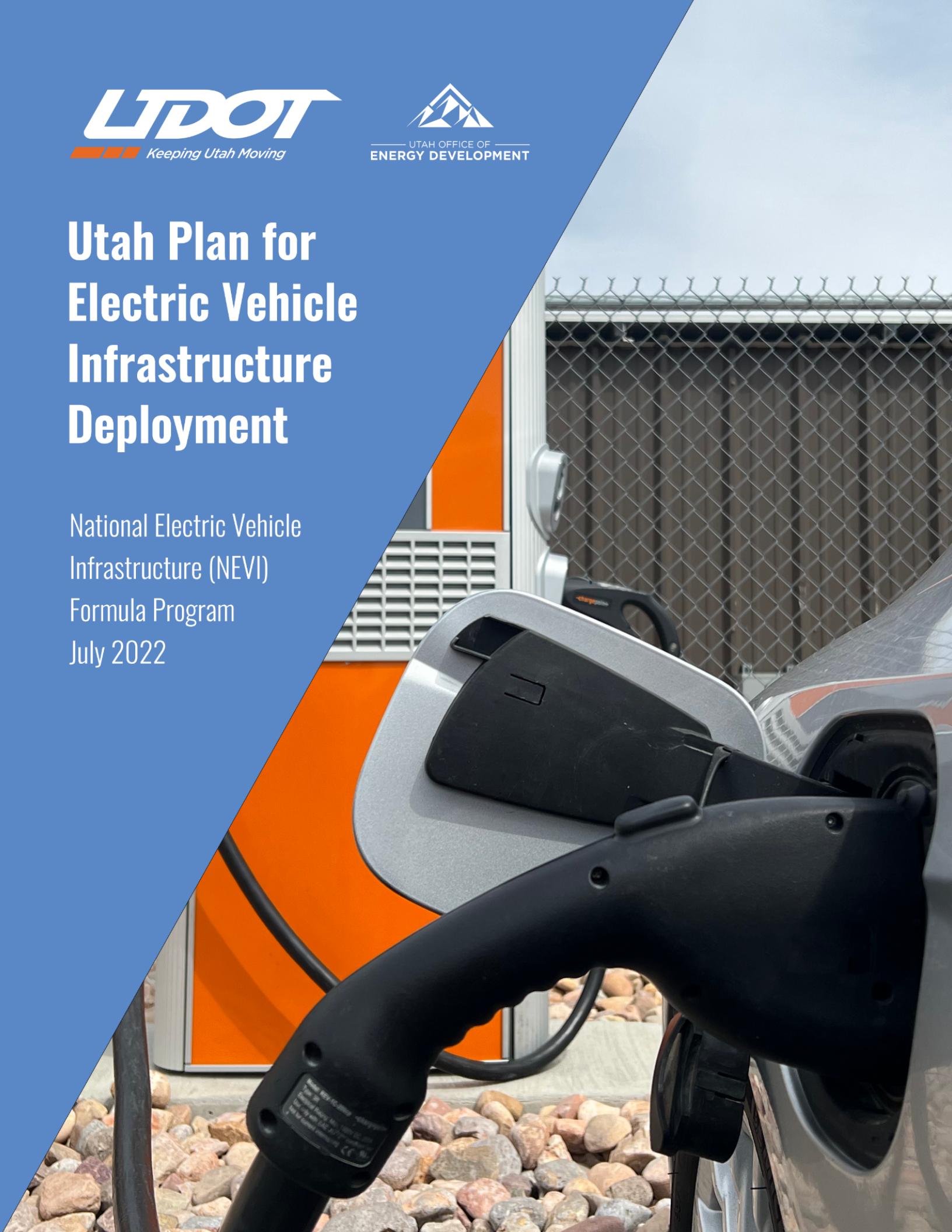




# Utah Plan for Electric Vehicle Infrastructure Deployment

National Electric Vehicle  
Infrastructure (NEVI)  
Formula Program  
July 2022



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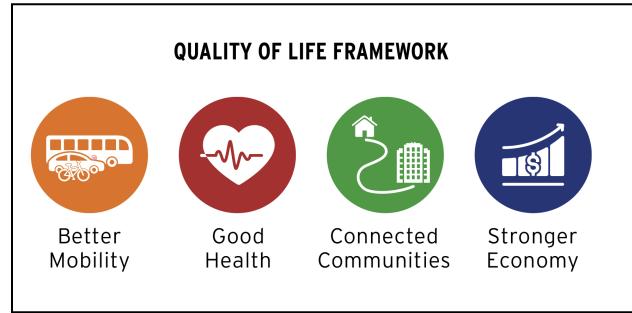




# Utah Plan for Electric Vehicle Infrastructure Deployment

## Introduction

Utah's approach to transportation is based on a Quality of Life framework built on four outcomes: Good Health; Better Mobility; Strong Economy; and Connected Communities. This framework is implicit in all transportation projects and initiatives, facilitating the goal for all users of the transportation system to have choices, so that they can go where they want, when they want, in the way they want – safely.

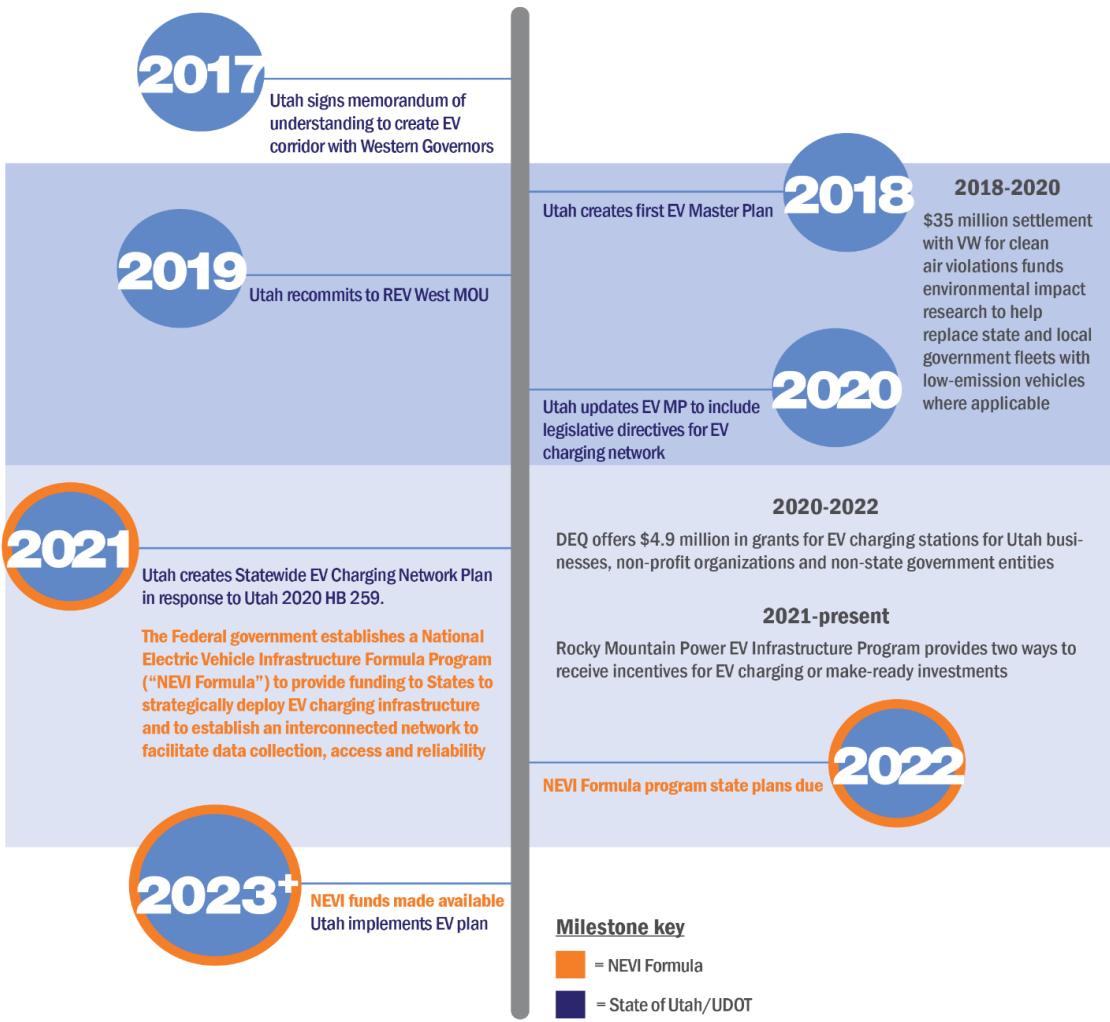


Since 2015, the number of EVs in Utah has grown by an average of 48 percent year over year, and the rate of growth is climbing. Many of the largest vehicle manufacturers (General Motors, Volkswagen, Ford, Volvo, Honda) have set ambitious goals towards converting to a largely electrified fleet within ten to fifteen years, and some are planning a complete transition away from internal combustion engine vehicles as early as 2035.

The [Infrastructure Investment and Jobs Act](#), signed into law on November 15, 2021, established a first-of-its-kind [National Electric Vehicle Infrastructure Formula Program \(NEVI\)](#). NEVI will provide funding to states to deploy electric vehicle charging infrastructure along public roads to establish an interconnected network across each state and throughout the nation. According to the Joint Office's Memorandum issuing guidance regarding the NEVI program on Feb. 10, 2022, the Utah Department of Transportation (UDOT) has been officially tasked with planning and executing the NEVI program; however, UDOT is working in close partnership with the Utah Office of Energy Development (UOED), and each agency plays a key role in implementing this vision. To reflect joint leadership of this program, the partnered team of UDOT and UOED are referred to throughout the document as the Utah NEVI Team. The plan also includes input from technical experts from public research universities; federal, state, and local agencies; the electric vehicle industry; energy service providers; and nonprofit entities. The plan addresses statewide EV charging needs and connectivity to reliably travel across the state and in rural areas, as well as augmenting the needs in urban areas for greater densities of EV.



## Dates of State Plan for Electric Vehicle Infrastructure Deployment Development and Adoption



### UDOT's EV Infrastructure Development

In 2017, UDOT began planning for the adoption of EVs and the infrastructure that would be needed to support them. Utah's governor, along with governors from seven other western states – Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, and Wyoming – joined together to form a group referred to as [REV West](#). These eight governors signed a [Memorandum of Understanding](#) (MOU) to provide a framework for creating an Intermountain West EV Corridor, making it possible to drive an EV across major transportation corridors in the western United States. This effort has prepared Utah to work in coordination with surrounding states to create seamless EV infrastructure.

In 2018, Utah developed its first [Electric Vehicle Master Plan](#). Its purpose was to create and implement a unified EV infrastructure strategy for enhanced transportation and better air quality for Utah. This led to the creation of the State Agency Electric Vehicle Expansion Committee to continue to develop a unified EV infrastructure strategy for the advancement of EV charging across Utah, with an objective of improving air quality through zero emission transportation. This five-year master plan lays out best practices to guide state agencies and other interested parties in the implementation of EV technologies at



their places of business and operation. An outreach committee was also formed to assist in community outreach around EV expansion.

In 2019, the governors of all eight REV West states recommitted to the partnership and updated the founding MOU. The updated MOU expanded the scope of the partnership to include new interstate highway routes, defined seven activities for state collaboration, and included an annual progress report to update each governor and the general public on REV West's progress to date. Below are some of REV West's accomplishments:

- Built more than 175 direct current fast charge (DCFC) stations since the MOU launch, and another 150 DCFC stations are in the planning phase;
- Engaged the Federal Highway Administration (FHWA) for federal support through the Alternative Fuels Corridor (AFC) program, leading to the designation of nearly 1,250 miles of electric charging corridors, and more than 7,500 miles of “corridor pending” highways;
- Released Policy Baseline report in October 2018;
- Released Voluntary Minimum Standards for DCFC stations in December 2019;
- Leveraged U.S. State Energy Program funds and other sources to enhance coordination between State Energy Offices and transportation agencies on:
  - Addressing regulatory barriers to station development and signage;
  - Identifying infrastructure gaps;
  - Developing DCFC station analysis maps for internal planning;
  - Exchanging model EV programs and sharing strategies for EV program design.
- Obtained funding from the U.S. Department of Energy under the [Corridors for the West](#) (CORWest) grant led by the Utah Clean Cities Coalition, which identifies barriers to EV adoption and supports infrastructure deployment in rural and remote areas;
- Partnered with electric service providers on infrastructure development.

In 2020, Utah created its second [Electric Vehicle Master Plan](#). Building on previous plans, this plan was updated to include legislative directives for EVs. Additionally, the 2020 Utah Legislature passed House Bill 259 ([H.B. 259](#)), Electrical Vehicle Charging Network, which directed UDOT to develop a separate statewide EV charging network plan that provides implementation strategies to ensure that EV charging stations are available:

1. At strategic locations as determined by UDOT by June 30, 2021;
2. At incremental distances no greater than every 50 miles along the state's interstate highway system by December 31, 2025; and
3. Along other major highways within the state as UDOT finds appropriate.

The [Utah Statewide Electric Vehicle Charging Network Plan](#), published on June 30, 2021, fulfilled the requirements of H.B. 259, which became Utah Code (UC) 72-1-216. Its purpose was to set a plan to prepare for rising rates of EV adoption and the resulting expansion of EV charging capacity needs in Utah's urban and rural areas by installing a charging infrastructure backbone along interstates and other strategically selected routes. It included contributions from stakeholder engagement, and provides guidance for EV charging station developers regarding implementation of electric vehicle service equipment (EVSE) on a statewide level. The Utah Statewide EV Charging Network Plan is the basis for the Infrastructure Deployment and Implementation sections of the NEVI Plan and also to fulfill the requirements of UC 72-1-216.

The 2021 Statewide EV Charging Network Plan identified charging corridors based on:

- Connectivity
- Traffic volumes
- Tourism

- Local and interstate commerce
- Transportation resilience and public safety
- Facilitation of accelerated fleet and consumer EV adoption

The State of Utah accomplished many goals related to EVs in 2020, including the following:

- Utah State Fiscal Year 2020 (FY20) legislative funding allocation for EV charging at state facilities;
- Division of Air Quality (DAQ) Workplace Electric Vehicle Charging Funding Assistance Program;
- Volkswagen Settlement Funding: UDOT Rural Electric Vehicle Service Equipment (EVSE) Expansion (See more below.)

In 2021 UDOT completed an EVSE installation project to invest \$949,672 in grant funding from the [Utah DAQ VW Settlement](#) along with \$200,000 in funding from the state legislature. The project resulted in 16 DCFC chargers in eight locations across the state, along with another 11 Level 2 chargers in areas where three-phase power was not feasible. The lessons learned from this project regarding contracting, utility coordination, site host selection and contracting, etc. have informed the implementation strategies in this plan.



## State Agency Coordination

Utah's Electric Vehicle Resource Group is working toward the creation of a practical strategy for the advancement of EV charging infrastructure across Utah. The Resource Group is chaired by the UOED and includes the following partners:

- UDOT
- UDAQ (a division of the Utah Department of Environmental Quality)
- Department of Government Operations (DGO)
- Governor's Office of Economic Opportunity
- Department of Natural Resources
- Utah Clean Air Partnership (UCAIR)
- Leaders for Clean Air
- Utah State University's Advancing Sustainability through Powered Infrastructure for Roadway Electrification (ASPIRE) Research Center
- Rocky Mountain Power
- Utah Rural Electric Co-op Association

The NEVI Team has worked with the EV Resource Group to ensure that the planning and implementation of EV infrastructure is thoughtful, diverse, supported, and dynamic to the changing needs of the state.

In addition to engagement with the stakeholders in the EV Resource Group, the development of the NEVI plan has been accomplished through engagement with Utah's State Office of [Tourism](#), Department of Workforce Services, Governor's Office of Planning and Budget, Division of Multicultural Affairs, and the Department of Health.

UDOT will continue to meet with state agencies and expand outreach to all relevant stakeholder groups as the plan is implemented with a goal towards maximizing opportunities to utilize U.S.-made EV supply equipment.

## Public Engagement

The Utah NEVI Team established a public engagement strategy that builds on previous efforts (described in the Overview of Utah's EV Infrastructure Plan for Deployment, Development, and Adoption section of this plan) and lays out a plan for how to engage with a broad spectrum of stakeholders throughout plan development and deployment. The NEVI Team public engagement approach applies tailored strategies for four main audiences:

- Key stakeholders who influence strategic decision making for the plan
- Partner stakeholders who will facilitate execution of the plan
- Site-specific stakeholders whose input will affect EVSE site planning
- General public

### Stakeholders Involved in Plan Development

**Key stakeholders:** The key stakeholders previously in the State Agency Coordination section will continue to shape the vision for EV expansion in Utah as well as others such as private sector companies, EVSE original equipment manufacturers (OEMs), and the Utah Clean Cities Coalition. A complete list of stakeholders who were engaged during plan development has been provided in this section; notes from stakeholder meetings and interviews are included in Appendix A: Stakeholder Engagement.

**Partner stakeholders:** Initial outreach to this stakeholder group primarily aimed to inform partner stakeholders of the NEVI program and kick off discussions about how they and the Utah NEVI Team might achieve shared positive outcomes. For example, the Division of Multicultural Affairs will advise the NEVI Team regarding equity and access for disadvantaged communities (DACs). The Division of Workforce Services and Division of Human Resources will collaborate to identify workforce training and development opportunities for jobs related to the EV infrastructure industry. As the NEVI Plan moves into implementation, the Team will begin work on mutually beneficial efforts with these partners.

**Site-specific stakeholders:** Utah's NEVI Plan identifies proposed site locations for EVSE; however, individual site designs will not be developed until the plan has been approved and funding is available. At that time, the NEVI Team will identify stakeholders who can share insights about how to best design and configure each site. In most cases, the locals have greater and more nuanced knowledge about ideal locations that will garner the highest utilization, how to deliver the most benefit to the community, and any other factors unique to the area that might influence success. In addition to seeking input from site-specific stakeholders early in the process, the NEVI Team will maintain relationships with them through installation and ongoing operations.

**Public Outreach:** Early on, communication with the general public will be focused on education about the rising number of EVs in Utah and the need for EVSE infrastructure. During NEVI Plan development, the NEVI Team has created a [website](#) to provide basic information and receive comments from the general public. As efforts progress, the NEVI Team will expand the scope of its communications to share more information about the Utah NEVI Plan through media stories, social media, and other mass communications channels. The Team also intends to hold public meetings to share information with various audiences and seek their input.

### Key Takeaways from Early Stakeholder Engagement

Throughout the stakeholder outreach conducted while developing this plan, some common themes emerged. Some of the key takeaways are summarized here:

- Planning and engagement should be coordinated at the local level to ensure the implementation of the plan addresses local interests regarding economic development, equity, and access to transportation choices.
- The spirit of collaboration is strong in the state and many potential partnerships have been identified where partners would provide site locations, in-kind services, and investments to support development of the state's EV infrastructure.
- Communities recognize the need to build EV infrastructure, but lack the capital investment and utility infrastructure to support extensive buildup in the state's rural communities.
- EV adoption is outpacing existing infrastructure. The state should focus on filling gaps in EVSE and invest in demand areas.
- Many of the gaps that exist currently in Utah's charging network are in, or en route to, tourist destinations in rural communities.
- Utah needs to plan for adaptability around supply chain issues and the procurement of EVSE and utility infrastructure.
- NEVI contracting language should provide full disclosure of known risks and encourage robust due diligence on the part of potential public and private sector partners. For example, recent [media reporting](#) indicates that in areas where low utilization is expected, small local governments/businesses may not recoup their investment, even with NEVI subsidization.



## Engagement Tools

UDOT's team constructed a public involvement plan and resources to support the development of the NEVI Plan. Outreach strategies and resources created to support the NEVI Plan include:

- **Project Webpage:** A public input site (<https://udotinput.utah.gov/evplan/>) was developed to provide background on the NEVI program, host the draft and final NEVI Plan, and collect stakeholder input.
- **One-Page Overview:** Co-branded with UDOT and the UOED, this one-page overview provides key elements of the NEVI guidance and Utah's goals to share with interested parties.
- **Key Stakeholder Outreach:**
  - UDOT conducted fifteen (15) interviews between April 2022 and May 2022 with a broad spectrum of key stakeholders to identify key issues to inform the development of the NEVI Plan and identify additional stakeholders that should be considered.
  - UDOT initiated a Request for Information (RFI) process in partnership with REV West participants.
- **EV Resource Group Coordination:** The EV Resource Group met in March 2022 and June 2022 to provide input on corridor locations, key issues, and to support ongoing outreach within the communities and agencies that they represent.
- **Key Stakeholder Email:** Directed interested stakeholders to the project webpage and to review and comment on the draft version of the NEVI Plan.

## Stakeholders Involved in NEVI Plan Development

Engagement on EV Infrastructure between Sept 2021 and June 2022	
Entity	Type of Engagement and Key Takeaways
<b>EV Resource Group</b>	Quarterly Meetings
<b>Community-based organizations</b> - Utah Clean Cities, Utah Clean Energy, South West Energy Efficiency Project, AMPLY Power, Western Resource Advocates.	These groups provided input to UDOT's Strategic Investments program in developing the 2021 Utah Statewide EV Network Charging Plan.
<b>Department of Energy and Clean Cities Coalitions organizations</b> - CORWest, Drive Electric USA-Utah, RURAL USA-Utah, and EMPOWER programs	<p>Launched to implement a network of EV charging and innovative partnerships</p> <p>Utah Clean Cities are heavily involved with state, regional and national efforts on multiple and complementary Alternative Fuel projects.</p>
<b>State environmental protection agencies</b> - Utah's Department of Environmental Quality	Involved in the EV Resource Group and involved in the 2021 Utah State EV Master Plan.

<b>State Economic Development Agencies - Utah Office of Tourism</b>	<p>Virtual meeting</p> <p>In support of EV Interstate travel for destination travelers.</p>
<b>State and Federal land management agencies -</b> Utah State Parks Division, (manages 42 state parks and recreation areas)  U.S. Forest Service (Utah has five national forests)  National Park Service (Utah is home to five parks)	Each agency has indicated interest in being site hosts for EV charging stations.
<b>State public transportation agencies</b>  UDOT  Utah Transit Authority	<p>UDOT is leading on the development of the plan</p> <p>UTA will be involved in planning for future projects and identifying overlap where we can achieve built out status.</p>
<b>State manufacturing extension partnerships -</b> University of Utah Manufacturing Extension Partnership (UUMEP) Center	<p>Participants in the EV Resource Group.</p> <p>Actively involved in developing EV manufacturing.</p>
<b>Electric utilities and transmission and distribution owners and regulators</b>	<p>UDOT is in regular coordination with to understand opportunities to leverage funding and develop opportunities for EV charging sites:</p> <p>Rocky Mountain Power – Ongoing coordination. \$50 million investment in electric vehicle charging infrastructure within the service area.</p> <p>Utah Rural Electric Cooperative Association – Interested in partnerships.</p> <p>Utah Municipal Power Agency – Interested in partnerships.</p> <p>Utah Associated Municipal Power Systems - Interested in partnerships.</p>



<b>Port and freight authorities</b> - UDOT's Planning group covers freight planning, Utah Inland Port Authority (UIPA)	UIPA's five-year strategic plan includes developing strategies for deploying low or no emissions technology, including electric.
<b>Private sector EV charging station owners and network operators and program managers</b> - EVgo Services, Evercharge, Enviro Spark, EV Structure, ABB, Blink, ChargePoint, Electrify America, Livingston Energy Group, T4L, Spacebott LLC, Center for Sustainable Energy, HDR Inc, McKinsey & Company, Michael Baker International, Mountain West Consulting, Replica, FreeWire Technologies, Strata Networks, Apex Electrical, RC Hunt Electric, Tritium, bp pulse, Delta Electronics, ClipperCreek, Webasto, Leviton, SemaConnect	Ongoing coordination with private sector companies. In June 2022, UDOT received input from 20 EVSE providers, utility contractors, manufacturers, and EV program managers to identify considerations in procurement of equipment, planning, implementation, and operations and maintenance.
<b>Vehicle manufacturers</b> - RIVIAN, Volvo, Volkswagen, Ford	UDOT's Strategic Strategic Investments program is working to identify planned investments in EV infrastructure to allow the state to direct investments to areas around the state with lesser demand.
<b>Education and Research</b> - ASPIRE	The ASPIRE program, a Utah State University program, has local partnership on research and innovation in EV infrastructure. They are committed to ongoing participation in the EV Resource group.
<b>Environmental justice, equity, and other community advocacy organizations with an interest in EV charging</b> - Office of Multicultural Affairs, Division of Human Resource Management's Equity and Inclusion Accelerator.	Commitment to supporting community engagement and guidance on equity in transportation planning.
<b>Investors in EV charging infrastructure</b> - Walmart, Flaming Gorge Resort	Business leaders have expressed interest in being site hosts.

To be further engaged in July 2022



**Vehicle manufacturers - Utah Auto Dealers**

**Tribal governments - Utah is home to eight Tribal Nations including:**

- Navajo
- Ute Mountain Ute
- Ute
- San Juan Southern Paiute Tribe
- Confederated Tribes of Goshute
- Skull Valley Band of Goshute
- Paiute Indian Tribe of Utah
- Northwestern Band of Shoshone Nation

**Metropolitan Planning Organizations and Regional Transportation Planning Organizations -**  
Utah has seven Association of Governments that participate in regional transportation planning.

- Bear River Association of Governments
- Wasatch Front Regional Council
- Mountainland Association of Governments
- Five County Association of Governments
- Six County Association of Governments
- Southeastern Utah League of Governments
- Uintah Basin Association of Governments

**Freight industry groups - Utah Trucking Association**

**Private sector EV charging station owners and network operators**

- Delta EV Charging Solutions
- Blink
- BTC Power
- ClipperCreek
- EFACEC
- Enel X
- EVBox
- EverCharge
- EvoCharge
- EVSE LLC
- Flo
- FreeWire
- Grizzl-E
- JuiceBar
- LiteOn
- PowerCharge
- SemaConnect
- Siemens
- Signet
- Tritium
- Wallbox

- WattZilla

#### **Unions and other labor organizations**

#### **Real estate industry groups**

**Minority- and women-owned organizations** - Women's Business Center of Utah

#### **EV industry organizations and EV advocacy groups**

#### **Gas station owners and operators**

**Emergency management and public safety agencies** - Be Ready Utah, Utah Department of Public Safety, Utah Division of Risk Management

**State weights and measurement agencies** - Utah Department of Agriculture and Food Metrology Lab

*See Appendix A for a complete list of stakeholder and key feedback.*

### **Ongoing Outreach**

Following initial stakeholder engagement, UDOT is continuing outreach and engagement specific to the NEVI plan. The following is an outline of the anticipated engagement effort for the near future and into the first five years of implementation.

#### **Early Year 1**

- Continued Public Comment on NEVI Plan: Stakeholders and the public will be invited to review the Utah NEVI Plan and provide comment by visiting the project webpage.
- Key Stakeholder Interviews (second round): Continued focus on identifying stakeholders and community interests as well as EV corridors and charging site locations for consideration in planning years 2-5. This outreach will include interviews with at least 15 groups including the EV Resource Group, advocacy groups, municipal planning organizations, Utah Auto Dealers Associations, additional state agencies, federal land management agencies, minority- and women-based organizations, and emergency management and public safety agencies.
- Tribal Engagement: The two largest Native American reservations by land mass are located in Utah. This equates to 4.5 percent of the land area in Utah. Utah is also home to eight distinct tribal nations. The NEVI plan will include feedback and engagement with these sovereign nations.
- Quarterly EV Resource Group Coordination.
- Email milestone updates to NEVI stakeholder list after the second round of key stakeholder engagement.
- Milestone updates to the NEVI webpage.
- Ongoing public outreach and education regarding EVs and EVSE will help increase awareness and ultimately improve consumer confidence in Utah's EV charging network.
- Direct coordination with local communities that fall within Utah's AFCs to identify charging site locations and coordinate on community specific interests.
- Identify interested communities and partners for EV sites beyond the AFCs with a focus on localized, equitable investment.

## Years 2-5

- Build on lessons learned from the first year into contracting specifications, and continue local engagement.
- Coordinate with local energy service providers and the Utah Department of Government Operations to identify both public and private partnership and funding opportunities with a focus on economic development opportunities, increasing transportation choices, and providing energy resiliency.



## Plan Vision and Goals

The vision of the Utah NEVI Plan is to coordinate with the diverse rural and urban communities in Utah to strategically deploy EV charging infrastructure and establish an interconnected network supporting the development of convenient, accessible, reliable, and equitable EV charging.

### Utah's Challenge

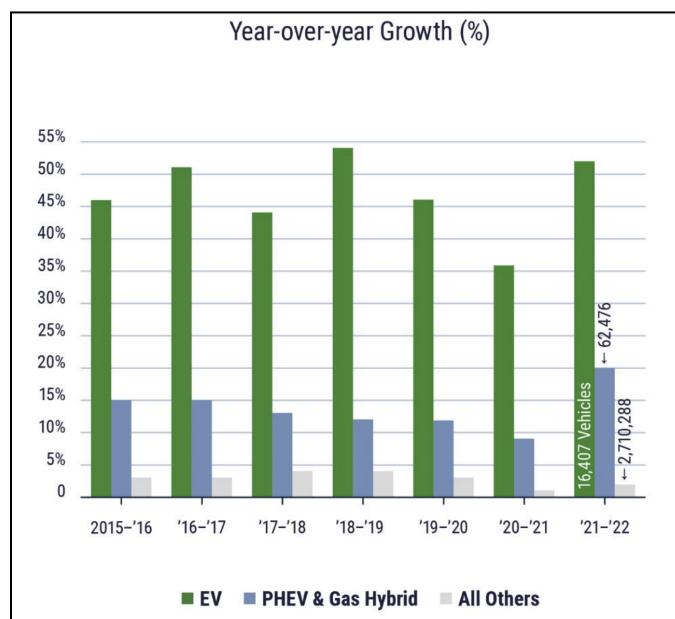
With Utah's population booming, the state needs to grow in a way that balances a variety of needs and preserves quality of life. UDOT aims to provide Utahns with diverse choices to travel where they want, when they want, in the way they want – safely. In order to meet this goal, Utah must be prepared to meet imminent demands as EV ownership and usage increase.

Utah is the fastest growing state in the nation according to 2020 Census Bureau data. The state's population is projected to increase from approximately 3 million people in 2015 to almost 6 million by 2065, and much of that growth is expected to occur along a narrow 90-mile corridor known as the Wasatch Front.

Currently, the number of EVs in Utah is relatively low; however, the rate of adoption is extremely rapid. In 2021, 16,407 EVs, or about 3 percent of the overall number of registered vehicles were registered in the state. While that number may not seem large, EV ownership in 2021 reflected a 52 percent increase from the previous year, and the average year-over-year rate of increase since 2015 was 48 percent. The need for investment in EVSE is about more than meeting the needs of today. It's about preparing for a fast-approaching future, when EVs are ubiquitous and adequate charging infrastructure is essential.

We identified and prioritized corridors based on their contribution to the following:

- Connectivity
- Traffic Volumes
- Tourism
- Local and Interstate Commerce
- Transportation Resilience and Public Safety
- Facilitation of accelerated fleet and consumer EV adoption



### Plan Vision

The Utah NEVI Team's vision is to provide all users with convenient access to EV charging infrastructure, so they can go where they want, when they want, in the way they want. The plan is built upon the following strategies:

- 1. Equitable access and connectivity are the first priorities.** Create a backbone for the EVSE network by meeting NEVI program criteria and by providing EVSE every 50 miles with the requisite 97% uptime availability.
- 2. Implementation should enable private sector ownership as quickly and broadly as possible.** Leverage contracting strategies and input from potential private sector owners to identify and facilitate transfer of EVSE ownership to private businesses. Throughout the life of the project, NEVI funded EVSE will be required to collect data in a manner that protects user privacy.
- 3. Overall planning and individual site installations should enhance quality of life and strengthen local economies, especially in rural and underserved areas.** Include local stakeholders in designing and implementing individual sites to identify ways that EVSE can strengthen the economy, optimize mobility, connect communities, and improve health. Seek to prioritize investment of NEVI program funds in areas that are underserved, especially rural communities.

NEVI program requirements align with Utah's prior strategy to build an infrastructure backbone to meet basic needs for EV access and connectivity; this will help mitigate range anxiety by ensuring that charging infrastructure is located within reasonable distances from the previous and next EV chargers. Per NEVI program guidelines, Utah will meet the minimum 50-mile spacing requirement on interstates and designated AFCs, other than in a small number of locations where submitted discretionary exceptions have been approved (see page 64). The intent for this initial phase is to provide a safety net for EV drivers; however, it may not adequately accommodate high-volume travel periods in some locations.

Additional EV chargers may be installed over time to accommodate increasing EV adoption rates and demands. It is expected that augmentation of capacity will likely be fulfilled by both private sector and strategic government investments, the NEVI Team will continue to engage with private sector partners to identify opportunities for private investment. The Team will plan with a goal to "future-proof" site designs, installing sufficiently sized power infrastructure to account for anticipated increases in user demand. This all ensures that the greatest long-term value is gained through investment of NEVI funds, and will also make future private investment more attractive by reducing feasibility challenges. The Utah NEVI Team is exploring contracting strategies to encourage private acquisition of EVSE (see discussion in the Contracting section on page 22).

As the path to privatization of charging infrastructure continues to unfold, it appears beneficial for the public sector to invest early in the process by providing the core infrastructure necessary to support the early phases of adoption. This may be accomplished by direct EVSE installations, public-private partnerships, matching grant programs, building code requirements, and other mechanisms that encourage EVSE infrastructure buildout.

## Outcome-Oriented Goals

UDOT has established the following plan for the next five years:

- Year 1: Place DCFC stations along Utah's AFCs to achieve built out status. These corridors include I-15, I-70, I-80, I-84, I-215, and portions of US-6 and US-191.
- Years 2-3: Identify and begin building high-priority corridors that provide access to Utah's five National Parks, forty-two State Parks, and other places of interest.
- Years 4-5: Update the Plan to focus on additional localized investment in rural corridors and equity hotspots based on lessons learned in years 1-3.

**Goal 1:** Ensure anyone can choose to travel in an EV, no matter where in Utah they want to go.



**Desired Outcome:** Provide NEVI-compliant charging stations spaced approximately 50 miles apart along Utah's AFCs by the third year of the program. Although sections of I-15, I-215, and I-84 meet corridor ready status for EV charging stations under the AFC program, they will all need some form of upgrade or modification to meet the NEVI requirements.

**Goal 2:** Maximize tax dollar value by leveraging funding with public-private partnerships.

**Desired Outcome:** NEVI funds will be used to support installation of public/private EV charging sites that maximize investment of state and other federal funds to develop a robust charging network with meaningful connectivity to adjoining states in the region.

**Goal 3:** Complement and support the buildout by the private sector and new entrants into the EV market.

**Desired Outcome:** Establish regular communications with partners and stakeholders through milestone updates and public input opportunities and quarterly coordination with the EV Resources Group.

**Goal 4:** Apply an equity lens across all elements of the NEVI Plan to ensure that the deployment, installation, operation, and use of EV charging infrastructure achieves equitable and fair distribution of benefits and services to rural and underserved communities.

**Desired Outcome:** UDOT will continue to develop opportunities for transportation investments in diverse and disadvantaged communities to stimulate economic growth and provide access to jobs and critical services, while being mindful of the potential impacts and unintended consequences of growing development on existing communities.

In addition to these four objectives, through the NEVI Plan, UDOT also seeks to meet the NEVI requirement of > 97 percent equipment uptime and interconnectivity of the EV mobility network, leverage existing and planned data sets to optimize and improve the electric vehicle charging network, and coordinate with neighboring states through the REV West group.



## Contracting

UDOT has a broad base of experience in developing contracts to accomplish a wide variety of needs in planning, constructing, operating, and maintaining their highway network. While these contracts can vary substantially in scope and desired outcome, they can also vary widely in the vendor/supplier community's interest and capability to undertake the work. As stated in the Plan Vision and Goals section of this report, a major project objective is to support private sector ownership of the EVSE to meet the NEVI requirements whenever feasible.

UDOT has gained valuable experience and insight to EVSE contracting while deploying charging infrastructure funded through the Volkswagen Mitigation Trust funds and other state programs. This experience with EVSE projects, coupled with contracting experience associated with the highway system, will yield well-planned and functional contracting that considers unique opportunities, varied contracting partner needs, and the evolving electrified transportation landscape.

### **Overall Contracting Approach**

Utah intends to use a blend of contracting approaches to effectively implement NEVI projects. This approach will help determine when to use best value contracting and when to leverage parallel grant programs, other non-federal grant opportunities, to make other funding sources available.

#### **Best Value Contracting**

Drawing on past EVSE project delivery experience and approaches of other states, UDOT will pursue multi-step, best value contracting under most situations. This approach will be flexible with respect to the wide variation of potential vendors/suppliers and individual EVSE site needs. UDOT recognizes that some locations will be easier to monetize, making them more desirable to the private sector. Therefore UDOT may bundle less-desirable locations with higher value installations when feasible.

During the development of its Request for Proposal (RFP) process, UDOT will include language to encourage local investment and small/minority business inclusion. UDOT will structure the evaluation and scoring process to prioritize program goals.

#### **Key Considerations:**

- NEVI compliant EVSE installation
- 97 percent uptime requirement
- Host site criteria elements (restrooms, cell service, lighting, etc.)
- Community engagement
- Inclusion of small and rural businesses
- Extended equipment warranty and networking plans
- Data sharing structures and details
- Cybersecurity
- Increased cost-sharing value
- The use of qualified workforce meeting minimum qualifications (i.e., [EVITP](#)) for technicians performing installation and maintenance of charging stations to ensure that the deployment of charging infrastructure will:
  - support stable career-track employment for Utah workers
  - increase the safety and reliability of charging station function and use
  - mitigate potential project delivery issues such as cost overruns and delays
- Justice40 measurements and goals
- Emphasis on equitable opportunity contracting per Title VI of the Civil Rights Act of 1964



During the procurement process, vendors will be asked to present and describe their approach for addressing and meeting NEVI program goals as outlined in the RFP and scoring criteria. Proposal evaluations will be combined with pricing information to determine the overall best value proposal.

### **Grant Program**

In order to leverage other non-federal grant funds (state funds, utility incentives, etc.), a portion of NEVI may be administered as a grant for EVSE. There are other state and private funding grants that can help fill critical areas in the network.

### **Small Business, Local Investment, Community Engagement**

As stated in the State Agency Coordination and Public Engagement sections above, the Utah NEVI Team intends to actively seek relevant stakeholder engagement throughout the NEVI funding cycle to help identify community needs and concerns. With respect to electrified transportation, there are varying and diverse perspectives and needs across the state. UDOT intends to engage at the local level to bring that perspective to the contracting process and help ensure local concerns are represented.

### **Evolving Procurement Process**

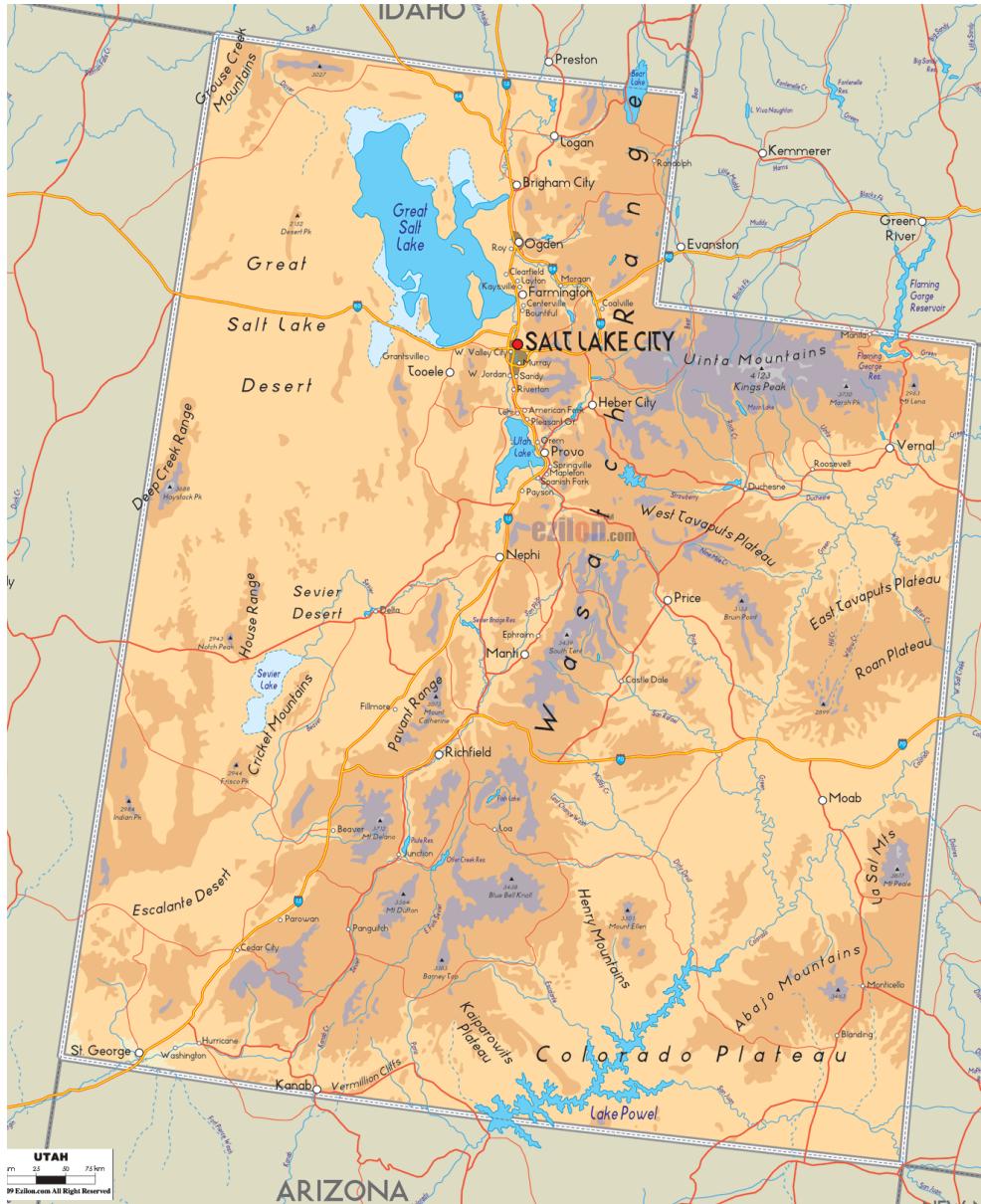
As allowed in the February 10, 2022 NEVI Guidance, UDOT intends to contract in a way that transitions all state-installed highway public-facing EVSE infrastructure to the private sector when it is feasible to do so. Utah, along with many other states, has asked for more specific guidance and acceptable contract terms regarding how to fulfill the NEVI Guidance provision, “ownership of EV charging infrastructure does not need to revert to the State when a State elects to contract with a private entity to install, operate, or maintain EV charging infrastructure.” We anticipate that in the early phases of EV adoption and EVSE deployment there will be some installations that will be less attractive to potential private sector partners (i.e., installations in rural areas with low utilization rates and interstate rest areas). UDOT will work to address individual situations on a site-by-site basis.

Additional procurement related needs include:

- Working with existing site owners to upgrade sites to meet NEVI guidelines and best practices. Some potential owners include Electrify America, Tesla, and others.
- UDOT may own some EV stations until federal law allows for the limited commercialization of interstate rest areas, as interstate rest areas may be the only feasible locations along AFCs due to long stretches of public lands.
- UDOT will evaluate how to address Energy Service Provider (ESP) proposals that may offer reduced charging fees to the public. These options could provide cost savings when compared to other privatized EV charging stations.
- Delaying installation of EV charging sites until after the second year of implementation may better leverage NEVI funding by providing for increased private investment EV adoption continues to grow.



## Existing and Future Conditions Analysis



*Map of Utah's Geography*

## State Geography, Terrain, Climate and Land Use Patterns

### Geography and Terrain

Utah's major geographic regions include: the Middle Rocky Mountains; the Basin and Ridge Region in the west; and the Colorado Plateau in the southeast. Utah has some of the most diverse geography in the lower 48 states. High alpine ski areas receive more than 500 inches of snow each year, while the lower

desert areas around St. George rarely see snow events. Utah is internationally renowned for its light powder ski snow, and its scenic beauty of red sandstone in Zion and Arches National Parks. Salt Lake City is adjacent to the Wasatch fault line, and significant seismic events are an ongoing concern for infrastructure design and resiliency.

### **Historical Climate**

Utah is an arid state due to the geographic relationship to the Rocky Mountains, which acts to divert precipitation. Within the state, there are widely varied sub climates such as the high alpine areas along the Middle Rocky Mountains, and the lower subtropical climates of southwestern Utah. The southern part of the Colorado Plateau has cool, dry winters and wet summers, with frequent thunderstorms. Northern Utah is affected by air masses from the northern Pacific Ocean and continental polar air; it receives most of its precipitation in the cool season.

Utah has four distinct seasons. The average temperature high during July in northern Utah is 92 degrees Fahrenheit and 100 degrees in southern Utah. During the winter months, the average statewide temperature is slightly below freezing. There are numerous sub-climates that exceed those temperatures, often to the extreme.

### **Future Climate**

Like many other western states, Utah is in the midst of an exceptional drought. As with other parts of the world, Utah is already seeing an increased occurrence in [extreme weather events](#) including floods, fires, exceptional snow, and rain events. For example, last year, the state of Utah reported 1,131 wildfires, exceeding the 10 year average. There was also an increase in the number of flash flood warnings and 40 percent more avalanches in 2021.

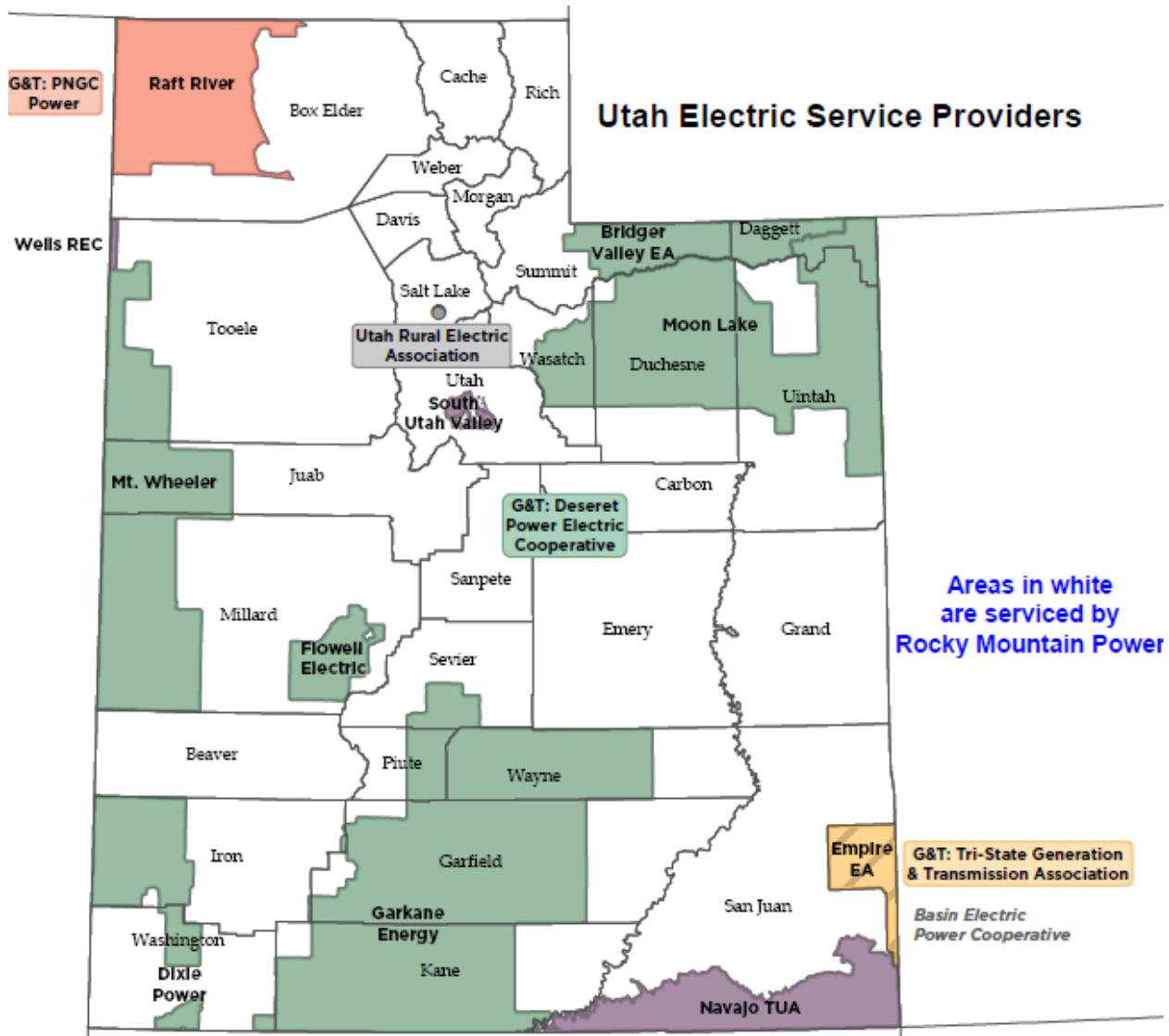
### **Land Use Patterns**

Utah is more than 70 percent public land, including five national parks, national recreation areas, national monuments, national forests, Bureau of Land Management (BLM) managed areas, and state lands. (See: [www.yourutahyourfuture.org](http://www.yourutahyourfuture.org)). Approximately 75 percent of Utah's population is concentrated along the Wasatch Front near Salt Lake City (See: <https://gardner.utah.edu/wp-content/uploads/UPC-Estimates-Dec2021.pdf>). The combination of highly concentrated population and expansive public lands creates unique challenges for deploying EVSE across the state. As an example, there is a 100-mile section of I-70 with no services or population centers. Sections of I-80 also have long stretches of highway with no services.

### **Utah Utilities**

Electric utilities that service the project area are Rocky Mountain Power, Utah Rural Electric Cooperatives Association (URECA), and the Utah Associated Municipal Power Systems (UAMPS). The utility companies have communicated that each area of interest would require an individualized capacity analysis. Until the actual host site is identified, it is unknown how much work will be needed to complete the "make ready" for individual sites along our corridors. The availability of three-phase power will be a major issue in many parts of rural Utah. This reality will inform the discretionary exception request process where waivers may be required in the interest of feasibility and practicality.





Utah's Electric Service Provider Service Areas 2020

## State Travel Patterns, Public Transportation Needs, Freight and Other Supply Chain Needs

### Travel Patterns

Rural highways in Utah carry approximately 32 percent of statewide vehicle miles traveled (VMT); however, 72 percent of lane miles in Utah are in rural areas. Although VMT on rural highways is relatively low, routes outside urban areas are vital. They carry traffic for commerce, regional travel, and tourism – one of Utah’s critical economic centers. Additionally, these routes connect underserved people in rural towns with access to opportunity and critical needs, such as healthcare, groceries, and education. Routes outside of the main interstate system also serve as detours during extreme events such as crashes, floods, mud/landslides, wildfires, snowstorms, etc.

Commuting traffic along the Wasatch Front area is the most significant concentration of vehicle miles

traveled within the state. Additionally, seasonal and weekend traffic is creating substantial increases of vehicle travel on most rural routes. Travel to state and national parks is highest between April and September each year, with volumes between four and ten times higher than off-peak months. This means that traffic volumes can also vary significantly based on time of year.

## Public Transportation

UDOT is responsible for planning, designing, building, maintaining, and operating a multimodal system. The system includes the interstate and state highways. UDOT also manages funds specifically for active transportsations such as pathways and bike lanes that provide greater ability to commute, access public transit and enjoy recreation. UDOT works closely with local transit providers to serve the greatest benefit overall with both systems working together.

Utah Transit Authority (UTA) is the major service provider for public transportation along the Wasatch Front. The service area is approximately 1,600 square miles and serves six counties, including many nearby municipalities. The average annual ridership from 2014 to 2018 exceeded 45 million trips. For years 2016 to 2020 average annual ridership was 40,535,760. UTA's current active bus fleet includes 506 service buses and 22 contingency buses, which are serviced by five maintenance facilities; one of those facilities houses Special Services, a demand response system serving people with disabilities.

UDOT and UTA will identify potential opportunities to co-locate charging stations. An example of this partnership may be the use of UTA Park and Rides lots as public and fleet charging stations.

Utah also has five other transit providers outside the UTA service area. UDOT has a division devoted to planning and support of rural transit agencies, and the NEVI Team will coordinate with them regarding EVSE opportunities.

Ride hailing services such as Uber and Lyft also have a presence along the Wasatch Front. In 2021, Salt Lake City adopted its own [Electrified Transportation Resolution](#), which includes goals to expand electric vehicles for its internal fleet, advance charging infrastructure in the community, and work with external partners to electrify public transit and smart mobility platforms such as rideshare and car share. (See <https://www.slc.gov/sustainability/ev/>) Salt Lake City will continue to pilot partnerships with rideshare services while building out its own network of more than 200 charging stations.

## Tourism

Tourism is a major part of Utah's economy, contributing \$7 billion annually. Travelers from all across the world come to Utah to see the Mighty Five national parks (Bryce, Zions, Arches, Canyonlands, and Capitol Reef), as well as the many national forests, recreation areas, scenic byways, and monuments. Utah's parks, monuments, recreation areas, ski areas, historic sites, and state parks draw millions of resident and nonresident visitors annually.

Prior to the Covid-19 pandemic in 2020, Utah's national park visitors spent \$1.2 billion in Utah's "gateway communities," which are local communities adjacent to national parks. They supported 18,700 jobs, \$441 million in labor income, and \$759 million in total output with Utah's five national parks. These communities received a combined 7.8 million recreation visits in 2020.

(See: <https://travel.utah.gov/wp-content/uploads/TravelTourism-Dec2021.pdf>)

Since 2020, attendance at national parks has resulted in significant increases to traffic in parks and surrounding communities. For example, in 2021 there was a 90 percent average daily increase to Zion National Park when compared to 2019. Other locations such as Arches National Park and Canyonlands National Park have also seen a growth of more than double the amount of cars on average when compared to previous years. Developing reliable and accessible EV infrastructure along Utah's AFC corridors and directing investment to the state's gateway communities and rural areas will support Utah's thriving



tourism industry.

### **Freight and other Supply Chain Needs**

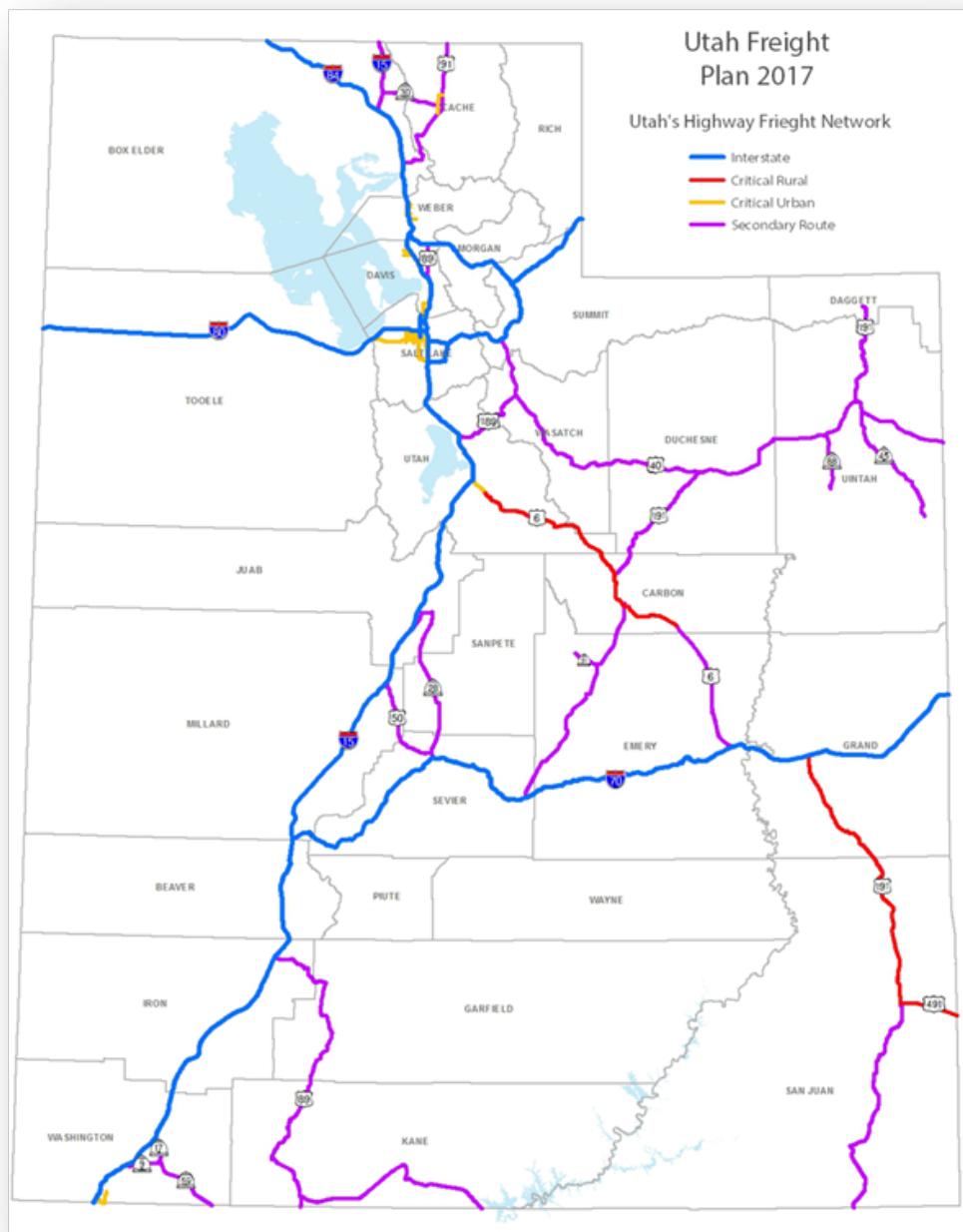
Several major interstate freight routes run through Utah, including I-15, I-80, I-84, and I-70; these routes are critical for moving goods from the west coast to the eastern states. Heavy-duty vehicles make up a significant portion of vehicles traveling many of these interstate corridors. In central and rural Utah, the mix may be as high as 45 percent trucks (single and multiple trailers).

In 2018, a renewed interest spurred the Utah State Legislature to create the Utah Inland Port Authority (UIPA) with the goal to become the freight Crossroads of the World. The Inland Port is a multi-modal trade and logistics hub that will facilitate the production and movement of goods in and out of Utah. This is anticipated to increase rail and highway freight across the state.

Additionally, UDOT and Rocky Mountain Power (RMP) will participate on the Freight Logistics Electrification Demonstration (F-LED) project, a collaboration with USU, UDOT and UIPA to electrify heavy-duty freight and hauling operations within the Inland Port. The project will incorporate innovative charging systems with 5G communications including plug-in, static and dynamic wireless charging. The project will utilize advanced intelligent control systems to optimize its operation and energy use. During the 2021 legislative session, the Utah Legislature appropriated funds to USU to enable the project.

The Utah NEVI team is coordinating with RMP in evaluating potential investments at the Utah Inland Port. RMP has begun this process by signing a Cooperation Agreement with UIPA. In the Cooperation Agreements, all parties agree to coordinate and cooperate on developing EV infrastructure within the development areas. RMP proposes to make investments within UIPA as part of the F-LED project, a state funded collaboration with UIPA and USU, to electrify freight hauling operations.



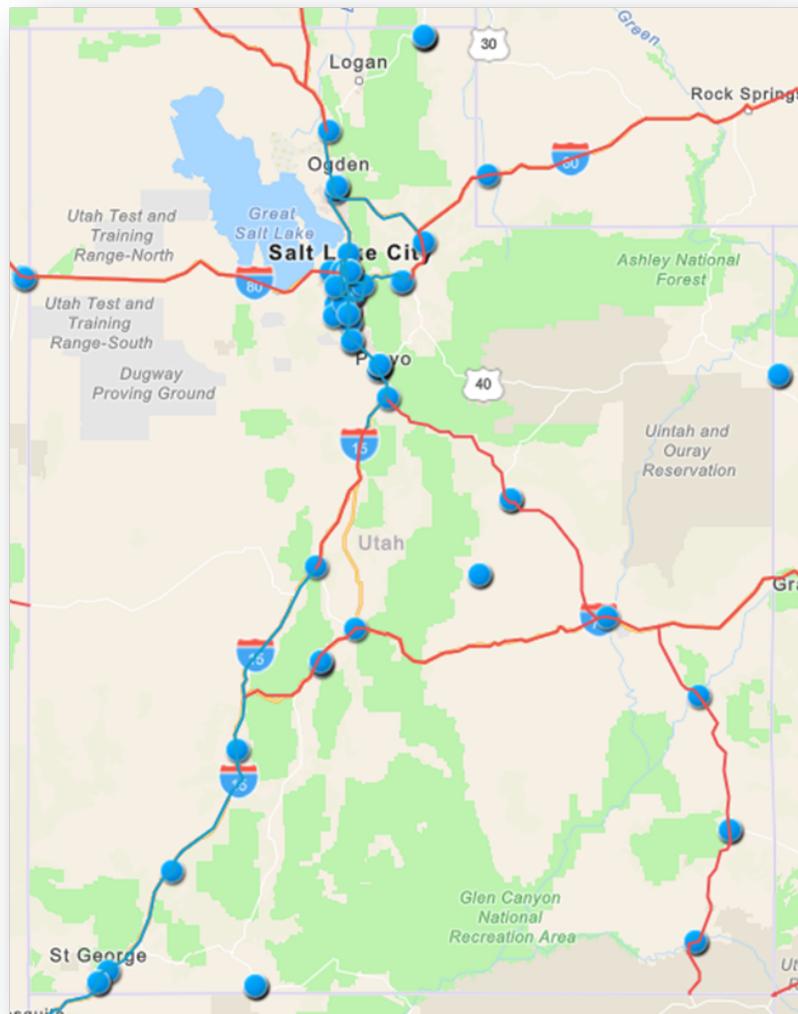


*Source: UDOT 2017 Freight Plan*



## Alternative Fuel Corridors - Corridor Networks

Utah's existing identified AFCs consist of its interstate routes and two segments of US highways. These corridors have some of the highest annual average daily traffic (AADT) traffic counts and are likely to see higher rates of utilization in early phases of the NEVI deployment.



*Utah's Existing Fast DCFC locations (>50 kW)*

All Utah segments of I-15, I-215, I-70, I-80 and I-84, as well as US-6 and US-191 in the state have been designated as AFCs. As infrastructure must be located along designated corridors, Utah's existing EV charging stations may require upgrades or modification to meet the NEVI requirements. Pending AFC routes will also need similar consideration.

## Existing Locations of Charging Infrastructure Along AFCs

The existing DCFCs throughout Utah may need some form of upgrade to meet the NEVI guidance. This may include additional chargers (Electrify America areas) or new chargers with increased power output (all others). NEVI funds would be allocated to meet these upgrade requirements. A Level II charger summary is located in Appendix C.

### Existing DCFC along AFC routes in Utah

#### State of Utah Alternative Fuel Corridor Charging Stations

State EV Charging Location Unique ID	Route ID	Reference Post	DCFC Ports	Level II Ports	Access Type	Owner Type	Station Name	City	EVSE NETWORK
195097	15	4.5	1	0	Public	Private	EV EXPERIENCE FAST CHARGER1	St. George	ChargePoint Network
195105	15	4.5	1	0	Public	Private	EV EXPERIENCE FAST CHARGE 2	St. George	ChargePoint Network
146946	15	11	4	0	Public	Private	Walmart 1439 - Washington, UT	Washington	Electrify America
135873	15	57	4	0	Public	Private	Walmart 1438 - Cedar City, UT	Cedar City	Electrify America
123449	15	111	4	0	Public	Private	Days Inn - Beaver, UT	Beaver	Electrify America
123480	15	188.5	4	0	Public	Private	Flying J - Scipio, UT	Scipio	Electrify America
121757	15	257	4	0	Public	Private	Walmart 4068 - Spanish Fork, UT	Spanish Fork	Electrify America
60341	15	269	1	1	Public	Private	Ken Garff Nissan - Orem	Orem	Non-Networked
149998	15	282.5	1	0	Public	Gov	LEHI POWER LEHI POWER DC	Lehi	ChargePoint Network
198673	15	284.5	1	2	Public	Private	Thanksgiving Point - Megaplex Theatres	Lehi	eVgo Network

State EV Charging Location Unique ID	Route ID	Reference Post	DCFC Ports	Level II Ports	Access Type	Owner Type	Station Name	City	EVSE NETWORK
195102	15	290.5	1	0	Public	Private	CAMPINGWORLD DRAPER DC 1	Draper	ChargePoint Network
195103	15	290.5	1	0	Public	Private	CAMPINGWORLD DRAPER DC 2	Draper	ChargePoint Network
70456	15	293	1	4	Public	Private	Tim Dahle Nissan Southtowne	South Jordan	Non-Networked
207596	15	293	1	0	Public	Private	RIVERTON CHEVY STATION 1	South Jordan	ChargePoint Network
174146	15	294.5	1	0	Public	Gov	Sandy City Hall DC 1	Sandy	ChargePoint Network
174147	15	294.5	1	0	Public	Gov	SANDY CITY CITY HALL DC3	Sandy	ChargePoint Network
174149	15	294.5	1	0	Public	Gov	SANDY CITY CITY HALL DC2	Sandy	ChargePoint Network
47541	15	301.5	1	2	Public	Private	Tim Dahle Nissan	Murray	Non-Networked
47543	15	301.5	1	1	Public	Private	Tim Dahle Nissan	North Salt Lake	Non-Networked
144373	15	304	1	3	Public	Private	Harley Davidson - Salt Lake City	South Salt Lake	Non-Networked
170340	15	305.5	8	0	Public	Private	Sam's Club - Salt Lake City, UT	Salt Lake City	Electrify America
49748	15	307.5	1	2	Public	Private	Ken Garff Nissan - Salt	Salt Lake	Non-

State EV Charging Location Unique ID	Route ID	Reference Post	DCFC Ports	Level II Ports	Access Type	Owner Type	Station Name	City	EVSE NETWORK
							Lake City	City	Networked
198836	15	308	1	1	Public	Private	The Gateway - Summer Parking 4C	Salt Lake City	eVgo Network
213555	15	342	1	0	Public	Private	YOUNG HYUNDAI WEST EXPRESS	Ogden	ChargePoint Network
213556	15	342	1	0	Public	Private	YOUNG HYUNDAI EAST EXPRESS	Ogden	ChargePoint Network
156879	70	37	4	0	Public	Private	Walmart 5168 - Richfield	Richfield	Electrify America
158965	70	37	2	0	Public	Gov	State of Utah R4 HQ	Richfield	ChargePoint Network
163553	70	57	4	0	Public	Private	Love's 581 Salina, UT	Salina	Electrify America
163552	70	162	4	0	Public	Private	Green River Coffee (Green River, UT)	Green River	Electrify America
163416	80	113	2	0	Public	Private	ReFuel Salt Lake City	Salt Lake City	EV Connect
91867	80	144	4	2	Public	Gov	Summit County - Library	Park City	Non-Networked
198771	80	144	1	1	Public	Private	Newpark Resort	Park City	eVgo Network
174320	80	163	1	0	Public	Gov	SUMMIT COUNTY COALVILLE QC	Coalville	ChargePoint Network
198842	215	2	1	2	Public	Private	REI	Salt Lake City	eVgo Network

State EV Charging Location Unique ID	Route ID	Reference Post	DCFC Ports	Level II Ports	Access Type	Owner Type	Station Name	City	EVSE NETWORK
153327	215	15.5	1	0	Public	Gov	STATE OF UTAH UDOT SOUTH L3 2	Taylorsville	ChargePoint Network
175116	215	15.5	1	0	Public	Gov	STATE OF UTAH UDOT SOUTH L3 1	Taylorsville	ChargePoint Network
172902	215	22.9	1	0	Public	Private	RMP NTO OFFICE NTO WEST LOT FC	Salt Lake City	ChargePoint Network
174398	215	23	1	0	Public	Gov	DEQ DEQ MASOB MAIN	Salt Lake City	ChargePoint Network
185963	6	240	2	2	Public	Private	Price City Museum	Price	ChargePoint Network
167233	191	24.5	1	0	Public	Gov	STATE OF UTAH BLUFF EAST 2	Bluff	ChargePoint Network
167234	191	24.5	1	0	Public	Gov	STATE OF UTAH BLUFF WEST 1	Bluff	ChargePoint Network
167183	191	71.5	1	0	Public	Gov	STATE OF UTAH WELCOME WEST 2	Monticello	ChargePoint Network
181441	191	71.5	1	0	Public	Gov	STATE OF UTAH WELCOME EAST 1	Monticello	ChargePoint Network
122658	191	126	1	0	Public	Private	RMP NTO OFFICE RMP MOAB CPE250	Moab	ChargePoint Network

## Known Risks and Challenges

Deploying high-power EVSE requires a pragmatic approach and thoughtful planning. In May 2022, UDOT issued a Request for Information (RFI) in order to gather additional perspectives on risks, best practices, and other pertinent information. (A summary of RFI findings is included in Appendix B.) Below is a list of some key risks and considerations:

- **Supply chain:** Material supply chain issues may limit the number of EVSE available for purchase nationwide. This may force some states to purchase EVSE at higher prices in order to meet NEVI implementation schedules.
- **NEVI minimum site power requirements:** Four 150kW charging ports may not be possible or practical in some rural areas where access to three-phase power is not proximate.
- **Matching funds:** May be difficult to arrange on lesser valued locations.
- **Availability of labor and workforce:** Meeting the minimum qualifications per the NEVI [Notice of Public Rule Making](#).
- **Transportation infrastructure resiliency:** EVSE redundancy and connectivity to alternative corridors will be imperative to meet near term growth and meet user expectations. The NEVI funds will provide some measure of implementation, but strategic longer-term views should be included.
- **Site resiliency:** Planning for onsite power generation will play a critical role in long-term acceptance of electrified transportation as converting to electrified transportation includes increased risk during emergency events requiring long travel times or use of alternative routes or power grid failures.
- **Future-proofing:** Site design during early phases of EV adoption has focused on single stall parking. Efforts should be made to consider larger vehicles and vehicles towing trailers. Pull through designs, additional capacity and other future-proofing measures should be implemented.
- **Capacity:** While Utah's primary strategy is focused on providing statewide access to DCFC, future increased capacity needs should also be considered early in the development phase. Adoption of EVs may be adversely impacted if adequate charging ports are not available during travel, particularly during high travel periods such as holidays or other big events.
- **Connectivity to other corridors:** Proper EVSE corridor planning includes considerations about connectivity to other corridors to ensure an overall functional network. In some cases, spacing of charging sites along interstates may exceed 50-miles by several miles to efficiently integrate EVSE on connecting corridors into the network.
- **Lack of grid availability:** Some rural and remote areas do not have any existing power infrastructure. In UDOT's previous VW/DEQ grant project, three-phase power did not exist at two sites. The estimated cost to bring three-phase power to two of the sites was quoted at double the entire project budget.
- **Liability mitigation:** each site must be assessed for site specific liability risks and mitigated via insurance as necessary.
- **Schedule:** Issues likely to impact the deployment timeline in the first year of the program include:
  - Timing of NEVI plan approval by the Joint Office
  - The procurement process timeline
  - Locating and negotiating with suitable site locations/hosts
  - Grid and circuit load analysis/engineering by ESPs
  - Grid and circuit modifications to meet power needs
  - Environmental clearances, as necessary
  - Equipment availability/supply chain issues (EVSE and utility transformers)

Some factors likely to impact the process of deploying charging infrastructure during the first five years include:

- Equipment supply chain issues that would delay needed materials including utility equipment such as transformers, and EVSE equipment, materials and parts.
- Private installations that happen in advance of funding availability that may fulfill NEVI requirements for site locations and allow the state to adjust investments. Examples include:



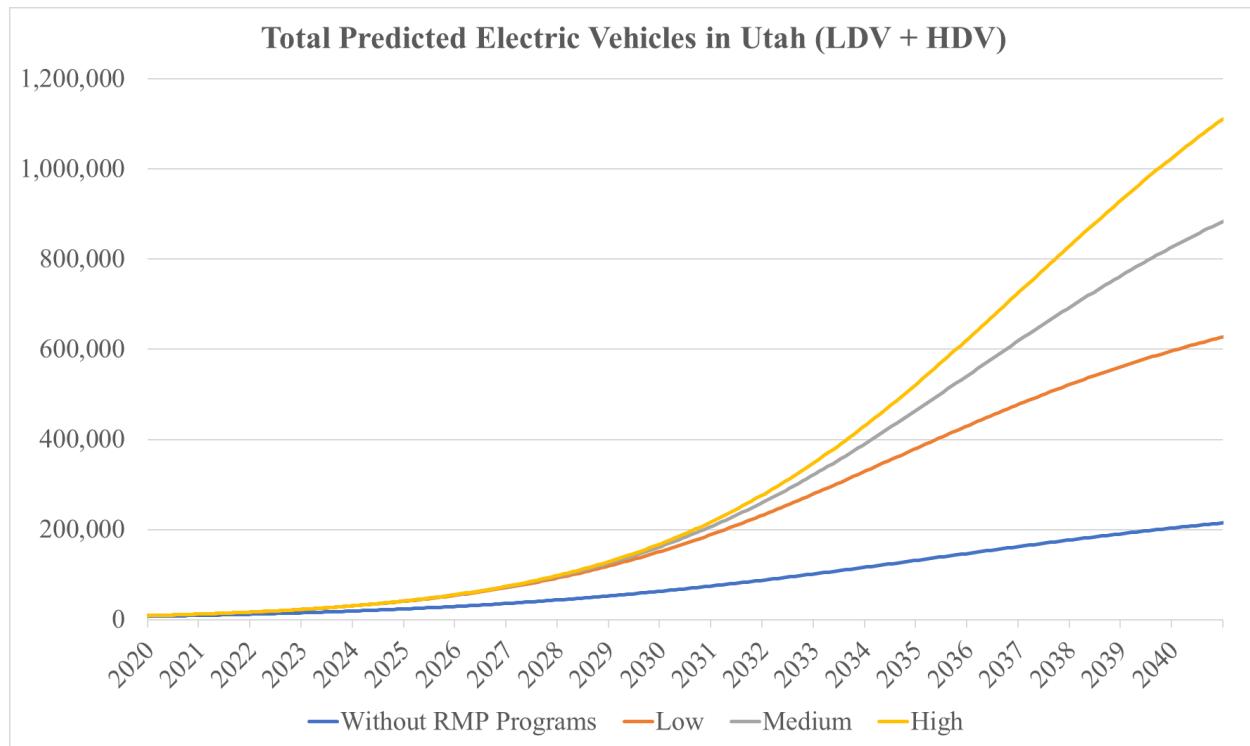
- Starbucks/Volvo initiative ([Link](#))
- 7-Eleven initiative ([Link](#))
- Electrify America network ([Link](#))
- Walmart / Electrify America partnership ([Link](#))
- EVGO EVSE network ([Link](#))
- Rivian EVSE network ([Link](#))
- Ford EVSE BlueOval network ([Link](#))
- Kroger Co. announcement ([Link](#))



## EV Charging Infrastructure Deployment

The NEVI Team intends to use the NEVI funding to focus initially on creating the foundation of a statewide EV mobility charging network. Future-proof designs that can accommodate expected innovations and efficiency improvements, and appropriate site selection will help ensure an effective, reliable, and equitable network that can be improved and expanded upon over time.

The NEVI Team will continue ongoing coordination with key financial stakeholders, including RMP to coordinate the NEVI program funding with the utility's \$50 million investments in EVSE over roughly the same time period. The RMP investment is anticipated to satisfy many of the EVSE needs in the urban areas along the Wasatch Front and other high-utilization areas of its service territory. UDOT intends to use the NEVI funds to partner with RMP and public/private partners to provide access to a statewide network of chargers outside of RMP's service area. Through effective coordination, the NEVI Team, RMP, and other public/private installations will complement each other and meet charging needs in both urban and rural areas.



Source: Utah's EV Charging Plan 2018

## Funding Sources

UDOT will engage the public and private sectors to determine the most advantageous approach to funding strategies for deploying the needed EVSE infrastructure. An example of matching funding is the planned investment by RMP. As previously stated, the anticipated \$50 million investment is expected to provide opportunities to partner on key sites within RMP service areas where both parties' interests align. The state's three other electric service provider (ESP) associations have expressed similar interest in partnering within their members' respective service areas.

The 2022 Utah Legislature appropriated \$3 million to the UOED to develop an EVSE matching grant program, giving preference to smaller ESPs. This funding may be applied towards the NEVI program's 20 percent match requirement for EVSE sites in small ESP service areas that contain planned NEVI EVSE locations.

The Utah DEQ's [Workplace Electric Vehicle Charging Funding Assistance Program](#) (managed by the Utah Division of Air Quality) was created by the 2019 Utah Legislature, which appropriated \$4.9 million to be used as an incentive for the installation of EVSE throughout the state. The EVSE Incentive Program allows businesses, non-profit organizations, and other governmental entities (excluding State Executive Branch agencies who received separate funding for EVSE installation) to apply for a grant for reimbursement of up to 50 percent of the purchase and installation costs for a pre-approved EVSE project. Funds can be used for the purchase and installation of both Level 2 or DCFC EVSE. The EVSE Incentive program will encourage potential partners to consider this program to reduce overall barriers to entry for NEVI funding.

Multiple private entities have approached UDOT with interests in partnering. These include fueling station owners, business owners, charging infrastructure owners and others. Although the amount of private investment funds are unknown, there are several potential sources of private investment for EVSE projects. During the next few months and throughout the project duration, UDOT will continue to explore market interest and explore strategies to provide input into the procurement/contracting process. The goal is to maximize investment of private, local, state and federal funds to develop a robust charging network for the state of Utah, with connectivity to adjoining states in the region.

## **2022 Infrastructure Deployments/Upgrades and FY23-26 Infrastructure Deployments**

<b>NEVI ALTERNATIVE FUEL CORRIDOR (ELECTRIC) FUNDING SUMMARY</b>				
<b>Corridor / Task</b>	<b>2022</b>	<b>2023-2024</b>	<b>Cost if Exception Approved</b>	<b>Exception Request Savings</b>
NEVI Report /	\$ 250,000	\$ 1,250,000	\$ 1,500,000	

Program Mgt				
I-15 South	\$ 0	\$ 2,500,000	\$ 2,500,000	
I-15 and I-84 North	\$ 0	\$ 1,800,000	\$ 1,800,000	
I-215	\$ 0	\$0	\$0	
I-70	\$ 0	\$ 7,600,000	\$ 1,600,000	\$ 6,000,000
I-80 West	\$ 0	\$ 3,750,000	\$ 750,000	\$ 3,000,000
I-80 East	\$ 0	\$ 1,500,000	\$ 1,500,000	
I-84 Central	\$ 0	\$ 750,000	\$ 750,000	
US-6	\$ 0	\$ 2,600,000	\$ 1,600,000	\$ 1,000,000
US-191	\$ 0	\$ 2,550,000	\$ 1,800,000	\$ 750,000
	<b>\$ 250,000</b>	<b>\$ 24,300,000</b>	<b>\$ 13,800,000</b>	<b>\$ 10,750,000</b>
NEVI's 80%		\$ 19,440,000	\$ 11,040,000	\$ 8,600,000
Matching Funds 20%		\$ 4,860,00	\$ 2,760,000	\$ 2,150,000

Deployments during the first year of the NEVI program (2022) will be the most difficult to forecast due to timing of the NEVI plan approval process and the fast approaching end of the 2022 federal fiscal year (FY). It is anticipated that FY 2022 expenses will largely focus on procurement development and infrastructure location planning.

The following maps show:

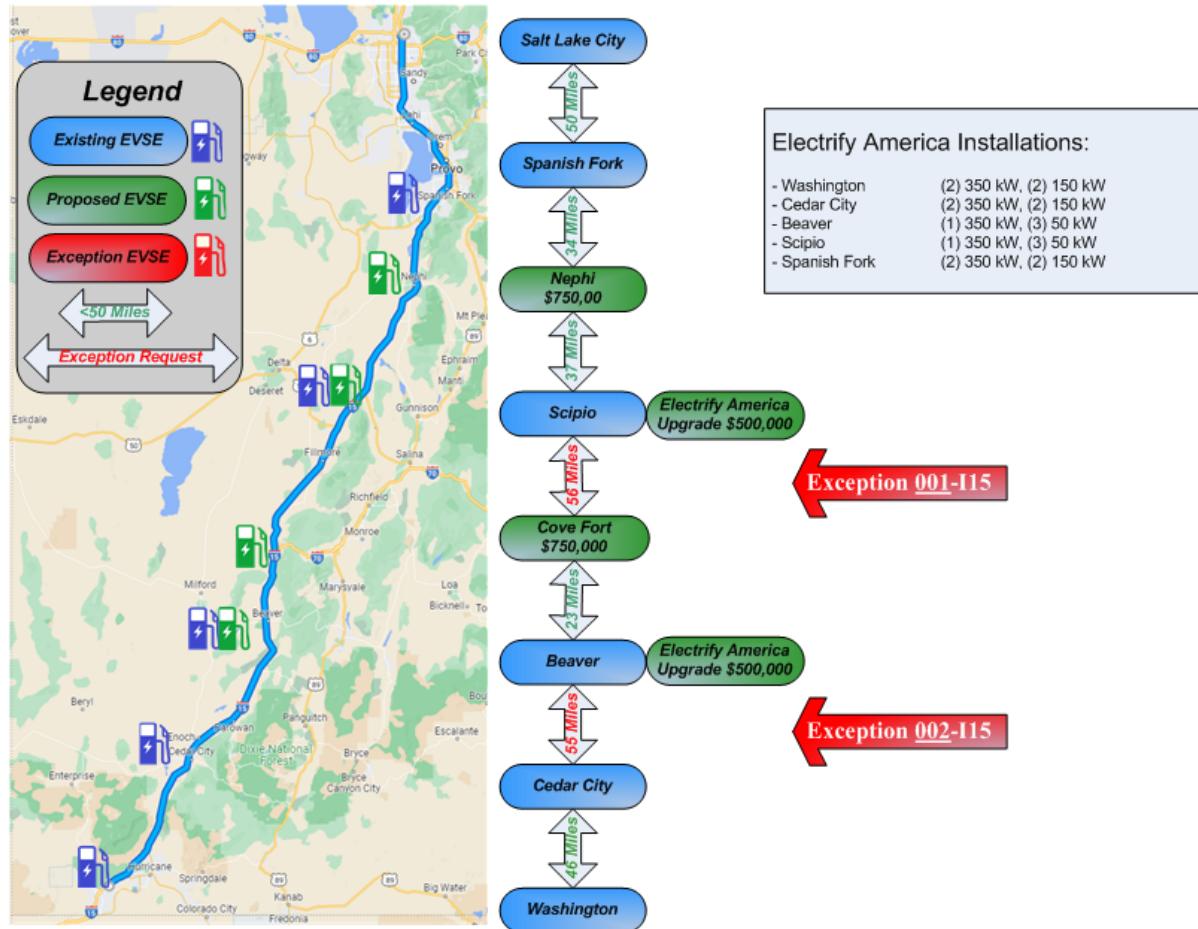
- Approximate locations of planned EV charging infrastructure
- Approximate locations of existing EV charging infrastructure along those corridors, specifically noting existing EV charging infrastructure targeted for upgrade or improvement to meet the requirements of the NEVI programs
- EV charging infrastructure density (e.g., stations/mile) along Alternative Fuel Corridors and the Interstate Highway System

#### Maps of Utah's EVSE Deployments

1. Interstate 15 South Corridor Plan
2. Interstate 15 and Interstate 84 North
3. Interstate 215 Corridor Plan
4. Interstate 70 Corridor Plan
5. Interstate 80 West Corridor Plan
6. Interstate 80 East Corridor Plan
7. Interstate 84 Central Corridor Plan
8. US-6 (Central) Corridor Plan
9. US-191 (South) Corridor Plan



## 1 - Interstate 15 - South Corridor Plan



- (1) Approximate locations of planned EV charging infrastructure along Interstate 15 from Salt Lake County south to Washington County. This corridor has Electrify America installations in Washington, Cedar City, Beaver, Scipio, and Spanish Fork.

The I-15 South corridor spans Salt Lake City, Utah to the Utah-Arizona border. The corridor spans 302 miles, which would require seven EVSE stations to meet NEVI spacing requirements. The map shows existing NEVI compliant EVSE in four of the seven locations. The two sites in Scipio and Beaver require EVSE upgrades, and two new sites are also required to complete this corridor segment. Two discretionary exceptions are indicated where spacing exceeds 50 miles.

Location	AADT*: Positive Direction	Energy Service Provider (ESP)	Station Ownership	FY22 Funding	FY23-26 Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
Washington City	27,000	City of Washington	TBD**	\$ 0	\$ 0				Electrify America
Cedar City	32,000	Pacificorp	TBD	\$ 0	\$ 0			Beaver/Cedar City 55 Miles	Electrify America
Beaver	23,000	Beaver City Corp /RMP	TBD	\$ 0	\$ 500,000		x		Electrify America Upgrade
Cove Fort	16,000	Pacificorp	TBD	\$ 0	\$ 750,000	x		Cove Ft / Scipio 56 Miles	
Scipio	18,000	Pacificorp	TBD	\$ 0	\$ 500,000		x		Electrify America Upgrade
Nephi	20,000	Nephi City	TBD	\$ 0	\$ 750,000	x			
Spanish Fork	82,000	Spanish Fork City	TBD	\$ 0	\$ 0				Electrify America
<b>CORRIDOR INVESTMENT TOTALS</b>				\$ 0	\$ 2,500,000				

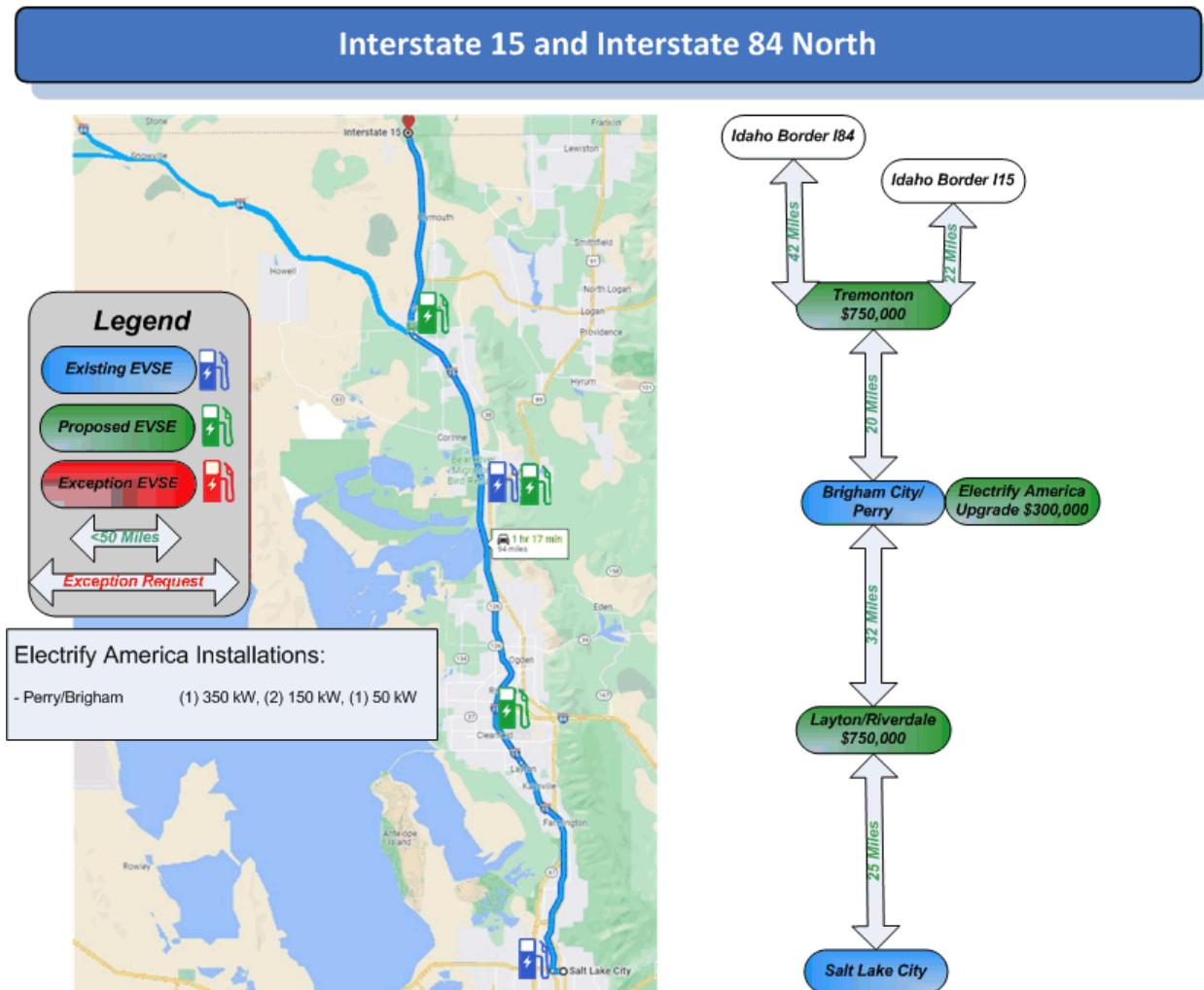
**Legend:** Gray row indicates an exception request.

\*AADT: Annual Average Daily Traffic

\*\*TBD: To Be Determined



## 2 - Interstate 15 and Interstate 84 North



- (2) Approximate locations of planned EV charging infrastructure along Interstate 15 (I-15) from Salt Lake County north through Box Elder County to the Utah-Idaho border.

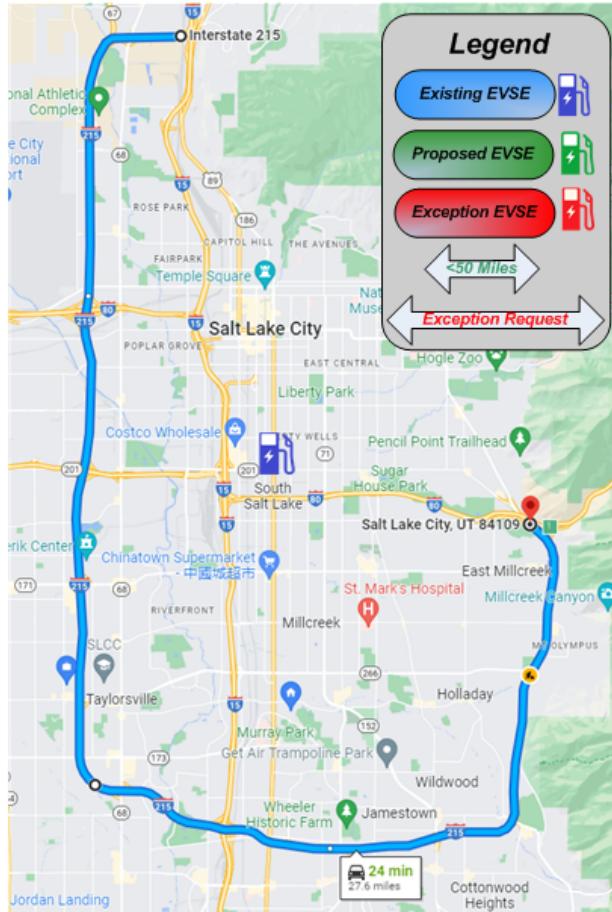
The I-15 and I-84 North corridor spans Salt Lake City, Utah to the Utah-Idaho borders. The corridor spans 94 miles, which would technically require three EVSE stations to meet NEVI spacing requirements; however, to provide EVSE access to the I-84 segment, an additional EVSE site is planned near the I-15/I-84 junction. The map shows existing NEVI compliant EVSE in one of the four locations (Salt Lake City). The site in Brigham City/Perry requires an EVSE upgrade, and two new sites are also required to complete this corridor segment. No discretionary exceptions are requested.

2 - Interstate 15 North & Interstate 84 North Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Ownership	<u>FY22</u> Funding	<u>FY23-26</u> Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
Layton / Riverdale	115,000	Pacificorp	TBD	\$ 0	\$ 750,000	x			
Brigham City / Perry	54,000	Brigham City Corp	TBD	\$ 0	\$ 300,000		x		Electrify America <b>Upgrade</b>
Tremonton	22,000	Pacificorp	TBD	\$ 0	\$ 750,000	x			
<b>CORRIDOR INVESTMENT TOTALS</b>				\$ 0	\$ 1,800,000				



### 3 - Interstate 215 Corridor Plan

#### Interstate 215 Corridor Plan



**Urban EVSE**  
Expansion will be coordinated with Energy Service Provider (Rocky Mountain Power).

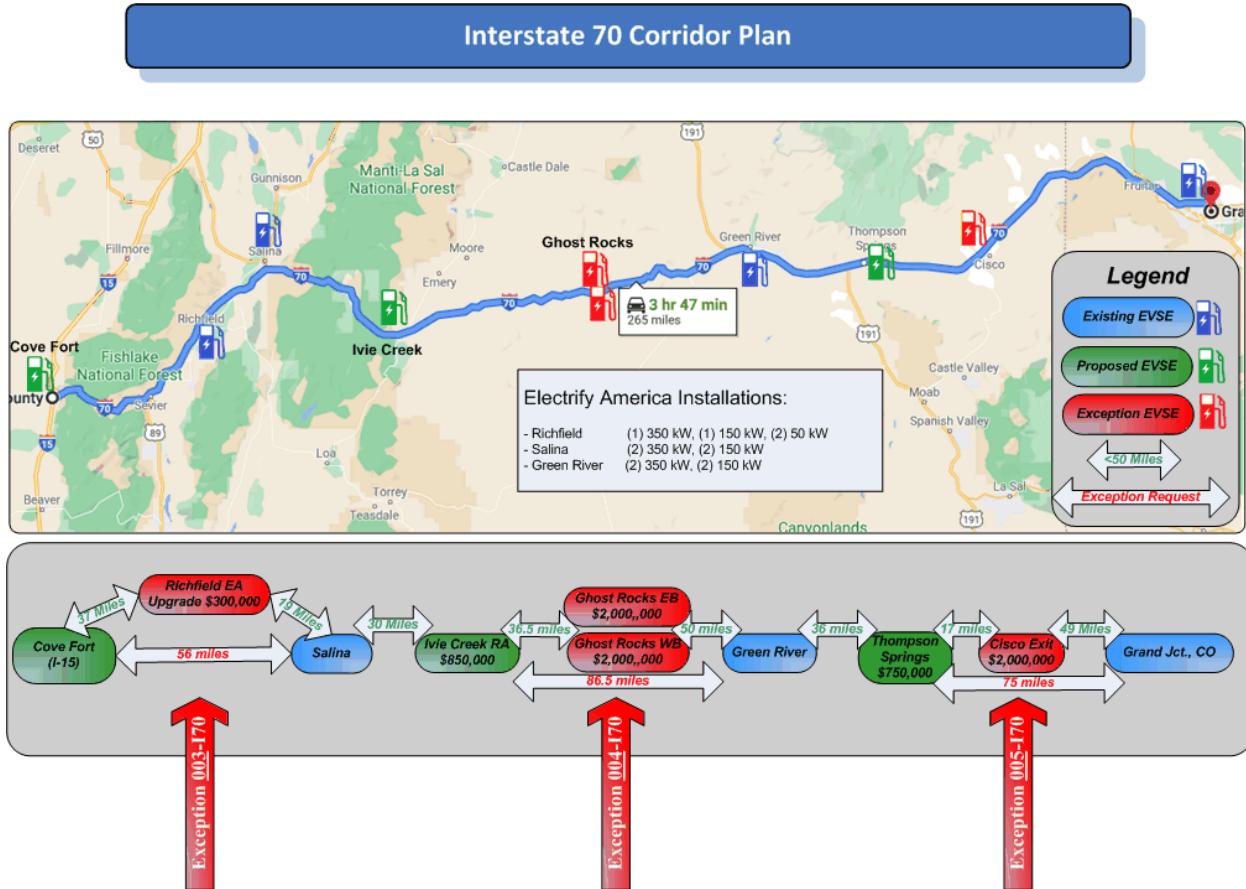
- (3) Interstate 215 (I-215) Corridor - Approximate locations of planned EV charging along I-215. Urban EVSE expansion will be coordinated with the local energy service provider, Rocky Mountain Power.

The I-215 corridor rings the northern portion of the Salt Lake County area. The corridor spans 24 miles, which would technically require one or two EVSE stations to meet NEVI spacing requirements. There are numerous NEVI compliant EVSE along this corridor, and more EVSE are expected to be made available between RMP and the private sector. No discretionary exceptions are requested.

3 - Interstate 215 Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Ownership	<u>FY22</u> Funding	<u>FY23-26</u> Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
Salt Lake City Area		Multiple		\$ 0	\$ 0				Urban Area: No NEVI Funds
<b>CORRIDOR INVESTMENT TOTALS</b>				\$ 0	\$ 0				



## 4 - Interstate 70 Corridor Plan



- (4) Interstate 70 (I-70) Corridor extends from Grand Junction, Colorado to Cove Fort on I-15. There are Electrify America installations in Richfield, Salina, and Green River.

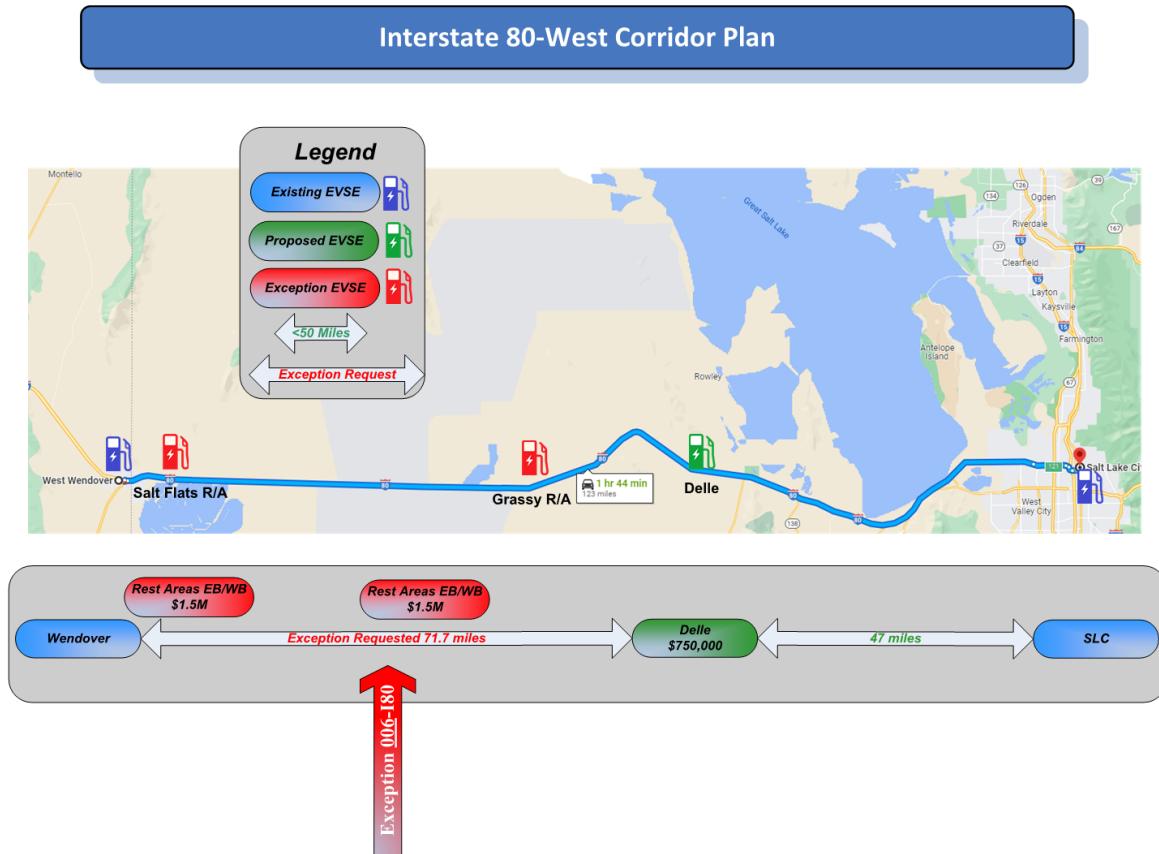
The I-70 corridor spans from the junction with I-15 to the Utah-Colorado border. The corridor spans 236 miles, which would require nine EVSE stations in Utah and one in Colorado to meet NEVI spacing requirements. The map shows existing NEVI compliant EVSE in two of the identified locations. One existing site in Richfield would need to be upgraded, and six new sites are also required to complete this corridor segment. Due to cost, grid availability, geography, and equity considerations, four discretionary exceptions are indicated where spacing exceeds 50 miles.

4 - Interstate 70 Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Ownership	FY22 Funding	FY23-26 Funding	EVSE Scope of Work		Exemption Request Type	NOTES
						New	Upgrade		
Richfield	6,500	Pacificorp	TBD	\$ 0					
Salina	6,800	Pacificorp	TBD	\$ 0	\$ 0			52 Miles to Cove Fort	Salina and Richfield Together
Ivie Creek Rest Area	5,800	Pacificorp	TBD	\$ 0	\$ 850,000	x		Ivie Creek - Green River 86.5 Miles	
Ghost Rocks Rest Area EB	4,200	Solar Micro Grid Need	TBD	\$ 0	\$ 2,000,000	x		Remote, No Power, BLM	Environmental Clearance
Ghost Rocks Rest Area WB	4,200	Solar Micro Grid Need	TBD	\$ 0	\$ 2,000,000	x		Remote, No Power, BLM	Environmental Clearance
Green River	9,600	Pacificorp	TBD	\$ 0	\$ 0				
Thompson Sprg	11,000	Pacificorp	TBD	\$ 0	\$ 750,000	x		Thompson to Grand Jct 75 miles	
Cisco	8,600	Solar Micro Grid Need	Multiple	\$ 0	\$ 2,000,000	x		Remote, No Power, BLM	Environmental Clearance
<b>CORRIDOR INVESTMENT TOTALS</b>				\$ 0	\$ 7,600,000				

**Legend:** Gray row indicates an exception request.



## 5 - Interstate 80 West Corridor Plan



- (5) Interstate 80 (I-80) from Salt Lake County west to the border with Nevada. This section of the interstate runs through a rural portion of Utah with few existing utilities.

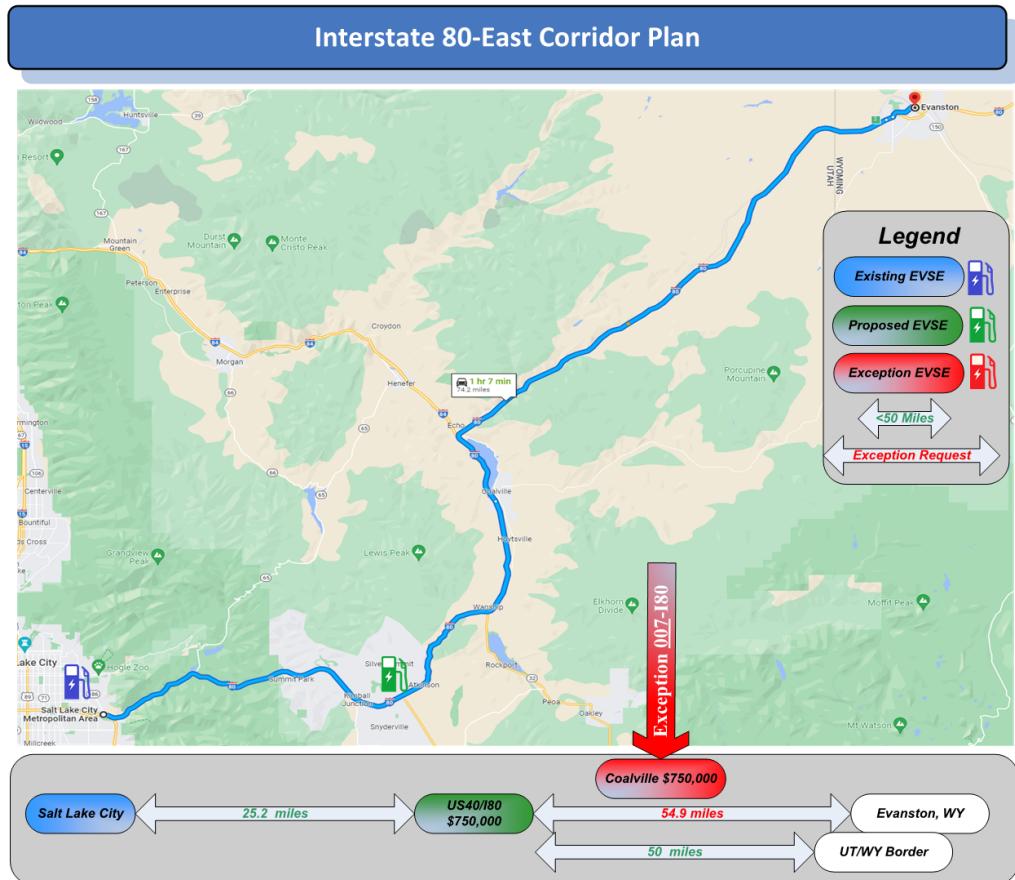
The I-80 West corridor spans from Salt Lake City, Utah to the Utah-Nevada border. The corridor spans 119 miles, which would require seven EVSE stations in Utah and one in Nevada to meet NEVI spacing requirements. The map shows existing NEVI compliant EVSE in two of the four locations. The two sites at the eastbound and westbound Grassy rest areas would require EVSE upgrades, and three new EVSE sites are also required to complete this corridor segment. Four discretionary exceptions are indicated where spacing exceeds 50 miles

5 - Interstate 80 West Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Ownership		<u>FY23-26</u> Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
Rest Areas		Pacificorp	State	\$ 0	\$ 3,000,000	x		Both Sides of Freeway	
Delle Service Station	8,200	Pacificorp	TBD	\$ 0	\$ 750,000	x		Delle to Wendover NV 71.7 Miles	
<b>CORRIDOR INVESTMENT TOTALS</b>				\$ 0	\$ 3,750,000				

**Legend:** Gray row indicates an exception request.



## 6 - Interstate 80 East Corridor Plan



(6) Interstate 80 (I-80) from Salt Lake County east to Evanston, Wyoming.

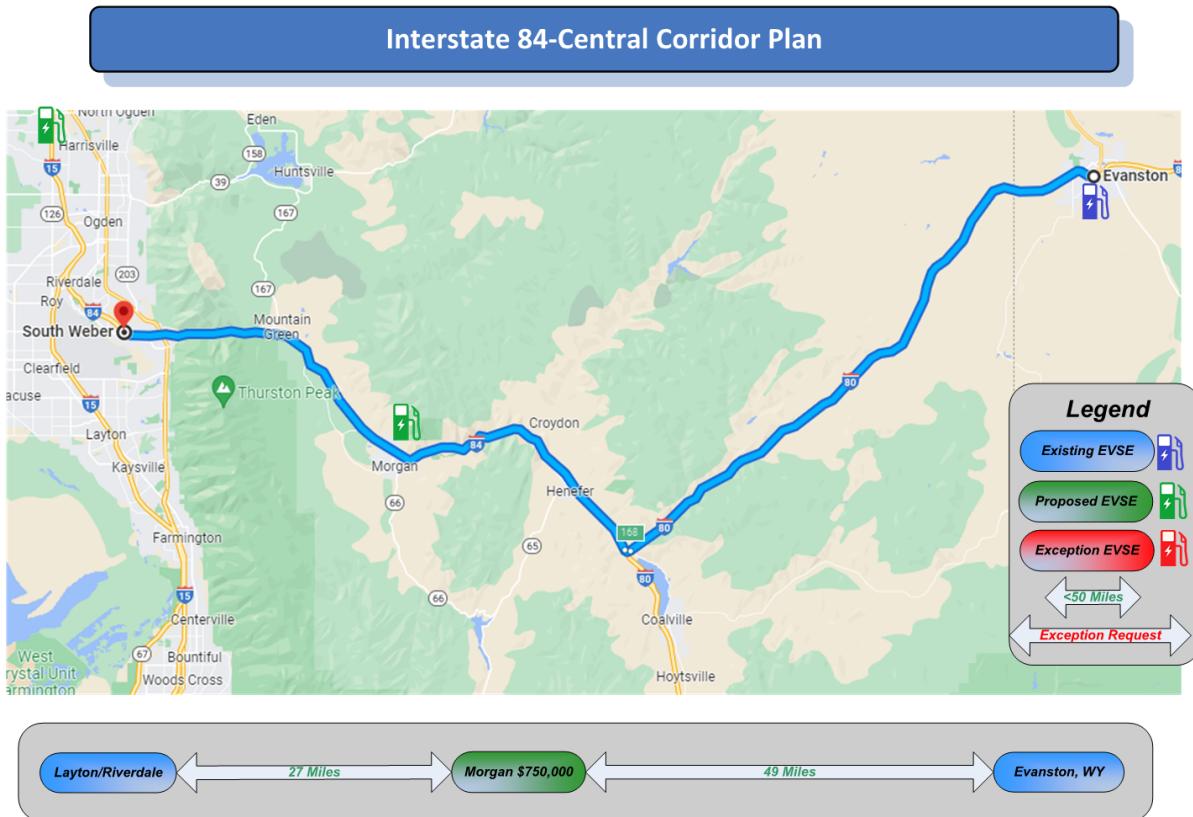
The I-80 East corridor spans Salt Lake City, Utah to the Utah-Wyoming border. The corridor spans 70 miles, which would require two EVSE stations in Utah to meet NEVI spacing requirements. The map shows existing NEVI compliant EVSE in one of the two locations. A new site is planned to complete this corridor segment. One discretionary exception is indicated where spacing exceeds 50 miles.

6 - Interstate 80 East Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Owner ship	<u>FY22</u> Funding	<u>FY23-26</u> Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
US-40 / I-80 Interchange	59,000	Pacificorp	TBD	\$ 0	\$ 750,000	x		US-40 to Evanston WY 54.9 miles	
CORRIDOR INVESTMENT TOTALS				\$ 0	\$ 750,000				

**Legend:** Gray row indicates an exception request.



## 7 - Interstate 84 Central Corridor Plan



(7) Interstate 84 (I-84) from I-15/Ogden City to Evanston, Wyoming.

The I-84 Central corridor spans from I-15/Ogden City, Utah to the Utah-Wyoming border. The corridor spans 76 miles, which would require two EVSE stations in Utah and one in Wyoming to meet NEVI spacing requirements. The map shows existing NEVI compliant EVSE in two of the three locations. One new site is required to complete this corridor segment. No discretionary exceptions are requested.

S.

7 - Interstate 84 Central Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Ownership	<u>FY22</u> Funding	<u>FY23-26</u> Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
Riverdale	115,000		TBD	\$ 0	\$ 0				Short route, No NEVI
Morgan	15,000		TBD	\$ 0	\$ 750,000	x			
<b>CORRIDOR INVESTMENT TOTALS</b>				\$ 0	\$ 750,000				



## 8 - US-6 (Central) Corridor Plan



- (8) US-6 connects from I-15 in Spanish Fork, connecting to I-70 in Green River. This section runs through a rural portion of Utah with few existing utilities.

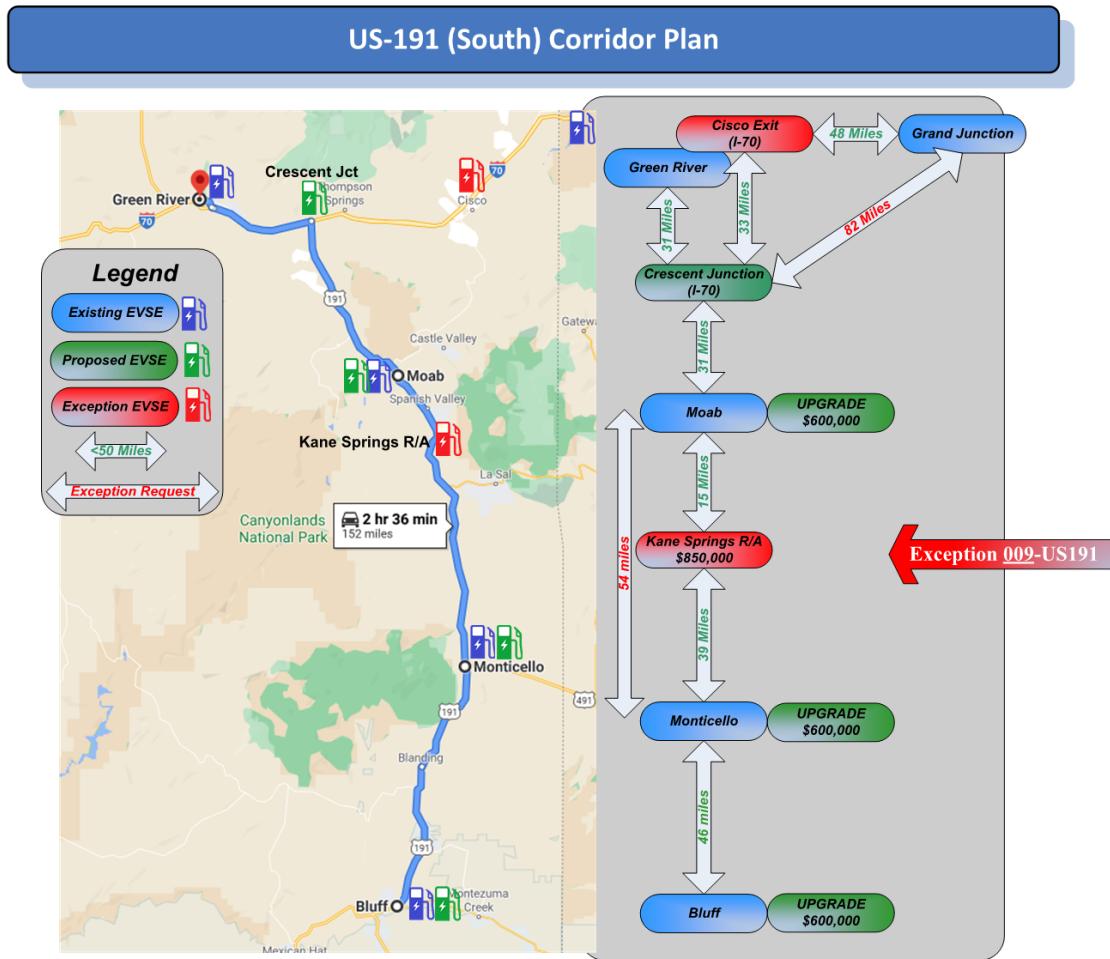
The US-6 Central corridor spans I-15 in Spanish Fork to the I-70 Junction in Green River, Utah. The corridor spans 131 miles, which would require four/five EVSE stations to meet NEVI spacing requirements. The map shows existing NEVI compliant EVSE in two of the locations. Two or three new sites are also required to complete this corridor segment. One discretionary exception is indicated where spacing exceeds 50 miles.

8 - US 6 Central Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Ownership	FY22 Funding	FY23-26 Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
Tie Fork Rest Area	9,400	Pacificorp	TBD	\$ 0	\$ 600,000	x	x		
Wellington	7,500	Pacificorp	Private	\$ 0	\$ 1,000,000	x		Wellington-Green River 54.9 Miles	
Horse Canyon	6,500	Solar Microgrid Needed	PPP / GOV	\$ 0	\$ 1,000,000	x		Remote, No Electrical, Minimal Gap	
CORRIDOR INVESTMENT TOTALS					\$ 0		\$ 2,600,000		

**Legend:** Gray row indicates an exception request. Green text indicates exception request savings



## 9 - US-191 (South) Corridor Plan



(9) US-191 South connects from I-70 in Green River to Bluff.

The US-191 South corridor spans from I-70 in Green River to Bluff, Utah near the Utah-Arizona border. The corridor spans 152 miles, which would technically require four EVSE stations to meet NEVI spacing requirements, but six potential stations are planned. The map shows existing NEVI compliant EVSE in one of the six locations. The three sites in Moab, Monticello, and Bluff require EVSE upgrades, and two new sites may also be required to complete this corridor segment. One discretionary exception is indicated where spacing exceeds 50 miles.

9 - US 191 South Corridor Summary									
Location	AADT: Positive Direction	Energy Service Provider (ESP)	Station Ownership	FY22 Funding	FY23-26 Funding	EVSE Scope of Work		Exception Request Type	NOTES
						New	Upgrade		
Bluff	2,600	Pacifcorp	PPP* / GOV	\$ 0	\$ 600,000		x		
Monticello	4,800	Empire Electric	PPP / GOV	\$ 0	\$ 600,000		x	Monticello-Moab 54 Miles	
Kane Springs	<b>5,600</b>	<b>Pacifcorp</b>	<b>PPP / GOV</b>	<b>\$ 0</b>	<b>\$ 750,000</b>	x		Minimal Gap	
Moab	8,900	Pacifcorp	Mixed	\$ 0	\$ 600,000				
<b>CORRIDOR INVESTMENT TOTALS</b>				\$ 0	\$ 2,550,000				

**Legend:** Gray row indicates an exception request. Green text indicates exception request savings

PPP: Public Private Partnership



## Infrastructure Deployment and Upgrade Considerations

### Upgrades of Corridor Pending Designations to Corridor Ready Designations

To maximize future flexibility regarding non AFC corridors, UDOT did not submit new routes or modify existing route status during Round 6 nominations. UDOT intends to focus on existing AFCs to meet the new NEVI standards. UDOT may elect to nominate during future rounds after assessing updated EVSE deployment plans and determining alignment with then-existing advantages and/or disadvantages to AFC designation. High priority rural corridors may be sufficiently addressed with midpowered (less than 150kW per port) EVSE to maximize funding without adversely impacting EV owners' equitable access to charging infrastructure.

### Increases of Capacity/Redundancy along Existing AFCs

The Utah NEVI Team also intends to include capacity and redundancy considerations in the network and site designs. The ability to expand a site quickly and efficiently will be driven by market adoption of electric vehicles and will be most pronounced at locations with high AADT and peak seasonal traffic patterns. Redundancy may be in the form of high-power DCFCs, but may also be lower power Level II chargers to keep costs reasonable while being able to provide some measure of service during high utilization periods.

UDOT intends to meet the minimum NEVI guidelines in all installations where practical and will analyze increasing EVSE quantity at locations that have the electrical and parking capacity to accommodate additional chargers. The recommended sites will be spaced farther apart and will also be evaluated to optimize the overall network gap filling function. For example, NEVI guidelines require 4 x 150kW EV charging stations to be located every 50 miles. Additional capacity at strategic station sites would optimize travel time and provide more charging options to EV owners where they could "leapfrog" busy stations to locations with more options. Also, the possibility of adding several Level II chargers at stations, as space allows, could help buffer wait times during high-use periods and also provide more power level to relevant legacy EVs.

### EV Freight Considerations

Light and medium duty freight vehicles will be considered in the design and layout of EVSE sites. Where possible, the Team intends to include light duty vehicles pulling trailers. This means site design should include best efforts to integrate pull-through designs rather than single passenger car parking designs that are currently prevalent.

Heavy duty freight (single, dual, and triple trailer) require facility designs that are outside the funding scope of the NEVI program; however, as previously mentioned UDOT is working with researchers at UIPA and The Point on dynamic wireless vehicle charging that is embedded in the roadway. This charging scheme allows for dynamic and static wireless charging potential. Wireless charging is currently up to 500 kilowatt with 1 megawatt designs being tested. Wireless charging will likely be more effective at servicing heavy duty freight vehicles.

### Public Transportation Considerations

Public transportation needs will be addressed in other portions of the Joint Infrastructure Bill. The NEVI Team is looking for opportunities to colocate EVSE where strategic interests overlap at park and ride facilities and other similar locations to optimize power loads and support multi-model transportation electrification.

## State, Regional, and Local Policy

UDOT will support policy development by providing insight into EVSE needs, key considerations, development resources, and other reference materials. Additionally, UDOT is a member of the American Association of State Highway Officials (AASHTO) EV Working Group and participates in the REV West and Western Governors Association (WGA) groups and will continue to coordinate on a regional level for best practices of EVSE deployment and policy considerations.

The NEVI plan will rely on third-party entities to coordinate with municipalities on zoning and permitting. Discussions with stakeholders during the development of the EV infrastructure plan demonstrated that utilities and EVSE companies are well-equipped to handle zoning and permitting processes as part of their normal business practices. UDOT will monitor developments at the state and local level during the implementation of this plan and provide updates to state and local officials when requested or as appropriate. UDOT, in partnership with its contractors, may provide educational resources and assistance to applicants and stakeholders on best practices, as needed.



## Implementation

Successful implementation of the NEVI plan will require quality planning, design, robust equipment and supportive operation and maintenance (O&M) agreements. During the procurement process, UDOT will include best practice requirements to support ongoing function and reliability of EVSE installation to maintain the required 97 percent uptime, regardless of final ownership. As such, strong ongoing O&M support requirements must be included in each installation.

### Strategies for EVSE Operations & Maintenance

UDOT anticipates requiring a minimum of five years O&M from the equipment manufacturer to ensure the EVSE is operational throughout the NEVI program duration. Service plan options will be evaluated on a site-by-site basis, and the state may seek out and encourage 10-year O&M contracts when feasible.

### Strategies for Identifying EV Charger Service Providers and Station Owners

With several suitable suppliers and site host options, UDOT will likely pursue “best value” contracting. The procurement will have high standards with respect to the quality of equipment, data collection and reporting, cybersecurity, siting standards, and O&M.

EVSE type, quantity and location are all critical to providing a foundational EV charging network that can provide material early functionality and that has been designed for potential expansion as EVSE utilization demand increases. Planning phases of the Utah EVSE charging network will consider many factors to ensure functionality, redundancy, and growth capacity.

### Strategies for EVSE Data Collection & Sharing

Included in each procurement and resulting contract will be a requirement for EVSE data collection and sharing of information that respects consumer privacy. All EVSE receiving NEVI funding will include data communication network plans that help facilitate power sharing, payment processing, error reporting, and other useful functions and information collection.

Requirements will be included in the procurement to provide an Application Program Interface (API) or similar method of sharing data with UDOT and the federal government for the purposes of improving the EVSE program and measuring progress towards goals. Personally identifiable information will be removed by the EVSE operator, prior to sharing with the government.

**EVSE Data:** Procurements will require that industry standard data be shared about the EVSE functions and EV charging session data. This is typically being shared in most installations of networked EVSE. Session information will include data such as charging session length, time of day usage, connector used (CHadeMO, CCS1, J1772), peak power, charge curves, etc.

**EV Driver Data:** Information about EV drivers will be “scrubbed” of any personally identifiable information before transmitting outside the EVSE network system.

### Strategies to Address Resilience, Emergency Evacuation, Snow Removal/Seasonal Needs

Electrification of surface transportation brings many exciting opportunities, but also yields unique challenges that are not typical of internal combustion engine vehicles. Vehicles which operate on gasoline can be easily refueled with a couple gallons of gas, where EVs will require different solutions that are not commonly available today. OEMs are starting to be innovative in their approach to providing

bi-directional charging that will allow one vehicle to send power to an appropriately equipped vehicle needing some level of energy transfer.

On a larger scale, there are concerns about providing alternate route options during emergency events such as wildfires, avalanches, earthquakes, and other disasters. Providing alternate routes will be essential as more electric vehicles travel the highways. Alternate routes will also provide some measure of relief for high-volume travel days such as weekends, sporting events, or other events.

Finally, on-site backup power will be a critical feature as more vehicles are electrified. This will include on-site power generation from sources such as compressed natural gas, hydrogen, solar, and others. This will also include energy storage features such as batteries or hydrogen.

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

Included in the procurement process is the requirement that installations shall follow Occupational Safety and Health Administration (OSHA), local codes, and industry best practices. Electrical licensure in Utah requires certification and ongoing education requirements for independent electrical contractors as well as union contractors. Both organizations strongly promote and require safety, training, and investment in continued growth. Additionally, the National Electric Code (the current state-adopted version) will be included in procurements as the required standards for electrical work.



## Civil Rights

This plan, and its implementation, will uphold all State and Federal civil rights laws, including but not limited to Title VI of the Civil Rights Act, the American Disabilities Act, and Section 504 of the Rehabilitation Act.

UDOT is committed to achieving full compliance with Title VI of the Civil Rights Act of 1964 and all related non-discrimination laws. Through its policies, assurances and procedures, UDOT makes every effort to ensure that no person is excluded from participation in or denied the benefits of any UDOT program or activity on the basis of race, color, national origin, sex, disability, age, gender identity, sexual orientation, or income. The NEVI program provides an opportunity to engage Disadvantaged Business Enterprise (DBE) owners in providing services and we commit to making DBE owners aware of contracting opportunities.

The Title VI Program ensures compliance by:

- Conducting internal and external compliance reviews.
- Conducting Title VI training to staff, suppliers, vendors, contractors, local governments and other UDOT sub-recipients of federal funds.
- Developing Title VI compliance information for internal and external dissemination.
- Processing the disposition of Title VI complaints received by the UDOT.
- Providing oversight and monitoring that provisions of Executive Orders on Environmental Justice and Limited English Proficiency (LEP) are carried out under Title VI program jurisdiction.

Each year UDOT updates its Title VI Implementation Plan to ensure that it is in compliance with state and federal laws and ensuring all people have equal opportunities. Please see the 2022 plan here [Title VI Implementation Plan.pdf](#)

### Americans with Disabilities Act (ADA) Requirements

The Americans with Disabilities Act of 1990 (ADA) is a civil rights statute prohibiting discrimination against persons with disabilities in all aspects of life. This law is enforced by the U.S. Department of Justice (DOJ) and requires accessible planning, design, and construction to integrate people with disabilities into mainstream society. UDOT complies with all aspects of the law to ensure that persons with disabilities can safely access facilities and services.

During 2012 and 2013, the Federal Highway Administration (FHWA) developed the following guidance regarding ADA requirements for constructing access ramps on resurfacing projects. Projects deemed to be exempt must include access ramps within the scope of the project.

UDOT will develop EV charging stations in accordance with ADA standards related to accessible parking spaces. Projects that alter existing infrastructure will upgrade existing secondary access ramps or install new, compliant ramps as part of the project.

Public outreach events must be held in accordance with [Section 504 of the Rehabilitation Act of 1973](#) to generate public feedback from the disability community.

## Equity Considerations

UDOT plans to use this federal funding to focus on the needs of rural communities. Up until this point, much of the EV infrastructure investment has been in urban areas, where EV ownership density is highest; however, EV ownership and demands are also growing in rural areas that are currently

underserved. A critical part of linking rural Utah communities is providing a charging network for statewide travel in EVs with minimal delay or disruption. The NEVI Team will help ensure that rural communities are prepared for and supported in EV growth through education, outreach, and technical planning support to fulfill the goals of the Justice40 Initiative.

Many rural communities may not have sufficient resources or experience with EVs or charging infrastructure. The NEVI Team will work with community partners using tools such as “Charging Forward: A Toolkit for Planning and Funding Rural Electric Mobility Infrastructure,” to discuss the benefits and challenges of rural vehicle electrification and identify partnership opportunities. (See: <https://www.transportation.gov/rural/ev/toolkit> and Resources for EV Infrastructure Planning <https://www.transportation.gov/rural/ev/toolkit/planning-resources>)

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

The NEVI team is committed to reducing barriers to EV ownership, regardless of a person’s location or economic levels. The Team anticipates FHWA will establish national standards for measuring the benefits to the public such as air quality and job creation. In the meantime, there are examples from industry, other states, and current practices that the NEVI Team may adopt to internally track, measure and assess performance through the lifecycle of managing the NEVI implementation.

The NEVI Team will also work with MPOs who are responsible for regional transportation planning and have existing relationships with community leaders across the state. The MPOs can advise our team on disadvantaged communities they have identified in their planning processes. One of the tools developed to demonstrate commitment and outline a path to address disadvantaged communities is the Utah Compact On Racial Equity, Diversity, & Inclusion (<https://multicultural.utah.gov/governor-gary-herbert-joins-racial-equity-leaders-to-form-the-utah-compact-on-racial-equity-diversity-and-inclusion/>). This Compact has been endorsed by State leaders in Utah, including UDOT Executive Director Carlos Braceras. One of the five principles outlined in the Compact is to engage people from disadvantaged communities in the planning process. Appropriate engagement with disadvantaged communities in the state must include consultation and input from people within those communities. This will require a community-driven initiative informed by equity-centered data analysis. We also rely upon the Utah Division of Multicultural Affairs to advise us on how to best engage disadvantaged communities and identify key community contacts.

## **Process to Identify, Quantify, and Measure Benefits to DACs**

UDOT acknowledges that the process of arriving at meaningful measures of direct and indirect benefits to DACs will likely be iterative. The NEVI Team anticipates that FHWA will establish national standards for measuring these benefits; however, the Team will also utilize the following evaluative measure, which is also a measure for the plan as a whole (see Program Evaluation section):

Is the percentage of NEVI compliant EVSE sites in underserved, underrepresented, and/or overburdened communities in excess of 40 percent?

- If not, how is the NEVI Team adapting to achieve this objective?

The NEVI Team will also develop additional measures through direct engagement with DACs, following the sentiment of the adage “nothing about us without us.” Rather than presuppose outcomes that will offer the greatest benefit to DACs, the Team will conduct targeted outreach to representatives of DACs for their insights regarding needs and benefits to their communities. As this plan has been developed, UDOT met with the State’s Division of Multicultural Affairs to ensure that this plan will address equity among Utah’s disadvantaged communities. This coordination will be ongoing as the funding becomes available and implementation begins.

UDOT is a performance-based organization, leading the industry in its methods for collecting, visualizing, and leveraging performance data. This expertise will be applied to the development of quantitative measures that have been co-created with DACs. Additionally, qualitative measures may be established.

### **Benefits to DACs through this Plan**

For example, installing charging stations in disadvantaged communities in both rural and urban areas does little for households with low vehicle ownership rates; however, the presence of charging stations could increase access to locally-owned businesses while travelers charge their vehicles, providing additional income to local economies that can translate to overall growth in prosperity and wealth. Further indirect benefits shared by the greater community might include improved air quality due to zero mobile emission rates of electric vehicles. Finally, as electric vehicles become more available , access to charging stations will present decreased cost of ownership and operation.

## **Labor and Workforce Considerations**

Installing, operating, and maintaining the NEVI Formula Program's EV charging infrastructure will create new opportunities for workers in the electrical and other construction trades, while also creating work for the skilled incumbent workforce in Utah. To ensure safety and high quality delivery, we will monitor the training and experience level of the workforce that is installing and maintaining EV charging infrastructure. The most recent guidance from the Joint Office identified training and certification programs like the Electric Vehicle Infrastructure Training Program ([EVITP](#)). Such certifications are relatively inexpensive to obtain and are available to those without higher education. The EVITP website shows that there are only 12 certified providers listed on the EVITP site for Utah, all of whom are in the urbanized Wasatch Front. This indicates a potential job growth area.

Additionally, Utah's Weber State University is preparing the future workforce through its EV Automotive Services training program. This three-phase program is the only one of its kind in the region. The program trains individuals on basic electrical theory and completion includes an ASE L3 Light Duty Electric/Hybrid Vehicle Certification. Coordination with programs, such as the training program at Weber State, will support the growth and diversification of Utah's local workforce.

The State of Utah will advertise and seek to incentivize these trainings and certifications among rural and underrepresented potential job candidates. This will serve dual purposes of providing employment opportunities to disadvantaged groups while also building the necessary workforce to service the expansion of EVSE in Utah's nonurban areas.

UDOT is committed to Equal Employment Opportunity (EEO) and Affirmative Action in our hiring and contracted processes. We have a long history of contracting with federally identified Disadvantaged Business Enterprises (DBEs) as either prime providers or subcontractors. UDOT may request proposals for NEVI contracts to submit a DBE Performance Plan as part of a responsive proposal.

On an annual basis, the Team will submit identifying information about known organizations operating, maintaining, or installing EVSE along with information about any certifications of these entities through State or local business opportunity certification programs.



## Cybersecurity

As has been done by other energy companies, UDOT will require all NEVI funded EVSE to use industry standard cybersecurity specifications such as the following:

- Confirmation of existence and maintenance of security controls to protect the EV network, systems, software, confidential information, and data no less rigorous than those set forth in the latest published version of ISO/IEC 27001 – Information Security Management Systems–Requirements and ISO/IEC 27002 – Code of Practice for International Security Management.
- If providing a web portal or web service, providers must confirm that web services use HTTPS/TLS version 1.2 or later for all content.
- Confirmation of encryption of all EV site data while at rest as well as when in transit over the network.
- Confirmation that all EV site -related file transfers are encrypted while at rest as well as when in transit over the network.
- Confirmation that all encryption uses National Institute of Standards and Technology (NIST) approved algorithms and key lengths.
- Confirmation of support of federated single-sign-on (SSO) authentication for any EV site accounts, whether via web interface or mobile application. EVSEs must have the ability to support Azure Active Directory.
- If EVSEs do not support federated single-sign-on (SSO) authentication, confirmation that accounts provided support multi-factor authentication compliant with NIST SP 800 63-3 Authentication Assurance Level 2. Provide documentation that supports compliance and describe supported authentication mechanisms.
- Confirmation, by provision of supporting documentation, that email sent while under the Contract by you or by any service originates from a domain(s) with a published Domain-based Message Authentication, Reporting and Conformance (DMARC) policy of “reject” and with a published Sender Policy Framework (SPF) policy consisting of valid senders and a “fail” directive (-all). If the optional DMARC “pct” directive is used, “pct” must be set to “100”;
- Confirmation, by provision of supporting documentation, that email sent while under the Contract by you or by any service passes a DMARC authentication check;
- Confirmation, by provision of supporting documentation, that email sent while under the Contract by you or by any service is signed by a DomainKeys Identified Mail (DKIM) 2048 bit key.
- Confirmation, by provision of supporting documentation, that email sent while under the Contract by you or by any service supports Transport Layer Security (TLS).
- Description of the process to disclose known vulnerabilities related to products or services provided as they pertain to the proposed service.
- Description of methods supplied to verify software integrity and authenticity for any software or patches provided by you as they pertain to the proposed service.
- Description of the process for security event monitoring and notification/alert/response plans, including response to security incidents affecting the State of Utah.
- Confirmation of the process to notify the state of a security incident as soon as practicable, but no later than 48 hours after discovery.
- Coordination of responses to security incidents with the state that pose a security risk to the State.
- Confirmation that all rights to any data provided by the state shall remain exclusive property of the State.
- Confirmation that EV sites will not share data with third parties for unrelated commercial purposes, such as advertising or advertising-related purposes.



- Description of remote access if required as part of the service, and confirmation of ability to conform to state requirements for intermediate host methods for remote access, such as Citrix or Virtual Desktop.
- If remote access of any type will be required as part of the service, and if a virtual private network is required, confirmation of the ability to terminate in a demilitarized zone network (DMZ). Note that direct virtual private network connectivity to Company corporate networks is always prohibited.
- If remote access of any type will be required as part of the service, confirmation that there will be notification to the state when remote or on-site access is no longer needed by contractor representatives, where applicable.
- All contractors will be asked to list facilities proposed in bid located outside the continental United States.
- All contractors will be asked to list any support staff used during the term of this contract located outside the continental United States.
- Disclosure of third parties upon which the contractor depends to deliver the state offering (such as third-party software, implementation, hosting, for example).
- Description of methods to securely ship and deliver products to the state as they pertain to the proposed service.

For Hosted or Cloud Services:

- If service is comprised in whole or in part of a cloud-based or hosted services solution, the state will request contractors confirm they currently undergo, or are willing to undergo, annual Statement on Standards for Attestation Engagements (SSAE) Service Organization Control (SOC) 2 Type 2 audits (“Audit”) for the enterprise or covering the scope of services for the term of the contract with the state, as appropriate. Note that a datacenter audit alone will not be sufficient. You may include an audit for a data center/colocation provider for informational purposes.
- If service is composed in whole or in part of a cloud-based or hosted services solution, the state requests confirmation that administrative access complies with NIST SP 800 63-3 Digital Identity at Authentication Assurance Level 2 or higher, where compromise of one factor does.



## Program Evaluation

The principal program evaluations will focus on affirmative answers to the following questions:

- Did the NEVI Team engage with relevant affected stakeholders regarding the siting considerations prior to committing to each specific site location?
- Have each of the identified corridors been built out with NEVI compliant EVSE?
  - If not, what percent of progress towards the goal has been achieved?
  - If not, how is the NEVI Team adapting to achieve this objective?
- Is the EVSE uptime for each site at least 97 percent?
- Is the percentage of NEVI compliant EVSE sites in underserved, underrepresented, and/or overburdened communities in excess of 40 percent?
  - If not, how is the NEVI Team adapting its efforts to achieve this objective?
- Are all non-interstate right of way NEVI funded EVSE contracted to local public/private entities for ownership, operations and maintenance?

Using tools developed to draft the EV plan (GIS Map, Deployment Maps and Public Involvement Plan specifically), UDOT intends to reevaluate the network on an annual basis and make adjustments to the Plan accordingly. This includes monitoring private sector development, examining usage data returned from installed equipment, and working with its stakeholders to develop new locations and make adjustments and/or improvements to existing locations based on utilization data.



## Discretionary Exceptions

This section includes requested exceptions from the requirement that charging infrastructure be installed every 50 miles along the State's portion of the Interstate Highway System within one mile of the interstate. These requests are related to grid capacity, geography, equity, and/or extraordinary cost.

Utah's geography and the segments of the Interstate Highway System through the state's rural areas require nine discretionary exceptions for FY 2022-23. These exceptions have been informed by coordination with ESPs to identify grid requirements that meet NEVI guidance and conservative use of NEVI funds to ensure wise investment that will be utilized by EVs. Equity considerations include locating EV charging stations in communities that would benefit, which in certain cases extends the 50 mile spacing requirement.

State of Utah NEVI Plan Exception Request, FY 2022				
Exception # <sup>1,5</sup>	Type <sup>2</sup>	Distance of Deviation <sup>3</sup>	Included in Round 6 AFC Nomination	Reason for Exception Request <sup>4</sup>
<b>001-I15</b> <i>Cove Fort to Scipio</i>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>6</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography X Equity X Extraordinary Cost
<b>002-I15</b> <i>Cedar City to Beaver</i>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>5</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography X Equity X Extraordinary Cost
<b>003-I70</b> <i>Cove Fort to Salina</i>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>6</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography X Equity X Extraordinary Cost
<b>004-I70</b> <i>Ivie Creek to Green River</i>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>36.5</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography X Equity X Extraordinary Cost
<b>005-I70</b> <i>Thompson Sg. Grand Jct. CO</i>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>25</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography X Equity X Extraordinary Cost
<b>006-I80</b> <i>Delle to Wendover NV</i>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>21</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography X Equity X Extraordinary Cost
<b>007-I80</b> <i>US40 to Evanston, WY</i>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>4.9</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography X Equity X Extraordinary Cost
<b>008-US6</b>	<input checked="" type="checkbox"/> 50 miles apart <input type="checkbox"/> 1 mile from exit	<b>14.1</b> miles — miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X Grid Capacity X Geography

<i>Price to Green River</i>				<input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Extraordinary Cost
<b>009-US191</b> <i>Moab to Monticello</i>	<input checked="" type="checkbox"/> <b>50 miles apart</b> <input type="checkbox"/> 1 mile from exit	<b>4</b> miles <del>—</del> miles	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Grid Capacity <input checked="" type="checkbox"/> Geography <input checked="" type="checkbox"/> Equity <input checked="" type="checkbox"/> Extraordinary Cost

1. Indicate the number for this specific exception request that corresponds to the same number located on the map provided below.
2. Select 50-mile and/or 1-mile distance exception or both
3. Note the distance of the exception request. For example, if the exception request is for a deviation of 5 miles from the 50-mile requirement, indicate 5-miles.
4. Check all reasons that apply. See [Maps](#)
5. Exception Request Number – Route Number



## Appendices

**Appendix A: Stakeholder Engagement**

**Appendix B: Summary of Request for Information Responses**

**Appendix C: Existing Level II EV Charging Summary**

**Appendix D: Utah's EV Infrastructure One-Pager**

**Appendix E: State of Utah NEVI Plan Exception Requests, FY 2022**



## Appendix A: Stakeholder Engagement

<b>Interview Date</b>	<b>Organization</b>	<b>Key Recommendations and Considerations</b>
May 25, 2022	Wasatch Front Regional Council	<p>Going into more detail of where the charging locations are so that planning can support infrastructure. Urban equability can be hard. How much responsibility should a city have for a parking lot, or mall that has so many charging spots?</p> <p>What could someone do for 45 minutes while charging? Needs to be a safety aspect</p> <p>Suitability map for charging stations.</p> <p>Characteristics of a desired spot and rating it.</p>
April 12, 2022	UDOT Title VI	Utilize UDOT's existing Title VI policy and include ADA and Section 504 of the Rehabilitation Act.
April 26, 2022	UDOT Geographic Information Systems (GIS)	Coordination on EV Chargers GIS.
April 26, 2022	Salt Lake City (SLC) Sustainability	<p>SLC working on a master plan for EV. Include city owned chargers and programs that would help the city and adoption of EV.</p> <p>Converting fleet by 2023. SLC would like to gauge what business needs are in this field so they can figure out where to focus and develop programs. Partnerships: car dealerships. Contracting: Get O&amp;M contract. Maintenance has been the main challenge. Equity: It is an opt in mentality and communities should tell us what they need.</p>



April 25, 2022	Utah Division of Multicultural Affairs	<p>Many of the burdens from the transportation and energy systems have been historically and disproportionately borne by disadvantaged communities. Unequal distribution of benefits from the transportation and energy systems has prevented disadvantaged communities and minority-owned and women-owned businesses from realizing equitable benefits from these systems, while other historic barriers to transportation have made facilities inaccessible to individuals with disabilities. For these reasons, the NEVI Formula Program will emphasize equity considerations at its inception to avoid exacerbating existing disparities in the transportation system and to develop a convenient, reliable, affordable, and equitable charging experience for all users. NEVI Formula Program investments in EV charging infrastructure have the potential to:</p> <ul style="list-style-type: none"> <li>• Improve clean transportation access through the location of chargers;</li> <li>• Decrease the transportation energy cost burden by enabling reliable access to affordable charging;</li> <li>• Reduce environmental exposures to transportation emissions;</li> <li>• Increase parity in clean energy technology access and adoption;</li> <li>• Increase access to low-cost capital to increase equitable adoption of more costly, clean energy technologies like EVs and EV chargers;</li> <li>• Increase the clean energy job pipeline, job training, and enterprise creation in disadvantaged communities;</li> <li>• Increase energy resilience;</li> <li>• Provide charging infrastructure for transit and shared-ride vehicles;</li> <li>• Increase equitable access to the electric grid; and</li> <li>• Minimize gentrification-induced displacement resulting from new EV charging infrastructure.</li> </ul>
June 13, 2022	Utah Transit Authority (UTA)	UTA has a Zero Emissions Plan and MOU with Rocky Mountain Power. The agency is looking to do more and identify additional locations for fleet charging. The amount of power that is needed makes it difficult, but the equipment is compatible with EV cars. Need to identify a process to bill private users and not take up fleet charging capacity. Opportunity exists to mitigate demand charging where there are connections to traction charging. UTA built their charging infrastructure plan based on equity and prioritizes the need to run chargers in places that have the most need. Data collection includes daily reports on performance. ABB equipment allows for monitoring of charging equipment. Ongoing collaboration: Is there an overlap where we can achieve built out status and help move forward the transit. UDOT's contribution could be land for charging sites.
May 5, 2022	Utah State Parks	State parks would like to be considered as potential site hosts



May 25, 2022	Utah Clean Energy	Equity in rural and urban places look different. Rural areas have hesitancy because there are greater needs like food and water.  Need to be aware of a myopic look and only looking at the corridor and not having a unified transportation system.
May 19, 2022	URECA (Utah Rural Electric Cooperative Association)	Looking for funding to build out infrastructure and reduce capital costs. Dixie invested and hasn't seen a return on investment. Their EV vehicle loan program has been successful. Garkane would like to lead out and own EV Chargers. Providers will need to have advance notice on how to best prepare and lay the groundwork for infrastructure and contracting. Next phase of outreach UDOT should discuss identified routes and talk through considerations and identify who is interested in being an owner/operator within the service area. Concern that EV adoption is outpacing infrastructure and the supply chain threats. Rural Utah needs to have affordable EV vehicle options and a range that can cover long distances. Has a grant from the State and is interested in partnering.
Existing weekly meetings	Rocky Mountain Power	UDOT will coordinate with the utility's \$50 million investments in EVSE. The RMP investment is anticipated to satisfy many of the EVSE needs in the urban areas along the Wasatch Front and other high utilization areas of its service territory.
April 25, 2022	UAMPS (Utah Associated Municipal Power Systems)	UAMPS functions as a consortium of all these power groups. We operate on a wholesale level. Each group gets to chart their own path. We coordinate power projects - example, the building of a solar farm. Urban members see the value in EV. Rural members have less resources available and aren't going to invest in vehicles or infrastructure. Members will be concerned over funds to cost share, ownership of chargers and infrastructure, and who is paying for the power. Need a network of chargers to address range anxiety. If the goal of NEVI is pollution offset, then invest in urban areas. IF it is building a network, then spread the infrastructure.
April 29, 2022	UMPA (Utah Municipal Power Agency)	UMPA has set aside funds for potential grant opportunities to deploy EV chargers. Distributive transformers may be out for 24 months. UMPA could facilitate identifying sites and partnerships with the cities. UMPA is diversifying power with solar, hydro. Provo has a goal to be 60% renewable by 2030. Spanish Fork as a potential site next to wind farms. UMPA will provide a letter of support, Has \$50K set aside, look for in-kind matches of materials and labor, find opportunities for locations and get them on City Master Plans. Groups meet monthly and Kevin recommends presenting the opportunity.

April 28, 2022	ASPIRE (Advancing Sustainability through Powered Infrastructure for Roadway Electrification) at USU	ASPIRE has state funds for a demonstration project at Inland Port and would like to identify matching funds for freight electrification demonstrations. Focus should be on major interstates 1-80 and I-15. Tourism is a huge driver and Utah has lots of vehicles coming through traveling a long distance. State should invest in higher level chargers to meet demands and support adoption. Consider the capability of the site to handle higher kw. People are more concerned with charger anxiety than range anxiety (i.e. how long it will take to charge). Consider an approach on a volume basis in key areas. Gaps create higher demands at the stations that do exist. Need to predict whether higher volumes might be going and invest there. DC chargers aren't for locals, locals charge at home. States should consider wireless charging to reduce O&M costs and allow greater accessibility and less maintenance.
April 11, 2022	EVgo	<p>EVgo likes to be an owner/operator. Aligns well with driver interests.</p> <p>Solicitation - consider bundling, Weighting criteria (policy priorities), Cost-effectiveness, Charger utilization vs. corridor coverage, Providers will see where locations are along corridors that will have the highest utilization.</p> <p>Amenities, Distribution of available EVSE</p> <p>Competitive Solicitations - Less attrition, Shorter timelines and higher quality projects.</p> <p>First come, first serve - Oversubscribed, high attrition, higher staff time</p> <p>Site upgrades to meet NEVI requirements - Challenge is not being able to deliver power requirements, or there are better locations with better amenities and higher utilization.Best Practices</p> <p>Public funding programs</p> <p>Deploy funding quickly in multiple rounds that are predictable to align with continuous private sector development</p> <p>Seek interagency partnerships</p> <p>Support rural charger deployment by offering O&amp;M assistance.</p> <p>Corridor strategy</p> <p>UT - nominate segments of corridors to get to built out status.</p> <p>Is 600 kw reasonable? No, it would be overkill in many places.100 kw is Evgo is ideal charging speed.</p>
May 3, 2022	Utah Office of Tourism	<p>Would like to see provided areas for EV station needs</p> <p>Make sure rural communities are enhanced not bypassed</p>

May 20, 2022	Utah Clean Cities	<p>Clean Cities - keeps track of all Alt fuel stations in the state.</p> <p>Suggests I-70 as a corridor. Would like corridor designation for hydrogen</p> <p>Get EV built out first, then move to nat gas leading to hydrogen</p> <p>Charging Forward Program</p> <p>Drive Electric USA (nationwide corridor)</p> <p>Dealership training</p> <p>Campaign with National Park - launching in Zion. EV Shuttle program.</p> <p>Build out existing corridors and densify what we have to get ready for fast charging</p> <p>List of key stakeholders: SLC, RMP, Dominion, Matt with DEQ, Aspire, Inland port, Andrew Conley, HNTB, corridor solutions</p>
May 9, 2022	US Forest Service	<p>Our Intermountain region has (only) 4 EV chargers, all Level 2, across multiple states, and each was spec'd separately. As of now, we have not identified funding to install more. Hopefully that changes in the near future.</p> <p>Desire to develop a library set of drawings/specs that our region can reference for future projects including a list of best practices.</p>
March 2022, June 2022	EV Steering Committee	Quarterly coordination meeting
June 13, 2022	Zion National Park	<p>National parks Services (NPS) is engaged but would be included through State DOT's planning &amp; funding requests, as would communities. Would like to see Utah parks and communities as sites for effectively deploying charging infrastructure for the traveling public. Would like to assist in any way as UDOT considers applying to USDOT for such funding. Appreciate readiness for collaboration on transportation projects and programs.</p>



## Appendix B: Summary of Request for Information Responses

The Utah Department of Transportation (UDOT) posted a Request for Information (RFI) regarding the National Electric Vehicle Infrastructure Formula Program (NEVI) and Electric Vehicle Supply Equipment (EVSE). UDOT reached out to industry groups (contractors, consultants, vendors, experts, etc.) to obtain information regarding the delivery of this program. Information requested included:

- potential partnerships with property owners, EVSE companies or other entities that would assist in establishing the EVSE Infrastructure along the State's Alternative Fuel Corridor.
- models in which site hosts would contribute 20 percent of the costs of installation, operation, and maintenance in exchange for the continued ownership of the chargers
- availability of EVSE fast charging stations, on-site electrical generation, battery energy storage facilities
- information related to how industry has coordinated with other governmental entities and/or private landowners to deploy EVSE.

One-on-one discussions were held on May 26, 2022 and June 2, 2022 with eight industry representatives.

Twenty Responses were received on June 9, 2022.

### RFI Response Summary

COMPANY	TYPE OF WORK	WEBSITE
Evercharge	Project Management (turnkey)	<a href="http://www.evercharge.net">www.evercharge.net</a>
Enviro Spark	Project Management (turnkey)	<a href="http://www.enviroparkenergy.com">www.enviroparkenergy.com</a>
EV Structure(The Electric Highway LLC)	Project Management (turnkey)	<a href="http://www.evstructure.com">www.evstructure.com</a>
EVgo Services	Project Management (turnkey)	<a href="http://www.evgo.com">www.evgo.com</a>
Livingston Energy Group	Project Management (turnkey)	<a href="http://www.solution.energy">www.solution.energy</a>
T4L, Inc./Spacebott LLC/ABB	Project Management (turnkey)	
Center for Sustainable Energy (CSE)	Program Management	<a href="http://www.energycenter.org">www.energycenter.org</a>
HDR, Inc	Program Management	<a href="http://www.hdrinc.com">www.hdrinc.com</a>
McKinsey & Company	Program Management	<a href="http://www.mckinsey.com">www.mckinsey.com</a>
Michael Baker International	Program Management	<a href="http://www.mbakintl.com">www.mbakintl.com</a>
Mountain West Consulting	Program Management	<a href="http://www.mwconsultllc.com">www.mwconsultllc.com</a>
Replica	Siting Data Analysis	<a href="http://www.replicahq.com">www.replicahq.com</a>
FreeWire Technologies	Equipment Manufacturer: Chargers/ Project Management	<a href="http://www.freewiretech.com">www.freewiretech.com</a>
Rivian	Equipment Manufacturer: Chargers	<a href="http://www.rivian.com">www.rivian.com</a>
Strata Networks	Telecommunications Cooperative (Uintah Basin)	<a href="http://www.stratanetworks.com">www.stratanetworks.com</a>
Apex Electrical	Electrical/Alternative Energy Source	<a href="http://www.apxelectricco.com">www.apxelectricco.com</a>

R C Hunt Electric	Electrical / Sale & Installation of Chargers / Project Management	<a href="http://www.huntelectric.com">www.huntelectric.com</a>
UAMPS	Electric Utilities Network	<a href="http://www.uamps.com">www.uamps.com</a>
Crumbo's Inc.	Interested Property Owner: Gas Station	<a href="http://www.crumbos.com">www.crumbos.com</a>
Salt Lake City	Interested Property Owner: Local Government	



## Appendix C: Existing Level II EV Charging Summary

Station ID	Plug Type	Ownership	Facility Location	City	Network
202438	J1772	public	South City	South Salt Lake	SemaCharge Network
155297	J1772	public	SCO CCH1	Cedar City	ChargePoint Network
175512	J1772	public	SCO CCH2	Cedar City	ChargePoint Network
123370	TESLA	private	RCS Rocket Motor Components, Inc	Cedar City	Non-Networked
194276	J1772	public	WEST CHARGERS PARRISH #1	Centerville	ChargePoint Network
194277	J1772	public	WEST CHARGERS PARRISH #2	Centerville	ChargePoint Network
154089	J1772	public	STATEOFTDAS DHSCLEARFIELD2	Clearfield	ChargePoint Network
164643	J1772	public	STATEOFTDAS DWSCLEARFIELD1	Clearfield	ChargePoint Network
167678	J1772	public	STATEOFTDAS DHSCLEARFIELD3	Clearfield	ChargePoint Network
175263	J1772	public	STATEOFTDAS DWSCLEARFIELD2	Clearfield	ChargePoint Network
175264	J1772	public	STATEOFTDAS DWSCLEARFIELD3	Clearfield	ChargePoint Network
181589	J1772	public	STATEOFTDAS DHSCLEARFIELD1	Clearfield	ChargePoint Network
91868	J1772	public	Summit County - Courthouse	Coalville	Non-Networked
143541	J1772	public	SUMMIT COUNTY COALVILLE 2	Coalville	ChargePoint Network
165356	TESLA	public	Lone Peak Center	Draper	Non-Networked
85937	J1772	public	LONE PEAK 6 SYNCHRONY	Draper	ChargePoint Network
149377	J1772	public	STATEOFTDAS FREDHOUSE1	Draper	ChargePoint Network
155551	J1772	public	LD BOWERMAN INV MINUTEMAN ST2	Draper	ChargePoint Network
169888	J1772	public	WRIGHT HOMES STATION #2	Draper	ChargePoint Network
173089	J1772	public	LONE PEAK 6 LONE PEAK 2 (S)	Draper	ChargePoint Network
174698	J1772	public	STATEOFTDAS FREDHOUSE3	Draper	ChargePoint Network
174699	J1772	public	STATEOFTDAS FREDHOUSE4	Draper	ChargePoint Network
174700	J1772	public	STATEOFTDAS FREDHOUSE2	Draper	ChargePoint Network
174701	J1772	public	STATEOFTDAS FREDHOUSES5	Draper	ChargePoint Network
174702	J1772	public	STATEOFTDAS FREDHOUSE6	Draper	ChargePoint Network
174865	J1772	public	STATEOFTDAS DRAPERDOC5	Draper	ChargePoint Network
174866	J1772	public	STATEOFTDAS DRAPERDOC4	Draper	ChargePoint Network
174867	J1772	public	STATEOFTDAS DRAPERDOC3	Draper	ChargePoint Network
174868	J1772	public	STATEOFTDAS DRAPERDOC2	Draper	ChargePoint Network
174869	J1772	public	STATEOFTDAS DRAPERDOC1	Draper	ChargePoint Network
175574	J1772	public	LD BOWERMAN INV MINUTEMAN ST5	Draper	ChargePoint Network
175575	J1772	public	LD BOWERMAN INV MINUTEMAN ST3	Draper	ChargePoint Network
175576	J1772	public	LD BOWERMAN INV MINUTEMAN ST4	Draper	ChargePoint Network
175577	J1772	public	LD BOWERMAN INV MINUTEMAN ST1	Draper	ChargePoint Network
181826	J1772	public	WRIGHT HOMES STATION #1	Draper	ChargePoint Network
186524	J1772	public	IKEA USA DRAPER 1	Draper	ChargePoint Network
190046	J1772	public	STATEOFTDAS DRAPERDOC6	Draper	ChargePoint Network
192681	J1772	public	CAMPINGWORLD DRAPER AC 1	Draper	ChargePoint Network
192682	J1772	public	CAMPINGWORLD DRAPER AC2	Draper	ChargePoint Network
192683	J1772	public	CAMPINGWORLD DRAPER AC3	Draper	ChargePoint Network
205969	J1772	public	LONE PEAK 6 LONE PEAK 2 (N)	Draper	ChargePoint Network
148040	J1772	public	Walgreens - Draper, UT #12294	Draper	SemaCharge Network
93799	J1772	public	SPX CHARGEPOINT BUILDING J	Farmington	ChargePoint Network
94496	J1772	public	SPX CHARGEPOINT BUILDING F	Farmington	ChargePoint Network
143344	J1772	public	SPX CHARGEPOINT SPX BLD E	Farmington	ChargePoint Network
155294	J1772	public	SCO FILLMORE1	Fillmore	ChargePoint Network
155227	J1772	public	STATE OF UTAH GRASSY MNT EB 1	Grantsville	ChargePoint Network
155249	J1772	public	STATE OF UTAH GRASSY MNT WB 2	Grantsville	ChargePoint Network
175489	J1772	public	STATE OF UTAH GRASSY MNT EB 2	Grantsville	ChargePoint Network
175490	J1772	public	STATE OF UTAH GRASSY MNT WB 1	Grantsville	ChargePoint Network
184667	J1772,NEMA515	private	Hill AFB	Hill AFB	Non-Networked
164054	J1772	public	KAYSVILLECITY BARNES PARK N P	Kaysville	ChargePoint Network
164081	J1772	public	KAYSVILLECITY HERITAGE PARK N	Kaysville	ChargePoint Network
167619	J1772	public	KAYSVILLECITY CITY HALL 3	Kaysville	ChargePoint Network
167620	J1772	public	KAYSVILLECITY CITY HALL 1	Kaysville	ChargePoint Network
180742	J1772	public	KAYSVILLECITY BARNES PARK S P	Kaysville	ChargePoint Network
180758	J1772	public	KAYSVILLECITY HERITAGE PARK S	Kaysville	ChargePoint Network
181573	J1772	public	KAYSVILLECITY CITY HALL 2	Kaysville	ChargePoint Network
155295	J1772	public	SCO LAYTONH2	Layton	ChargePoint Network
163663	J1772	public	RC WILLEY LAYTON 1	Layton	ChargePoint Network
175511	J1772	public	SCO LAYTONH1	Layton	ChargePoint Network

Station ID	Plug Type	Ownership	Facility Location	City	Network
180675	J1772	public	RC WILLEY LAYTON 2	Layton	ChargePoint Network
189236	J1772	public	UT MARKET DAVISHOSPITAL#1	Layton	ChargePoint Network
189237	J1772	public	UT MARKET DAVISHOSPITAL#3	Layton	ChargePoint Network
191718	J1772	public	UT MARKET DAVISHOSPITAL#2	Layton	ChargePoint Network
207346	J1772	public	SCO LAYC-2	Layton	ChargePoint Network
207444	J1772	public	SCO LAYC-1	Layton	ChargePoint Network
197386	J1772	public	Walgreens - Layton, UT #2523	Layton	SemaCharge Network
156332	J1772	public	Stack Real Estate Stations location	Lehi	SemaCharge Network
216428	J1772	public	TPark Six	Lehi	SemaCharge Network
61073	J1772	public	ADOBE LEI ADOBE STATION 1	Lehi	ChargePoint Network
104896	J1772	public	TPARK TPARK4	Lehi	ChargePoint Network
104957	J1772	public	TPARK TPARK2	Lehi	ChargePoint Network
117024	J1772	public	TPARK NORTH SLOPE 2	Lehi	ChargePoint Network
118504	J1772	public	IP1 INNOVATION PT 3	Lehi	ChargePoint Network
118677	J1772	public	IP1 INNOVATION PT 2	Lehi	ChargePoint Network
147524	J1772	public	LONE PEAK NORTH STATION	Lehi	ChargePoint Network
149999	J1772	public	LEHI POWER LEHI POWER L2	Lehi	ChargePoint Network
150353	J1772	public	LONE PEAK STATION 1	Lehi	ChargePoint Network
155496	J1772	public	TPARK TPARK 1	Lehi	ChargePoint Network
163736	J1772	public	TPARK NORTH SLOPE 1	Lehi	ChargePoint Network
164276	J1772	public	LEHI POWER LEHI CITY HALL	Lehi	ChargePoint Network
165070	J1772	public	IP1 INNOVATION 2B	Lehi	ChargePoint Network
165355	J1772	public	Hyatt Place Salt Lake City/Lehi	Lehi	Non-Networked
171513	J1772	public	ADOBE LEI NORTH LOT 4	Lehi	ChargePoint Network
171514	J1772	public	ADOBE LEI NORTH LOT 3	Lehi	ChargePoint Network
171515	J1772	public	ADOBE LEI NORTH LOT 2	Lehi	ChargePoint Network
171516	J1772	public	ADOBE LEI NORTH LOT 1	Lehi	ChargePoint Network
171517	J1772	public	ADOBE LEI ADOBE STATION 2	Lehi	ChargePoint Network
173817	J1772	public	IP1 INNOVATION PT 4	Lehi	ChargePoint Network
173818	J1772	public	IP1 INNOVATION PT 1	Lehi	ChargePoint Network
174649	J1772	public	LONE PEAK CENTER STATION	Lehi	ChargePoint Network
174650	J1772	public	LONE PEAK SOUTH STATION	Lehi	ChargePoint Network
180965	J1772	public	IP1 INNOVATION 2A	Lehi	ChargePoint Network
180966	J1772	public	IP1 INNOVATION 2D	Lehi	ChargePoint Network
180967	J1772	public	IP1 INNOVATION 2C	Lehi	ChargePoint Network
186061	J1772	public	ADOBE LEI P2-3 GW	Lehi	ChargePoint Network
186062	J1772	public	ADOBE LEI P1-1 ADA GW	Lehi	ChargePoint Network
186063	J1772	public	ADOBE LEI P2-11 GW	Lehi	ChargePoint Network
186064	J1772	public	ADOBE LEI P2-16 GW	Lehi	ChargePoint Network
186065	J1772	public	ADOBE LEI P2-9 NGW	Lehi	ChargePoint Network
186066	J1772	public	ADOBE LEI P1-3 GW	Lehi	ChargePoint Network
186110	J1772	public	ADOBE LEI P2-17 GW	Lehi	ChargePoint Network
186111	J1772	public	ADOBE LEI P2-18 GW	Lehi	ChargePoint Network
186112	J1772	public	ADOBE LEI P2-1 GW	Lehi	ChargePoint Network
186113	J1772	public	ADOBE LEI P2-5 GW	Lehi	ChargePoint Network
186114	J1772	public	ADOBE LEI P2-19 GW	Lehi	ChargePoint Network
186115	J1772	public	ADOBE LEI P2-6 GW	Lehi	ChargePoint Network
186116	J1772	public	ADOBE LEI P2-2 NGW	Lehi	ChargePoint Network
186266	J1772	public	ADOBE LEI P1-10 GW	Lehi	ChargePoint Network
186267	J1772	public	ADOBE LEI P1-5 GW	Lehi	ChargePoint Network
186268	J1772	public	ADOBE LEI P1-2 GW	Lehi	ChargePoint Network
186415	J1772	public	ADOBE LEI P1-4 GW	Lehi	ChargePoint Network
186705	J1772	public	ADOBE LEI P2-7 GW	Lehi	ChargePoint Network
186706	J1772	public	ADOBE LEI P2-8 NGW	Lehi	ChargePoint Network
186707	J1772	public	ADOBE LEI P2-4 NGW	Lehi	ChargePoint Network
186708	J1772	public	ADOBE LEI P1-6 GW	Lehi	ChargePoint Network
186733	J1772	public	ADOBE LEI P2-13 NGW	Lehi	ChargePoint Network
186734	J1772	public	ADOBE LEI P2-14 NGW	Lehi	ChargePoint Network
186735	J1772	public	ADOBE LEI P2-15 NGW	Lehi	ChargePoint Network
186807	J1772	public	ADOBE LEI P2-12 NGW	Lehi	ChargePoint Network
189247	J1772	public	UT MARKET MOUNTAINPOINT#1	Lehi	ChargePoint Network

Station ID	Plug Type	Ownership	Facility Location	City	Network
189248	J1772	public	UT MARKET MOUNTAINPOINT#2	Lehi	ChargePoint Network
194183	J1772	public	UVU LEHI 1	Lehi	ChargePoint Network
195973	J1772	public	LEHI LEHI	Lehi	ChargePoint Network
197951	J1772	public	LEHI LEHI 2	Lehi	ChargePoint Network
201230	J1772	public	IP1 INNOVATION 3B	Lehi	ChargePoint Network
201562	J1772	public	IP1 INNOVATION 3D	Lehi	ChargePoint Network
183119	J1772	public	NUTERRA NUTERRA WEST 1	Midvale	ChargePoint Network
183123	J1772	public	NUTERRA NUTERRA EAST 1	Midvale	ChargePoint Network
148030	J1772	public	Walgreens - Midvale, UT #9239	Midvale	SemaCharge Network
213168	J1772	public	Element Moab	Moab	SemaCharge Network
148107	J1772	public	Moab Spring Ranch	Moab	SemaCharge Network
148110	J1772	public	Adventure Inn	Moab	SemaCharge Network
148114	J1772	public	City Hall	Moab	SemaCharge Network
148115	J1772	public	ACT Campground	Moab	SemaCharge Network
187288	J1772	public	Gonzo Inn	Moab	Non-Networked
201890	J1772	public	CPTSTATION12 STATION 1	Moab	ChargePoint Network
205161	J1772	public	Under Canvas Moab	Moab	RIVIAN_WAYPOINTS
187289	J1772	public	Crump Reese Moab Chevrolet	Moab	Non-Networked
143370	J1772	public	UOFL 6100 S 2	Murray	ChargePoint Network
143371	J1772	public	UOFL 6100 S 1	Murray	ChargePoint Network
146986	J1772	public	GRANTON SQUARE GRANTON SQUARE	Murray	ChargePoint Network
155226	J1772	public	MURRAYCITY MURRAY CITY FD	Murray	ChargePoint Network
207349	J1772	public	SCO SELECTHEALTH1	Murray	ChargePoint Network
207350	J1772	public	SCO SELECTHEALTH2	Murray	ChargePoint Network
214273	J1772	public	SCO IMC-3	Murray	ChargePoint Network
214274	J1772	public	SCO IMC-2	Murray	ChargePoint Network
47542	J1772	private	Tim Dahle Nissan	Murray	Non-Networked
104351	J1772	public	EMI HEALTH EMI HEALTH 1	Murray	ChargePoint Network
173511	J1772	public	EMI HEALTH EMI HEALTH 3	Murray	ChargePoint Network
173512	J1772	public	EMI HEALTH EMI HEALTH 2	Murray	ChargePoint Network
206325	J1772	public	MURDOCK MURRAY STATION 2	Murray	ChargePoint Network
166758	J1772	public	Kolob Canyons Visitor Center	New Harmony	Non-Networked
156012	J1772	public	EAGLEWOODLOFTS STATION 1	North Salt Lake	ChargePoint Network
47544	J1772	private	Tim Dahle Nissan	North Salt Lake	Non-Networked
145139	J1772	public	BW OGDEN OGDEN	Ogden	ChargePoint Network
69059	J1772	public	UVU PARKING SVCS 1	Orem	ChargePoint Network
100273	J1772	public	UVU PARKING L6	Orem	ChargePoint Network
100274	J1772	public	UVU PARKING W2	Orem	ChargePoint Network
100282	J1772	public	UVU PARKING M23	Orem	ChargePoint Network
164335	J1772	public	UVU PARKING L6-2	Orem	ChargePoint Network
164336	J1772	public	UVU PARKING M22	Orem	ChargePoint Network
164337	J1772	public	UVU PARKING M26	Orem	ChargePoint Network
173120	J1772	public	STATE OF UTAH UDOT OREM	Orem	ChargePoint Network
173121	J1772	public	STATE OF UTAH UDOT OREM 2	Orem	ChargePoint Network
173344	J1772	public	UVU PARKING L13	Orem	ChargePoint Network
205443	J1772	public	UVU AUX BUILDING	Orem	ChargePoint Network
60342	J1772	private	Ken Garff Nissan - Orem	Orem	Non-Networked
100279	J1772	public	UVU PARKING GARAGE	Orem	ChargePoint Network
127974	J1772	public	Ecker Hill - Park and Ride Lot	Park City	Non-Networked
144161	J1772	public	OUTLETS PC EV2	Park City	ChargePoint Network
174384	J1772	public	OUTLETS PC EV1	Park City	ChargePoint Network
62547	J1772	public	BMW OF PG VISITOR CHARGER	Pleasant Grove	ChargePoint Network
183163	J1772	public	SJPI VGI #2	Pleasant Grove	ChargePoint Network
183164	J1772	public	SJPI VGI #1	Pleasant Grove	ChargePoint Network
183166	J1772	public	SJPI VGI #3	Pleasant Grove	ChargePoint Network
186272	J1772	public	BLD 1,5 BLDG 5 #1	Provo	ChargePoint Network
186276	J1772	public	BLD 1,5 BLDG 1 #1	Provo	ChargePoint Network
186277	J1772	public	BLD 1,5 BLDG 5 #2	Provo	ChargePoint Network
155323	J1772	public	SCO SEVIERC1	Richfield	ChargePoint Network
168079	J1772	public	SCO ROY ST1	Roy	ChargePoint Network
195426	J1772	public	Walgreens - Roy, UT #7495	Roy	SemaCharge Network

Station ID	Plug Type	Ownership	Facility Location	City	Network
148491	J1772	public	Staybridge Suites	Saint George	SemaCharge Network
201847	J1772	private	Citizens West	Salt Lake City	Non-Networked
47407	J1772	public	Utah Paper Box	Salt Lake City	Non-Networked
204380	J1772	public	CW Corp 2825	Salt Lake City	SemaCharge Network
204381	J1772	public	CW Corp 2795	Salt Lake City	SemaCharge Network
70534	J1772	public	Costco	Salt Lake City	Non-Networked
42013	J1772	public	American Bush - Solar Canopy	Salt Lake City	Non-Networked
63179	J1772	private	Utah Division of Air Quality	Salt Lake City	Non-Networked
201846	J1772	public	North Six Apartments	Salt Lake City	Non-Networked
50204	J1772,TESLA	private	American Bush	Salt Lake City	Non-Networked
200488	J1772	public	DEQ Technical Support Center	Salt Lake City	Non-Networked
67843	J1772	public	EVSLCC GFSB 1	Salt Lake City	ChargePoint Network
77510	J1772	public	STATE OF UTAH WEST 1	Salt Lake City	ChargePoint Network
92420	J1772	public	AIRPORT HOTELS COMFORT INN 2	Salt Lake City	ChargePoint Network
95023	J1772	public	PUBLIC USE FOREST DALE GOL	Salt Lake City	ChargePoint Network
95028	J1772	public	PUBLIC USE PIONEER PARK	Salt Lake City	ChargePoint Network
95030	J1772	public	PUBLIC USE SORENSEN MULTIC	Salt Lake City	ChargePoint Network
99395	J1772	public	SLC AIRPORT EMPLOYEE 4	Salt Lake City	ChargePoint Network
121617	J1772	public	PUBLIC USE MTN DELL GOLF	Salt Lake City	ChargePoint Network
143387	J1772	public	DEQ TECHCTRPUBLIC1	Salt Lake City	ChargePoint Network
144510	J1772	public	DEQ UTAH STA 5	Salt Lake City	ChargePoint Network
145560	J1772	public	EVSLCC AAB 2	Salt Lake City	ChargePoint Network
145673	J1772	public	DEQ UTAH STA 3	Salt Lake City	ChargePoint Network
149666	J1772	public	STATEOFUTDAS CANNONDOH4	Salt Lake City	ChargePoint Network
155158	J1772	public	EVSLCC AAB 1	Salt Lake City	ChargePoint Network
163668	J1772	public	PUBLIC USE RAC PARKING	Salt Lake City	ChargePoint Network
170197	J1772	public	GEC1 OLENE WALKER 2	Salt Lake City	ChargePoint Network
172625	J1772	public	STATE OF UTAH EAST 1	Salt Lake City	ChargePoint Network
173090	J1772	public	AIRPORT HOTELS HILTON 2	Salt Lake City	ChargePoint Network
173091	J1772	public	AIRPORT HOTELS COMFORT INN 1	Salt Lake City	ChargePoint Network
173092	J1772	public	AIRPORT HOTELS HILTON 1	Salt Lake City	ChargePoint Network
173262	J1772	public	SLC AIRPORT EMPLOYEE 3	Salt Lake City	ChargePoint Network
173263	J1772	public	SLC AIRPORT EMPLOYEE 2	Salt Lake City	ChargePoint Network
173264	J1772	public	SLC AIRPORT EMPLOYEE 1	Salt Lake City	ChargePoint Network
174254	J1772	public	DEQ TECHCTRPUBLIC2	Salt Lake City	ChargePoint Network
174508	J1772	public	DEQ UTAH STA 4	Salt Lake City	ChargePoint Network
174509	J1772	public	DEQ UTAH STA 2	Salt Lake City	ChargePoint Network
174510	J1772	public	DEQ UTAH STA 1	Salt Lake City	ChargePoint Network
174761	J1772	public	STATEOFUTDAS CANNONDOH3	Salt Lake City	ChargePoint Network
174762	J1772	public	STATEOFUTDAS CANNONDOH2	Salt Lake City	ChargePoint Network
174763	J1772	public	STATEOFUTDAS CANNONDOH1	Salt Lake City	ChargePoint Network
181959	J1772	public	GEC1 OLENE WALKER 1	Salt Lake City	ChargePoint Network
185727	J1772	public	JCC HEADQUARTER STATION 2	Salt Lake City	ChargePoint Network
185728	J1772	public	JCC HEADQUARTER STATION 1	Salt Lake City	ChargePoint Network
185729	J1772	public	JCC HEADQUARTER STATION 3	Salt Lake City	ChargePoint Network
191394	J1772	public	EVSLCC CT 5	Salt Lake City	ChargePoint Network
191395	J1772	public	EVSLCC CT 3	Salt Lake City	ChargePoint Network
191396	J1772	public	EVSLCC CT 2	Salt Lake City	ChargePoint Network
191397	J1772	public	EVSLCC CT 1	Salt Lake City	ChargePoint Network
191398	J1772	public	EVSLCC CT 4	Salt Lake City	ChargePoint Network
195085	J1772	public	PUBLIC USE SUGAR HOUSE	Salt Lake City	ChargePoint Network
195879	J1772	public	PUBLIC USE FAIRMONT PARK	Salt Lake City	ChargePoint Network
200455	J1772	public	SLCO FLEET GOLF COURSE 1	Salt Lake City	ChargePoint Network
200456	J1772	public	SLCO FLEET GOLF COURSE 3	Salt Lake City	ChargePoint Network
200878	J1772	public	PUBLIC USE INTL PEACE GARD	Salt Lake City	ChargePoint Network
202059	J1772	public	Iron Road Healthcare	Salt Lake City	SemaCharge Network
204298	J1772	public	FAIRPARKAPTS STATION1	Salt Lake City	ChargePoint Network
211771	J1772	public	DCFS DHS ST2	Salt Lake City	ChargePoint Network
211772	J1772	public	DCFS DHS ST1	Salt Lake City	ChargePoint Network
213954	J1772	public	SLCO FLEET GOLF COURSE 2	Salt Lake City	ChargePoint Network
214252	J1772	public	SCO MEMC-SLC-1	Salt Lake City	ChargePoint Network

Station ID	Plug Type	Ownership	Facility Location	City	Network
214253	J1772	public	SCO MEMC-SLC-2	Salt Lake City	ChargePoint Network
49749	J1772	private	Ken Garff Nissan - Salt Lake City	Salt Lake City	Non-Networked
165146	J1772	public	Hyatt Place Salt Lake City Airport	Salt Lake City	Non-Networked
78902	J1772	public	SRO TOWNE RIDGE 3	Sandy	ChargePoint Network
87581	J1772	public	EVSLCC LHM 1	Sandy	ChargePoint Network
99802	J1772	public	CITY CENTER NEW STATION 1	Sandy	ChargePoint Network
122796	J1772	public	SRO TOWNE RIDGE 4	Sandy	ChargePoint Network
123662	J1772	public	SANDY CITY CITY HALL 6	Sandy	ChargePoint Network
143505	J1772	public	SANDY CITY PUBLIC WORKS 2	Sandy	ChargePoint Network
154534	J1772	public	RIOT RSL 2	Sandy	ChargePoint Network
172231	J1772	public	SRO TOWNE RIDGE 2	Sandy	ChargePoint Network
172232	J1772	public	SRO TOWNE RIDGE 1	Sandy	ChargePoint Network
173318	J1772	public	CITY CENTER NEW STATION 2	Sandy	ChargePoint Network
174043	J1772	public	SRO TOWNE RIDGE 5	Sandy	ChargePoint Network
174142	J1772	public	SANDY CITY CITY HALL 5	Sandy	ChargePoint Network
174143	J1772	public	SANDY CITY CITY HALL 4	Sandy	ChargePoint Network
174144	J1772	public	SANDY CITY CITY HALL 3	Sandy	ChargePoint Network
174145	J1772	public	SANDY CITY CITY HALL 2	Sandy	ChargePoint Network
174148	J1772	public	SANDY CITY CITY HALL 1	Sandy	ChargePoint Network
174308	J1772	public	SANDY CITY PUBLIC WORKS 1	Sandy	ChargePoint Network
175391	J1772	public	RIOT RSL 3	Sandy	ChargePoint Network
175392	J1772	public	RIOT RSL 1	Sandy	ChargePoint Network
175393	J1772	public	RIOT RSL 4	Sandy	ChargePoint Network
175394	J1772	public	RIOT RSL 6	Sandy	ChargePoint Network
175395	J1772	public	RIOT RSL 5	Sandy	ChargePoint Network
192999	J1772	public	EVSLCC LHM 2	Sandy	ChargePoint Network
193000	J1772	public	EVSLCC LHM 3	Sandy	ChargePoint Network
202008	J1772	public	Murdock Ford	Santaquin	Blink Network
70468	J1772	private	Tim Dahle Nissan Southowne	South Jordan	Non-Networked
165357	J1772	public	Holiday Inn South Jordan - SLC South	South Jordan	Non-Networked
148021	J1772	public	Wasatch Renal Center	South Salt Lake	SemaCharge Network
82445	J1772	public	1800 S 300 W 1800 S 300 W	South Salt Lake	ChargePoint Network
123470	J1772	public	GEC1 STATION 02	South Salt Lake	ChargePoint Network
123471	J1772	public	GEC1 STATION 01	South Salt Lake	ChargePoint Network
155533	J1772	public	STATE OF UTAH TIE FORK REST 2	Spanish Fork	ChargePoint Network
175570	J1772	public	STATE OF UTAH TIE FORK REST 1	Spanish Fork	ChargePoint Network
214257	J1772	public	SCO SFH-2	Spanish Fork	ChargePoint Network
214258	J1772	public	SCO SFH-1	Spanish Fork	ChargePoint Network
166754	J1772	public	Comfort Suites St. George - University Area	St. George	Non-Networked
166755	J1772	public	Hyatt Place - St. George Convention Center	St. George	Non-Networked
214262	J1772	public	SCO SGRH-1	St. George	ChargePoint Network
214343	J1772	public	SCO SGRH-2	St. George	ChargePoint Network
49746	J1772	public	Stephen Wade Auto Center	St. George	Non-Networked
49747	J1772	private	Stephen Wade Auto Center	St. George	Non-Networked
149663	J1772	public	STATEOFUTDAS CLVNRMPTN14	Taylorsville	ChargePoint Network
156011	J1772	public	STATEOFUTDAS TSOB16	Taylorsville	ChargePoint Network
164611	J1772	public	UDOT HQ EAST	Taylorsville	ChargePoint Network
174750	J1772	public	STATEOFUTDAS CLVNRMPTN13	Taylorsville	ChargePoint Network
174751	J1772	public	STATEOFUTDAS CLVNRMPTN12	Taylorsville	ChargePoint Network
174752	J1772	public	STATEOFUTDAS CLVNRMPTN11	Taylorsville	ChargePoint Network
174753	J1772	public	STATEOFUTDAS CLVNRMPTN10	Taylorsville	ChargePoint Network
174754	J1772	public	STATEOFUTDAS CLVNRMPNT8	Taylorsville	ChargePoint Network
174755	J1772	public	STATEOFUTDAS CLVNRMPNT7	Taylorsville	ChargePoint Network
175112	J1772	public	STATE OF UTAH UDOT SOUTH HQ1	Taylorsville	ChargePoint Network
175113	J1772	public	STATE OF UTAH UDOT SOUTH HQ3	Taylorsville	ChargePoint Network
175114	J1772	public	STATE OF UTAH UDOT SOUTH HQ2	Taylorsville	ChargePoint Network
175115	J1772	public	STATEOFUTDAS CLVNRMPTN9	Taylorsville	ChargePoint Network
175610	J1772	public	STATEOFUTDAS TSOB15	Taylorsville	ChargePoint Network
175611	J1772	public	STATEOFUTDAS TSOB14	Taylorsville	ChargePoint Network
175612	J1772	public	STATEOFUTDAS TSOB13	Taylorsville	ChargePoint Network
175613	J1772	public	STATEOFUTDAS TSOB11	Taylorsville	ChargePoint Network

Station ID	Plug Type	Ownership	Facility Location	City	Network
175614	J1772	public	STATEOFTDAS TSOB10	Taylorsville	ChargePoint Network
175615	J1772	public	STATEOFTDAS TSOB9	Taylorsville	ChargePoint Network
175616	J1772	public	STATEOFTDAS TSOB8	Taylorsville	ChargePoint Network
175617	J1772	public	STATEOFTDAS TSOB7	Taylorsville	ChargePoint Network
175618	J1772	public	STATEOFTDAS TSOB6	Taylorsville	ChargePoint Network
175619	J1772	public	STATEOFTDAS TSOB5	Taylorsville	ChargePoint Network
175620	J1772	public	STATEOFTDAS TSOB4	Taylorsville	ChargePoint Network
175621	J1772	public	STATEOFTDAS TSOB3	Taylorsville	ChargePoint Network
175622	J1772	public	STATEOFTDAS TSOB2	Taylorsville	ChargePoint Network
175623	J1772	public	STATEOFTDAS TSOB1	Taylorsville	ChargePoint Network
175624	J1772	public	STATEOFTDAS TSBO12	Taylorsville	ChargePoint Network
180924	J1772	public	UDOT HQ WEST	Taylorsville	ChargePoint Network
193005	J1772	public	EVSLCC GFSB 2	Taylorsville	ChargePoint Network
214339	J1772	public	SCO PRIMARY-WCBHC-1	Taylorsville	ChargePoint Network
148025	J1772	public	Walgreens - Taylorsville, UT #6961	Taylorsville	SemaCharge Network
155298	J1772	public	SCO BRH1	Tremonton	ChargePoint Network
201985	J1772	public	THE VINE APTS STATION1	Vineyard	ChargePoint Network
212743	J1772,TESLA	public	Best Western Plus-Settlers Point	Washington	Non-Networked
206286	J1772	public	Quality Inn Stateline	Wendover	Blink Network
147385	J1772	public	HUNT ELECTRIC 1920 BLDG	West Valley City	ChargePoint Network
154785	J1772	public	GRANGER MEDICAL WEST STATION	West Valley City	ChargePoint Network
154786	J1772	public	GRANGER MEDICAL EAST STATION	West Valley City	ChargePoint Network
166901	J1772	public	WVC GARAGE LEVEL SEVEN A	West Valley City	ChargePoint Network
166902	J1772	public	WVC GARAGE LEVEL ONE B	West Valley City	ChargePoint Network
166903	J1772	public	WVC GARAGE LEVEL SIX A	West Valley City	ChargePoint Network
166904	J1772	public	WVC GARAGE LEVEL THREE A	West Valley City	ChargePoint Network
166905	J1772	public	WVC GARAGE LEVEL ONE C	West Valley City	ChargePoint Network
175424	J1772	public	GRANGER MEDICAL MIDDLE STATION	West Valley City	ChargePoint Network
181299	J1772	public	WVC GARAGE LEVEL ONE A	West Valley City	ChargePoint Network
181300	J1772	public	WVC GARAGE LEVEL FOUR A	West Valley City	ChargePoint Network
181301	J1772	public	WVC GARAGE LEVEL TWO A	West Valley City	ChargePoint Network
181302	J1772	public	WVC GARAGE LEVEL FIVE A	West Valley City	ChargePoint Network
193840	J1772	public	HUNT ELECTRIC 1811 BUILDING E	West Valley City	ChargePoint Network
193841	J1772	public	HUNT ELECTRIC 1811 BUILDING W	West Valley City	ChargePoint Network

## Appendix D: Utah's EV Infrastructure Plan One-Pager

**UDOT** | **Utah's National Electric Vehicle Infrastructure Plan**

**OVERVIEW**

The Utah Department of Transportation (UDOT) and the Utah Office of Energy Development (UOED) are developing a plan to implement a convenient, reliable and equitable electric vehicle charging network in Utah to prepare for the increase in electric vehicles on Utah's highways, and support economic development, transportation choice, energy resiliency, and emergency route options.

The Infrastructure Investment and Jobs Act, signed into law on Nov. 15, 2021, established a first-of-its-kind National Electric Vehicle Infrastructure Formula Program (NEVI). NEVI will provide funding to states to deploy electric vehicle charging infrastructure along public roads to establish an interconnected network across the state and nation. UDOT and OED are leading the planning effort to unlock the first year's \$5,372,731 apportioned for the state through the NEVI program.



**NEVI Funding Requirements** A key objective of this funding is to ensure a convenient, affordable, reliable, and equitable national network. To be eligible for funds, states need to fully build out EV charging networks along designated Alternative Fuel Corridors (AFCs) with the goal of EV charging infrastructure installed every 50 miles within 1 travel mile of the Interstate. EV Infrastructure should include at least four 150kW Direct Current (DC) Fast Chargers with Combined Charging System ports capable of simultaneously DC charging four EVs with minimum station power capability at or above 600kW

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### UTAH'S VISION

Through coordination with key stakeholders, Utah will strategically deploy electric vehicle charging infrastructure and establish an interconnected network supporting the development of convenient, accessible, reliable, and equitable EV charging.

#### 5 Year Goals

##### YEAR 1

Place a DCFC station along Utah's AFCs to achieve build-out status. These corridors include I-15, I-70, I-80, I-94, I-215, a portion of US-8 and US-191.

##### YEAR 2-3

Identify and begin building high-priority corridors that provide access to Utah's five National Parks, 42 State Parks, and other places of interest.

##### YEAR 4-5

Focus on additional localized investment based on lessons learned in years 1-3.

<b>Objective 1</b>	Ensure anyone can choose to travel in an electric vehicle, no matter where in Utah they want to go. Although sections of I-15, I-215, and I-84 meet corridor ready status for EV charging stations under the AFC program, they will all need some form of upgrade or modification to meet the NEVI requirements.
<b>Objective 2</b>	Maximize tax dollar value by leveraging innovative funding and private partnerships.
<b>Objective 3</b>	Complement and support the build out of the EV private sector and new entrants into the market – while moving forward with this plan.
<b>Objective 4</b>	Apply an equity lens across all elements of this plan to ensure that the deployment, installation, operation, and use of EV charging infrastructure achieves equitable and fair distribution of benefits and services to rural and disadvantaged communities.

To learn more about Utah's NEVI plan visit: [www.udotinput.utah.gov/evplan](http://www.udotinput.utah.gov/evplan)

## Appendix E: State of Utah NEVI Plan Exception Requests, FY 2022

### 001-I15: Interstate 15: Cove Fort to Scipio

#### Alternative Fuel Corridor:

- Interstate 15

#### Type of Exemption:

- Greater than 50 miles

#### Distance of Deviation:

- 6 miles

#### Round 6 AFC Nomination:

- No

#### Reason for Exception Request:

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost

#### Description:

Cove Fort is a new location that is strategic for the connectivity with I-70 and maintaining continuity along I-15. Existing EVSE at Scipio was installed by Electrify America. As of July 2022, three of the four units are rated to 50 kW, and will either need to be upgraded, or a full new installation of NEVI compliant EVSE at another location will be required.

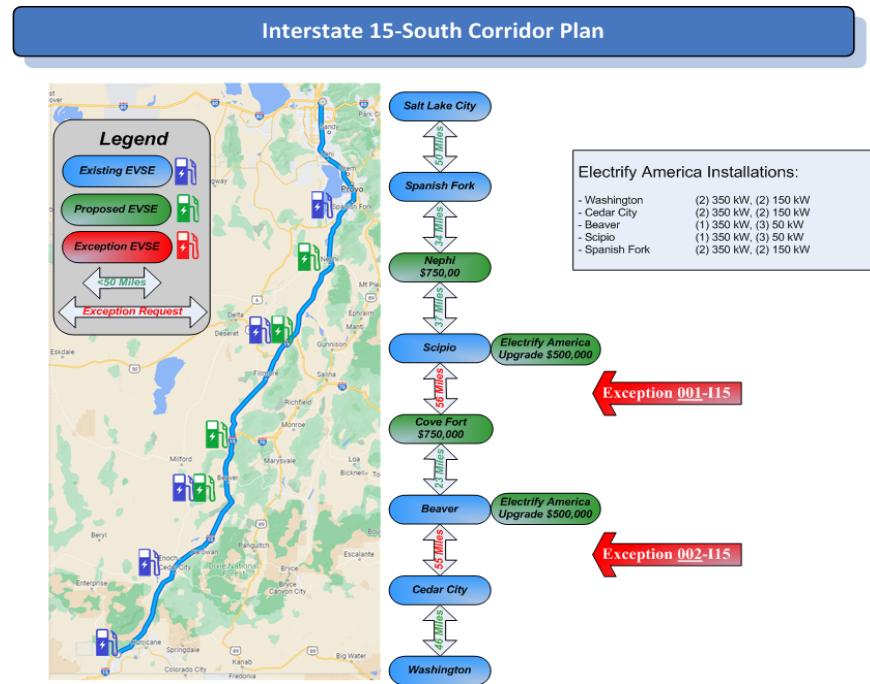
Although slightly more than 50-mile spacing, these two locations are the best optimization of EVSE spacing along the overall I-15 corridor while also supporting the I-70 AFC corridor connection in a meaningful way. Additional Capacity/Density builds may be possible later in the NEVI funding window.

#### Optional Mitigation:

In order to meet the 50-mile or less requirement, an additional full installation would need to be placed in Fillmore Utah, which is approximately mid-way between the two proposed EVSE locations.

#### Realized Savings:

To avoid this minimal gap, the project would need to expend an additional \$750,000 on a new EVSE site in Fillmore, thereby reducing the amount of funding available to provide access to other underserved and underrepresented rural communities.



## 002-I15:

### Interstate 15: Cedar City to Beaver

#### Alternative Fuel Corridor:

- Interstate 15 South Corridor

#### Type of Exemption:

- Greater than 50 miles

#### Distance of Deviation:

- 5 miles

#### Round 6 AFC Nomination:

- No (interstate corridor)

#### Reason for Exception Request:

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost

#### Description:

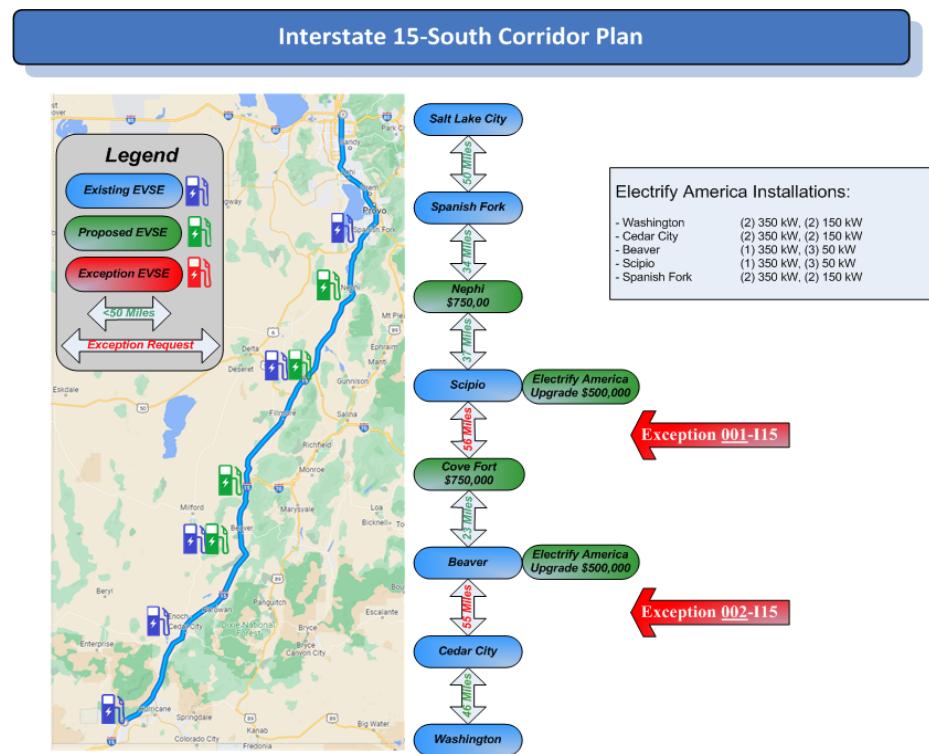
Existing EVSE have been installed at Beaver and Cedar City along the I-15 corridor. The spacing between locations is 55 miles. Both locations have adequate charging ports, EVSE capacity, and site total power.

#### Optional Mitigation:

In order to meet the 50 mile or less requirement, an additional full installation will need to be placed in Parowan, Utah, which is approximately mid-way between the two proposed EVSE locations.

#### Realized Savings:

To avoid this minimal gap, an additional \$750,000+ site would need to be developed, thereby reducing the amount of funding available to provide access to other underserved and underrepresented rural communities.



## 003-I70:

### Interstate 70: Cove Fort to Salina

#### Alternative Fuel Corridor:

- Interstate 70

#### Type of Exemption:

- Greater than 50 miles

#### Distance of Deviation:

- 6 miles

#### Round 6 AFC Nomination:

- No

#### Reason for Exception Request:

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost

#### Description:

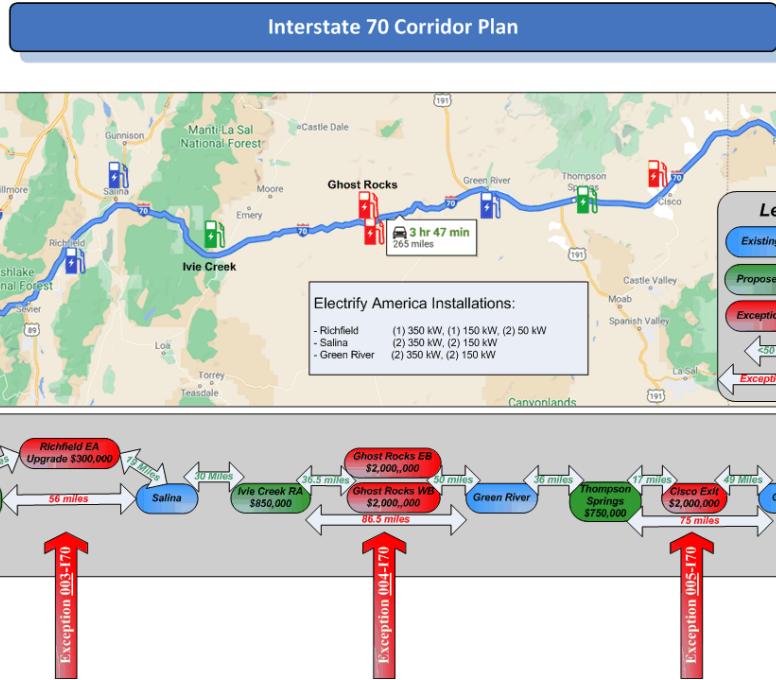
This section of I-70 ties into I-15 and provides critical corridor/network connectivity. Electrify America has installed NEVI compliant EVSE in Salina and a new NEVI funded EVSE site in Cove Fort is planned on the west end. Although the distance between the two segment nodes is 56 miles, there are additional, non-NEVI compliant, DCFC charging options in between. The town of Richfield is located 37 miles from the I-15 interchange and has two DCFC EVSE installations. The first is a Electrify America with 350/150/50/50 kW configuration and a UDOT owned site with 62/62 kilowatt ports (tethered for 125 kilowatts under single use). These mid-powered DCFC sites in Richfield provide a substantial supplemental alternative for the region and segment.

#### Optional Mitigation:

In order to meet strict NEVI 50 mile spacing, the Electrify America installation in Richfield would need to be upgraded to support program qualifying equipment.

#### Realized Savings:

It is estimated that upgrading the Electrify America location in Richfield will require additional EVSE and utility side equipment for a total estimated cost of \$300,000+, thereby reducing the amount of funding available to provide access to other underserved and underrepresented rural communities.



## 004-I70:

### Interstate 70: Ivie Creek to Green River

**Alternative Fuel Corridor:**

- Interstate 70

**Type of Exemption:**

- Greater than 50 miles

**Distance of Deviation:**

- 36 miles

**Round 6 AFC Nomination:**

- No

**Reason for Exception Request:**

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost

**Description:**

Interstate 70, in central Utah is one of the most challenging areas to provide any automotive support, including electric vehicles. The highway passes through Bureau of Land Management (BLM) lands, in some of the most scenic areas of the country. Currently, signs in Green River and Salina inform travelers that there are no services for the next 109 miles.

UDOT operates a non-interstate rest area located adjacent to the interstate. This rest area (Ivie Creek) is planned for EVSE development; however, the remaining gap will still be much larger than the 50-mile target. Additional rest areas (Ghost Rocks) are located on the eastbound and westbound lanes of I-70, but there is no electrical infrastructure within 36 miles. The area around Ghost Rocks is also owned by BLM and would need extensive environmental clearance to allow an adequate solar farm.

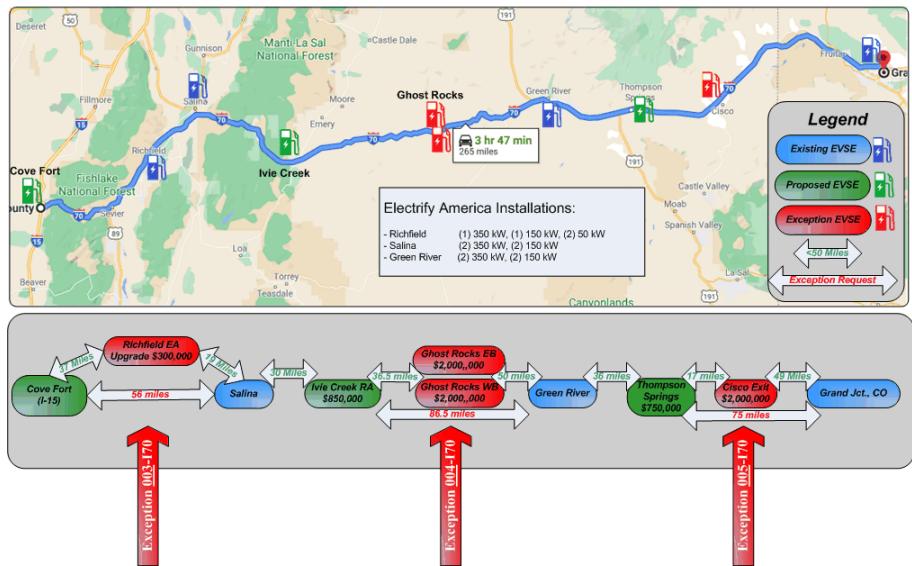
**Optional Mitigation:**

There is no feasible way to provide high powered EVSE within this segment. Even Level II chargers would be difficult to deploy due to insufficient land for an onsite solar array and energy storage.

**Realized Savings:**

The total savings is well over \$4 million. It is estimated that more than \$2 million per rest area (EB and WB) would be needed to support NEVI compliant EVSE. Additionally, solar array field environmental concerns would likely add to the impracticality of the location. The savings on this exception request could support four or five NEVI standard EVSE installations on other rural corridors.

**Interstate 70 Corridor Plan**



## 005-I70:

### Interstate 70: Thompson Springs to Grand Junction, CO

**Alternative Fuel Corridor:**

- Interstate 70

**Type of Exemption:**

- Greater than 50 miles

**Distance of Deviation:**

- 25 miles

**Round 6 AFC Nomination:**

- No

**Reason for Exception Request:**

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost

**Description:**

This section of I-70 is similar to 004-I70 in that it is very remote, has no service amenities, and electrical infrastructure is difficult and costly to access. To meet NEVI guidelines, an EVSE station would need to be located at Cisco, a ranch exit that connects State Route 128. There are no services or electrical access at this location. No evaluation of rights of way have been performed at this time.

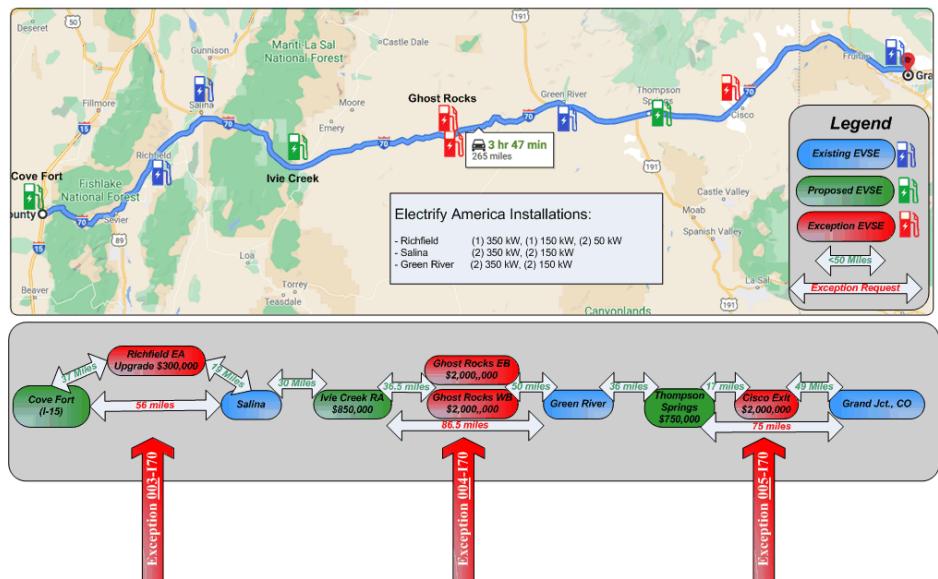
**Optional Mitigation:**

There are no feasible locations that offer infrastructure and amenities to support EVSE in this segment.

**Realized Savings:**

The total savings is estimated to be at least \$2 million by not developing this site. The required solar array, energy storage, and EVSE would be cost prohibitive. The savings could be applied towards approximately two to three additional priority rural corridor EVSE sites after built out status is achieved.

**Interstate 70 Corridor Plan**



## 006-I80:

### Interstate 80: Delle to Wendover, NV

#### Alternative Fuel Corridor:

- Interstate 80

#### Type of Exemption:

- Greater than 50 miles

#### Distance of Deviation:

- 21 miles

#### Round 6 AFC Nomination:

- No

#### Reason for Exception Request:

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost

#### Description:

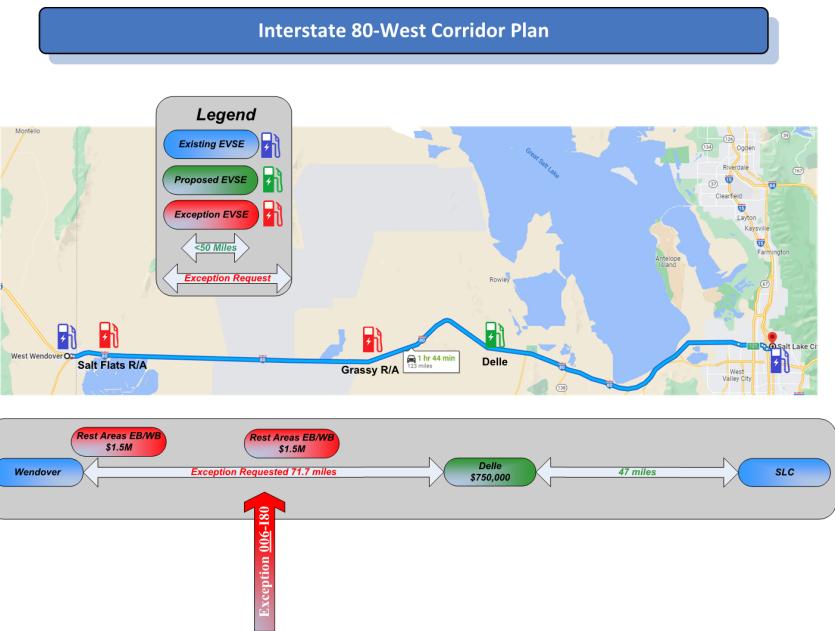
I-80 across the Salt Flats in west Utah presents challenges with respect to its remoteness and electrical access. The most centrally located business site is at the Delle Exit, which also has good access to three-phase power. Siting a NEVI compliant EVSE station here provides EV owners with access to restroom facilities, lighting, good cell service reception, and also provides a public private partnership opportunity.

In a previous UDOT EVSE project at the nearby UDOT interstate Grassy Mountain Rest areas (eastbound and westbound), the quote to bring three-phase power to the site for DCFC exceeded \$1.5 million. Therefore, Level 2 chargers were installed to provide emergency EVSE charging. The Grassy Mountain Rest Areas (EB and WB) would still require extensive utility upgrade costs to bring in three-phase power.

Another mitigating factor is that the relatively flat terrain through this segment would allow for maximum travel range for an EV.

#### Optional Mitigation:

In order to meet the NEVI spacing requirements, EVSE would need to be placed at four interstate rest areas (Grassy EB/WB and Salt Flats EB/WB). Both rest areas are within the interstate right of way which would prevent public private partnership opportunities and negate any possibility of cost recovery. Because the interstate is divided, it would require installations at both eastbound and westbound directions. Developing the Salt Flats locations could adversely incentivize EV owners to avoid the private EVSE 10 miles away in Wendover because the EVSE in the UDOT owned rest areas would be free to the public (due to the federal prohibitions on commercialization



in the interstate rights of way.)

### Realized Savings:

Total savings is estimated to be \$3 million realized by not upgrading the two Grassy EB/WB rest areas (\$750,000 each) nor the two Salt Flats rest area installations (\$750,000 each).

## 007-I80: Interstate 80: US40 Interchange to Evanston, WY

### Alternative Fuel Corridor:

- Interstate 80

### Type of Exemption:

- Greater than 50 miles

### Distance of Deviation:

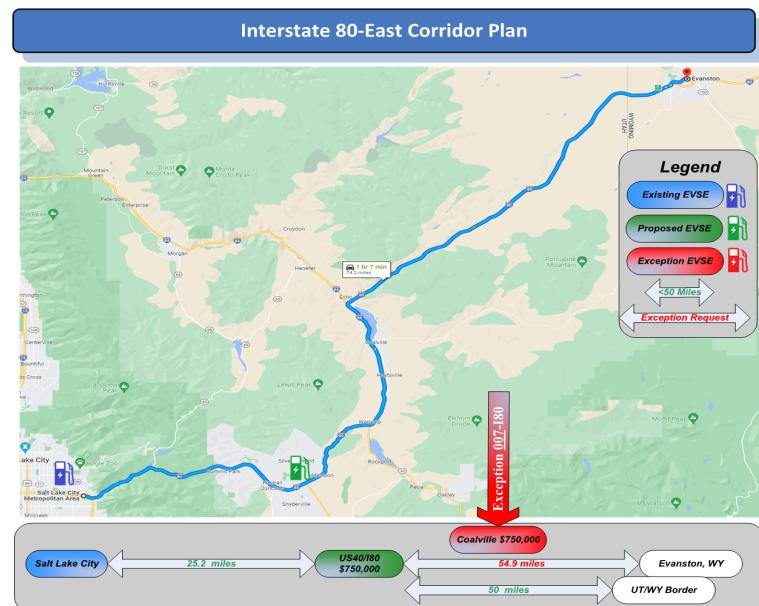
- 5 miles

### Round 6 AFC Nomination:

- No

### Reason for Exception Request:

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost



### Description:

This segment provides critical connectivity to planned US-40 corridor installations, and also regional connectivity to Wyoming. Although it is 50 miles to the Utah-Wyoming border, it is practical to consider adjacent state connectivity, and the distance to the nearest EVSE in Wyoming would be 55 miles.

An additional consideration is the mid power EVSE (62/62 kW) and Level II chargers in Coalville Utah. This provides a charging availability safety net for the traveling public.

### Optional Mitigation:

Upgrading the installation at Coalville would likely be the most feasible approach for an alternative plan to meet the NEVI spacing; however, the location being proposed at the interchange of US-40/I-80 provides much more benefit with respect to regional mobility and connectivity.

### Realized Savings:

Total savings is estimated to be \$750,000 by not upgrading at the Coalville site.

## 008-US6: US-6: Price to Green River

### Alternative Fuel Corridor:

- US 6

### Type of Exemption:

- Greater than 50 miles

### Distance of Deviation:

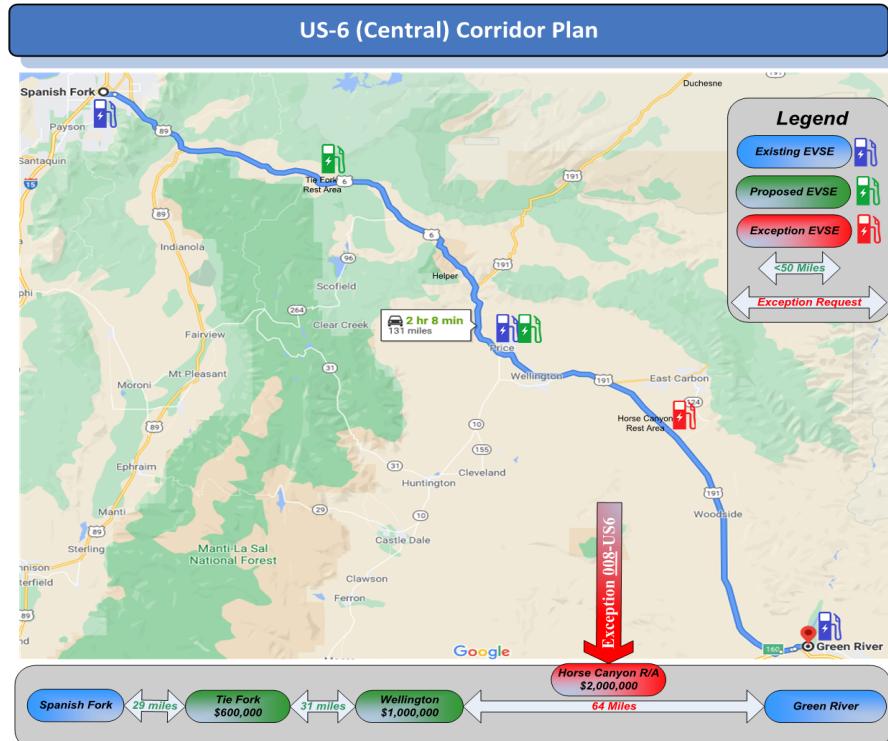
- 14 miles

### Round 6 AFC Nomination:

- No

### Reason for Exception Request:

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost



### Description:

This segment of US-6 has no access to the electrical grid. The rest area at Horse Canyon would need a solar array and energy storage. The land around the highway and rest area is owned by BLM, and extensive environmental studies would likely delay any large scale solar project.

Currently, upgrading existing installations in Price Utah is attractive due the city being the owner of existing EVSE and also acting as the energy service provider.

### Optional Mitigation:

During later stages of EVSE planning, locations in Wellington will also be considered as this would reduce the gap by five to six miles, but still not meet NEVI goals.

### Realized Savings:

Total savings is estimated to be over \$2 million by not installing the additional site at Horse Canyon Rest Area. Horse Canyon would require a solar array, energy storage, and EVSE in addition to paved parking, cell service/internet availability and other amenities expected by EV

owners. Additionally environmental approval would likely take multiple years. The savings could be applied towards approximately two to three additional priority rural corridor EVSE sites after built out status is achieved.

## 009-US191: US-191: Moab to Monticello

### Alternative Fuel Corridor:

- US 191

### Type of Exemption:

- Greater than 50 miles

### Distance of Deviation:

- 4 miles

### Round 6 AFC Nomination:

- No

### Reason for Exception Request:

- Grid Capacity
- Geography
- Equity
- Extraordinary Cost

### Description:

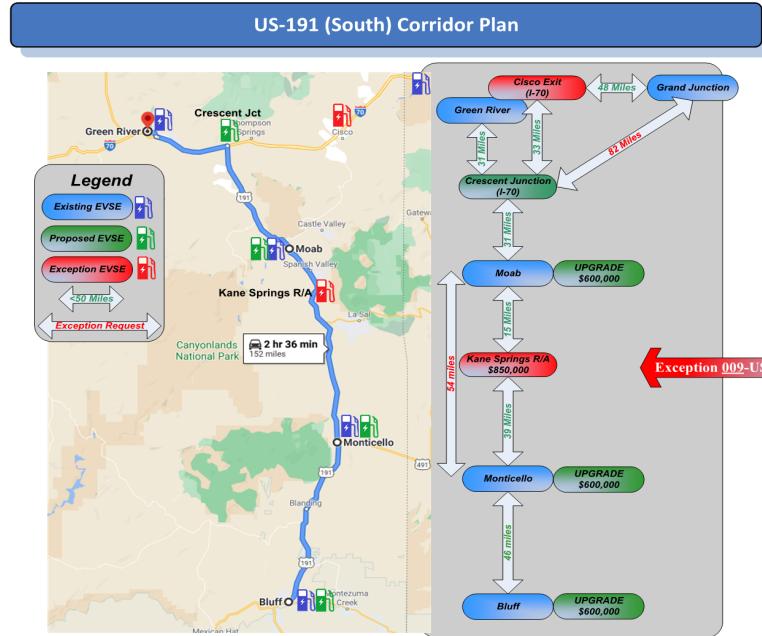
Kane Springs rest area is located between Monticello and Moab. This location has single phase power and would need to be upgraded on the utility side or use a battery storage or onsite power generation solution such as FreeWire. Both Moab and Monticello are populated towns with all of the site amenities and nearby economic development opportunities for EV owners.

### Optional Mitigation:

In order to meet the 50 mile or less requirement, an additional full installation will need to be placed in Kane Springs, which is approximately midway between the two adjacent corridor EVSE locations. There are few on site amenities at this location, and the development of NEVI EVSE at Kane Springs could likely decrease the economic opportunities for Moab and Monticello.

### Realized Savings:

The total savings is estimated to be \$850,000 by not developing this location.





Utah's Electric Vehicle Infrastructure Plan