## Montana Electric Vehicle (EV) Infrastructure Deployment Plan Update

July 31, 2023

# Montana 2023 Electric Vehicle (EV) Infrastructure Deployment Plan Update

### 1. Introduction

Montana's 2023 Electric Vehicle Infrastructure Deployment Plan Update (2023 Plan) was developed by the Montana Department of Transportation (MDT) and the Montana Department of Environmental Quality. The Plan update provides a summary of public engagement activities, changing market conditions, challenges, and implementation strategies to ensure compliance with 23 CFR 680 and meet the goals of the National Electric Vehicle Infrastructure (NEVI) program, to facilitate a national EV charging network.

The 2023 Plan includes a community engagement outcomes report that identifies outreach to Disadvantaged Communities (DACs) and describes a strategy for more direct community outreach after the State has selected priority communities for NEVI funding.

The State is in the process of identifying which alternative contracting method is most appropriate for NEVI projects that will minimize risk and maximize value. A project solicitation has not been executed as of the submittal date of this Plan. This Plan provides an outline of the process the State would follow for soliciting projects and evaluating proposals.

#### **Updates from Prior Plan**

Sections of the Plan that have been updated:

- State Agency Coordination
  - A Memorandum of Agreement was signed between the Montana Departments of Transportation and Environmental Quality, which houses the State Energy Office
- Public engagement
  - Includes public engagement activities and meetings since the 2022 EV Deployment Plan was approved.
  - Community Engagement Outcomes Report that notes outreach to disadvantaged communities.
  - o Utility engagement meetings
  - Tribal engagement activities
  - Outreach and meetings to discuss Community Fueling and Infrastructure discretionary grant with potential project partners and overlap and differences with NEVI requirements.
- Plan Vision and Goals
  - Revision to the 2022 proposed phased approach from the installation of two charging ports at some underutilized locations to the installation of four charging ports at each location based on final rules in 23 CFR 680.

- Contracting
  - Status of contracting process
- Civil Rights
  - Update to include requirement that charging station owners follow the U.S. Access Board Design Recommendations for Accessible Electric Vehicles
- Existing and Future Conditions Analysis
  - EV adoption: updated state EV registration data
  - Grid capacity: additional utility analysis on estimated load impacts from Direct Current Fast Charging (DCFC) stations
  - Known risks and challenges
- Charging Infrastructure Deployment
  - Current and planned charging stations (Level 2 and DCFC)
  - Tentative locations for first year of NEVI deployment.
- Equity Considerations
  - Update on process the State intends to follow and metrics the State will use to identify, measure, and track project benefits.
- Program Evaluation
  - Update to include how the State plans to track and monitor uptime requirements.

## 2. State Agency Coordination

Since Montana submitted the initial Electric Vehicle Deployment Plan in 2022, the Montana Department of Transportation and Montana Department of Environmental Quality (the Agencies) have entered into a Memorandum of Agreement (MOA) that outlines the roles and responsibilities of each agency in implementing the NEVI Program. The Agencies continue to work collaboratively to develop Montana's project delivery approach, prioritize locations and establish data collection and operation and maintenance procedures. The Agencies continue to work with other state agencies and policy makers, as appropriate, to provide input on the deployment of electric vehicle charging infrastructure.

#### Memoranda of Understanding with other agencies

The Montana Department of Transportation and Department of Environmental Quality entered into a Memorandum of Agreement (MOA) on April 24, 2023. The purpose of this MOA is to cooperatively implement Montana's National Electric Vehicle Infrastructure (NEVI) Program. Specifically, the MOA delineates and identifies duties and responsibilities of both agencies in developing and implementing Montana's NEVI program. The MOA specifies each agency's responsibility to comply with NEVI program and Title 23 U.S.C. requirements. These requirements include transparency, updating the EV Deployment Plan, NEVI project development and construction, data collection and reporting, and operation and maintenance of NEVI funded projects. Additionally, it acknowledges the expertise of each agency and seeks to leverage areas of expertise to establish an interconnected network

of electric vehicle charging stations and facilitate access, data collection and reliability.

## 3. Public Engagement

MDT and DEQ will work with vendors to conduct more targeted outreach to individual communities and stakeholders after the agencies finalize priority communities for NEVI projects along the corridors. Vendors will be required to develop a community engagement strategy that will identify community priorities, benefits, metrics, and impacts of electric vehicle supply equipment (EVSE) projects in each community and the surrounding area. The community engagement strategy will focus on priority locations and communities along the Alternative Fuel Corridors and smaller communities where residents commute to locations along the AFCs for employment, healthcare, shopping, and other essential services.

#### **Community Engagement Outcomes Report**

Activity/Date	Stakeholders	Communities	Topics	Key
	Engaged	represented	Discussed	Outcomes
Montana Clean Energy Fair* <sup>1</sup>	Current & potential electric vehicle drivers, OEM"s, members of non-profit community organizations	Statewide	Montana's NEVI Plan, funding, financing, and incentives for EVs	Disseminated information on upcoming funding opportunities and federal/state incentives for EVs
Electrify the Big Sky Conference/September 2022*	Montana rural electric cooperative leadership and members	Communities and electric cooperatives from across Montana; policy makers; about 300 attendees from communities across Montana including Tribes and DACs.	Vehicle electrification, Montana's EV Deployment Plan goals, how to create a statewide EV network	Public education on electric vehicle technologies, rate design, and state plan for NEVI fund deployment
Conservation Board Meeting/September 2022	Members of Livingston City Council; Conservation Board	Livingston	NEVI Plan priorities; discretionary exceptions	Understanding of Livingston's challenges with 1-mile from corridor requirement. Conservation
Charge West	Clean Cities, MT,	West Yellowstone,	Regional and	board Discussed

#### **Table 1 – Community Engagement Activities**

<sup>&</sup>lt;sup>1</sup> **Bolded**\* indicates participation and outreach activity that included Disadvantaged Communities

event/September 2022	ID, WY	Gardiner,	multi-state	more regional
•	Departments of	Bozeman, Big Sky	coordination on	coordination
	Tourism, electric		NEVI	between MT,
	vehicle station site		infrastructure	ID, and WY
	hosts		build out	on NEVI
				planning and
				charging
				infrastructure
				in gateway
				communities
				to
				Yellowstone
Montana Automobile	Automobile	Statewide	Dealership	Clearer
Dealers Association	Dealers		requirements	understanding
Electric Vehicle			for charging	of what
Working Group			infrastructure	dealers are
			and interest in	being required
			participating in	to install. Six
			a CFI	dealers were
			application	included in
				DEQ's CFI
				application.
Montana State Fire	Fire department	Statewide	Lithium-ion	Discussion on
Chiefs' Association &	chiefs & volunteer		battery fire	a future
Montana State	firefighters		hazards	hands-on
Volunteer Firefighters'				training for
Association/June 2023				EV and
				battery safety

#### **Statewide Listening Session\***

On July 10, 2023, DEQ and MDT hosted a virtual listening session to provide updates on Montana's EV Deployment Plan, answer questions, and accept comments to inform Montana's Deployment Plan and implementation of NEVI funds. Over 100 people attended the webinar and more than 150 people registered. Attendees included members of local governments, state agencies, utilities, tribes, community organizations, and those representing DACs. Following the webinar, DEQ and MDT sent out an e-mail to attendees and registrants of the webinar with a link to the recording and notification of an opportunity to provide comments and meet with both agencies about the update to the NEVI Plan.

During the listening session, participants had questions about recent developments with the North American Charging Standard (NACS) and how the State was thinking of incorporating NACS into the plan. Participants encouraged the Agencies to designate additional corridors as AFCs so that more travel routes and locations are eligible for funding. The Agencies plan is to focus on build out of the current AFC's so remaining NEVI funds can be spent in later years in off-corridor locations. There were also questions and comments about coordinating closely with Electrify America and other private entities that are installing charging stations along AFCs. The Agencies plan to incorporate feedback received during the listening session into the solicitation process.

#### **Tribal Engagement**

Prior to the July 10 webinar and listening session, DEQ reached out to representatives from Tribes and Tribal business development organizations to make sure they were aware of the webinar and to distribute

it to the contacts at their Tribes. DEQ also reached out to the Tribal liaison in the Governor's office and DEQ's Tribal and cultural liaison about the webinar and requested they share with their contacts.

Montana has seven federally recognized Indian reservations. Each of these reservations is a DAC. Six of the seven reservations are located along the AFCs, which are critical travel routes for each of the tribal communities. The Agencies will continue to reach out directly to Tribes, tribally based community and business development organizations and will include a specific Tribal outreach strategy in our community engagement strategy and plan.

#### **Utility Engagement**

The Agencies maintain a collaborative relationship with Montana's investor-owned utilities and rural electric cooperatives on electric vehicle charging station planning. The State has had meetings with these utility providers to discuss electric vehicle infrastructure, load impacts, and Montana's NEVI Plan. In February, the Agencies met with Montana's largest utility, NorthWestern Energy, to discuss the utility's role and interest in electric vehicle charging stations and the NEVI program. DEQ also worked closely with several rural electric cooperatives on locations in their service territory that were part of Montana's application for a CFI discretionary grant. Two rural electric cooperatives were included as project partners to own and operate CFI-funded charging locations in four communities within their service territory.

The Agencies are also working with each of the utility providers along designated AFCs on a new construction form for DCFC stations. This form will be used for NEVI applications to demonstrate that charging station owners, operators and site hosts have worked with their utility to provide and gather information about charging station capacity, load impacts, necessary upgrades, additional costs and distributed generation and storage needs at NEVI sites.

Montana's Electric Vehicle Infrastructure Prioritization Study<sup>2</sup> also included an electric supply assessment which analyzed the community-level capacity for each recommended charging location along the AFCs, based on information provided by the electric utilities. This study is a starting point to identify general locations that may be capacity constrained or where additional upgrades may be necessary. Of the FY22-23 priority locations, Columbus and Superior were identified in the EV Prioritization Study as possibly having capacity constraints at certain locations. The analysis also evaluated locations where battery storage may help reduce utility upgrade costs. More thorough site-specific analysis will need to be conducted in coordination with the electric utilities, site hosts, and owners and operators to determine whether upgrades are necessary and the extent of these upgrades. This analysis will be a critical step to help ensure that charging stations are sited in locations that minimize costs and grid impacts.

#### **Site-Specific Public Engagement**

The priority locations for FY22-23 that Agencies have identified are preliminary until a final competitive solicitation is issued. Until the RFP is issued, the Agencies will work with the third-party charging station owners and operators to develop a plan to engage with communities on the preliminary list to gauge interest and understand specific costs associated with each location. The Agencies will continue to monitor investment from private charging station owners/operators in publicly available charging locations in communities along AFC's. After the RFP is issued, the Agencies will work with successful vendors to focus on more site-specific public engagement to ensure that there is community input into siting, design, operation, and maintenance of NEVI-funded projects.

In spring 2023, MDT issued a Request for Information (RFI) to better understand interested parties'

<sup>&</sup>lt;sup>2</sup> AECOM, Montana Electric Vehicle Infrastructure Prioritization Study, June 2022.

preference on project solicitation methods and project details. The RFI included questions regarding the potential number of locations and cost thresholds for bundling EV charging locations to ensure project solicitations are sized appropriately to garner broad interest. There were twenty respondents to the RFI. Overall, MDT learned interested parties prefer bundling locations and would submit proposals with a project cost in the \$1.5-\$10-million-dollar range.

To determine interest in a potential application for Charging & Fueling Infrastructure (CFI) funding, DEQ released a Request for Interested Partners (RFIP) asking respondents to provide specific site locations, budgets, and configuration of charger types (DCFC/Level 2). DEQ applied on behalf of 27 project partners that would be subrecipients of CFI funds with DEQ acting as the pass-through for funding. If awarded funding, the Montana CFI project would partially fund charging locations in 28 communities to install 210 DCFC plugs and 126 Level 2 plugs.

The RFIP and outreach to communities, including entities that decided to not participate in the application, provided an opportunity to provide education about electric vehicles and charging infrastructure needs as well as provide updates on NEVI planning. Partners include two electric cooperatives, six local governments, six automobile dealerships, and locations within two Indian Reservations.

The response to the RFIP for charging locations with specific locations will compliment this NEVI Deployment Plan. Project partners include sites located off AFCs, more than a mile off AFCs, and Level 2 charging equipment. If DEQ is awarded CFI funds, the specific locations will be included in the 2024 NEVI Deployment Plan update.

## 4. Plan Vision and Goals

Montana's 2023 Plan update lays out the same vision and goals that were described in the state's 2022 EV Deployment Plan. The vision of Montana's Plan is to efficiently, equitably, and strategically deploy funding to support an interconnected network that provides Montana EV users and visiting EV drivers reliable and affordable access to EV charging infrastructure. Montana's These goals include:

- 1) Corridor build-out
- 2) Rural connectivity
- 3) Affordability
- 4) Outcome-oriented data collection
- 5) Reliable operation

Since Montana's 2022 EV Deployment Plan was approved last year, FHWA has provided additional guidance on data collection and reliability. This includes submitting data from EVSE stations funded with NEVI dollars to the EV Charging Analytics and Reporting tool (EV-ChART). Montana will also participate in the EV-ChART pilot group to help support development of the tool, so it is useful for states and other project partners.

Additionally, the Agencies will work to develop monitoring, reporting, and enforcement strategy that ensures that EVSE infrastructure meets 97 percent uptime requirements in the final NEVI rule. This strategy will focus on avoiding downtime by requiring that project owners/operators have experience and a track record of reliable operation. Additionally, the Agencies will work with EVSE owners/operators to develop a charging station performance management plan that outlines steps to remedy uptime defaults as quickly as possible.

Montana plans to meet the final NEVI rule requirement that at least four 150kW CCS charging ports be

installed at each location. Montana's 2022 EV Deployment Plan contemplated a phased approach, which would have considered installing two rather than four 150kW CCS ports at certain locations that have low utilization. The Agencies will continue to evaluate approaches such as battery storage and charging demand management to address the economic challenges at locations along corridors that will have lower utilization.

**Year 1 Quantitative goal:** Montana considers Year 1 to be the year that the state releases the first RFP for NEVI-funded projects. Montana will continue to focus on filling large charging gaps with stations no more than 100 miles apart along Interstates 15 (I-15), 90 (I-90), and 94 (I-94). Approximately 10 new locations will be needed to fill these large gaps with spacing of no more than 100 miles. The total number of locations funded may change depending on private investments along interstate highways and locations with higher traffic volume and potential utilization relative to other sites on the priority location list.

**Year 2-5 Focus Areas:** After large gaps along interstates are addressed, the State will prioritize locations that fill large charging gaps along US-2 and US-93 with stations no more than 100 miles apart. After stations are built out and 100-mile charging gaps are filled, the State will prioritize locations spaced no more than 50 miles apart as required by NEVI. Gateway communities to national parks and recreation/tourism destinations will also be a priority for investment. The State does not expect to nominate additional U.S. Highways as AFC's.

Montana does not anticipate that there will be additional NEVI funding remaining after the corridors are built-out. Montana has over 2,000 miles of interstates/highways currently designated as AFC's. The 2021 EV Infrastructure Prioritization study estimated that the state would need at least 36 additional locations to meet the 50-mile spacing requirements in the NEVI final rule. Montana will continue to track non-NEVI funded investments and locations to determine how to prioritize funding for additional locations along designated corridors.

## 5. Contracting

#### **Status of Contracting Process**

Currently, there are no active solicitations for NEVI funding in Montana. MDT is in the process of determining which alternative contracting method to pursue to minimize risk and maximize value. The following outline gives an overview that could apply to any of the alternative contracting processes that are being considered.

MDT would issue a Request for Qualifications, to which proposing entities will respond with a Statement of Qualifications. MDT would then score the Statements of Qualifications (RFQ) and short-list qualified entities. Upon being short-listed, entities would receive a Request for Proposals from MDT. The firms would then respond with a Technical Proposal, along with a price proposal. Depending on MDT's selected method, the Price Proposal would either be in the form of a Lump-Sum Bid Price Proposal or a Construction Phase Multiplier. MDT would then score the Technical Proposals and calculate the best-value firm based on the Price Proposal and Technical Proposal scores. Upon selection, MDT would issue a Notice to Proceed to the successful entity. The entity would then complete the design process, and thereafter begin construction. MDT anticipates issuing an RFQ late winter 2023/spring 2024.

During the 2023 session in the State of Montana, legislation was passed to approve alternative contracting methods to expedite delivery of construction projects. This gives Montana flexibility in how to approach the contracting process. The program will be focused on public-private partnerships with the match and ownership coming from the private entity.

In spring 2023 MDT issued a Request for Information (RFI) to better understand interested parties' preference on project solicitation methods. The RFI included questions about MDT using their Best-Value Design-Build, Fixed Cost Design-Build, or Progressive Design-Build procurement processes. Twenty responses were received from a variety of entities.

#### **Awarded Contracts**

Currently, no contracts have been awarded under Montana's NEVI program. As mentioned above, Montana intends to use an alternative contracting method to deliver projects. Alternative contracting, such as design-build or progressive-design-build, can provide a more flexible approach as it allows for evaluation on technical in addition to cost, a more efficient timeline to get chargers on the ground, and provides a competitive solicitation process that will help with cost containment. Through the RFP process, Montana will evaluate proposals based on the quality of the application and their ability to demonstrate compliance.

#### **Scoring Methodologies Utilized**

As mentioned above, currently there are no solicitations or contracts for NEVI funding in Montana. The state will score the Technical Proposals and calculate the best-value firm based on the Price Proposal and Technical Proposal scores from the package the firms submit.

The technical proposal will also require applicants to describe how they will engage with community organizations and members to site, design and operate charging locations. Scoring will take into consideration proposals that include letters of support from local community organizations and individuals. Additionally, scoring will recognize proposals from small businesses.

#### Plan for Compliance with Federal Requirements

Montana intends to ensure compliance with 23 U.S.C, 23 CFR 680 and all applicable requirements under 2 CFR 200 through the RFQ/RFP process. Applicants will be required to demonstrate how they will follow all requirements, and how any subcontractors they may use will do the same. The scoring criteria will favor those applicants who are able to successfully demonstrate their plans for compliance.

## 6. Civil Rights

Montana intends to ensure compliance with State and Federal civil rights laws, including Title VI of the Civil Rights Act and accompanying USDOT regulations, the American with Disabilities Act, and Section 504 of the Rehabilitation Act. All NEVI funded projects will comply with applicable civil rights requirements. An additional consideration Montana will make to address compliance with EV charging infrastructure minimum standards under 23 CFR 680 is to require that charging station owners comply with the U.S. Access Board Design Recommendations for Accessible Electric Vehicles<sup>3</sup>. This includes requiring that charging stations include secure payment methods that are accessible to persons with disabilities and include at least one contactless payment method that accepts major credit and debit cards. Additionally, Montana will consider scoring criteria that includes site, facility, building, and elements, parking, and route accessibility to persons with disabilities.

<sup>&</sup>lt;sup>3</sup> U.S. Access Board. Design Recommendations for Accessible Electric Vehicles. *Updated 8/11/2022*. <u>https://www.access-board.gov/ta/tad/ev/usab-evse-guide.pdf</u>

## 7. Existing and Future Conditions Analysis

#### **Current EV Ownership in Montana**

Electric vehicle adoption in Montana has nearly doubled since 2022 when Montana submitted the initial EV Deployment Plan. There are now 4,555 plug-in electric vehicles registered in Montana. Of these, 3,152 are battery-electric vehicles and 1,403 are plug-in hybrid electric vehicles. Flathead County, Gallatin County, and Missoula County are still the top three counties for EV registrations. EVs still represent less than a quarter of 1% of all light duty vehicles registered in the state. Montana still has one of the lowest adoption rates in the country, but EV registrations have been increasing by about 25% year over year since 2019 when DEQ began collecting registration data. The State expects that EV adoption will be relatively low, but that the number of EV registrations will continue to trend upwards as the number of public charging stations increase, more vehicle models become available (particularly pick-up trucks), and the cost of electric vehicles declines. Montana still expects that most of the EVs travelling in Montana over the next five years will be driven by visitors from other states with higher EV adoption such as Oregon, Washington, and California.

#### **Grid Capacity**

The 2021 EV Infrastructure Prioritization Study identified communities along AFCs that may be capacity constrained and/or need upgrades to accommodate the additional load from NEVI-funded charging stations. After the State has identified priority locations and NEVI sites have been selected, charging station owners, operators and/or site hosts will need to demonstrate that they have worked directly with their electric utility provider to determine site-specific capacity availability and necessary upgrades to minimize grid impacts.

NorthWestern Energy, Montana's largest utility, estimated that the new load from DCFC stations at locations in their service territory along AFC's to be 9.6MW.<sup>4</sup> NorthWestern also estimated the forward-looking demand from additional build-out of public DCFC stations along other travel corridors in their service territory. The total demand that they estimated with the additional build-out of public DCFC is 42MW by 2032.

#### **Travel Patterns**

In the past year, the state travel patterns in Montana have largely remained the same. As shown in Figure 1, there has been a slight uptick in Urban daily vehicle miles traveled (DVMT) as compared to 2021. Furthermore, the annual average daily traffic (AADT) data in Table 2 shows that I-90 and US-93 remain the most heavily traveled corridors in Montana.

Montana roads open to the public consist of 73,571 miles, including 12,916 miles of MDT routes. As shown in Figures 1 and 2, the interstate system accounts for 1.62% of the overall road mileage in Montana and 25.9% of DVMT, which is slightly reduced from the prior year.

<sup>&</sup>lt;sup>4</sup> NorthWestern Energy, 2023 Integrated Resource Plan, Vol.2. pgs.56-57. <u>https://www.northwesternenergy.com/docs/default-source/default-document-library/about-us/erp-irp/2023\_montana\_irp\_volume\_2\_final.pdf</u>



Figure 1: Percentage of Miles by Road System in Montana







Figure 3: Traffic Flow of All Vehicles in Montana



#### Figure 4: Commercial Vehicle Traffic Flow in Montana

Figure 5: Daily Vehicle Miles Traveled by Urban and Rural Area in Montana



		Miles	2022 Weighted	2022 DVMT
			AADT	
I-90	Rural	481	10,257	4,932,544.194
	Urban	64	22,611	1,442,717.091
	Total	545	11,704	6,375,261.285
I-15	Rural	375	4,263	1,600,498.078
	Urban	21	12,755	267,709.786
	Total	396	4,713	1,868,207.864
I-94	Rural	239	4,683	1,117,898.049
	Urban	11	5,791	62,967.745
	Total	250	4,731	1,180,865.794
US-93	Rural	253	7,637	1,934,194.27
	Urban	33	20,672	688,039.813
	Total	287	9,151	2,622,234.083
US-2	Rural	644	2,251	1,449,067.117
	Urban	22	15,021	324,277.825
	Total	665	2,665	1,773,344.942

**Table 2: Average Annual Daily Travel Along Alternative Fuel Corridors** 

#### **Public Transportation Needs**

The public transportation network in Montana is operated by several different entities and comprises several modes, including rural and urban bus systems, passenger rail, demand response vehicles, vanpools, carpools, and passenger air service. Assets such as vans and buses are not permanent assets but are continuously replaced and updated based on life cycle, demand, and availability of funds. These services allow people who don't have access to private vehicles to shop, visit friends/relatives, get to medical appointments, go to work, and take vacations. MDT provides funding and support to transit providers to ensure efficient, reliable transportation services and helps enable every Montanan to fully participate in society.

Recently, two municipal transit agencies and one university (City of Missoula's Mountain Line, City of Billings' MET Transit, and University of Montana) received funds from the Federal Transit Administration (FTA) and DEQ for electric transit buses. Mountain Line currently has a fleet of 12 electric transit buses out of a total fixed route fleet of 29. Mountain Line received FTA funds for electric buses in FY2020, FY2021, and FY2022 for electric transit buses as well as an award from DEQ in 2019. In FY2023, Mountain Line received another award to build a new transit hub that will have the ability to house a fully electric transit bus fleet.

The University of Montana (UM) in Missoula received an FY2018 FTA award for electric transit buses that serve campus. At the same time, UM was also awarded funds from DEQ from a portion of the state's Volkswagen Diesel Emissions Settlement for two electric transit buses. UM previously worked with DEQ to use funds from EPA's Diesel Emissions Reduction Act to purchase its first two electric buses in 2016. UM currently plans to operate only electric buses for their daily routes. One challenge for the newest buses was supply chain delays for the new chargers. The first buses use overhead charging, but the new ones use CCS plugs. Until the new charging equipment arrived, the new buses traveled nearly four miles to the Electrify America location at Walmart. The new chargers were installed in late 2022 and are fully

operational.

MET Transit received its first FTA award in FY2022 to replace older diesel transit buses with four new electric ones. These will be the first electric transit buses outside of Missoula.

#### **Known Risks and Challenges**

The greatest known risk and challenge to EV station deployment in Montana continues to be low utilization of charging stations, especially in the early years of the NEVI program. The Agencies anticipate that low utilization will make recovery of capital and operating costs of EV infrastructure challenging. The Agencies will continue to consider approaches to help charging infrastructure owners/operators reduce their capital and operating costs. For example, Agencies will evaluate the cost and value of battery storage to help mitigate demand charges in less utilized locations.

One of the challenges Montana identified in the 2022 EV Deployment Plan was the inability of charging station owners/operators to charge by the kilowatt-hour. This was due to a prohibition on charging "based on the cost of electricity" in Montana statute. The 2023 Legislature passed, and the Governor signed HB55 which repealed the language that prohibited charging based on the cost of electricity (e.g., charges per kilowatt-hour).

HB55 also imposed additional fees and requirements on DCFC charging station owners/operators. Rulemaking for HB55 is underway, but the new statute could create additional costs for EVSE owners/operators. The legislation imposes a 3 cent/kilowatt-hour tax on the electricity sold at public DCFC stations. This may require owners/operators of NEVI stations to install additional electric metering infrastructure at their locations.

Another challenge that Montana foresees is verifying the requirement in 23 CFR 680.106(3)(m) that limits the uses of income from the revenue earned from the operation of the EV charging stations. It will be challenging for the State to track and verify revenues of private owners and operators of EV charging stations are only being used for the purposes listed in regulation. The State plans to seek additional guidance and examples from other states on how to verify and track revenue earned from private entities that own and operate charging stations.

#### Alternative Fuel Corridor (AFC) Designations



**Figure 6: Montana's Alternative Fuel Corridors** 

Montana has not submitted additional nominations for new AFC corridor designations since the 2022 EV Deployment Plan was submitted.

#### **Existing Charging Stations**

#### Table 3: Existing EV Infrastructure in Montana

State EV Charging Location Unique ID*	Charger Level (DCFC, L2)	Route	Location (street address)	Number of Charging Ports	EV Network (if known)	Meets all relevant requirements in 23 CFR 680?	Intent to count towards Fully Built Out determination?
49871	L2	I-90 & US- 93	2715 Brooks St, Missoula	1	Non-networked		
74624	L2	I-90 & I-94	2100 King Ave W, Billings	1	Non-networked		
74625	L2	US-2 & US-93	2505 Highway 2 E, Kalispell	1	Non-networked		
80048	L2		308 E Park St, Gardiner	2	Non-networked		
82168	L2	I-90 & I-94	2133 King Ave W, Billings	1	Non-networked		

86909	L2		47 Town Center	2	ChargePoint		
			Ave, Big Sky				
86913	L2		25 Town Center	2	ChargePoint		
			Ave, Big Sky				
87730	L2	I-90	820 N Wallace	1	Non-networked		
			Ave, Bozeman				
99310	L2	I-90 & US-	201 E Front St,	2	Non-networked		
		93	Missoula				
99796	L2	I-90	510 N 7 <sup>th</sup> Ave,	1	Non-networked		
			Bozeman				
100462	L2	I-90	239 E Oak St,	1	Non-networked		
			Bozeman				
103926	L2	I-90	223 Haugan	2	Tesla		
			Deborgia E,				
			Saltese				
104819	L2		14735 Sylvan Dr,	1	Non-networked		
			Bigfork				
114626	L2	I-90	2701 N Montana	3	Tesla		
			Ave, Helena				
114628	L2	US-2 &	20 N. Main Street,	2	Tesla		
		US-93	Kalispell				
114629	L2		288 Lake	2	Tesla		
			McDonald Lodge				
			Loop Rd, Lake				
			McDonald				
114630	L2	I-90 & US-	823 39th St,	2	Tesla		
		93	Missoula			_	
114632	L2		305 N Oakes Ave,	4	Tesla		
			Red Lodge			_	
114633	L2		601 S Broadway	4	Tesla		
			Ave, Red Lodge				
114634	L2		250 South Canyon	3	Tesla		
			St, West				
			Yellowstone			_	
114635	L2		315 Yellowstone	3	Tesla		
			Ave, West				
			Yellowstone	-			
114636	L2	US-93	1380 Wisconsin	2	Tesla		
	-		Ave, Whitefish				
121706	DCFC	I-90 & US-	3555 Mullan Rd,	4	Electrify	Yes	Yes
	-	93	Missoula		America		
121712	DCFC	I-15	24 Main Street,	4	Electrify	Yes	Yes
			Dell		America	<u> </u>	
143151	L2	1-90	232 S Main St,	2	ChargePoint		
1.1.10=0			Livingston			<u> </u>	
144372	L2	1-90	121 E Griffin Dr,	1	Non-networked		
			Bozeman	-		<u> </u>	
144374	L2	1-90	540 Alaska	2	Non-networked		
			Frontage Rd,				
			Belgrade				

145527	L2		303 E Main St, Cooke City	1	Non-networked		
1476555	L2	I-94	511 2nd Avenue, Custer	2	SemaConnect		
155687	L2	I-90 & US- 93	1776 Stephens Ave, Missoula	2	Non-networked		
164271	L2	I-15	600 River Dr S, Great Falls	2	ChargePoint		
164638	L2	US-2 & US-93	183 Montclair Dr, Kalispell	2	ChargePoint		
167373	L2	I-15	1000 3rd Street NW, Great Falls	2	ChargePoint		
168410**	DCFC	I-90	31908 Frontage Rd, Bozeman	4	EV Connect	No	No
170364	DCFC	I-15 & I-90	122000 W. Browns Gulch Rd, Butte	4	Electrify America	Yes	Yes
170726**	L2	I-90 & I-94	1041 N 29th St, Billings	2	Non-networked		
186597**	DCFC	I-90 & US- 93	8500 Truck Stop Rd, Missoula	1	Non-networked	No	No
186598**	DCFC	US-93	105 Ridgewater Dr, Polson	1	Non-networked	No	No
186599**	L2	I-90 & I-94	210 N 27th St, Billings	4	Non-networked		
191551	L2		106 West Shore Road, Babb	2	SemaConnect		
194532	L2	US-2 & US-93	2510 U.S. Highway 2, East Kalispell	2	Non-networked		
194533	L2	US-93	1600 Hospital Way, Whitefish	4	Non-networked		
194534	L2	US-93	402 E 2nd St, Whitefish	2	Non-networked		
202570**	L2		204 W Wallace St, Virginia City	2	Non-networked		
204510- 12 & 204514	DCFC	US-93	6024 U.S. 93 S, Whitefish	4	ChargePoint	No	No
204513	L2	US-93	6024 U.S. 93 S, Whitefish	2	ChargePoint		
205871	DCFC	I-90 & US- 93	5243 Trumpeter Court, Missoula	1	ChargePoint	No	No
206160, 206302, 206320, 206322**	L2	I-90 & US- 93	University of Montana, Missoula	8	ChargePoint		

<sup>&</sup>lt;sup>5</sup> This location is not included in the June 28, 2023 AFDC Station Locator data but was included in the AFDC information in the original Deployment Plan. This is still an active location despite not being included in the 2023 AFDC data.

206370	L2	I-90 & I-94	3045 King Ave W, Billings	2	ChargePoint		
213541**	L2	I-15	710 S Atlantic St,2ChargePointDillon				
214084**	L2	I-90 & I-94	1901 Terminal Cir, Billings	6	EVGateway		
214085**	L2	I-15	375 S Alice St, Helena	2	EVGateway		
214337**	L2		375 US Hwy 89 S, Gardiner	2	ChargePoint		
214338**	DCFC		375 US Hwy 89 S, Gardiner	1	ChargePoint		
214647	L2	US-2	550 Hidden Estates Rd, Troy	2	Non-networked		
220467	L2	I-15	409 3rd Street NW, Great Falls	2	SemaCharge		
223714**	DCFC, L2		825 Pine Dr, Seeley Lake	4	ZEFNET		
225186- 225189	L2	US-2	50 Museum Loop, Browning	4	Rivian Waypoints		
227236	DCFC	US-93	2915 U.S. 93 S, Kalispell	1	ChargePoint	No	No
231076	L2	I-15	800 Central Ave, Great Falls	1	Blink		
236451**	L2	US-93	223 S 2nd St, Hamilton	2	EVGateway		
238057	L2	I-94	100 Ford Ave, Glendive	2	Blink		
250741	L2	I-90	8014 S Frontage Rd, Billings	2	EVGateway		
250811	DCFC	I-90	403 Main St, Billings	4	Electrify America	No	Yes
253837	L2		367 Pheasant Tail Ln, Big Sky	2	ChargePoint		
254260	L2	US-93	33791 Fox Ln, Polson	1	Non-networked		
301942	L2		#42 Montana Highway 84, Norris	1	Non-networked		
302383	L2	I-15	3900 10 <sup>th</sup> Ave S, Great Falls	2	ChargePoint		

\* Locations & information downloaded from the U.S. Dept. of Energy's AFDC Station Locator on July 27, 2023. Data search included only CCS and J1772 connectors. One location previously identified as 216391 in the AFDC Station Locator is no longer publicly available and only available to employees. \*\*Funded in part by Montana's Volkswagen Settlement funds.



Figure 7: AFCs and Existing Public DCFC/LEVEL 2 Locations

## 8. Charging Infrastructure Deployment

#### Strategy for EV Charging Infrastructure Installation

Montana's overarching state strategy for EV charging infrastructure installation to meet the vision and goals of the state's EV Deployment Plan is to facilitate intrastate and interstate electric vehicle travel that supports Montana's rural and tourism economies. In addition to meeting the minimum standards in 23 CFR 680, the state will give priority consideration to locations that are anticipated to benefit rural economies, particularly those that serve DACs, are located at the intersection of at least one AFC and another important travel route ("hubs") and those located in gateway communities to national parks and other recreation areas.

The Agencies will coordinate with local governments on EV-charging specific zoning and permitting requirements. The Agencies will also coordinate with utilities, community organizations, and other non-governmental organizations to coordinate education and information dissemination regarding electric vehicle charging station best practices for siting, design, operation, and other aspects.

#### **Funding Sources for Non-federal Share**

The Agencies expect that the non-federal share of NEVI Formula program funds will come from private entities that will own and operate the charging stations on private property. The State does not plan to provide state funds to cover the match. In some cases, the non-federal match could come from local governments

## 9. Planned Charging Stations

#### **Stations Under Construction**

The Agencies are not aware of any charging stations under construction at the time of this Plan update.

State EV Charging Location Unique ID	Route (note if AFC)	Location (street address, if known)	Number of Ports	Estimated Year Operational	Estimated Cost (total cost)	NEVI Funding Sources (Choose No NEVI, FY22/FY23, FY24, FY25,	New Location or Upgrade?
						FY26, or FY27+)	
St. Regis <u>or</u> Superior	I-90 (AFC)	Unknown	At least 4	2024	\$900,000	FY22/23	New
Three Forks	I-90 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23	New
Livingston	I-90 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23	New
Columbus	I-90 (AFC)	Unknown	At least 4	2024	\$900,000	FY22/23	New
Crow Agency	I-90 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23	New
Custer	I-94 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23	New
Forsyth	I-94 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23 or FY24	New
Terry	I-94 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23 or FY24	New
Melrose	I-15 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23 or FY24	New
Craig	I-15 (AFC)	Unknown	At least 4	2024	\$800,000	FY22/23 or FY24	New

#### **Table 4: NEVI Planned Stations\***

\*Locations are tentative and will not be finalized until the State issues a solicitation for projects

#### Table 5: Other Planned Stations

Charger Level (DCFC, L2)	Route	Location (street address)	Number of Charging Ports	EV Network (if known)	Meets all relevant requirements in 23 CFR 680?	Intent to count towards Fully Built Out determination?
DCFC & L2	I-15	215 N Main St, Conrad**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC & L2	I-15	635 N Montana St, Dillon**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC	I-15	1400 10 <sup>th</sup> Ave S, Great Falls	4	Electrify America	Yes	Yes
DCFC & L2	I-15	3715 31 <sup>st</sup> St SW, Great Falls**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC	I-15	3303 Montana Ave, Helena	4	Electrify America	Yes	Yes
DCFC & L2	I-15	1822 Custer Ave, Helena**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC & L2	I-90	20A Big Timber Loop Rd, Big Timber**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC & L2	I-90	2711 Frontage Rd, Billings**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC	I-90	2550 Catron St, Bozeman	4	Electrify America	Yes	Yes
DCFC & L2	I-90	203 N Main St, Deer Lodge**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC & L2	I-90	1010 N Crawford Ave, Hardin**	2 DCFC, 2 L2	ChargePoint	No	No
DCFC	I-94	73 MT-16, Glendive	4	Electrify America	Yes	Yes
DCFC	I-94	1210 S Haynes Ave, Miles City	4	Electrify America	Yes	Yes
DCFC & L2	US-93	1117 N 1 <sup>st</sup> St, Hamilton**	2 DCFC, 2 L2	ChargePoint	No	No

DCFC & L2	US-2	905 W 9 <sup>th</sup> St, Libby**	2 DCFC	ZEF Energy	No	No
DCFC & L2	US-2 & US- 93	15 Depot Park, Kalispell**	2 DCFC, 2 L2	ZEF Energy	No	No

\*\*Funded in part by Montana's Volkswagen Settlement funds.

#### Figure 8: Other Planned DCFC Locations



#### Planning Towards a Fully Built Out Determination

Montana's strategy for achieving fully built out status along each of the corridors in the following order:

- 1) To the extent possible, coordinate with private electric vehicle charging companies that are operating public charging networks to determine where they are building new, and upgrading existing, charging locations along each of the corridors.
- 2) Identify existing charging gaps of 100 miles or greater along each of the interstates. Priority locations in the RFP's will fill these gaps.
- 3) Prioritize locations that fill 50-mile gaps along each of the interstates.
- 4) Focus on addressing charging gaps of 100 miles or greater along both U.S. Highways.

5) Prioritize locations that fill 50-mile gaps along both U.S. Highways.

The State will prioritize "hubs," communities that are located at the intersection of at least two AFCs or an AFC and other key travel routes (U.S. or State highways). Additionally, the State will prioritize gateway communities to Glacier and Yellowstone National Parks and other key recreation areas that have the potential to attract significant EV traffic.

Montana anticipates that an additional 36-42 locations will be necessary to achieve fully built-out status along the AFCs. This is based on analysis in the Montana Electric Vehicle Infrastructure Prioritization Study. Additional locations may be necessary, if charging locations in bordering states do not meet distance requirements to achieve fully built out status along each of the corridors. Montana anticipates reaching built-out status on AFCs by 2036.

## **10. Implementation**

The State will execute an agreement with third parties to construct, operate, and maintain the charging infrastructure according to the requirements established in 23 CFR 680. Applicants for NEVI funding will be required to submit a detailed operation and maintenance plan that includes snow removal, operation during inclement and extreme weather, and public safety considerations.

The state will require that applicants provide documentation to ensure that work is performed by qualified laborers and technicians. Additionally, the state will require documentation that all electricians installing, operating, or maintaining electric vehicle infrastructure are EVITP certified or have graduated from a registered apprenticeship program for electricians that includes charger-specific training. The Agencies will continue to work with labor unions and other workforce development programs to discuss and receive their feedback on workforce development and requirements as they relate to the NEVI programs.

## **11. Equity Considerations**

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

The Agencies have conducted statewide outreach as part of the development of this Plan update. The Agencies plan to work with successful vendors on developing a community outreach and engagement strategy after the priority communities for each fiscal year of NEVI-funding are finalized. Representatives from DAC's participated in the NEVI Plan listening session on July 10, 2023. The Agencies plan to use the Justice40 Map<sup>6</sup> tool as well as the U.S. Department of Transportation's Equitable Transportation Community (ETC) Explorer<sup>7</sup>, and other tools to help identify communities that are underserved and burdened when it comes to access, environmental impacts, and other indicators.

<sup>&</sup>lt;sup>6</sup> Argonne National Laboratory, Electric Vehicle Charging Justice40 Map tool. https://anl.maps.arcgis.com/apps/webappviewer/index.html?id=33f3e1fc30bf476099923224a1c1b3ee

<sup>&</sup>lt;sup>7</sup> https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/Homepage/

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

Benefits Categories identified in EV Deployment Plan	Strategy for Tracking Benefits (Metrics, Baseline, Goals, Data Collection & Analysis Approach, Community Validation)
Increasing access to clean transportation options	Number of EV chargers installed in locations along AFC's with a focus on DAC's. Number of charging locations outside of DAC's that serve residents of DAC's who commute to locations for work, healthcare, commerce, or other essential services. Outreach to communities will be conducted prior to site selection to determine if certain sites are or are not accessible to residents of DAC's.
Supporting local economies and businesses by providing an additional service for residents and visitors	Dollars spent on EV charging infrastructure, owned by, or providing revenue to organizations located in DACs. Number and percentage of charging infrastructure owned that provide revenue to organizations and residents of DAC's.
Reducing public exposure to transportation emissions and public health impacts	Estimate of reduced tailpipe emissions from EV's served by charging infrastructure in DAC's and communities that serve DAC's. New modeling tools will likely need to be developed to estimate per charging station tailpipe emission reductions. Baseline emissions will be based on average light duty vehicle miles travelled and percentage of EV's in light duty vehicle registrations in each county. EPA MOVES emission modeling and EPA's EJ Screen, and other tools will be used to determine baseline emissions and public exposure to transportation emissions, particularly vulnerable populations.
Improving air quality	Estimate current air quality impacts from transportation emissions and estimated increased electric vehicle adoption after charging stations are installed. Estimate reduction in air pollutants including carbon monoxide, nitrogen oxides, ozone, and particulate matter will be estimated.
Increasing equitable adoption of EV's by increasing access to affordable charging options	Comparing EV registration data before and after charging stations are installed. Estimate dollars per year saved by EV drivers in fuel, maintenance and other and operating costs compared to equivalent gas- powered vehicles.

#### **Table 6: EV Infrastructure Benefits and Metrics to Track Benefits**

These initial benefit categories will be refined as the Agencies engage with communities where NEVI projects will be located. Additional or alternative benefit categories may be included to address each communities' priorities for clean, affordable, and equitable transportation access and the benefits that are important to them.

## 12. Labor and Workforce Considerations

Montana will ensure that installation and maintenance of EV infrastructure is carried out by a highly skilled and trained workforce. The installation and maintenance work will be done in compliance with 23 CFR 680 106(j) and Montana permitting and licensure requirements for electrical work or other skilled labor. Montana will require charging station owners to verify through documentations that all electricians

installing, operating, or maintaining EVSE has certification from the Electric Vehicle Infrastructure Training Program (EVITP) or have graduated from a registered apprenticeship program for electricians that includes charger-specific training. The state will enforce workforce requirements by requiring charging station owners and/or operators to submit documents in their application that demonstrate compliance with workforce training and experience requirements. Language will be included in the operations and maintenance agreement that requires charging station owners and operators to submit regular reports that demonstrate compliance with 23 CFR 680.106(j). All projects using NEVI funds will be required to pay Davis Bacon wages.

## 13. Physical Security & Cybersecurity

The State will comply with requirements in 23 CFR 680(106) as well as state law to ensure that consumer data is protected as well as the physical and cybersecurity of EV charging infrastructure. The State will require the owners and operators of NEVI-funded EV charging stations to submit a cybersecurity plan that demonstrates compliance with state and federal laws. The State will also require an operations and maintenance plan that includes a schedule and action plan for preventing and addressing risks and damage to charging station hardware.

## 14. Program Evaluation

After NEVI locations are installed, Montana will include an assessment on the performance of the chargers based on data the state will collect from owners and operators on quarterly, annual, and one-time bases. This includes verifying that peak charging session power for each port does not fall below 150kW, that a 97% uptime per port is maintained, and that maintenance and repair costs do not significantly exceed costs estimate by station owners. The State will continue to monitor any third-party hosted website that tracks charging station uptime, charging session success rates, and other operations data. The State will at minimum require self-reporting of necessary data and may conduct site visits to NEVI locations after installation and at regular intervals over the 5-year monitoring and reporting period.

The State will evaluate the success of each NEVI-funded charging location based on the following factors:

- 1) Each charging station and location is delivering economic and environmental benefits identified in Table 6 of this plan and verified in coordination with communities that are served by each of the locations.
- 2) EV charging infrastructure is being maintained according to the operations and maintenance plans submitted by the vendors and approved the State.
- 3) Each port is achieving at least 97% uptime

## **15. Discretionary Exceptions**

Montana is not seeking any discretionary exceptions at this time. The State will continue to monitor progress as the program develops and will continue to work closely with the FHWA Division Office and Joint Office on any issues that may trigger the need for an exception waiver on future annual updates to the Plan.

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