STATE OF UTAH ELECTRIC VEHICLE MASTER PLAN

2018

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State Agency Committee Members

Listed in Alphabetical Order

Adam Radel	*Department of Transportation*
Andrew Gillman	*Office of Tourism*
Annie Schneider	*Governor's Office of Energy Development*
CJ Connor	*Department of Transportation*
Eric Gardner	*Department of Administrative Services*
Jeff Mottishaw	*Department of Administrative Services*
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Department of Administrative Services
Listed in Alphabetical Order

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Mission Statement

Create and implement a unified electric vehicle infrastructure strategy for enhanced transportation and better air quality for Utah.

Project Overview

The State Agency Electric Vehicle (EV) Expansion Committee was assembled in order to create a unified, coordinated, and responsible EV infrastructure strategy for the advancement of EV charging across the Utah, thereby improving air quality through increased zero emission transportation. This five-year Master Plan acts as a guide for best practices in helping guide State Agencies and other interested parties in the implementation of EV technologies at their place of business and operation.

Members of the Committee were selected by their agency's leadership in EV adoption, technology, interest, involvement, and/or outreach.

Project Priorities

1. EV Station Proximity

While select EVs are capable of traveling 200 to 300 miles per charge, the majority of models on the road today range from 60 to 120 miles per charge. Therefore, the plan is to install stations 60 miles apart to accommodate for lower ranges and decrease range anxiety. The state will continue analyzing ideal charger locations to ensure strategic placement of the charger infrastructure.

2. Connection and Enhancement within the Region

In 2017, the State of Utah signed the Memorandum of Understanding (MOU) for Regional Electrical Vehicle Plan for the West (REV West). This Master Plan supports the regional agreement by including Interstates 15, 70, 80, and 84. Additionally, the State of Utah would welcome partnership opportunities with neighboring states where additional connections along major roadways could be made beyond the highways specified in the MOU.

3. Diversification of Fueling for State Fleet

The Utah Division of Fleet Operations sees the expansion of EV infrastructure as a way of solidifying electricity as an additional fueling category for the State.   It would also allow for the continued increase of EVs and electric hybrids within the State Fleet. Members of the Fleet EV Expansion Team would continue to provide technical and infrastructure support and expertise, as they have through the development of this Master Plan.

4. Improved EV Travel Experience

Utah continues to add more EVs onto its roads, and the improved electric infrastructure is greatly needed for Utah commuters [2]. Additionally, Utah continues to be a popular travel destination especially for those seeking outdoor recreation.

As Utah continues to be a popular location for travel, especially for those wanting to experience the great outdoors, the increased ease of EV travel through improved infrastructure will facilitate access to Utah's range of visitor destinations, from popular sites such as The Mighty 5® national parks of Southern Utah to all the national monuments, recreation areas, forests, state parks, open spaces and cultural offerings along the way. By targeting priority locations at gateway and base camp towns with opportunities to dine or explore nearby cultural attractions while charging, improved EV infrastructure can further support economic growth in Utah's rural communities.

5. Improved Air Quality

Behind every action of this project is the State's continued goal to decrease emissions through vehicle transportation as an effort to improve air quality for Utah. Motor vehicles are the largest source of emissions in the state. Electrifying transportation will assist with reducing emissions that contribute to both ozone and PM2.5.

Proposed Timeline

Table 1: Timeline

DATE	MILESTONE	AGENCY/GROUP INVOLVED
30-May 2018	Project Start/ Think Tank	DAS EV Mgt. Team
19-Jul 2018	Meeting W/ Stake Holders	State Agency Committee
9-Sep 2018	First Draft of Management Plan Review	
28-Sep 2018	Final Review of Management Plan	
26-Oct 2018	First Presentation of Management Plan to Stake Holders	State Agency Committee
9-Nov 2018	Begin Site assessments	UDOT, DAS, AGRC
30-Nov 2018	First Site Install begin. Training and certifications for staff begin	
30-Dec 2018	First Site install complete. Begin data, analytics, & usage tracking	DAS
30-Jan 2019	10 EVSE installed and online.	
28-Feb 2019	Site inspections and usage data collection.	DAS
30-Mar 2019	Continual monitoring of EV Charging Stations	DAS
30-Apr 2019	Project End, Review of Mgt. Plan	State Agency Committee

Considerations & Factors

Air Quality

Utah has several areas of non-attainment for particulate matter 2.5 (PM2.5) and ozone as designated by the Environmental Protection Agency (EPA). PM2.5 Non-attainment areas include [3]:

- Provo City
- Logan City and Franklin County, Idaho
- Salt Lake City
- Davis County
- Parts of Weber County
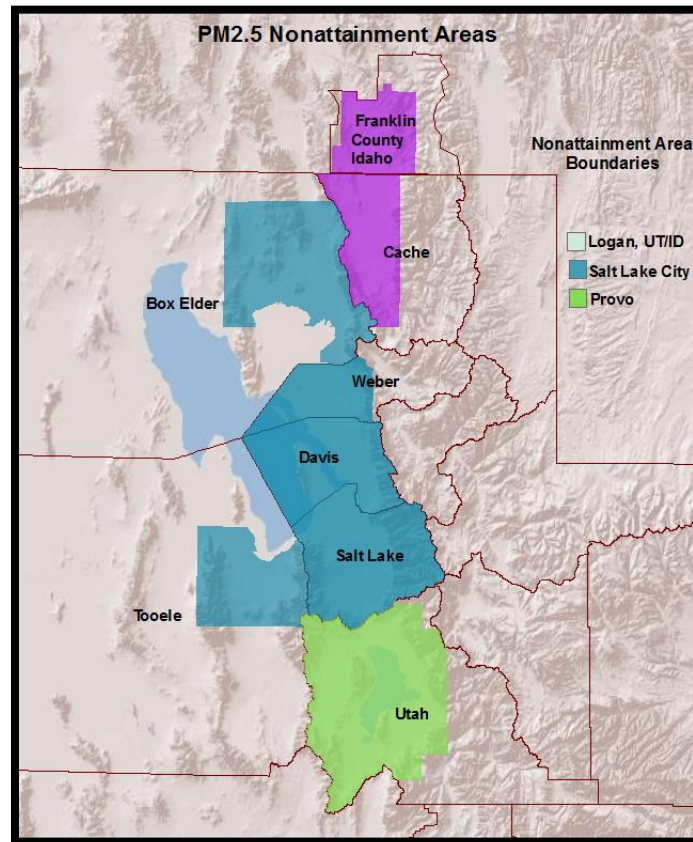- Parts of Box Elder County
- Parts of Tooele County

Figure 1

Source: "Area Designations: PM2.5 State Implementation Plan Development." Utah Department of Environmental Quality, www.deq.utah.gov/legacy/pollutants/p/particulate-matter/pm25/areas.htm.

Ozone Non-attainment areas include:

- Northern Wasatch Front
    - Salt Lake County
    - Davis County
    - Parts of Weber County
    - Parts of Tooele County
- Southern Wasatch Front, including part of Utah County
- Uinta Basin, including parts of Uintah and Duchesne County below 6,250 feet elevation

Figure 2

For more information, visit: https://deq.utah.gov/legacy/pollutants/o/ozone/

Charging stations within these non-attainment areas will be a priority, as an effort to help move those zones into compliance through increased EV adoption as a result of improved infrastructure.

Utility Infrastructure

While selecting sites for EV installment, power provider service territories will need to be considered. Particularly in circumstances in which Sustainable Transportation & Energy Plan (STEP) funds are utilized from Rocky Mountain Power, and must therefore be utilized in Rocky Mountain Power service areas only.
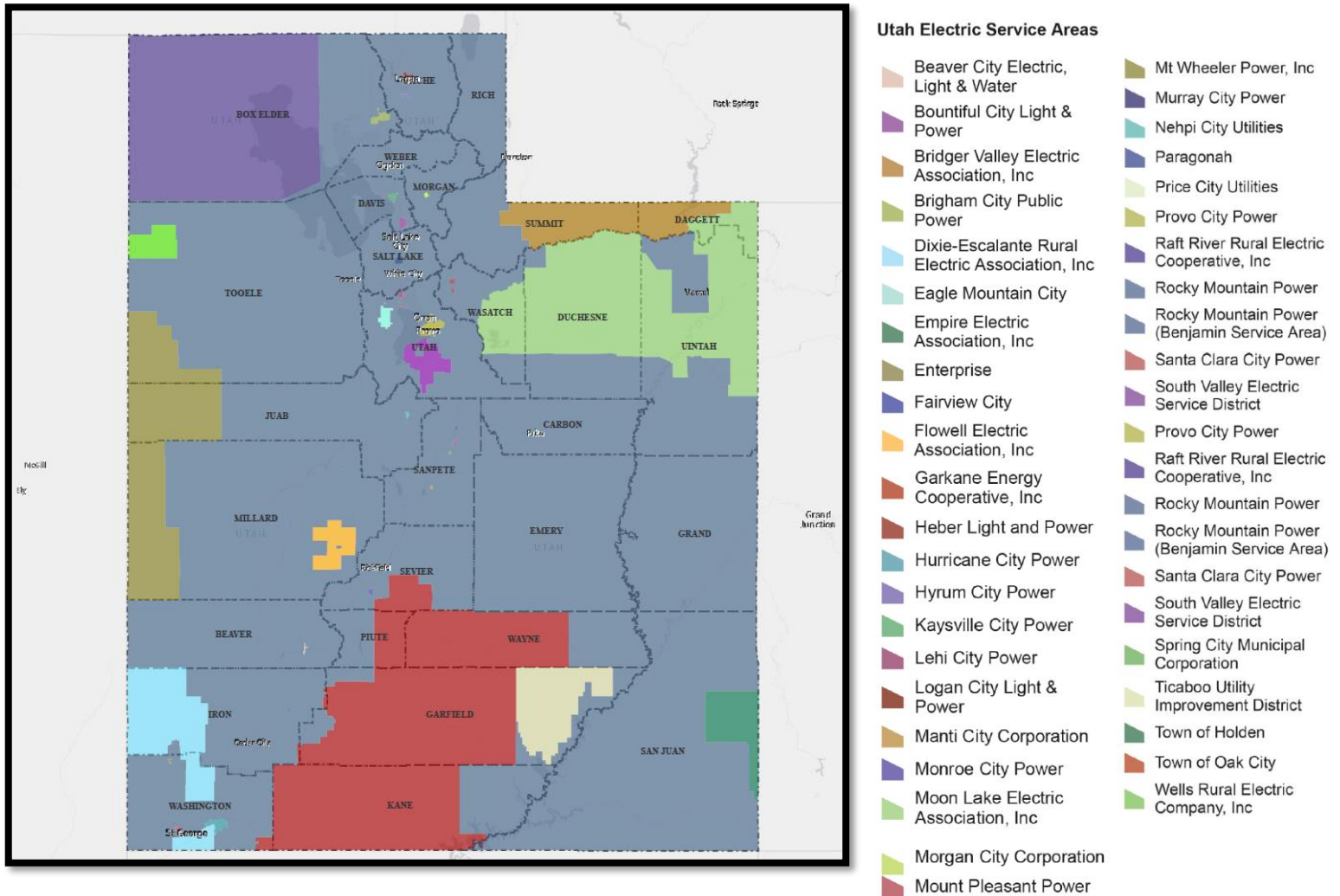
Figure 3
This map depicts service area boundaries for electric utilities. Boundaries are approximate
and based on information provided to the Utah Division of Public Utilities.
Source: Utilities, Utah Public. "Utah Electric Service Areas." Utah.maps.arcgis.com,
www.utah.maps.arcgis.com/apps/Viewer/index.html?appid=573dfdb6220d4fada6d833def6
33b866

- Rocky Mountain Power Service Area
  - With the desire to create partnerships outside the State of Utah, the service map of Rocky Mountain Power to all areas has also been provided.
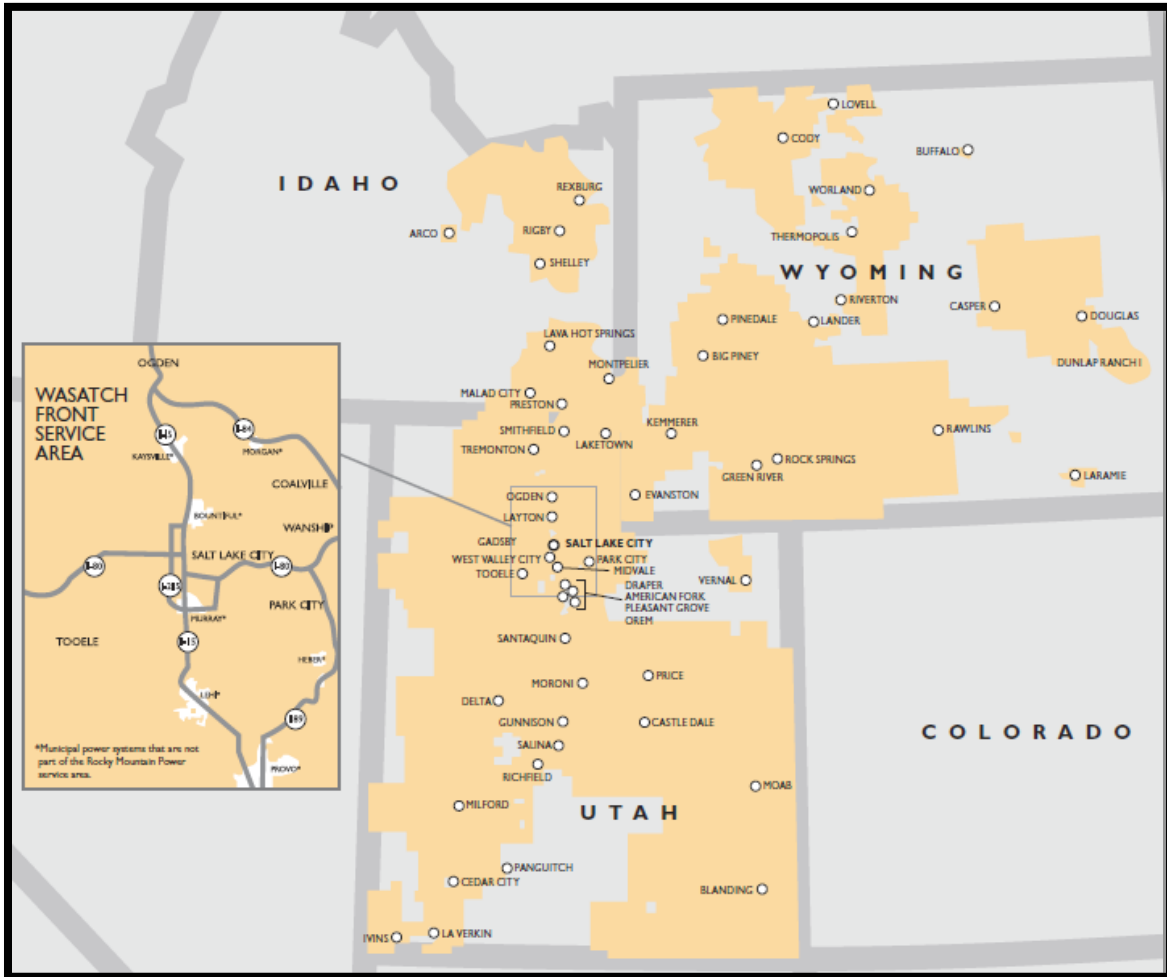

Figure 4
Rocky Mountain Service Area Map. Source: "Service Area Map." Glossary of Electrical Terms, www.rockymountainpower.net/about/cf/sam.html.

Reaching the "Mighty 5"® and Beyond

Utah is well known for its Mighty 5 ® national parks: Arches, Canyonlands, Capitol Reef, Bryce Canyon, and Zion. These destinations are so important to Utah's tourism economy that they motivated a previous initiative by the Governor's Office of Energy Development to help EV travelers experience them. But in the years since The Mighty 5 EV road trip was created, the Utah Office of Tourism (UOT) has stepped in to respond to the rapid growth in visitation at our national parks by promoting a wider range of destinations through a public-facing campaign called the Road to Mighty® and an internal tourism strategy called the Red Emerald Initiative.

The Road to Mighty® created a road trip along Utah's incredibly scenic roads, many of them designated scenic byways across southern Utah. The popularity of scenic byways for auto tourists also presents a powerful opportunity for growing EV infrastructure organized around logical resident and visitor routes. Meanwhile, the Red Emerald Initiative promotes community-led visioning for better-managed tourism that includes quality visitation over quantity, wider distribution of visitors throughout Utah, refined customer service and a focus on infrastructure investment.

While The Mighty 5® and The Greatest Snow on Earth® will continue to anchor Utah's tourism economy, the UOT is working with engaged partners and communities to increase their viability as a sustainable tourism destination through cooperative marketing and destination development — including the increase in EV infrastructure. Underscoring these efforts is an emphasis on maintaining the high quality of life for Utahns, which includes pride in our state and a passion to share an authentic experience with receptive visitors as well as enhanced access to outdoor recreation assets.
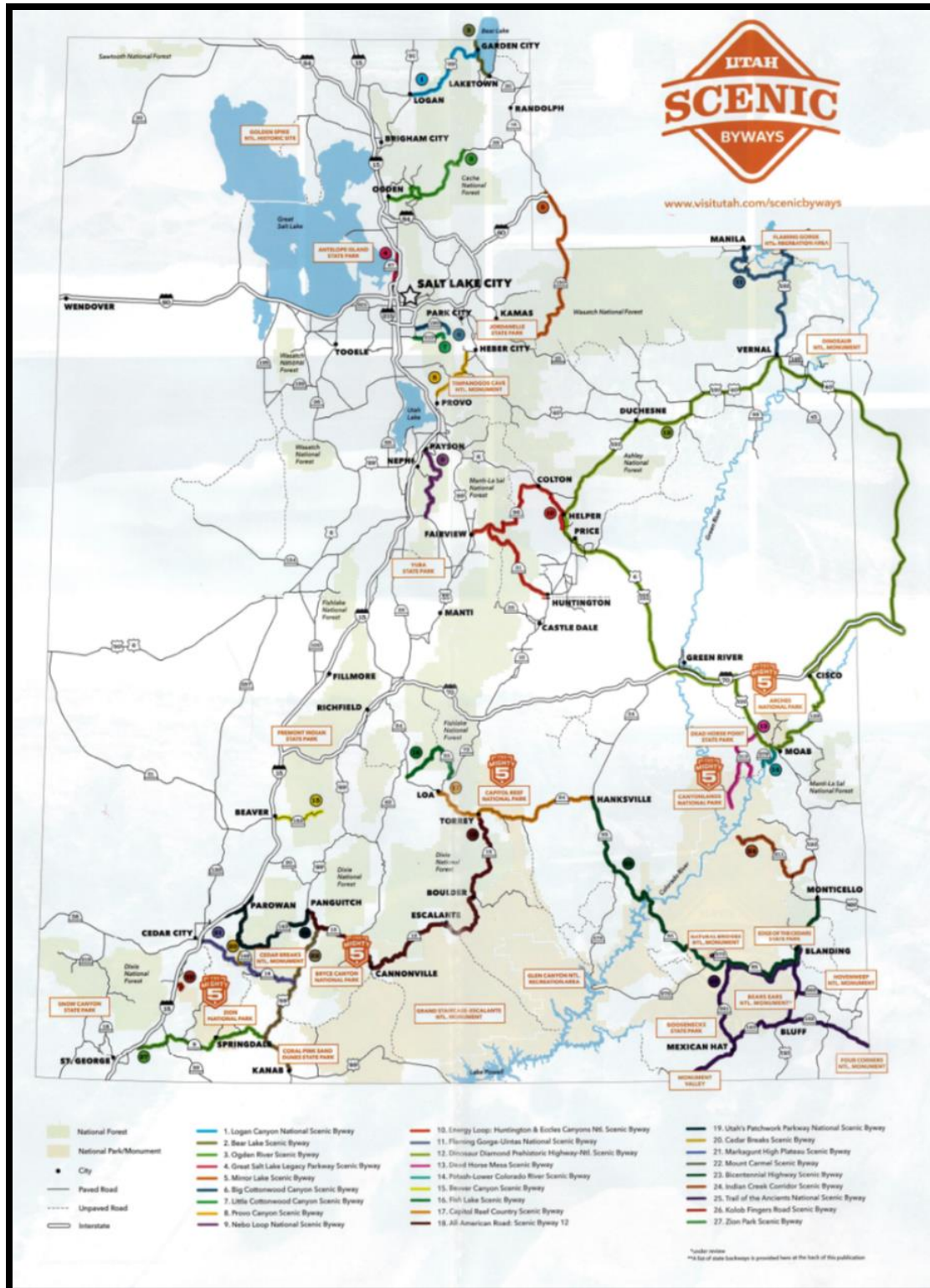
Figure 5
Map highlighting the Mighty 5, as well as federal and state scenic byways.

EV Development Efforts

Regional Efforts

On October 4, 2017, Governor Herbert signed a MOU between Utah and seven western states to collaborate on Regional Electric Vehicle infrastructure development in the west (REV West). The Utah corridors of specific focus are interstates 15, 70, 80, and 84. The State of Utah would also welcome partnership opportunities with other border-sharing REV West partners that will create additional connections along major roadways.

Utility Efforts

Rocky Mountain Power has been able to leverage funding through the West Smart EV grant for EV infrastructure deployment across their service territory. With many associated partners, they are prioritizing projects to expand the electric vehicle corridor along I-15. Additionally, workplace charging and fleet conversions to EVs are incentivized to those operating within their service territory.

County Efforts

Of the 29 counties in Utah, only two have begun organized efforts of installing chargers within their county limits.

- Salt Lake County installed chargers for their County Office buildings and Public Works building.
- Summit County, in partnership with Salt Lake City and Rocky Mountain Power, installed new EV fast-charging stations at Kimball Junction. The installations are part of the Live Electric campaign to improve air quality between Salt Lake City and Park City.[4]

City Efforts

Multiple cities across Utah have expanded, begun implementation, or have plans to install EVSE in their communities.

- Salt Lake City, in partnership with Utah Clean Energy, created the, "Electrified Transportation Roadmap: Best Practices and Clean Air Solutions Guide for Local Governments in Utah".
  - In 2018, Salt Lake City installed 28 EV chargers for the public and converted all city parking enforcement vehicles to electric. This conversion to EVs has reduced fuel costs by 90 percent.
- Sandy City received funding through the Rocky Mountain Power West Smart EV grant.
- West Jordan City has installed chargers at their City Hall and Public Works buildings.

- West Valley City is working with the West Smart EV grant in hopes of being able to install chargers at their city offices and parks.
- South Jordan City is applying for West Smart EV funding to initiate EV charging installations.

State Fleet Efforts & Support

Over the last several years, State Fleet has increased adoption of electric vehicles with the help of telematics (technology outlined below). Currently, State Fleet has 8,534 vehicles, of which 608 are hybrid and all-electric vehicles. As with personal EV owners, the lack of EV infrastructure across the entire state has limited the full potential of EVs within the Fleet. In order to increase driver confidence in both State employees and the public alike, Fleet has supported the EV expansion effort as a new sector in fuel for the State.

State Fleet continues to convert vehicles to lower emission vehicles. Since June 2018, Fleet has 608 hybrid and all-electric vehicles with the hopes of continued infiltration as the EV infrastructure continues to expand.

Telematics

State Fleet completed a one-year pilot to view possible seasonal variations in travel patterns and vehicle usage. As of June 2018, one-fourth of all State Fleet vehicles have telematics units installed. This Smart technology is designed to allow agencies to implement driver parameters that promote increased driver safety and improved fuel efficiency that lead to decreased fuel emissions. In particular, for this project telematics allows for agencies to see which of their vehicles are best suited to be converted to an electric model (i.e. short trips and city-travel).

State Contracts Available

Five EV vendors are now available under State contract. Contract availability for EVs streamlines support of the Governor's involvement of the regional EV Corridor, improves cost efficiency for participating agencies, and provides a more uniform user experience as a whole. For a full list of vendors and detail access, see Appendix C.

Phased Implementation

Over the course of five years, a three-phase implementation program will go into effect. Each phase of the program expands upon existing infrastructure. Cost of implementation and challenge of install increases with each phase. The goal is that by the third phase of the program, the state EV charging network will be realized in rural communities providing connections to complete electrified transportation throughout the state. Throughout the planning process the state EV mapping platform, state park visitation data, and site specific analyses will be evaluated to determine the most economic development strategies.

Phase 1

- Connection to the major corridors (I-15, 70, 80, 84) for continued enhancement of the existing Alternative Fuels Corridor.
- Installation Locations Characteristics:
    - State-owned buildings
    - Areas near major freeways/interstates
    - Easy electrical hook-up
    - Low construction requirements
- Workplace and Fleet Level 2 Chargers
- Funding sources are currently available

Phase 2

- Focus on locations off or near the major corridors defined in Phase 1. These could include: Highway 89, Highway 6, major roadways toward Logan, and major roadways toward Bear Lake.
- Installation Locations Characteristics:
    - State Parks
    - Areas of high entertainment
    - Accessibility to electricity on site
    - Medium construction requirements
    - Tourism Information (park visitation data)
- Level 2 Chargers with some Level 3 Chargers were deemed necessary

Phase 3

- Chargers will be suggested in rural communities that would provide high benefit and are considered necessary to state-wide EV travel
- Location Characteristics:
  - o Based at a travel destination or entertainment center (to provide something to do while charging).
  - o Protection from harsh weather conditions
  - o State Fueling Site, or some other type of State-owned property
  - o Property available to be developed through a public/private partnership(s)

Funding Opportunities

Clean Fuels and Vehicle Technology Grant

- Awarded to DAS from DEQ
- Amount: $70,000
- Timeline: To be used within 18 months (as of May 2018)
- Parameters:
    - May only be used on EV charging stations and construction.

UDOT Funding

- Already awarded to UDOT on EV infrastructure development
- Amount: $200,000
- Timeline: to be used within the FY19 fiscal year (deadline June 30, 2019)
- Purpose:
    - $15,000 - $20,000 on Utah State University GIS EV mapping development
    - Remaining balance for EVSE installations and technology.

Rocky Mountain Power WestSmart EV Grant

Rocky Mountain Power incentives are offered to Utah non-residential customers and multifamily dwellings to offset the cost of installing charging stations. Funds are limited and are available on a first-come, first-served basis.

- Non-residential & multifamily AC Level 2 Charger
    - Single port
        - $2,500 per charger up to 75% of total charger cost
    - Multi-port
        - $3,500 per charger up to 75% of total charger cost
- Non-residential & multifamily DC Fast Charger
    - Single port
        - $30,000 per charger up to 75% of total charger and installation costs
    - Multi-port
        - $42,000 per charger up to 75% of total charger and installation costs
- Non-residential & multifamily grant-based custom projects
    - Custom incentives
    - DEADLINE: November 1, 2018

For additional information, visit: https://www.rockymountainpower.net/env/ev/tcb.html

UCAIR Grant

The goal of the UCAIR Grants Program is to reduce emissions of criteria pollutants that cause Utah's poor air quality. The reoccurring grant can be up to $60,000. For additional information, visit: https://www.ucair.org/ucair-grant/

Utah Volkswagen Settlement

The State of Utah is a beneficiary of over $35 million from the Volkswagen (VW) Environmental Mitigation Trust, part of a settlement with VW for violations of the Clean Air Act (CAA). The Governor has designated the Utah Department of Environmental Quality (DEQ) as the lead agency to administer this funding, including the development of an Environmental Mitigation Plan (EMP). The EMP will provide a high-level overview of which eligible vehicle/equipment categories the State of Utah will fund through the settlement to reduce the excess nitrogen oxide (NOx) emissions from the VW, Audi, and Porsche vehicles that were not in compliance with the CAA.

Eleven percent of the settlement has been designated for Light-Duty, zero-emissions-vehicle supply-equipment:

- Recommended by advisory committee and received significant support from the public
- Stimulates the deployment of emerging technologies that have long-term air quality benefits
- Recognizes existing efforts statewide that provide various (and abundant) funding sources
- Targets government-owned facilities, providing double benefits to taxpayers
- Prioritizes facilities in nonattainment areas, near major transportation corridors, and allows public access.

For additional information, visit: https://deq.utah.gov/air-quality/volkswagen-settlement
For application, visit: https://documents.deq.utah.gov/air-quality/planning/air-quality-policy/vw-settlement/DAQ-2018-013423.pdf

Electrify America

EV chargers will be installed along interstates 15, 70, and 80. Varying levels of charger outputs will be installed at these locations and will be dependent on economic feasibility and public usage. These locations will be determined based on business partnerships and have been established to complete a national charging network.

For additional information, visit: https://www.electrifyamerica.com/submissions

Partner Funding

For many locations in Utah, particularly in the rural community areas, partnership development will be crucial for the success of the program. Partnership recommendations are preferable when both organizations provide a matching contribution to the project at hand. A MOU or other formal agreement is also strongly recommended.

Table 2, Parts A & B: Funding Layout

A.
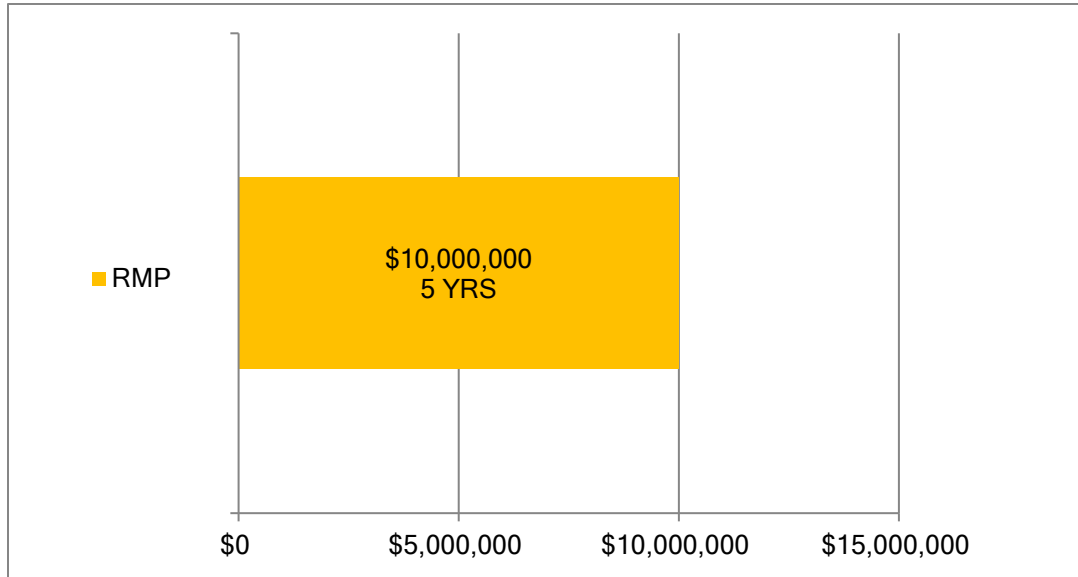
B.
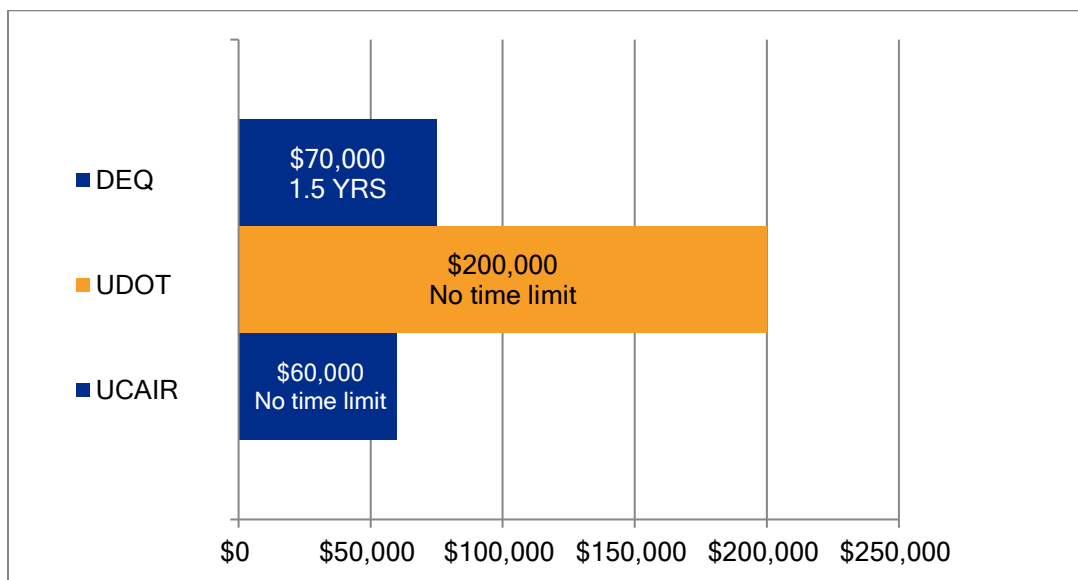
Both UCAIR and Rocky Mountain Funding would need to be applied for through a grant process.

Partnership Development

State Government

The State of Utah is open to developing partnerships with bordering states as it continues to support the Governor's efforts on the REV West initiative. Particular areas of interest include state locations running along the major corridors, as well as areas along state and federal designated byways.

City & County Governments

In areas that show significant benefits to expanding the EV infrastructure along major corridors and/or for State Fleet usage, the State can provide a matching program if funds are available and can provide similar application assistance as provided with State agencies that utilize this Master Plan as well.

Private Business

Particularly in areas of rural development, the State would be happy to develop partnerships with community businesses. Cost matching will be required for projects between private entities and the State of Utah.

Application Management

The State EV Expansion Committee, along with Fleet EV Expansion Committee, are available to answer questions on the various grant applications outlined in this document. Each agency will be responsible, to submit their own applications. This document is designed to help guide EV development across Utah in an efficient and unified manner so that the developing EV infrastructure can be accessed by the greatest number of EV users across the State as a whole.

For specific content questions (i.e. grant funding, mapping, site selection, etc.) please see the contact page on page 32 of this document.

Site Assessment Considerations

To begin site assessments, below is a checklist of some of the top characteristics to consider when looking to install a charging station at your desired location:

Table 3: Site Assessment Checklist

| Did you...	Completed
Consider the charging needs of your intended audience (how long do EV users stay in/around your facility)?	☐
Dedicate a circuit for each EVSE unit on the electrical panel (needed in most cases).	☐
Sufficient electrical capacity from the utility connection to the electrical panel.	☐
Decide if you want your chargers network connected or not? The network allows for retrieval of usage data.	☐
Make sure that your data connection is strong enough to support network operation.	☐
Ensure that selected stalls for install are ADA compliant	☐
Consider signage for EV-designated stalls?	☐
Consider expansion of the system?	☐
Place conduit for future expansion or require additional conduit on all future builds	☐
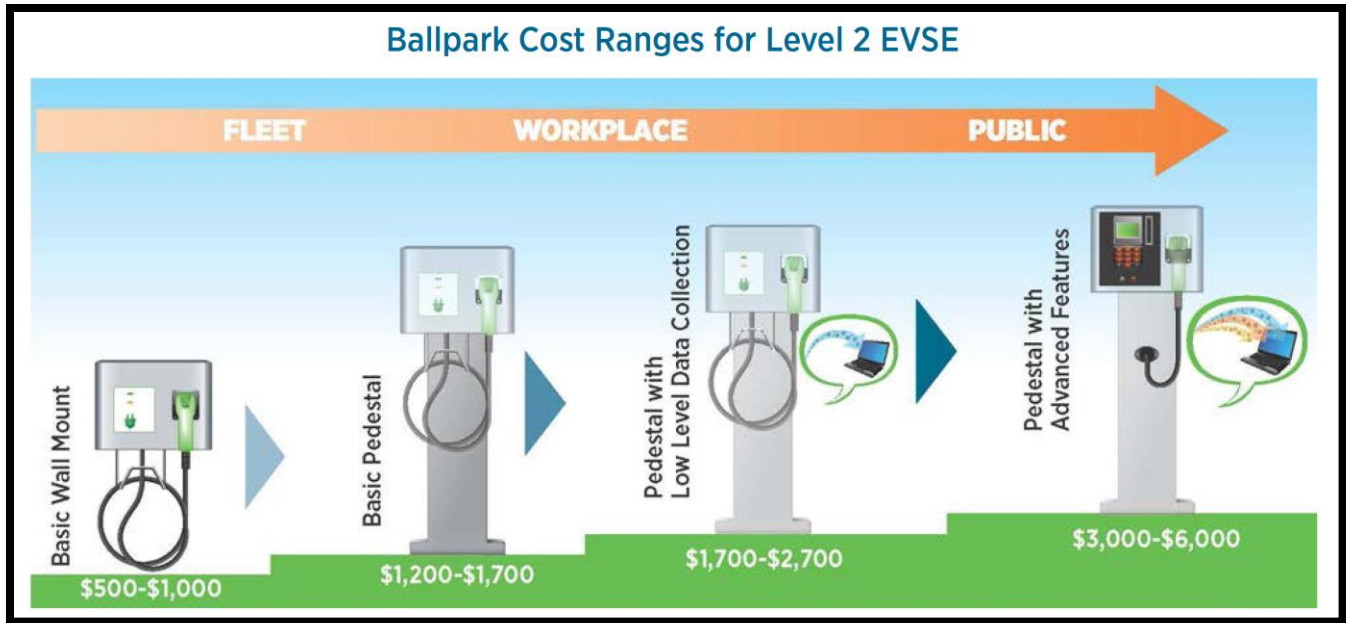
Figure 6
Image from Kristina Riverbark, New West Technologies

For more specifics on site selection, and other EVSE information, visit:
https://www.afdc.energy.gov/uploads/publication/evse_cost_report_2015.pdf

Appendix A

Map Modeling

Various mapping tools were developed and/or enhanced by UDOT to help aid in the site selection for this project, and combined to help ease site selection for entities interested in installing EV infrastructure. These map sets will continue to be maintained and expanded upon in the upcoming years of the Master Plan. To view any or all of the listed layers available below, please visit:
http://uplan.maps.arcgis.com/apps/Cascade/index.html?appid=f4c96f6e586746ada05f2223aae963dc

- General EV Master Plan Mapping Tools Including:
    - Current Level 2 & Level 3 Charger Locations
    - Proposed EV Charging Locations for each Phase
    - State Fuel Site Locations
    - State Facility Locations
    - Utah Electric Service Areas
    - State and Federal Scenic Byway Designations
    - State and National Park Locations

Appendix B

Telematics

Smart technology designed to allow agencies to implement driver parameters that promote increased driver safety and improved fuel efficiency that lead to decreased fuel emissions.

GeoTab: SmartCities

A Smart City is defined as "an urban development vision to integrate information and communication technology (ICT) and Internet of things (IoT) technology in a secure fashion to manage a city's assets."[4,5] "…Smart City initiatives can involve a varying degree of technology implementation. Everything from a simple public-facing downtown development map to a complicated deployment of Bluetooth sensors to track traffic patterns.[9,10] In almost every case, however, sensor data is critical to an effective Smart City strategy".

For additional information, visit: https://www.geotab.com/smart-city-insights/

Appendix C

State of Utah Contracts

In 2018, five vendors entered into cooperative contracts with the State of Utah which can be utilized by all public entities (i.e. schools, local government, etc.). These vendors include:

Contract ID	Contract Name	Contractor Name	End Date	
AR2842	Chargepoint Electrical Vehicle Charging Station Equipment And Supplies	VERDEK LLC	3/31/2023	View Details
AR2841	Chargepoint Electrical Vehicle Charging Station Equipment And Supplies	NATIONAL CAR CHARGING LLC	3/31/2023	View Details
AR2843	Chargepoint Electrical Vehicle Charging Station Equipment And Supplies	VIDEO VOICE DATA COMMUNICATIONS (VVDC)	3/31/2023	View Details
AR2840	Chargepoint Electrical Vehicle Charging Station Equipment And Supplies	LILYPAD EV LLC	3/31/2023	View Details
AR2839	Chargepoint Electrical Vehicle Charging Station Equipment And Supplies	THE ELECTRIC HIGHWAY CO	3/31/2023	View Details

To view the EVSE State Cooperative Contracts, as well as other State Contracts, please visit: https://statecontracts.utah.gov/Home/Search

Appendix D

Examples of Site Selections by Phase

The sites listed are simply examples for each phase of development to help in the aid of site development for interested parties. They are not current projects planned by the State of Utah.

- Suggestions for Proposed Phase 1 Sites:
  - Location: Grassy Mountain Rest Area (East Bound)
  - Desirable Features:
    - Near I-80
    - At State-owned Facility
  - Location: Bryce Canyon Info Center: 3 Mi NW Ruby's Inn Hwy 12, Ruby's Inn
  - Desirable Features:

- One of the Mighty 5® locations
- State-owned facility
- On a National Scenic Byway

- Suggestions for proposed Phase 2 sites:
  - Location: UDOT Region 4: 940 S Carbon Ave, Price UT
  - Desirable Features:
    - At State-owned Facility
    - Near State Fuel Site
    - Near National Scenic Byway
    - Special Note: area outside of Rocky Mountain Power service area
  - Location: Koosharem UDOT # 331A - State Rd 32 in Koosharem
  - Desirable Features:
    - State-owned Facility
    - Near State Fuel Site
    - Near State Scenic Byway
- Suggestions for proposed Phase 3 sites near:
  - Location: Blanding DHS Office: 522 N 100 E, Blanding, UT
  - Desirable Features:
    - Near State Fuel Site
  - Location: Richfield, UT
  - Desirable Features:
    - No EV development in area
  - Location: Bluff, UT
  - Desirable Features:
    - No EV development in area

Frequently Asked Questions (FAQ's)

For Drivers:

Q: What's the difference between a hybrid and an electric vehicle?

> A: a conventional hybrid vehicle refers to one which has both a gasoline engine and an electric motor. An electric vehicle, runs solely on an electric motor and requires no additional fuel for power, but instead stores its energy in on-board battery systems.
>
> For more information, visit: https://blog.ucsusa.org/josh-goldman/comparing-electric-vehicles-hybrid-vs-bev-vs-phev-vs-fcev-411

Q: What is the difference between a level 1, level 2, and level 3 (DC Fast) charger?

> A: Please see below for basic differences between charging levels. For more information visit:
> https://www.afdc.energy.gov/uploads/publication/evse_cost_report_2015.pdf

Charging Level	Vehicle Range Added per Charging Time and Power	Supply Power
AC Level 1	4 mi/hour @ 1.4kW 6 mi/hour @ 1.9kW	120VAC/20A *(12-16A continuous)*
AC Level 2	10 mi/hour @ 3.4kW 20 mi/hour @ 6.6kW 60 mi/hour @ 19.2 kW	208/240VAC/20-100A *(16-80A continuous)*
DC Fast Charging	24 mi/20minutes @24kW 50 mi/20minutes @50kW 90 mi/20minutes @90kW	208/480VAC 3-phase *(input current proportional to output power; ~20-400A AC)*

Q: How will I know when I need to charge the vehicle?

> A: Each EV model has its own notification system, but most models have a charging gauge that looks very similar, and acts similarly to a gas gauge on the vehicle dashboard.

Q: Can I overcharge the battery?

A: No, the charging station will automatically shut off once the battery system in the EV has been fully charged.

Q: How do I know where to charge?

A: There are many information sources available. Many newer models come with an EV charger locator application already installed in the vehicle. You can also view available chargers in your community by visiting PlugShare (https://www.plugshare.com/).

For Building Managers:

Q: Who is responsible for maintenance and/or replacement of parts of the EV charger?
A: If chargers are purchased under State contract, operations and maintenance is covered by the contract and managed by the EVSE manufacturer.

Q: Are people allowed to stay parking in a stall once their vehicle has completed charging?
A: That is a decision up to those installing the chargers. Common practice is to add signage at each EV stall and only allow charging EVs to park there.

Q: Who do we contact if there is a problem with the EV charger?
A: If you have a problem with your EV charger, contact the phone number provided by the manufacturer. If purchased under State contract, service should be provided within 24 hours.

Q: How do you decide where to install and EV charger?
A: Please refer to "Site Assessment Checklist" on page 18. Or visit:
https://www.afdc.energy.gov/uploads/publication/evse_cost_report_2015.pdf

Q: What type of EV charger should you install?
A: It depends on several factors, how much funding you have available for the project, energy availability, and audience characteristics. Think of how people typically use the parking site that you are considering; are they there for 30 minutes or less, or for several hours (4 +). If in the shorter time range (less than 1 hour) a DC fast charger would be the most beneficial, but if parking times are typically longer, then a Level 2, or even Level 1 could be beneficial. For more information on charging selection, visit:
https://www.afdc.energy.gov/uploads/publication/evse_cost_report_2015.pdf

Q: Who is responsible for collecting/maintaining data gathered from EV chargers?
A: If your EVSE is a "smart charger" and connected with a network, then the manufacturer will provide an account to which you can access usage data from the chargers. If they are not connected to a network, then there is limited or no data that can be pulled from the units.

For Administrators:

Q: Who pays for the energy used at the changing station?

A: Whoever pays the electrical bill. If you choose to allow payment of power used at your charger, then you can have the individual who is charging their car pay for the energy. In this situation, the facility would receive a credit on their bill for this energy cost.

Q: Does the public have to pay to utilize a charging station at a State facility?

A: Currently, no State facility requires payment for any of the EV charging stations.

Q: Do we have to reimburse drivers that charge their personal electric vehicles while on work duty?

A: No.

Q: Who is responsible for the costs of maintenance and repair (who is billed)?

A: The owner of the charging station.

Q: How much does it cost to install an EV charger?

A: The average cost of an EVSE install ranges from:

- Level 1 $300-$1,500
- Level 2 $400-$6,500
- DCFC $10,000-$40,000

For more information, visit:
https://www.afdc.energy.gov/uploads/publication/evse_cost_report_2015.pdf

Q: Is there a State contract for EV chargers?

A: Yes, please refer to Appendix C of this report for further details.

Contact Information

Listed in Alphabetical Order

Name	Work Title	Agency	Email	Phone
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