fleet electrification and linking to additional resources.
- Distribute outreach materials using identified communication channels, in line with outreach plans.
- Explore new communications channels to reach additional residents and businesses (e.g., multifamily residents).

Q3 Q4 2024

- Continue implementation of outreach plan.
- Evaluate impact of outreach using identified metrics to establish a baseline and track impact going forward.

Q1 2025

- Continued implementation of outreach plan.
- Adjust outreach and engagement materials to reflect new opportunities and incorporate any feedback received.

Roles and Responsibilities

City of Grand Junction

- Lead identification of existing local communication channels.
- Support the development of outreach plans.
- Co-lead the development of outreach materials.
- Lead distribution of materials through identified City channels and monitoring of impact.

Xcel Energy Partners in Energy

- Lead inventory of existing information sources.
- Lead development of outreach plans.
- Co-lead development of outreach materials.
- Support distribution of outreach materials, including attendance at up to 3 events.

Partner Organizations

- **Mesa County Libraries** to support distribution of outreach materials and/or hosting of events.
- **CLEER** to support distribution of outreach materials through ReCharge coaching and other existing channels.
- **Horizon Drive BID**, **Downtown Grand Junction**, **Chamber of Commerce**, and other **local business development organizations** to support business outreach.

Related Resources

- **Informational and Capacity Resources**
  - Drive Clean Colorado resources.
  - CLEER resources.
  - EVCO statewide educational campaign.

- **Funding**
  - Xcel Energy home charging programs and income-qualified EV purchase/lease rebate.
  - Xcel Energy Higher Emissions Community enhanced charger rebates.
  - Colorado Department of Transportation E-Mobility Education and Awareness grants.
  - Federal and State EV and EV charging tax credits.
  - (Anticipated) Colorado Energy Office (CEO)
    - Service Panel Upgrade + Residential Resources (SPURR).
    - Vehicle Investment for Sustainable Transportation Access (VISTA).
    - Vehicle Exchange Colorado Program (VXC).

Strategy CA-2: Engage Dealerships and Auto Shops

This strategy emerged as a priority throughout the planning process and was brought forward by EV Action Team members as well as by dealership representatives during a focus group conducted by the City.

Dealerships play a unique and critical role in the transition to EVs as a key touchpoint with residents considering a new vehicle. We heard from dealerships that they understand that the automotive and micromobility industries are moving toward electrification and recognize the need for education of both their staff and customers. There is currently one Grand Junction dealership participating in Xcel Energy's EV Dealer Network and encouraging additional dealers to join could help build local capacity and inform residents about where to go if they are considering an EV.

Finally, this strategy also involves engaging with auto shops to provide information about EV resources and connect them with opportunities for EV-specific maintenance

training. This will help increase local EV knowledge and make residents feel more comfortable purchasing an EV, knowing that there are trained local professionals to work on it.

Target Audience

- Vehicle dealerships
- Auto shops
- Residents and business considering vehicle purchase

Metrics

- **Number of dealerships participating in Xcel Energy's EV Dealer Network**
  - Target 4 additional dealerships participating in the network by 2025.
- **Number of outreach events for dealerships**
  - Target 2 events for dealership staff to learn about EV benefits and incentives by 2025.
- **Number of EV maintenance trainings**
  - Target 2 auto shops trained in EV maintenance by 2025.
- **EV share of most recent model year vehicle registrations**
  - Monitor change in the percentage of new model year vehicle registrations in Grand Junction that are EVs using Atlas Public Policy EValuateCO dashboard as a proxy for new EV sales.

Scope and Timeline

Q1 Q2 2024
• Use initial outreach conducted during plan development to identify specific gaps and opportunities for dealership outreach. • Research best practices and existing resources for engaging auto shops and dealerships. • Develop a dealership and auto shop outreach plan to fill identified gaps and distribute materials. • Identify any organizations currently providing dealer training materials, certification programs, or other resources. • Engage with training providers to determine feasibility of in-person training for dealers and auto shops.

Q3 Q4 2024

- In line with the outreach plan, develop dealership-facing education materials including:
  - Information on Xcel Energy's EV Dealership Network benefits and how to join.
  - Connection to other resources or training opportunities.
- In line with outreach plan, develop customer-facing education materials, for example:
  - Summary of vehicle rebates, incentives, and where to go for additional information that dealerships could use to create vehicle window stickers.
  - Fact sheet handout or flyer describing the benefits of EVs and available incentives.
- Engage local dealerships to distribute education and outreach materials.
- Schedule, coordinate, and host in-person training for dealership staff, including support to join Xcel Energy EV Dealer Network.
- Identify any organizations currently providing auto shop training materials, certification programs, or other resources.

Q1 2025

- Schedule, coordinate, and host in-person trainings for auto shops.

Roles and Responsibilities

City of Grand Junction

- Support the development of outreach materials.
- Support research into best practices and existing resources for engaging auto shops and dealerships.
- Lead engagement with auto shops and EV dealers, including distribution of education materials.

Xcel Energy Partners in Energy

- Lead the development of outreach plan.
- Lead research into best practices and existing resources for engaging auto shops and dealerships.
- Lead the development of outreach materials.
- Provide connection to Xcel Energy EV Dealer Network resources.
- Support coordination of training events for dealers and auto shops.

Partner Organizations

- **Drive Clean Colorado** to provide dealership education resources.
- **Third-party organization(s)** to lead dealer and auto shop trainings (TBD).
- **Local colleges** (Colorado Mesa University / Western Colorado Community College) to host in-person dealer and auto shop trainings (TBD).

Related Resources

- **Informational and Capacity Resources**
  - Xcel Energy EV Dealership Network.
  - Drive Clean Colorado and other industry organization dealership resources.
  - EVCO statewide educational campaign.

- **Funding**
  - Xcel Energy EV Supply Equipment and EV Supply Infrastructure programs.
  - Colorado Department of Transportation Zero Emission Vehicle Workforce Development Grant.

Strategy CA-3: Support Electric Micromobility Adoption

Acknowledging that there are still cost and other barriers to EV adoption for many Grand Junction households, and that there are economic and environmental benefits to reducing vehicle miles traveled, this strategy focuses on exploring opportunities to support other electric micromobility options. Specifically, this strategy will build on the City's existing shared e-scooter pilot and e-bike ownership program to leverage emerging opportunities at the state level and explore the potential for a local e-bike incentive program.

Target Audience

- Residents
- Bike shops
- Visitors

Metrics

- **Number of e-bikes and/or e-bike rebates provided**
  - Build on baseline established during the 2023 e-bike ownership program.
- **Engagement with e-bike website pages**
  - Establish a baseline and monitor traffic to, and engagement with, existing and new City of Grand Junction EV pages, including number of views/downloads for key online resources.
- **Number of people engaged at in-person events**
- **Participation in e-bike ownership programs**

Scope and Timeline

Q3 Q4 2023

- Inventory existing rebates and resources to support e-bike adoption.
- Throughout implementation, research and document other potential electric micromobility programs, resources and technologies.
- Develop educational materials to communicate the benefits of e-bikes as an affordable and accessible mode of transportation, along with current e-bike programs and upcoming statewide e-bike program.
- Evaluate the need for, and feasibility of, a local e-bike rebate program.

Q1 Q2 2024

- Distribute educational materials in alignment with the outreach plan developed in Strategy CA-1.
- Evaluate uptake and impact of local e-bike ownership program and statewide e-bike rebate to identify gaps and opportunities for additional incentives.
- If determined to be beneficial, develop program design, budget request, and proposal for a local e-bike rebate program.

Q3 Q4 2024

- If relevant, submit a budget request and proposal for a City-funded e-bike rebate program in 2024 and prepare to launch.

Q1 2025

- If developed, launch City-funded e-bike rebate program.

Roles and Responsibilities

City of Grand Junction

- Co-lead the development of educational materials.
- Lead evaluation of the need and feasibility of a local e-bike rebate program.
- Lead development and distribution of e-bike educational materials.
- Lead evaluation of program impact.
- Lead program design, budget request, and implementation of a local e-bike rebate program.

Xcel Energy Partners in Energy

- Support inventory of existing rebates and resources.

Partner Organizations

- **Local bike shops** to support outreach and education.
- **Mesa County Bicycle Alliance** to support outreach and education.

Related Resources

- **Funding**
  - Colorado Energy Office Community Access to Electric Bicycles Grant Program
    - Funding for the development and implementation of e-bike deployment projects in communities across the state.
  - Colorado Energy Office Community Access to Electric Bicycles Rebate Program
    - Statewide incentive for low- and moderate-income Coloradans anticipated to be available August 2023. See Appendix C: Funding Resource Details for incentive amounts and income qualification.
    - Grant programs for e-bike ownership for low/moderate income residents.

Longer-Term Community Adoption Strategies

These Community Adoption strategies were identified as important by the EV Action Team and the community but are not currently slated for implementation in 2023 – 2024. Strategies may be brought forward earlier depending on funding and capacity.

- **EV Tourism Marketing.** Incorporate EV opportunities into Grand Junction's tourism marketing efforts in coordination with regional partners.
- **EV Connections for Commuters.** Explore the potential to support EV adoption and access for in-commuters (e.g., through incentives for EV drivers using Park and Rides or EV vanpool options).
- **EV Group Buy.** Organize a passenger vehicle group buy for community members to bring down costs and ease barriers to purchase.
- **Equitable EV CarShare.** Explore the feasibility of an equitable EV CarShare pilot program serving low-income and/or multifamily households.

Public Charging (PC) Focus Area

Based on projections described in the Where We Are Going section of this plan, Grand Junction could need between 187 and 266 public EV charging ports to serve vehicles on the road by 2030. While most charging can be done at home or work, where vehicles are typically parked for long periods, public charging plays a critical role in making EV adoption feasible for those without access to charging at home or work, such as multifamily residents, homes without garages, or renters. Additionally, public charging is a visible indicator of a community's commitment to EVs, assuring residents and visitors that they will be able to recharge their vehicle when needed. This visibility and access can help to ease "range anxiety", a common barrier cited by community members engaged in the development of this plan.

While Grand Junction's existing network provides convenient access to those working and visiting downtown, traveling into and through Grand Junction, or living in a central location, there will be a need for more equitably distributed charging as EVs become more affordable and accessible for all residents. Additionally, many currently available state and federal funding opportunities include a focus on equity, with priority or enhanced incentives available for designated Disproportionately Impacted Communities[4]. **Figure 9** shows the location of Disproportionately Impacted Communities designated at the state and federal level within Grand Junction.

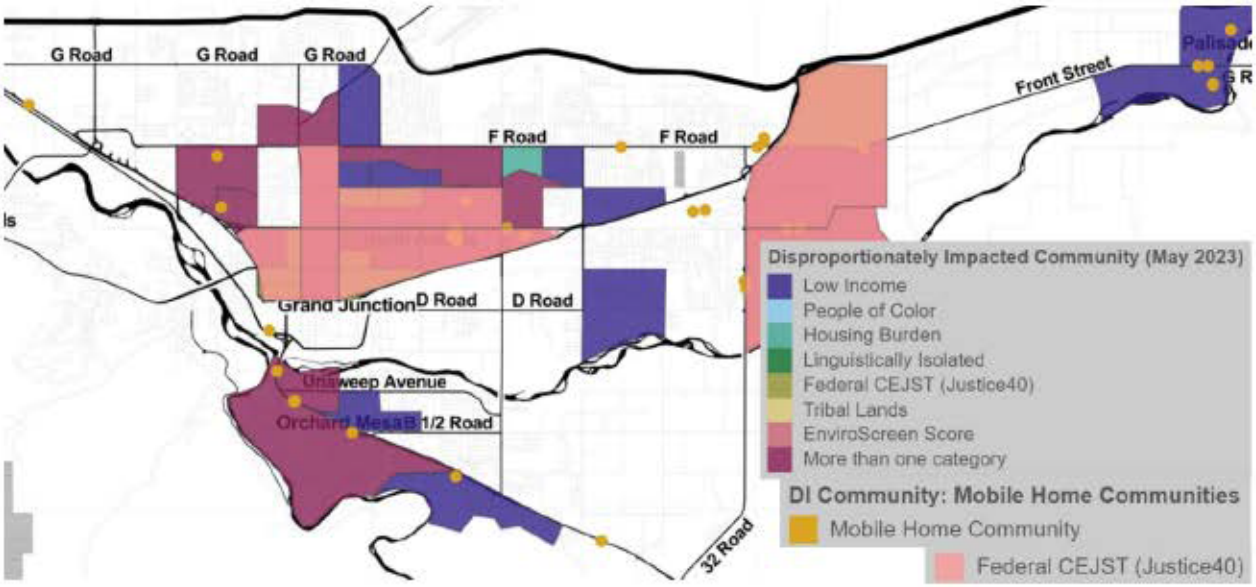

Figure 9. Disproportionately Impacted Communities and Federal Justice40 communities in Grand Junction that may be eligible for enhanced funding to support EV charging (Colorado Department of Health and Environment, 2023).

[4] The term Disproportionately Impacted Community refers to areas that meet the definition of "Disproportionately Impacted Community" under Colorado law, as defined by House Bill 23-1233. Details about what this definition includes can be found on the Colorado EnviroScreen Tool.

Many of these communities have limited access to EV charging currently and include locations identified by community members as potential sites for future charging, as shown in **Figure 10**. The strategies in this focus area aim to continue the build-out of convenient, accessible, and equitable charging across Grand Junction, including areas currently underserved by EV infrastructure.

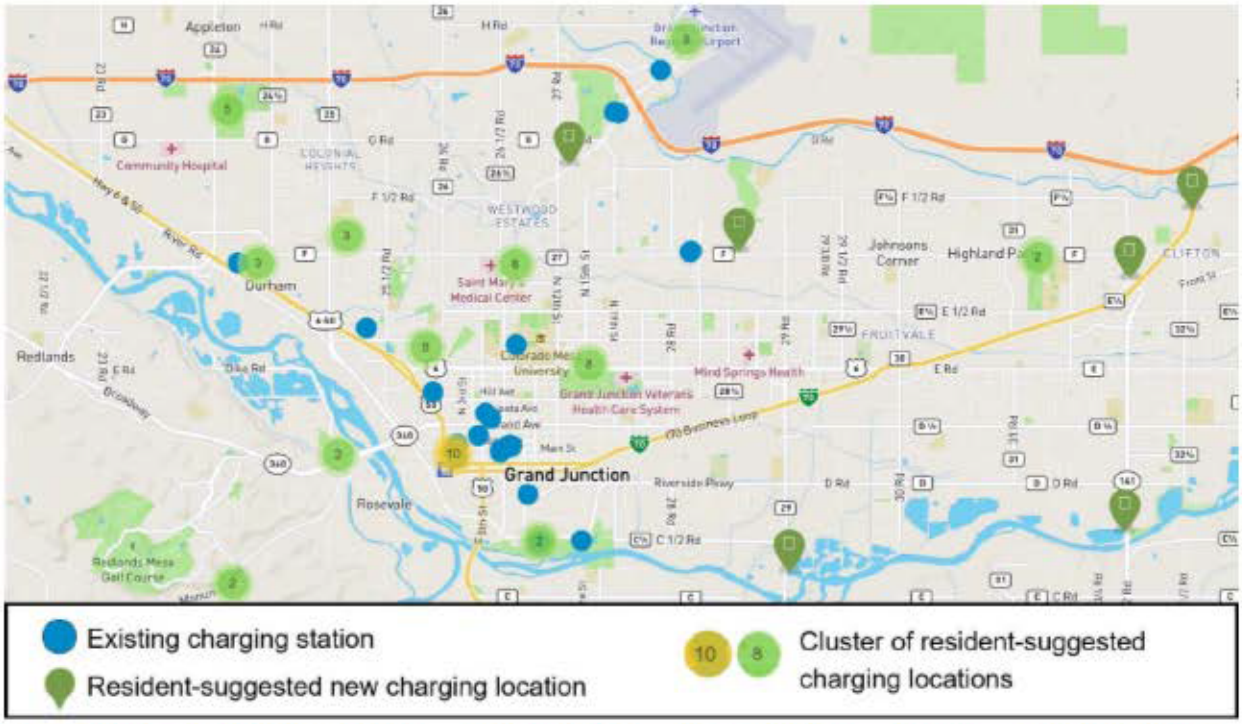

Figure 10. Potential charging locations suggested by residents through the city's interactive EngageGJ platform.

Strategy PC-1: Engage Potential Private Charging Site Hosts

This strategy involves using mapping and engagement completed during the development of the EV Readiness Plan. Mapping will be used to identify priority areas for future EV charging infrastructure and inform the engagement of potential site hosts within those areas, to raise awareness of the benefits and opportunities related to EV charging. Several factors that could inform the identification of priority areas for charging include equity considerations, funding, and public demand.

Target Audience

- Businesses
- Property owners
- Property management companies
- Developers
- Hotels
- Hospitals
- Education institutions

- Tourism industry
- Mesa County
- Truck stops
- Visitor's Center
- Shopping destinations
- Convenience stores
- Restaurants
- Grand Junction Economic Partnership (GJEP)
- Gas stations
- Movie theaters
- Micromobility partners (E.g., Lime, Bird)
- Horizon Drive Business Improvement District
- Chamber of Commerce

Metrics

- **Number of private charging stations installed**
  - Keep pace with projected demand.
  - Track number of locations exploring station installation and the total number installed.
- **Use of installed private charging stations**
  - Establish a baseline and monitor going forward.

Scope and Timeline

Q3 Q4 2023

• Develop criteria to inform identification of locations best suited for public Level 2 and DC fast charging, for example:
  ○ Equity considerations such as location within a designated Disproportionately Impacted Community, income, and access to home charging.
  ○ Applicable funding opportunities.
  ○ Proximity to existing charging infrastructure.
  ○ Identification by community members through EngageGJ.
• Use mapping to identify priority locations for Level 2 and DC fast charging in Grand Junction.
• Identify property owners, developers, and/or businesses in priority locations, for example, hotels, motels, gas stations, and convenience stores for Level 2 charging.
• Develop outreach and messaging to engage property owners, developers, and businesses. Based on stakeholder input, include an emphasis on competitive advantage, destination charging, and communication of existing incentives to support charging.

Q1 Q2 2024

- Distribute outreach and messaging related to Level 2 and DC fast charging to identified property owners and developers identified property owners for Level 2 and DCFC charging.
- Connect interested site hosts with Xcel Energy EV Advisors and/or CLEER ReCharge coaches to support site assessment and installation of EV charging.

Q3 Q4 2024

- Continued engagement with private site hosts to recruit and provide support to additional site hosts.

Roles and Responsibilities

City of Grand Junction

- Co-lead mapping and development of criteria for prioritization of potential charging locations.
- Lead identification of potential site hosts, including property owners, businesses, and developers for targeted outreach.
- Support the development of outreach materials.
- Lead engagement of potential charging site hosts and distribution of outreach materials.

Xcel Energy Partners in Energy

- Co-lead mapping and development of criteria for prioritization of potential charging locations.
- Lead development of outreach materials, for example:
  - Resources to support in-person engagement.
  - Print resources.
  - Social media posts.

Xcel Energy

- EV Advisors to support site assessment and installation process at potential charging locations with Xcel Energy electricity service.

Partner Organizations

- **CLEER** to provide coaching to potential site hosts through ReCharge Colorado program.

Related Resources

- **Funding**
  - Xcel Energy Programs
    - Income qualified and Higher Emissions Community charging rebates.
    - Multifamily EV Solutions programs.
    - EV Supply Infrastructure (EVSI) program.
    - EV Supply Equipment (EVSE) program.
    - Critical Peak Pricing program.
  - Colorado Energy Office Charge Ahead Colorado grants.
  - Federal EV Charging tax credits.
  - IIJA competitive Discretionary Grant Program for Charging and Fueling Infrastructure (CFI).

Strategy PC-2: Install Public Charging at Public Facilities

This strategy involves using mapping and community input to prioritize public facilities for charging, apply for available grant funding, and install charging stations.

Target Audience

- City departments
- Airport
- Bureau of Land Management
- Other governmental agencies
- City-owned recreational locations, including parks and trailheads

Metrics

- **Number of charging stations installed at public facilities**

Scope and Timeline

Q1 Q2 2024
• Use existing mapping and location prioritization from Strategy PC-1 to identify public facilities well situated for public charging. • Conduct site assessments at each potential location to evaluate the feasibility and identify any electrical upgrades required. • Request quotes for charging station installation, if necessary and appropriate. • Identify applicable funding programs for charging at each location and evaluate the availability of agency match funds, if required. • Determine and develop pricing structures for charging and payment system.
Q3 Q4 2024
• Apply for grant funding to install charging at priority locations. • Issue a request for proposals for the installation of charging stations, if necessary.

Q1 2025
• Install charging stations at priority public facilities. • Promote the opening and availability of new charging stations.

Roles and Responsibilities

City of Grand Junction
• Lead identification of public facilities well suited for public charging. • Lead request for quotes, coordination of site assessments, application for grants, and project management of station installation. • Lead promotion of charging stations once installed.
Xcel Energy Partners in Energy
• Support the use of existing mapping and prioritization framework to identify public facilities in priority charging areas. • Support the promotion of new charging stations, once installed, for example through the creation of flyers or other materials.
Xcel Energy
• EV advisors to support site assessment and charging station installation process.

Related Resources

- **Funding**
  - Xcel Energy Programs
    - Income qualified and Higher Emissions Community charging rebates.
    - EV Supply Infrastructure (EVSI) program.
    - Critical Peak Pricing program.
  - Colorado Energy Office Charge Ahead Colorado grants.
  - Federal EV Charging tax credits.
  - Infrastructure Investment and Jobs Act (IIJA) competitive Discretionary Grant Program for Charging and Fueling Infrastructure (CFI).
  - (Anticipated) Colorado Energy Office Community Access Enterprise programs.

Strategy PC-3: Implement EV Parking Enforcement and Pricing Structure Best Practices

EV parking policy, pricing, and enforcement can be critical to making sure that charging is affordable and accessible and to ensure that stations are reliably available for use by EV drivers. This strategy involves the development and implementation of EV parking enforcement best practices, including consideration of beneficial pricing structures for charging.

Target Audience

- City parking enforcement
- Businesses
- Residents

Metrics

- **Charging station use and availability metrics**

Scope and Timeline

Q1 Q2 2024

- Inventory existing parking requirements and opportunities, including:
  - Evaluate existing code requirements and restrictions related to the enforcement of EV charging spaces and the ability of the City to write tickets for violation.
  - Engage businesses with charging to understand existing pricing structures and how they were developed.
- Research EV parking best practices, including consideration of:
  - Compliance with State of Colorado parking and signage requirements established through HB19-1298.
  - Existing code requirements and restrictions related to the enforcement of EV charging spaces and the ability of the City to write tickets for violation.
  - Affordable charging rates, while deterring drivers from remaining in a parking space after they have completed charging.
  - EV charging space signage.

Q3 Q4 2024

- Based on research, develop best-practice guidelines for EV parking enforcement and pricing.
- Implement best practice guidelines for EV charging at City-owned facilities.

Q1 2025

- Evaluate opportunities for implementation and enforcement of updated EV parking policy based on best practice guidelines.

Roles and Responsibilities

City of Grand Junction
• Lead inventory of existing parking requirements and opportunities. • Lead engagement with businesses to understand existing parking and pricing structures. • Co-lead development of best-practice guidelines for EV parking enforcement and pricing. • Lead implementation of best-practice guidelines at City-owned charging. • Lead evaluation of opportunities for EV parking policy.
Xcel Energy Partners in Energy
• Lead research into EV parking best practices. • Co-lead development of best-practice guidelines for EV parking enforcement and pricing.
Partner Organizations
• **CLEER** to support the development of parking and pricing best practices. • **Local colleges** (Colorado Mesa University / Western Colorado Community College) to support research into best practices (TBD).

Related Resources

- **Informational and Capacity Resources**
  - Existing City of Grand Junction charging stations and resources.

Strategy PC-4: Clarify and Streamline Permitting Process for EV Charging

For some homeowners and businesses, knowing where to start and what is required from a permitting perspective could be a barrier to EV charging installation. This strategy focuses on clarifying the permitting process for residential and commercial EV charging through the development of a "how to" guide and exploring opportunities to simplify site review.

Target Audience

- Residents
- Developers
- Contractors
- Electricians

Metrics

- **Average turnaround time for EV charging permit applications**
  - Establish a baseline and monitor going forward.

Scope and Timeline

Q1 Q2 2024

- Evaluate current permitting processes to document current EV charging review processes and identify opportunities for simplification and/or streamlining.

Q3 Q4 2024

- Develop a public facing "how to" guide documenting when a permit is required for EV charging and the steps involved.
  - Include connection to other outreach materials developed through the implementation of Strategy CA-1.
  - Incorporate learnings from the implementation of Strategy PC-1 to inform identification of current gaps or pain points in the charging installation process.
- Engage electricians, businesses, and charging installers to review the guide and support distribution.

Roles and Responsibilities

City of Grand Junction

- Lead evaluation of existing permitting processes and identification of opportunities for clarification.
- Lead development of "how to" guide for EV permitting.

Xcel Energy Partners in Energy

- Support the development of "how to" guide and connection to resources developed through the implementation of Strategy CA-1.

Partner Organizations

- **CLEER** to support evaluation of permitting processes in conjunction with GoEV City resources.

Related Resources

- **Informational and Capacity Resources**
  - Example streamlined EV charging station permits and guidelines:
    - City of Contra Costa, CA Streamlined Permit Application
    - Montgomery County, MD Residential EV Charging Permitting Guidelines
    - New York State EV Charging Station Permitting Resources
    - Commerce City, CO Minimum Submission Documents
  - GoEV City resources.

Longer-Term Public Charging Strategies

These Public Charging strategies were identified as important by the EV Action Team and the community but are not currently slated for implementation in 2023 – 2024. Strategies may be brought forward earlier depending on funding and capacity.

- **Regional Coordination for EV Infrastructure.** Work with public and private partners operating outside of city limits to promote regional charging stations, identify charging gaps, and explore opportunities to enhance the regional charging network.
- **Innovative Charging Solutions.** Explore opportunities to pilot innovative charging solutions such as vehicle-to-building technology.
- **EV Charging Accessibility Standards.** Develop and implement accessibility standards for all charging stations, above and beyond ADA requirements.
- **Mobility Connections.** Connect EV charging with other mobility options, for example through the co-location of shared micromobility hubs and charging infrastructure.
- **Multifamily Charging Outreach and Resources.** Provide targeted outreach and resources to multifamily property owners and managers to support the installation of charging.

Fleet Electrification (FE) Focus Area

In addition to personal vehicles and e-mobility options, transportation electrification also has potential benefits for fleet operators, including lower and more reliable fuel costs and reduced maintenance needs. Fleet electrification by local public agencies can also serve as an example to the rest of the community of the potential application and benefits of EVs.

Strategy FE-1: Evaluate Opportunities for Municipal Fleet Electrification

As detailed in the **Where We Are Now** section of this plan, the City has made a start toward electrification with two passenger EVs, two electric forklifts and ninety-six electric golf carts already in the fleet. The City also has two electric lawn mowers, 2 Ford-E cargo vans, and an electric recycling truck on order. Additionally, the City was an early adopter of Compressed Natural Gas (CNG) fleet vehicles, fueled using methane gas produced at the Persigo Wastewater Treatment Facility. In 2021, the City's CNG station underwent an upgrade to increase capacity and take advantage of a growing supply of digester biogas. Since it is anticipated that CNG will continue to play an important role in fueling heavy-duty fleet vehicles, the City's electrification efforts may initially focus on light-duty fleet while taking advantage of medium- and heavy-duty opportunities as they arise.

At the time of plan development, the City is participating in Xcel Energy's Fleet Electrification Assistance Program (FEAP) which will analyze 36 fleet vehicles and provide recommendations to inform municipal fleet electrification going forward. This strategy involves completing FEAP and creating a plan for the implementation of the recommendations provided.

Target Audience

- City departments
- Airport
- Mesa County

Metrics

- **Percentage of light-duty EVs in City, Mesa County, and Airport fleet**
  - 12% light-duty fleet electrification by 2025 (TBC based on FEAP report and recommendation).
- **Percentage of zero-emissions vehicles in City, Mesa County, and Airport heavy-duty fleets**
  - Target for each entity to be developed based on FEAP recommendations and CNG fueling capacity/plans.
- **Impact of fleet electrification**
  - Establish a baseline for fuel use, cost, GHG emissions and monitor going forward.

Scope and Timeline

Q3 Q4 2023
• City of Grand Junction to complete participation in Xcel Energy FEAP.
Q1 Q2 2024

• Evaluate the feasibility of recommendations provided through FEAP participation.
• Use FEAP results to inform the development of an implementation plan to guide municipal fleet electrification including:
  ○ Current vehicle type and age.
  ○ Recommended replacement models.
  ○ Replacement timelines.
  ○ Infrastructure needs associated with fleet electrification.
  ○ Available financial incentives.
  ○ Budget request timelines.

Q3 Q4 2024
• Explore the development of EV purchasing guidelines to support fleet electrification implementation plan. • Begin implementing FEAP recommendations, for example through: ○ Preparation of budget requests to purchase light-, medium- and/or heavy-duty electric fleet vehicles and install fleet charging at municipal facilities in 2025.
Q1 2025
• Purchase of electric fleet vehicles and installation of infrastructure to support fleet charging.

Roles and Responsibilities

City of Grand Junction
• Lead participation in FEAP. • Lead development of a fleet electrification plan based on FEAP recommendations. • Lead evaluation and implementation of FEAP recommendations.
Xcel Energy Partners in Energy
• Support the development of FEAP implementation plan.
Xcel Energy
• Lead coordination and completion of FEAP analysis. • Support the development of FEAP implementation plan.

Related Resources

- **Funding**
  - Xcel Energy FEAP program.
  - Resources available to support the implementation of FEAP recommendations.
    - Higher Emission Community support and supplemental rebates.
    - Xcel Energy EVSI program.

- Xcel Energy EVSE program.
- Xcel Energy Critical Peak Pricing Program.
- CEO Fleet Zero-Emission Infrastructure Program.
- Colorado Department of Public Health and Environment (CDPHE) Clean Fleet Vehicle & Technology Grant Program.
- Federal EV and EV charging tax credit direct payments.
- Climate Mayors' EV Purchasing Collaborative discounts.
- IIJA competitive Discretionary Grant Program for Charging and Fueling Infrastructure.
- U.S. Department of Transportation Carbon Reduction Program administered through the Metropolitan Planning Organization.
- U.S. Department of Energy, Energy Efficiency and Conservation Block Grant Program.
- (Anticipated early 2023) U.S. EPA Diesel Emission Reduction grants.

Strategy FE-2: Provide Electric Mobility Training for City Leadership and Staff

As the City begins to implement strategies identified in this Readiness Plan and prepare for both community-wide and fleet adoption, it will be important for City staff and leadership to be familiar with electric mobility technologies and processes. This strategy focuses on developing and implementing a training program for City staff to build awareness and support informed decision-making practices.

Target Audience

- Planning staff
- Mechanics
- Vehicle operators
- Department Directors
- Finance staff
- Parking officers
- Elected officials
- Metropolitan Planning Organization (MPO)

Metrics

- **Number of staff trained in each department**

Scope and Timeline

Q1 Q2 2024

• In coordination with the implementation of Strategy CA-2, develop Electric Mobility 101 and targeted training materials for staff in different roles (e.g., planner, vehicle operator, leadership, etc.). Training could include:
  o Financial costs and funding opportunities.
  o EV and electric mobility benefits.
  o EV operation and maintenance.
  o EV charging station operation and maintenance.
  o EV charging management software.
  o Permitting.
  o Parking best practices.

Q3 Q4 2024
• Develop an assessment or survey to evaluate completion and effectiveness of training. • Deliver training program for City leadership and staff. • Administer assessment or survey to evaluate completion and effectiveness of training.
Q1 2025
• Adjust training as needed based on year one evaluation. • Ongoing annual training for City leadership and staff.

Roles and Responsibilities

City of Grand Junction
• Co-lead development of training materials. • Lead delivery of training program.
Xcel Energy Partners in Energy
• Co-lead development of training materials. • Support delivery of training program. • Connect the City with emerging Xcel Energy Transportation Electrification Plan (TEP) opportunities.
Partner Organizations
• Third party organizations to lead electric mobility training (TBD).

Related Resources

- **Funding**
  - Colorado Department of Transportation ZEV Workforce Development Grant.
  - Colorado Department of Transportation E-Mobility Education and Awareness Grant.
  - Xcel Energy Commercial Workforce Training (anticipated in 2024 – 2026 Xcel Energy Transportation Electrification Plan).

- **Informational and Capacity Resources**
  - CLEER resources.
  - Colorado Electric Vehicle Coalition (CEVC).
  - Colorado Municipal League (CML).
  - FleetPros FleetCon conference taking place in Loveland in August 2023 includes numerous sessions on alternative fuel vehicles and EVs.

Strategy FE-3: Conduct EV Fleet Assessments

Similar to a municipal fleet, there are potential benefits of fleet electrification for any fleet operator in Grand Junction. Any fleet based in Xcel Energy service territory with five or more vehicles is eligible to participate in the FEAP program. This strategy therefore focuses on recruitment and support of Grant Junction business and organizations to participate in FEAP.

Target Audience

- Businesses with fleets
- Colorado Mesa University (CMU)
- Hospitals
- Chamber of Commerce
- Delivery-focused businesses (e.g., materials/parts suppliers)
- Local public agencies

Metrics

- **Number of entities participating in FEAP**
  - Five additional participants by 2025

Scope and Timeline

Q3 Q4 2023
• Identify entities already participating in FEAP and other local fleet operators eligible to participate.
Q1 Q2 2024

• Develop targeted outreach to encourage local fleet operators to participate in FEAP, for example:
  ○ Toolkit or one-page overview to share with eligible entities.
• Work with existing channels to distribute to local businesses, for example:
  ○ Present at Chamber of Commerce meeting.

Q3 Q4 2024
• Support interested entities to apply for and participate in FEAP.

Roles and Responsibilities

City of Grand Junction
• Lead identification of local fleet operators. • Lead distribution of outreach materials.
Xcel Energy Partners in Energy
• Support identification of existing and potential FEAP participants. • Lead development of targeted outreach materials. • Support local entities' application for and participation in FEAP. • Monitor participation in FEAP, in coordination with the Xcel Energy team.
Partner Organizations
• Lead implementation of FEAP in coordination with local fleet operators.
Partner Organizations
• **Downtown Grand Junction**, **Horizon Drive Business Improvement District**, **Chamber of Commerce,** and other local business development organizations to support identification of, and outreach to, fleet operators. • **CLEER** to support fleet outreach through the ReCharge program.

Related Resources

- **Funding**
  - Xcel Energy FEAP program.
  - Resources available to support the implementation of FEAP recommendations:
    - Higher Emission Community support and supplemental rebates.
    - Xcel Energy EVSI program.
    - Xcel Energy EVSE program.
    - Xcel Energy Critical Peak Pricing Program.
    - CEO Fleet Zero-Emission Infrastructure Program.
    - Colorado Department of Public Health and Environment (CDPHE) Clean Fleet Vehicle & Technology Grant Program.
    - Climate Mayors' EV Purchasing Collaborative discounts.
    - Federal EV and EV charging tax credit direct payments.
    - IIJA competitive Discretionary Grant Program for Charging and Fueling Infrastructure.
    - U.S. Department of Transportation Carbon Reduction Program administered through the Metropolitan Planning Organization.
    - (Anticipated early 2023) U.S. EPA Diesel Emission Reduction grants.

- **Informational and Capacity Resources**
  - CLEER ReCharge coaching.
  - Drive Clean Colorado informational resources.

Longer-Term Fleet Electrification Strategies

These fleet electrification strategies were identified as important by the EV Action Team and the community but are not currently slated for implementation in 2023 – 2024. Strategies may be brought forward earlier depending on funding and capacity.

- **Explore Options for Transit Electrification.** Monitor new EV technology for buses and coordinate with Grand Valley Transit local and regional partners to identify electric buses that are suitable for transit serving the Grand Junction community.
- **EV First Vehicle Replacement Policy.** Adopt a vehicle replacement policy that prioritizes electric or zero emissions vehicles.
- **Regional Coordination for Fleet Electrification and Charging.** Coordinate with regional fleet operators to learn and share best practices and experiences with light-, medium-, and heavy-duty fleet electrification.

HOW WE STAY ON COURSE

Successfully implementing the strategies identified in this EV Readiness Plan will require close coordination and collaboration between the City and its partners, along with regular tracking and reporting to ensure we stay on course.

The structure for implementation of this plan over the next 18-months will mirror that used in plan development, with a core Project Management Team meeting regularly to oversee day-to-day activities, regular coordination with a broader EV Action Team, and input from the wider community as necessary and appropriate, as shown in **Figure 11**.

Figure 11. Grand Junction EV Readiness Plan implementation structure.

Implementation of EV Readiness Plan strategies will be phased over the implementation period from Q3 2023 through Q1 2025 as shown in **Table 1**.

Table 1. Initial phasing of Grand Junction EV Readiness Plan strategies during the Q3 2023 - Q1 2025 implementation period.

Strategy	Q3 Q4 2023	Q1 Q2 2024	Q3 Q4 2024	Q1 2025
Strategy CA 1: Launch an Electric Mobility Education Campaign				
Strategy CA 2: Engage Dealerships and Auto Shops				
Strategy CA 3: Support Electric Micromobility Adoption				
Strategy PC 1: Engage Potential Private Charging Site Hosts				
Strategy PC 2: Install Public Charging at Public Facilities				
Strategy PC 3: Implement EV Parking Enforcement and Pricing Structure Best Practices				
Strategy PC 4: Clarify and Streamline Permitting Process for EV Charging				
Strategy FE 1: Municipal Fleet Electrification				
Strategy FE 2: EV Training for City Leadership and Staff				
Strategy FE 3: Conduct EV Fleet Assessments				

Tracking Progress

To ensure that this plan remains on track, the Project Management team will track and report key metrics identified in this plan on an annual basis.

Overarching Metrics

Tracking the overarching metrics in **Table 2** will provide an understanding of strategy impact. Additionally, these metrics will provide insight into the development of Grand Junction's EV landscape and be used to inform course adjustments, if needed. The

results may also be shared with Grand Junction City Council and the wider community to provide transparency around the implementation process and recognize the collaborative efforts of those involved.

Table 2. Overarching EV adoption and charging metrics.

Metric	Data Source
Light-Duty EVs on the road in Grand Junction zip codes and rate of adoption	Atlas Public Policy EValuateCO dashboard U.S. Census Bureau Zip Code Tabulation Area Population Data
Level 2 and DC fast charging ports in Grand Junction zip codes	Atlas Public Policy EValuateCO dashboard

Strategy Level Metrics

The Project Management Team will also track the strategy-specific metrics in **Table 3** to monitor plan implementation progress.

Table 3. Grand Junction EV Readiness Plan strategy metrics.

Strategy	Metrics
Strategy CA-1: Launch an Electric Mobility Education Campaign	• Number of social media posts. • Engagement with EV website pages and EngageGJ. • Number of Xcel Energy EV purchase rebates issued. • Number of people engaged at in-person events.
Strategy CA-2: Engage Dealerships and Auto Shops	• Number of dealerships participating in Xcel Energy's EV Dealer Network. • Number of outreach events for dealerships. • Number of EV maintenance trainings. • EV share of most recent model year vehicle registrations.
Strategy CA-3: Support Electric Micromobility Adoption	• Number of e-bikes and/or e-bike rebates provided. • Engagement with e-bike website pages. • Number of people engaged at in-person events. • Participation in e-bike ownership programs.
Strategy PC-1: Engage Potential Private Charging Site Hosts	• Number of charging stations installed. • Use of installed charging stations.
Strategy PC-2: Install Public Charging at Public Facilities	• Number of charging stations installed at public facilities.

Strategy	Metrics
Strategy PC-3: Implement EV Parking Enforcement and Pricing Structure Best Practices	• Charging station use and availability metrics.
Strategy PC-4: Clarify and Streamline Permitting Process for EV Charging	• Average turnaround time for EV charging permit applications.
Strategy FE-1: Municipal Fleet Electrification	• Percentage of light-duty EVs in City, Mesa County, and Airport fleet. • Percentage of zero-emissions vehicles at City, Mesa County, and Airport fleet. • Impact of fleet electrification.
Strategy FE-2: EV Training for City Leadership and Staff	• Number of staff trained in each department.
Strategy FE-3: Conduct EV Fleet Assessments	• Number of entities participating in FEAP.

Adapting to a Changing Landscape

The strategy work plans included in this EV Readiness Plan were developed within the context of rapidly changing technologies, industry standards, and funding opportunities. It will be important to evaluate and update strategies throughout implementation, to reflect advancements and new offerings from the transportation industry, Xcel Energy, and state and federal resources. The Xcel Energy Partners in Energy EV Toolkit may be a good resource for solutions to address unexpected barriers that may arise, and any adjustments will be documented and shared with the broader group and community.

APPENDIX A: COMMUNITY ENGAGEMENT SUMMARY

This EV Readiness Plan was developed through a nested engagement approach. In addition to regular project management meetings and three planning meetings with the EV Action Team, the City of Grand Junction also led broader engagement with the community throughout plan development. This Appendix provides a summary of EV Readiness Plan engagement.

In-Person Community Engagement

City staff attended a number of events (**Table 4**) throughout the spring and summer of 2023 to gather input on electric vehicle readiness and draft plan concepts. In total, over 160 community members were engaged at these events.

Table 4. In-person community engagement events related to the development of this EV Readiness Plan.

Event/Meeting	Date/Time	Location
Beers, Bikes, and Electric Vehicles	Mar 14 6 - 7:30 pm	Kannah Creek Edgewater Brewery
Hispanic Information Fair	April 13 5:30-7:30 pm	Mesa County Library Central Branch
Southwest Arbor Fest	April 22 9 am – 5 pm	Lincoln Park
EV Ride and Drive	April 30 1 – 5 pm	Lincoln Park Barn
Student Presentation	May 10	Colorado Mesa University
EV Readiness Plan Open House	May 24 5:30 – 7:30 pm	Bookcliff Activity Center

EngageGJ

In addition to in-person engagement, the City used a newly launched online engagement platform, EngageGJ, to gather additional feedback from community members.

Throughout the development of the EV Readiness Plan, the City used the EngageGJ platform to provide information about EVs along with updates related to plan development and opportunities to provide input. The EV program site included polls, a community forum, a survey, and an interactive map to which community members could add potential charging station locations. **Figure 12** summarizes interaction with the EngageGJ platform as of June 11, 2023.

Figure 12. EngageGJ engagement statistics as of August 20, 2023.

Public Comment Period

The Draft EV Readiness Plan was posted for public comment from July 21st to August 16th, 2023. In total, 8 public comments were received and all were reviewed by the project management team and integrated into the final plan document as appropriate.

Focus Groups and Interviews

City of Grand Junction staff engaged stakeholders and community partners through three focus groups and six interviews with key personnel to gain input on EV readiness to inform strategy development. The results of these focus groups and interviews are summarized in the following pages. Note that these summaries reflect the conversation that took place and the input of the participants and opinions may therefore not be representative of the City of Grand Junction or Xcel Energy.

Focus Group: Auto Dealers & Servicers (May 10, 2023)

Participants:

- Kevin Lemarr, Western Slope Auto (Ford, Lincoln, Toyota)
- Mike Nixon, GJ Chrysler, Dodge, Jeep, Ram
- Chris Haugen, Discovery Auto Group
- Trish Bobbitt and Jose Hernandez, Modern Classic Motors

Key Takeaways:

- Significant dealer skepticism about adoption in Grand Junction, about the performance of EVs, and the pre-owned EV market.

- Interest in Xcel Qualified Dealer Network; manufacturer/new dealers following the direction of manufacturers into EVs, the perceived direction the entire market is going.
- Education needed for dealers and their customers.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• A lot for dealer and servicer to learn, especially an independent dealer who needs to deal with multiple manufacturers' different technologies. Need to retrain service staff, add service infrastructure. Risks in working on electrical systems in EVs. • Battery concerns—environmental impact and performance in our climate & given the interest in off-road/recreational driving in the area. No effective charging or performance in cold. • Customer range anxiety. • Not enough charging infrastructure. • Hard to service Teslas; no service available in our area for brands like BMW and Mercedes. • Higher consumer costs; maintenance costs 3-4 times higher with EVs.* • $2 million lot upgrade to add chargers, with utility difficulties. • For pre-owned dealer, it's still unclear how much resources should be devoted to EVs (interest in charging station, but cost is high for current EV volume). • Pre-owned market is hard due to new-buying incentives, supply, battery concerns (end of warranty), and worry that newer technology will devalue current models. • Need to replace gas tax revenue and build out more resilient	• Already having success transitioning ICE drivers into PHEVs (Jeep PHEVs). • Increasing number of customers seeking EVs at independent dealers. • Tesla owners specifically demonstrate less range anxiety and more comfort that they're the safest bet in EVs (pre-owned). • EVs are the future and manufacturers are pushing them. • Seeing EV buyers looking to use EVs as a secondary/in-town vehicle. • Intentional new EV buyers are knowledgeable about vehicle models but benefit from education on owning and operating conveniently (noted lack of interest in EVs in local Hispanic/Latino customers). • Independent dealerships interested in hosting charging equipment that would also benefit nearby restaurants, and businesses. They would like help in this from the City, especially in coordinating with utility.

infrastructure because of EV weight and battery fires.

Focus Group: Grand Junction Tourism Sector (May 11, 2023)

Participants:

- Kyra Seppie, Event Coordinator, Downtown Development Authority
- Jonathan Purdy, Executive Director, Horizon Business Improvement District
- Brian Oliver, General Manager, Rockslide Brew Pub
- James Stover, Business Development Manager, GJ Adventures

Key Takeaways:

- Strategic placement of EV charging equipment and information for visitors about how to find it, along with connections provided by infrastructure or micromobility between attractions and hotel areas, will make the city even more appealing to visitors and maintain a profitable positive reputation for travelers using these modes.
- Excitement, with some safety concerns, about more incorporation of electric mobility (e-bikes and e-scooters) with visitors' trips to city, and in coordination with EV charging.
- The plan should strive for fairness and equity/equitable access to EVs and electric mobility.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• Hoteliers mostly don't think they need EV charging equipment yet, and those that don't advertise it and hold it only for guests. • Ample EV charging infrastructure would need to be well located at parks, destinations, and hotels for ease and flow of visitor travel (not all within city limits). • Need EV charging spot enforcement in the DDA area (parking a persistent issue here). • Perceived lack of coherent mapping for visitors to locate charging sites and possible EV servicers. A need to create a digital tool or landing page for this purpose (and hard copy, for DDA, Horizon, and Visit GJ offices).	• Grand Junction becoming a destination, not just a stop-through, so there is an opportunity to keep up with the EV transition to keep visitors coming and returning (noted that 60% of activity guests are now from outside the Grand Junction area). • Outdoor activity visitors (hiking, rafting, biking, etc.) already lean environmentally and, thus, will tend to skew toward EV driving. • EV readiness will be part of reputation management and our status as a destination, even at the level of which charging speeds are available in which

- Concern about safety of putting tourists on e-bikes, although in general the idea is appealing. Also concerned about how unreceptive much of our community is to bikes and e-bikes on the roads (would love to see canal roads used for this)..
- Currently no signage from the interstate to indicate charging capacity.
- Tension between local and tourist traffic (involving the "free" parking of the Avalon EV charging station).
- Hoteliers don't have time and ability to find, apply for, and report on technical grants for EV charging equipment. Up-front costs are also often prohibitive without grants.
- Businesses without their own parking require public/private partnerships if City-owned parking is nearby, would still need to benefit.

locations (logical, strategic placement).
- Co-locating charging equipment for through-travelers with local businesses, or at locations of their intended activities (e.g., river, trailheads), can help. generate revenue and that positive reputation.
- Adding information on chargers into descriptions of hikes, etc., that we already put in our marketing materials.
- Huge interest in e-bike movement, including e-mountain biking, as well as in other micromobility in the area. Also glad to see this plan includes other electric mobility.
- Opportunity to connect area tourism businesses and area contractors who install EV charging equipment.

Focus Group: Multifamily Housing Developers (May 12, 2023)

Participants:

- Kyle Oberkoetter, Four Points Funding
- Krista Ubersox, Grand Junction Housing Authority
- Brian Shiu, Anthony Properties
- MacKenzie Thorn, Sweeney/Aspen Starwood
- Ashley Chambers, City of Grand Junction Housing Division

Key Takeaways:

- Agreement that EV ownership rate will continue to increase and affect property development; desire to prepare but without overspending or investing in equipment that becomes obsolete.
- Parking at properties generally is designed to meet the code of municipality; concern about code requirements for EV charging equipment.
- Backend infrastructure costs, complications of working with utility, and the time required to find, apply, and report on grants are barriers to doing more than making EV-capable parking at developments.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption

- Anticipated difficulties in operating charging equipment and lack of assistance/direction from grantor and CLEER coach on how to operate led to refusal of grant award (property w/ dedicated parking).
- Anticipate that staff will be necessary to comply with grants that fund the installation of charging equipment.
- Large expenses incurred between charger site and source of electricity, not covered by grant amount for charger equipment.
- While aiming for particular AMI markets, price of charging equipment may raise rents too much.
- Concern about equipment becoming obsolete in 5 or 10 years.
- Low apparent utilization at two present sites (unsure if data is available at one of these).
- Concerns about indoor charging of e-bikes (fire risk if left plugged in too long), damage from hauling e-bikes in and out.
- Existing chargers needing consistent maintenance.
- Preparing properties for the future.
- Subcontracting EV equipment work is simple.
- Awareness of an experience with state-level charging equipment incentives.
- Environmental benefits.
- Charging equipment could be a community amenity.
- Interest in encouraging modes of non-vehicle travel, reducing vehicle miles traveled; choice of where to develop properties made about to non-vehicle forms of travel.
- Bike path access/proximity, bike storage, and other forms of mobility welcomed by group; two have GJ properties with bike storage on site.

Interview: Alternative Electric Mobility (June 5, 2023)

Participants:

- Henry Brown, Mobility Planner, City of Grand Junction

Key Takeaways:

- Huge potential to expand mobility and micromobility—and their accessibility—through electrification.
- Would like to see the EV readiness plan demonstrate consideration and due diligence on implementing range of electrified transportation and mobility throughout city, especially given the common concern from businesses and developers for "underparking" properties.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• Weight of EVs much greater by size, so more momentum would be delivered into pedestrians and cyclists than ICE vehicles in the event of a collision, making them even more deadly for pedestrians and cyclists. • Unlike with EVs, where there have already been steps toward unifying charging infrastructure, this is not the case at all with e-bikes (batteries not interchangeable, chargers look very different). This makes municipal/public charging much harder. • Security issues come with e-bikes (it's easy to walk off with a stolen bike). • Currently lacking in secure bike storage for first- and last-mile connections (with transit or otherwise). Considering locations with parking demand challenges like Powderhorn Ski Resort or the Mt. Garfield trailhead, secure bike storage paired with shuttle/transit travel could be highly effective. • Significant public comment requesting bikeshare since launch of micromobility pilot, but operators have concern about profitability based on their experience with the costs and management, so this might require more active funding (e.g., RTPO, City, some company or organization like a hospital system).	• Air quality improvement for pedestrians and others traveling outside of a vehicle—reduced tailpipe emissions. • There are increasingly available "neighborhood EVs" (also known as Low Speed Electric Vehicles or LSEVs) that could be appealing for in-town trips and are lower-weight, lower-speed vehicles. These would be a good in-town option for households who retain one ICE 4WD vehicle for trips into the mountains, etc., but there might also need to be incentives for their purchase and/or infrastructure that works well for them. • Neighborhood EVs need more intentional thinking, and likely public outreach and education. • As long as "electric vehicle" includes micromobility modes, then this plan is a huge opportunity. There is an untapped market in vehicles that can offer what many drivers only associate with vehicles as of now (e.g., cargo e-bikes). A lot of potential for mobility and micromobility is unlocked by going electric. In some places, accessibility vehicles specifically allowed on bike paths (roll-in wheelchair vehicles). • Opportunity for fleet e-bike sharing program, similar to WeCycle in the Roaring Fork Valley or other examples, with unified charging, battery, and management platforms. • Opportunity for fleet-oriented thinking in the plan (models like Denver and Colorado Carshare program). Developers have mentioned this here to offset

parking requirements, and City guidelines would help.

Interview: City of Grand Junction Vehicle Fleet (June 9, 2023)

Participants:

- Tim Barker, Fleet Manager, City of Grand Junction

Key Takeaways:

- EVs in the fleet will likely offer some key maintenance and replacement advantages over ICE vehicles.
- There may be an initial phase in which actual real-world performance has to be proven with new vehicles and training will be necessary for staff and operators.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• Buy-in from users/operators. Some will embrace while others will refuse to use or try to make sure they don't work (same happened with the CNG fleet vehicles at first). With reassurance that they will succeed, should be able to overcome this. • Adequate charging stations, which we're working on currently. • Determining which parts of fleet should remain CNG, which should go hybrid, and which fully BEV. • Some remaining unknowns about performance under real-world use conditions (example of bike path sweeper, in which case the advertised life on a charge is 9 hours but an engineer from the company couldn't verify was true under normal use conditions). • Training could be a challenge, depending on vehicles we choose, as we typically prefer factory (brand-specific) training and stick with that brand—as opposed to generic and more widely available courses. As long as training is	• Fuel savings. • Hybrids/electrics more effective in idling, which is a huge help to workers. • Less maintenance costs and time. Others with more electrified fleets state that much of the electrical diagnosis is simple. No engine oil, filters, and some other frequently-serviced components that ICE vehicles have. • EVs in fleet could result in a simpler replacement policy and schedule (after the first phase, at least), as we will need to be more aggressive on replacement based on battery life and not based in the same lifecycle cost analysis we currently do. Because batteries have very clear warranty lives and the battery is half of the price of the vehicle, the need to replace will be clearer than with other vehicles. • This is where vehicles are headed in general, and we will figure out a plan to make it work for us.

available, this should be no big challenge, and we plan to send a couple people to Mack for training on the incoming electric recycling truck.
- Since we have to go through our bidding process, we don't have the same opportunity as a private business to quickly react to one or two vehicles becoming available for sale on a shorter timeline than is currently available through factory supply chains—though supply chain for EVs is not any worse than for ICE vehicles at this point.

Interview: Community Development & City Planning (June 5, 2023)

Participants:

- Nicole Galehouse, Interim Planning Supervisor, City of Grand Junction

Key Takeaways:

- City planning staff will need to review and ensure compliance with new state EV-ready code, so there will be a need to communicate regulations clearly, simply, and to create a staff process that is also simple and places the burden on the applicant's plan.
- Education will be needed to help bring compliance and cooperation on the development side, and it will also be needed to ensure homeowners are not surprised by impacts to their construction and/or renovation timelines and expenses.
- City codes must reflect our determined threshold for "major renovations," relative to the new state EV-ready code.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• Cost is the main barrier, despite grants, etc., especially when it comes to locating EV charging equipment in housing developments. • Another educational need regarding the new state code will be in explaining clearly to the development community of what is required, when, and where. This	• Education on costs and how doing it earlier will be beneficial (developers, homebuilders). Having infrastructure located initially—even just lines in ground—is a big opportunity and keeps costs low. Retrofitting is astronomically higher in cost, and those conversions will be challenging.

will also be needed for homeowners, if purchasing a new-construction home (awareness that this is included in their construction documents, or their timeframe will be altered). This is also true for buyers of older homes who are planning renovations or homeowners planning to renovate their current homes.
- We will need to consolidate and adopt a standardized interpretation of what constitutes a "major renovation" under the new state EV-ready code, perhaps based on current nonconforming site threshold for consistency.
- The electrical permit that is impacted by the new state code comes after our internal processes, so if we want to get ahead of it, we need to check for these compliance issues while projects are under review (need to start catching these in October and November for March 1, 2024 deadline).
- Another education component comes with the new state EV code, which will be the biggest issue now. In our development code update process, there was a lot of pushback on lesser requirements. State regulations will help but there will be resistance, so if we can coordinate to maybe push cost-reduction grant/incentive programs to try to encourage it (and maybe help people see the costs on the front end are not completely burdensome), that could help. Previously, even when seeing actual financial numbers from a development project involving EV equipment, most of the zoning code committee initially resisted (and didn't trust the numbers).

Interview: Local Business (June 9, 2023)

Participants:

- Jorge Pantoja, Western Colorado Latino Chamber of Commerce, President
- Curtis Engelhart, Grand Junction Economic Partnership, Executive Director

Key Takeaways:

- City should overcommunicate with local businesses about the EV plan, from decisions made in its development through its implementation, also about financial benefits to EV adoption (fleet) and financial incentives available to purchase and operate EVs.
- EV education in business community a must.
- Business owners' lack of history with and knowledge about EVs is a barrier, while long-term savings, budgeting, and customer service/customer experience would be benefits.
- Electric mobility (e-bikes and e-scooters) is great for businesses and community, both for employees and for visitors/customers.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• Unknown, lack of experience with EVs, lack of awareness of benefits of EV ownership/operation, & lack of clarity on regulations involved. • Incentives are difficult, cumbersome, confusing: there are many different types and they're time-consuming to find, apply for, and obtain—especially if a small business doesn't have a devoted accountant or finance person who can spend significant time on this. Can City provide technical assistance on this? • Up-front costs initially dissuade business owners from considering EVs—especially given how many small businesses operate here. • If business community doesn't feel that it has been kept informed of the planning process, more resistance and less acceptance can be expected.	• Education to businesses could help them see benefits in catering to EV-driving customers, as well as in owning and operating EVs. • Many financial incentives available. • Catering to EV-driving customers and/or operating EVs could be effective PR and marketing. • EVs bring consistency in freight & transportation costs; independence from ebb and flow of gas prices, simplifying and clarifying budgeting processes. • Early adopter businesses could show proof of concept for other area businesses, lead by example. Could City partner with them on education to others? • E-bikes and electric micromobility a huge benefit to businesses; employees happier and perhaps remain more rooted in community & customers/visitors patronize wider variety of businesses in town via these modes; state e-bike incentive also a plus. Intrigued by carshare, potentially for employees in some businesses. • Xcel Energy FEAP program could be a benefit to those in Xcel territory (though now mostly unknown to businesses).

Interview: Streets, Infrastructure, and Parking (June 5, 2023)

Participants:

- Trent Prall, Director, Public Works Department, City of Grand Junction
- Kim Petek, Parking Coordinator, City of Grand Junction

Key Takeaways:

- We benefit from having significant infrastructural advantages and obviously desirable charging locations around the City that allow for other engagement while charging.
- Perceived parking shortage could be seen by some as worsened through sites being devoted to EV charging, and incentives and/or enforcement will be

needed to create charging site turnover, based on behavior seen at the current sites.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• Public parking is always a challenge. Some say we have too much and others say we have too little. • Challenge in getting Xcel and other utilities coordinated to get the right kind of power exactly where we need it, where certain types of charging makes the most sense (at Las Colonias, several hundred feet of boring had to be performed). • Need to incentivize and/or enforce parking component of EV charging so vehicles don't sit on charging spaces indefinitely. Would language in code need to be adapted/adopted to enforce this? New signage needed for this as well. • Parking revenue loss through EV charging is a concern (could be addressed through charging fees?). • Questions about why the private sector isn't filling the EV charging gap, and why a consolidated—rather than geographically dispersed—model for charging equipment might make sense in some ways.	• We have a lot of good infrastructure, a lot of good, well-dispersed access to Xcel's energy around downtown core with ample power (for DC Fast charging), and we have a lot of locations where someone could park and charge while shopping, recreating, or otherwise engaging in activities they choose (multipurpose locations). • Hope that having this EV plan in place will create a cohesive "master plan" for EV charging infrastructure and assisting with funding opportunities going forward. • There are a lot of downtown parking lots, streets, and rights of way in the community that would lend themselves to EV charging. • Locations like Rockslide parking lot (115 S. 5th Street) are highly visible and popular, so they would get used frequently and would also encourage adoption by other drivers (addressing range anxiety).

Interview: Alternative Electric Mobility (June 5, 2023)

Participants:

- Elizabeth Fogarty, Director, Visit Grand Junction

Key Takeaways:

- Collaboration between the EV Readiness Plan team and Visit GJ will be key in reaching both locals and visitors and communicating vital EV-related information. Mapping and/or a digital brochure that could be printed for Visit GJ offices should be consistent and might be most effective if developed collaboratively.

- The nature of driving-based tourism in Grand Junction and the marketing approach used by Visit GJ (spoke-and-wheel concept) mean that increasing adoption in the state and regionally will require City to be ready for a high rate of EV-driving visitors—or that it will only attract such visitors if equipped to accommodate their vehicles.

Summary of Input:

Barriers to EV Adoption	Opportunities in EV Adoption
• Don't currently have research on characteristics of EV drivers, but would be interested in incorporating that into future market research. Clear that EV ownership skews to higher-earning households at this point. • No charging station at Visit GJ offices yet, but would love to have that to promote. • No current questions coming in about EV charging locations, and imagine drivers simply go to their usual apps to locate them, though visitors who enter Visit GJ offices love hard copy materials that could include EV-related information. • Sometimes there are complaints by locals that we've attracted too many tourists to trailheads and the parking lots are full (and potentially trails too busy), though they usually report trails are fine. Seen by this office as a parking problem, not a trail traffic problem. But there might be pushback on chargers at these locations for this reason.	• See electrification as a positive direction, especially to align with state initiatives along the byways and their increased investment in EV charging, which should continue to enhance tourism around the state. • Visit GJ encourages the "stay in GJ" spoke-and-wheel concept (stay here, drive there). Increased charging infrastructure makes this more affordable and convenient. Would like to see rental fleet move this way. • We already tend to attract higher-earning household visitors, so there is a match to assumed earnings demographics of EV-driving tourists. • Driving travelers are main component of GJ visitors (63-75% of summer visitors), and they tend to visit three destinations in the state during their trip (Colorado Springs, Denver, and Grand Junction, often). • A lot of potential to collaborate on outreach materials and to weave in EV charging information into marketing, so we should continue to communicate and collaborate on this plan and implementation. Also important to push out to our own residents consistently (about half of Visit GJ website visits are GJ residents). An EV charger map to display would be key.

- Would love to have visitors experience a holistic, "full circle" of travel while here—like, "I can park my car here, plug it in, hop on a scooter, and go see other things I have in mind."

APPENDIX B: ELECTRIC VEHICLES 101

Since electric vehicles (EVs) are an emerging technology that is rapidly changing, it is important to ensure that everyone has a common understanding of the technology and terminology involved. This section explains the basics of currently available types of vehicles and charging stations and the associated uses, barriers, and benefits. Note, while electric options are available for medium- and heavy-duty vehicles, the descriptions provided in this section apply primarily to light-duty vehicles, which make up most of the electric vehicle market today.

Electric Vehicle Basics

EVs refer to any vehicle that uses an electric motor. An EV can have a fully electric motor or can contain an internal combustion engine (ICE) that supports the electric motor. A plug-in electric vehicle (PEV) utilizes an external source of electricity to store electrical energy within its onboard rechargeable battery packs. The travel range of the two types of plug-in electric vehicles are outlined in **Table 5** and are described in more detail in the following sections.

Table 5. Comparison of Types of Electric Vehicles

Electric Vehicle Type	Power Source	Travel Range
Battery Electric Vehicle (BEV)	Electric Motor	200 – 520 miles
Plug-in Hybrid Electric Vehicle (PHEV)	Electric Motor + Gasoline Engine	315 – 660 miles

Battery Electric Vehicle (BEV)

A BEV is an all-electric vehicle that does not require gasoline and, thus, has no tailpipe emissions. BEVs are fueled by plugging into charging stations. Energy is stored in the battery to be used when the car is running. Distances that a BEV can travel on a single

charge range from 200 to 520 miles with longer distances continuing in the future through continual advancements in battery technology. Recharging can take anywhere between 30 minutes to 12 hours depending on the type of charger, size of the battery, and level of depletion in the battery (Drive Change. Drive Electric., 2023).

Plug-In Hybrid Electric Vehicle (PHEV)

A PHEV provides a combination of both an electric motor and a gasoline engine and produces less tailpipe emissions than a traditional gas-powered vehicle. PHEVs use energy from the electric motor until the battery charge is fully depleted, which can occur between 15 to 60 miles, at which point, the gasoline engine takes over. The distance that a PHEV can travel on a single charge and full tank of gasoline ranges between 315 and 660 miles. The battery is charged similarly to the BEV through a plug, and the fuel tank is filled by traditional gas station (Drive Change. Drive Electric., 2023).

Charging Stations

EV charging stations are separated into three categories based on the speed at which the vehicle is charged: Levels 1, 2, and DC fast chargers. The sections below detail the appropriate application for each charger type.

Residential Charging Stations

Residents have two options for charging at home. Level 1 chargers use standard 120-volt AC outlets and can take 8 hours to a day to fully charge a depleted battery. Level 2 chargers require a 240-volt AC outlet and can fully charge a depleted battery in 4 to 6 hours. Residents can charge during off-peak hours to reduce the impact on the grid. **Table 6** provides a brief explanation along with the pros and cons of both types. All currently available EVs can use either charger type.

Table 6. Residential Electric Vehicle Charging Types

LEVEL 1	LEVEL 2
	

Electric Current (AC)	120 volts[5]; 20 amps[6]	208/240 volt; 30 amps
Charging Rate (miles range per hour of charging[7])	2-5	20-45
Benefits	• Uses standard residential wall outlet • Little to no investment in infrastructure required	• Quicker charging • Some models have available Wi-Fi controls to allow residents to take advantage of time of day electric rates • In the case of multifamily housing, the controls could be managed by a property manager.
Drawbacks	• Slower charging rate, but usually sufficient for residents who charge overnight	• Requires 240 Volt outlet or hardwired charger • Electrician likely required to install • Higher infrastructure cost investment
Estimated Costs	Low to no cost	$200 to $2,000

Commercial Charging Stations

Commercial Level 2 and DC fast chargers are most appropriate for commercial applications since the EVs are generally parked for shorter periods than residential applications. Level 2 chargers are the same as residential chargers and often have the option to include two charging ports at one station. DC fast chargers require an industrial DC outlet of 480 volts and can charge batteries up to 80% in 20 to 30 minutes. Many commercial chargers also come equipped with software that allows the user to control when vehicles are charging and may facilitate payment in public applications. **Table 7** shows the advantages and disadvantages of Level 2 and DC fast chargers.

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[5] Volts are a measurement of the force pushing the flow of energy through a charger. This measurement is determined by electricity supply. Standard household outlets provide 120 volts; outlets for dryers or other high-powered household equipment supply 240 volts.

[6] Amps are a measurement of the amount of electrical energy "flowing" through a charger. This is determined by the electrical load required by the equipment and can vary over time.

[7] Range per hour is a measurement of the miles an EV can travel on one hour of charge. This is generally applied to EV charging stations and expressed in terms of typical EV efficiency.

Table 7. Level 2 and DC Fast Charging Infrastructure

	LEVEL 2	Fast Charger
		
Electric Current	208/240 volt; 30 amps (AC)	480 volts DC
Charging Rate (miles range per hour of charging)	20-45	200-400+[8]
Benefits	• More economical than DC fast charger • Safe for long-term use	• Fastest charging option available
Drawbacks	• Slower charging	• Very expensive to purchase and install • Can cause degradation to EV batteries with frequent use
Estimated Equipment Costs	$2,500 to $6,000 (ICF, 2022)	$20,000 to $150,000 (ICF, 2022)

[8] Charging power varies by vehicle and battery state of charge.

APPENDIX C: FUNDING RESOURCE DETAILS

There is a wide range of existing and anticipated funding opportunities and incentives to support beneficial electrification. The following sections summarize key programs, grants, tax credits, and other financial incentives available as of June 2023 through Xcel Energy, the State of Colorado, and the Federal government.

The resources and funding available are changing rapidly. Visit Drive Clean Colorado's website for up-to-date information on available incentives and grant programs.

Xcel Energy Rebates and Programs

- **Critical Peak Pricing Program** offers discounted rates for electricity used in charging electric vehicles, data insights, and monitoring.
- **EV Supply Infrastructure (EVSI) Program** offers low or no-cost installation of EV supply infrastructure, choice of pricing plan for charging, upfront consulting, and technical assistance. The program is open to fleets, workplaces, public charging stations, community charging hubs, and multifamily buildings.
- **Charger Service** is an option to pay a monthly fee for an Xcel Energy owned level 2 charger for multifamily, fleet, and workplace customers.
- **Small Business Rebate** offers a $2,500 rebate for wiring costs for small businesses.
- **New Construction Rebate** offers an allowance of $2,000 per charging port to support new multifamily construction for EV ready parking spots.
- **Income-Qualified Rebates** are available for eligible organizations. Qualifications vary depending on the organization type. Rebate amounts are determined by the organization type as well as the level and number of chargers installed.

- **Residential Programs**
  - **Charger and Wiring Rebate** offers $500 or for income-qualified customers, a $1,300 - 2,500 rebate for home wiring or a level 2 charger.
  - **EV Accelerate at Home (EVAAH)** Xcel Energy installs and maintains a level 2 charger for a monthly fee on bill, with no upfront cost.
  - **Optimize Your Charge (OYC) Program** rewards customers for charging at times that benefit the grid.
  - **EV Purchase/Lease Rebate** offers income-qualified customers $5,500 for a new EV or $3,000 for a pre-owned EV.
  - **EV Network Dealers** have information on Xcel Energy programs and can provide the EV rebate at the point of sale.

Federal Incentives

Clean Heavy-Duty Vehicles Grants and Rebates

$1 billion in funding, including replacing heavy duty vehicles with EVs and associated charging infrastructure.

Diesel Emissions Reduction

Funds grants and rebates that protect human health and improve air quality by reducing harmful emissions from diesel engines.

Low or No Emission Vehicle Program

The Low or No Emission competitive program provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as the acquisition, construction, and leasing of required supporting facilities.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE)

To build and repair critical pieces of our freight and passenger road, rail, transit, and port transportation networks. Criteria for innovation include electric vehicles.

Charging and Fueling Infrastructure (CFI) Discretionary Grant Program

A competitive grant program distributing $2.5 billion over five years to strategically deploy EV charging infrastructure and other alternative fueling infrastructure projects in urban and rural communities in publicly accessible locations, including downtown areas and local neighborhoods, particularly in underserved and disadvantaged communities.

EV, Commercial Clean Vehicle, and EV Infrastructure Tax Credits

Up to $7,500 Credit for new vehicles under 14,000 pounds, and for commercial vehicles above 14,000 pounds (up to $40,000). EV chargers are eligible for a tax credit of up to 30% of the cost, or 6% in the case of property subject to depreciation (not to exceed $100,000). Consumers who purchase qualified residential fueling equipment through December 31, 2023, may receive a tax credit of up to $1,000.

State Incentives and Programs

Colorado EV Tax Credit

Up to $5,000 credit for purchase or lease (minimum 2-years initial term) new vehicles with a manufacturer's suggested retail price (MSRP) up to $80,000. Beginning January 1, 2024, Coloradans purchasing an EV with an MSRP up to $35,000 will be eligible for an additional $2,500 tax credit.

Charge Ahead Colorado

A competitive grant program offers an 80% match for charging station costs up to $9,000 for level 2 chargers and between $35,000 and $50,000 for DCFC chargers (depending on charger power output).

Direct Current Fast Charging (DCFC) Plazas

A competitive grant program designed to increase access to high-speed charging in communities and along highway corridors across Colorado. The program offers enhanced incentives for projects located in disproportionately impacted communities, sites incorporating battery storage and for applicants proposing 3 or more stations along corridor a given Federal Highway Administration designated EV corridor.

Fleet ZERO

Colorado's Fleet-ZERO is a competitive grant that supports charging for fleet owners and operators seeking to electrify their vehicles, as well as public and semi-public fleet charging sites and providers offering EV charging-as-a-service to fleets. The program prioritizes investments in disproportionately impacted communities and enhanced incentives for Qualifying Entities.

ZEV Workforce Development Grant

This Colorado Department of Transportation (CDOT) grant addresses multiple challenges that Colorado and the wider mobility and electrification industry are facing: talent shortages, gaps in new skillsets, and the growing need for training due to technological advances.

Community Access to Electric Bicycles Grant Program

This Colorado Energy Office will provide grants to non-profit organizations, local governments, tribal governments, and other community-based organizations to create e-bike programs that give e-bikes to low- and moderate-income Coloradans.

I-Codes Technical Assistance

The Colorado Energy Office (CEO) offers free technical assistance for jurisdictions adopting 2021 I-Codes. Questions about building I-codes, how to review or inspect for a measure, how I-codes interact, or how to comply, can be submitted to CEO's free Code Helpline.

Clean Fleet Enterprise Clean Fleet Vehicle and Technology Grant Program

Created to incentivize and support the use of electric motor vehicles and other clean fleet technologies by owners and operators of motor vehicle fleets. Includes a portfolio

to provide training and development of a clean transportation workforce to support the adoption of clean fleet vehicles for use in motor vehicle fleets.

E-Mobility Education and Awareness

This CDOT grant is designed to expand public awareness and education around EVs and increase public understanding of their benefits, capabilities, and availability.

Community Access to Electric Bicycles Rebate Program

This Colorado Energy Office program will implement a statewide e-bike rebate for low- and moderate-income Coloradans. CEO anticipates that rebates will be available to individuals in August. Rebate amounts will be based on income qualification and equipment type:

Income Tier	Base Incentive Amount	Equipment Incentive	E Cargo Bike Incentive	Adaptive E Bike Incentive
Low-Income (below 80% of Area Median Income)	$1,100	+$100	+$300	+$250
Moderate-Income (between 80% and 100% of Area Median Income)	$500	+$100	+$300	+$250

Community Access Enterprise

Programs to equitably reduce and mitigate the adverse environmental and health impacts of air pollution and greenhouse gas emissions produced by motor vehicles. It includes several programs.

Vehicle Exchange Colorado

State rebate program to encourage income-qualified Coloradans to replace high-emitting vehicles with EVs and other low-emitting mobility options. $6,000 for eligible Colorado residents for purchase or lease of a new electric or plug-in hybrid vehicle, $4,000 for purchase or lease of a used electric or plug-in hybrid vehicle. Program anticipated to launch August 2023.

Community-Accelerated Mobility Project

Develop mobility solutions that meet needs specific to local communities, including flexible funding that includes electric carshare, electric vanpool, community e-bike share, community charging infrastructure, and others.

(Anticipated) eCargo Bike Commercial Delivery Pilot Program

A pilot grant program available to community-based organizations, local governments, bike shops, delivery fleets, and others for replacing traditional delivery fleet vehicles with e-Cargo bikes. Grant program anticipated to open for applications spring 2023.

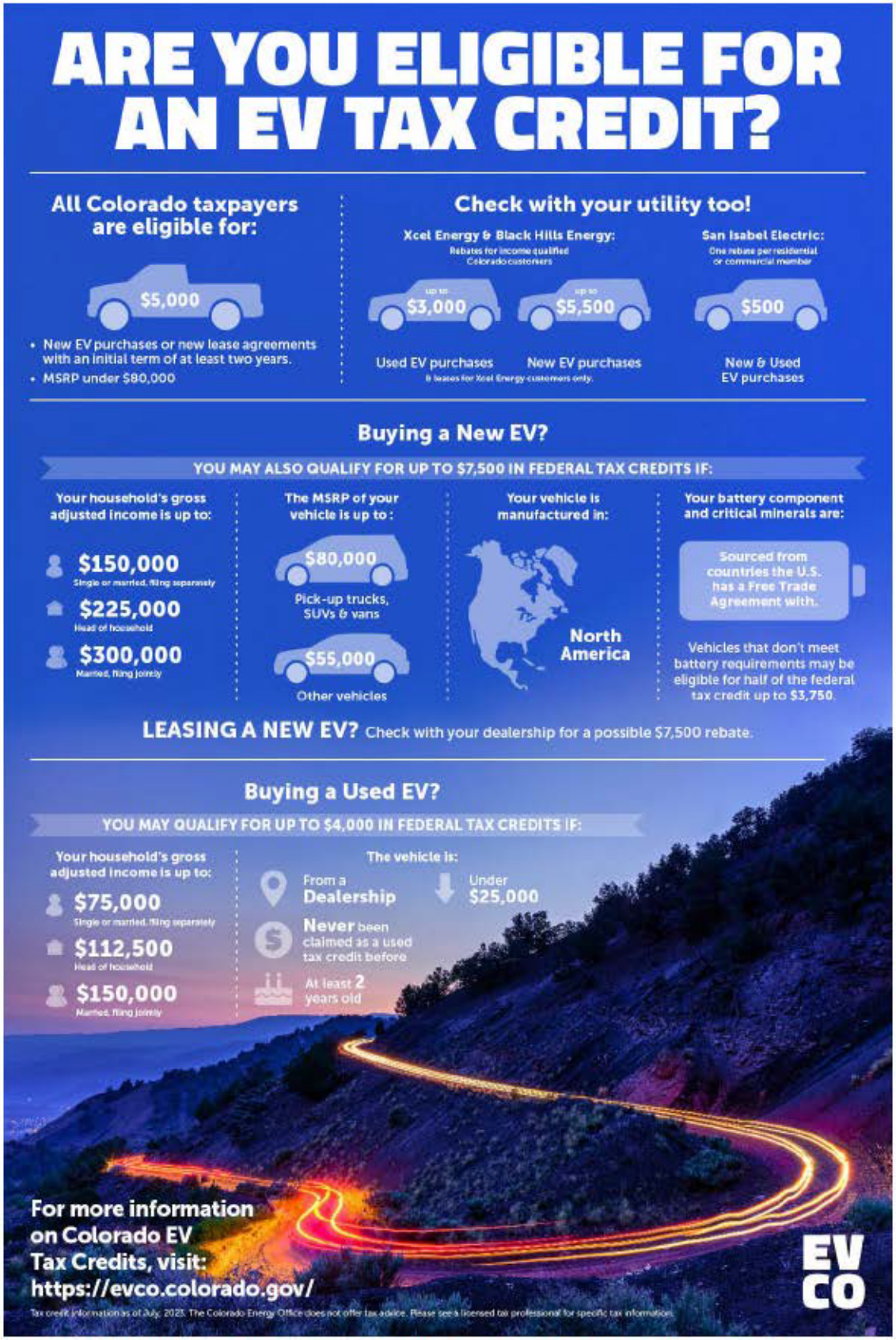

Figure 13. EVCO Tax Credit Infographic (current as of July 2023, visit the EVCO webpage for up-to-date information)

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