

Electric Vehicle Infrastructure Study SB 2061

September 30, 2020



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Executive Summary:

The popularity of using alternative fuel vehicles, such as electric and plug-in hybrid vehicles continues to grow across the United States. Currently the state has 166 Electric Vehicles (EV) and 193 Plug-in Hybrid vehicles registered, which is an increase from 150 EVs and 177 Plug-In Hybrids in 2019. ***Attachment A on pages 17-18 shows a county listing of where electric and hybrid vehicles are in North Dakota.***

The 66th Legislative Assembly passed two bills related to Electric Vehicle (EV) guidelines for parking spaces (HB1405) and annual vehicle registration fees (SB2016). The fees of \$120 for each Electric Vehicle (EV), \$50 for plug-in hybrid electric vehicles and \$20 for each electric motorcycle, established in SB2061 are intended to offset lost revenue for road funding on state registered vehicles.

The North Dakota Department of Transportation (NDDOT) has collected approximately \$24,030 in electric vehicle and plug-in hybrid fees from July 1, 2019 to July 1, 2020.

Within SB2061 is Section 2 which discusses a legislative study.

<https://www.legis.nd.gov/assembly/66-2019/documents/19-0516-04000.pdf>

The Electric Vehicle Infrastructure Study's purpose is to research infrastructure for EV's in North Dakota, as well as the economic impact.

After discussion with members of the Interim Agriculture and Transportation Committee, it was determined that the Electric Vehicle Infrastructure Study shall consist of three takeaways from this assignment and a report will be sent to legislative management upon completion:

- Design jointly owned public and private network
- Make recommendations regarding EV charging infrastructure
- Review costs and benefits of various options and future economic impact.

The SB2061 assignment for an Electric Vehicle Infrastructure Study expanded the Electric Vehicle (EV) Coalition's role as members worked together to research electric vehicle charging station infrastructure and rates, as well as economic impact to state funding and roadways. NDDOT conducted a series of meetings with EV Coalition members in 2019 and 2020.

The study committee determined that an electric charging station can be located on private and/or public property. It was also designated that a charging network facilitates electric vehicle movement in North Dakota. There are three levels of charging stations commonly used in homes, public places and the workplace. It is important to note that charging speeds are dependent upon several factors including the size of the charger (kilowatts per hour), type of connection and size of battery being charged.

NDDOT has done some analysis on EV charging coverage based on distance needed according to the FAST Act requirements. USDOT established a program to designate alternative fuels corridors across the U.S. in which the guidelines require EV stations to be placed at no more than 50-mile intervals and be located within 5 miles of the corridor. The FAST

Act is currently scheduled to end September 30, 2020. There may be a possibility that the next highway bill could change the spacing requirements for EV Charging Stations. It is recommended North Dakota adopt the most current federal spacing requirements for alternate fuels corridors for the interstate system. This will allow us the flexibility to increase the spacing requirements at a later date should the next highway bill increase the spacing requirements.

The study committee respectfully submits three recommendations for consideration:

- Recommendation: EV Charging stations should be privately owned and publicly available. Similar to how gas stations operate in the state.
- Recommendation: Century Code that may affect EV charging station infrastructure should be reviewed by state legislators. See Attachment D
- Recommendation:
 - Adopt the most recent federal spacing requirements for the Interstate System
 - Adopt a 75-mile spacing or the most recent federal spacing requirements (whichever is greater) for the remainder of the state.

Acknowledgement: We would like to thank the EV Coalition members for providing valuable information and assisting in researching data for this study. The EV Coalition consists of 33 key stakeholders including representatives from NDDOT, Basin Electric, Capital Electric, Montana Dakota Utilities, Lignite Energy Council, City of Bismarck, ND League of Cities, Department of Commerce, Bismarck MPO, Bismarck Mayor, Department of Health, Greater North Dakota Commerce, Great River Energy, North Dakota Chamber, North American Coal, Xcel Energy, Alliance for Automotive Innovation, General Motors, ND Rural Electric Cooperatives, North Dakota Association of Counties, Upper Great Plains Transportation Institute, Governor's Office, Public Service Commission, Federal Highway Administration, Otter Tail Power Co, Cass County Electric Cooperative, ND Utility Shareholders, Zef Energy, Greenways2go, Minnkota Power Cooperative, ND Air Quality, and ND Motor Carriers Association.

Purpose and Need:

The Electric Vehicle Infrastructure Study's purpose is to research infrastructure for EV's in North Dakota, as well as the economic impact.

After discussion with members of the Interim Agriculture and Transportation Committee, it was determined that the Electric Vehicle Infrastructure Study shall consist of three takeaways (listed below) from this assignment and a report will be sent to legislative management upon completion:

- Design jointly owned public and private network
- Make recommendations regarding EV charging infrastructure
- Review costs and benefits of various options and future economic impact

Definitions:

Electric Vehicle means a vehicle propelled by an electric motor powered by a battery, fuel cell, or other electric device incorporated into the vehicle and not propelled by an engine powered by the combustion of a hydrocarbon fuel, including gasoline, diesel, propane, or liquid natural gas.

Plug-in Hybrid Vehicle means a vehicle drawing propulsion energy from an internal combustion engine, an energy storage device, and a receptacle to accept grid electricity.

Background:

The 66th Legislative Assembly passed two bills related to Electric Vehicle (EV) guidelines for parking spaces (HB1405) and annual vehicle registration fees (SB2016). The fees of \$120 for each Electric Vehicle (EV), \$50 for plug-in hybrid electric vehicles and \$20 for each electric motorcycle, established in SB2061 are intended to offset lost revenue for road funding on state registered vehicles.

Within SB2061 is Section 2 which discusses a legislative study.

<https://www.legis.nd.gov/assembly/66-2019/documents/19-0516-04000.pdf>

Other states implement fees - More than half of states (28) have passed laws enacting special fees on electric and hybrid vehicles.

- States are rapidly adopting these laws: In 2013, only two states (Missouri and Nebraska) charged electric vehicles additional fees, but in 2019 alone, 10 states took action on electric and hybrid vehicle fees.

For your information a list of fees and charges other states have implemented can be found in Attachment B.

SECTION 2. LEGISLATIVE MANAGEMENT STUDY - ELECTRIC VEHICLE

INFRASTRUCTURE NETWORK. During the 2019-20 interim, the legislative management shall consider studying current methods, using the electric vehicle infrastructure coalition, led by the department of transportation, to collaborate with the North Dakota utility industry, and North Dakota electric vehicle stakeholder groups, to design a jointly owned public and private network of electric vehicle infrastructure to support both commercial and noncommercial vehicles and make recommendations regarding electric vehicle charging infrastructure. The study must include the evaluation of the relative costs and benefits associated with various options for electric vehicle infrastructure support and estimate the future annual economic impact. Legislative management shall report its findings and recommendations, together with any legislation necessary to implement the recommendations, to the sixty-seventh legislative assembly.

Electric Vehicle Coalition: Prior to the 2019 session, key stakeholders met and established an Electric Vehicle Coalition. The goal of the coalition is to work on connectivity of our transportation system and to prepare for the future of electric vehicles. The purpose of the coalition is to work with the key energy, automotive industry and government stakeholders to encourage the development of an electronic vehicle coalition and to proactively identify a variety of issues related to electric vehicles including but not limited to electric fueling/charging stations.

The 33 key stakeholders included representatives from NDDOT, Basin Electric, Capital Electric, Montana Dakota Utilities, Lignite Energy Council, City of Bismarck, ND League of Cities, Department of Commerce, Bismarck MPO, Bismarck Mayor, Department of Health, Greater North Dakota Commerce, Great River Energy, North Dakota Chamber, North American Coal, Xcel Energy, Alliance for Automotive Innovation, General Motors, ND Rural Electric Cooperatives, North Dakota Association of Counties, Upper Great Plains Transportation Institute, Governor's Office, Public Service Commission, Federal Highway Administration, Otter Tail Power Co, Cass County Electric Cooperative, ND Utility Shareholders, Zef Energy, Greenways2go, Minnkota Power Cooperative, ND Air Quality, and ND Motor Carriers Association.

Process:

The SB2061 assignment for an Interim Study expanded the Electric Vehicle (EV) Coalition's role as members worked together to research electric vehicle charging station infrastructure and rates, as well as economic impact to state funding and roadways. NDDOT conducted a series of meeting with EV Coalition members in 2019 and 2020.

- June 13, 2019 - 1 p.m., DOT Building
- September 1, 2019 - 9 a.m., DOT Building
- November 21, 2019 - 2:30 pm, DOT Building
- December 17, 2019 - 1 p.m., DOT Building
- January 29, 2020 - 9 a.m., DOT Building
- February 25, 2020 - 9 a.m., DOT Building
- May 28, 2020 - 9 a.m. via TEAMS
- June 25, 2020 - 9 a.m. via TEAMS
- July 27, 2020 - 1 p.m., via TEAMS
- August 31, 2020 - 1 p.m., via TEAMS
- September 21, 2020 - 1 p.m., via TEAMS

Discussions at the coalition meetings included information on EV charging stations already established within the state, comments from General Motors about advantages of EV and cost savings, battery life as well as range. The members discussed the FAST Act requirements where USDOT established a program to designate alternative fuels corridors across the US and the guidelines are followed, which include the EV stations must exist at no more than 50-mile intervals and be within 5 miles of the corridor. The coalition also discussed legislation which may need to be changed.

Findings

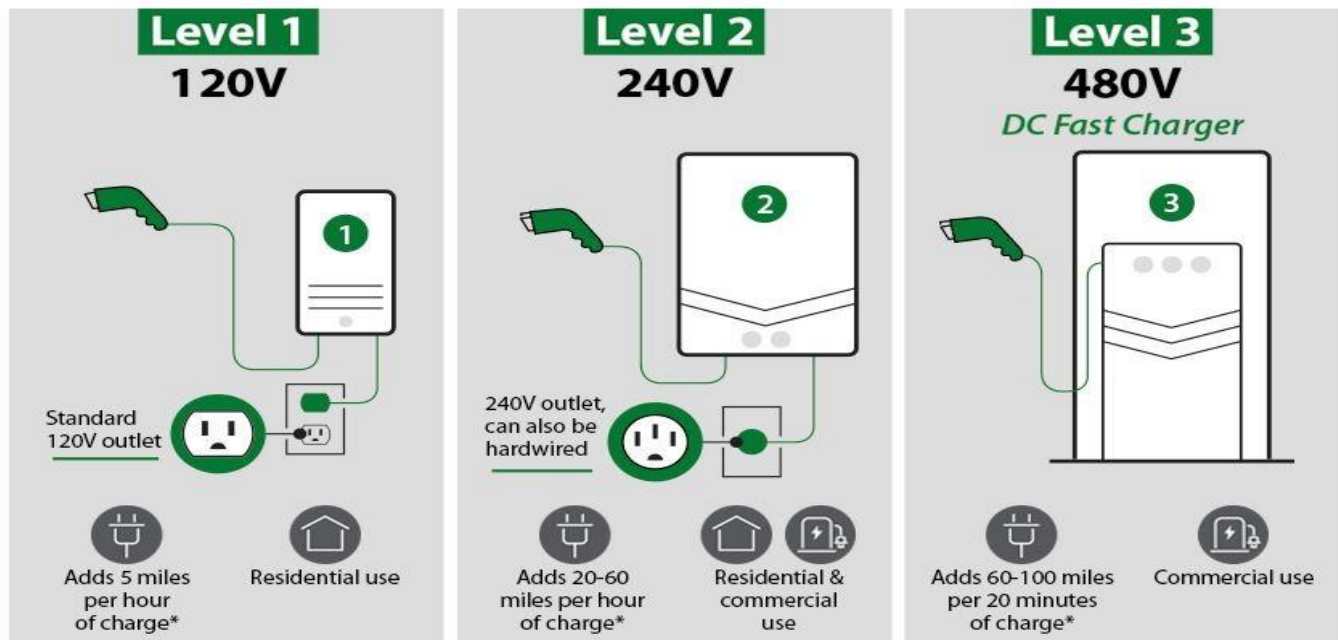
The study committee researched and reviewed a great deal of information that was available during the 2019-2020 study time frame and it will be presented in this report. We would like to note that electric vehicle and electric charging station technology is an industry that is rapidly changing, therefore some of the information may change within a short time frame of when this report is completed.

1. Design jointly owned public and private network

The study committee determined that an electric charging station can be located on private and/or public property. It was also designated that a charging network facilitates the connection that enables electric vehicles to travel in North Dakota.

Electric Charging Stations – There are three levels of charging stations commonly used in homes, public places and the workplace. It is important to note that charging speeds are dependent upon several factors including the size of the charger (kilowatts per hour), type of connection and size of the battery being charged.

Charging Levels



* Estimated. Actual charge times may vary.




Source: www.cenhud.com

According to the website, Energy.gov, charging an EV requires plugging into a charger connected to the electric grid, also called electric vehicle supply equipment. There are three major categories of chargers, based on the maximum amount of power the charger provides to the battery from the grid:

- **Level 1:** Provides charging through a 120 V AC plug and does not require installation of additional charging equipment. Can deliver 2 to 5 miles of range per hour of charging. Most often used in homes, but sometimes used at workplaces.
- **Level 2:** Provides charging through a 240 V (for residential) or 208 V (for commercial) plug and requires installation of additional charging equipment. Can deliver 10 to 20 miles of range per hour of charging. Used in homes, workplaces, and for public charging.
- **Level 3 (DC Fast Charge):** Provides charging through 480 V AC input and requires highly specialized, high-powered equipment as well as special equipment in the vehicle itself. (Plug-in hybrid electric vehicles typically do not have fast charging capabilities.) Can deliver 60 to 80 miles of range in 20 minutes of charging. Used most often in public charging stations, especially along heavy traffic corridors.

- **Tesla Superchargers** – These charging stations are a Level 3 charger and are for Tesla car owners exclusively. Typically, it takes less than an hour to fully charge a Tesla vehicle using a Supercharger.

Note: Charging times range from less than 30 minutes to 20 hours or more based on the type of EVSE, as well as the type of battery, how depleted it is, and its capacity. All-electric vehicles typically have more battery capacity than plug-in hybrid electric vehicles, so charging a fully depleted all-electric vehicle takes longer.

Different levels of charging in North America: SAE configurations	
Level-1 	<ul style="list-style-type: none"> • Supply from household outlet • Make use of EV's on-board charger • 120V 1ph AC; 12-16A • Charging power: 1.4KW or 1.9KW
Level-2 	<ul style="list-style-type: none"> • Supply from household outlet or EV Charge point • Make use of EV's on-board charger • 208-240V 1ph AC ; 12 to 80A (Typ. 30A) • Charging power: 2.5KW to 19.2KW (Typ. 7KW)
Level-3 	<ul style="list-style-type: none"> • Supply from 208-600V 3ph AC • Make use of off-board DC fast charger • 400A (Typ. 60A) • Charging power: up to 240KW (Typ. 50KW)

Source: pinterest.com

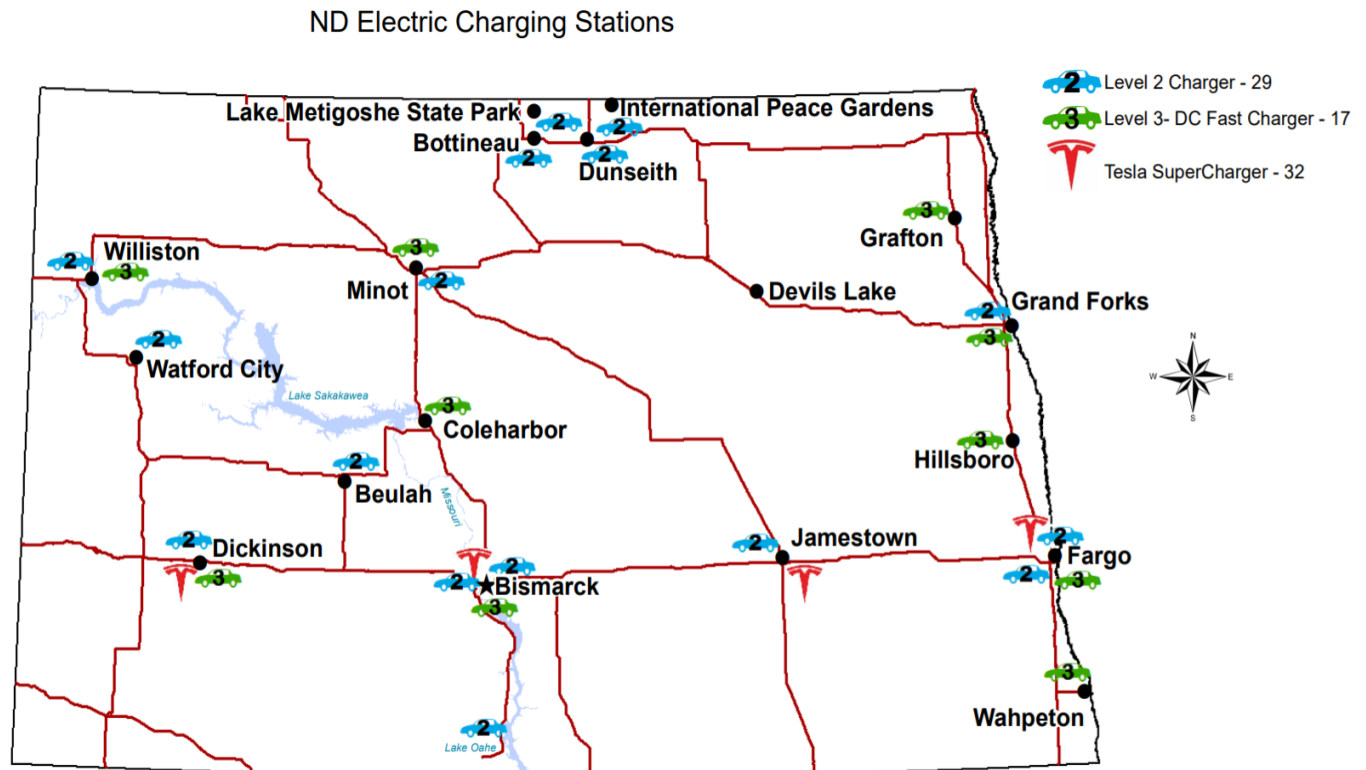
Volkswagen Settlement Awardees

In 2017, Volkswagen entered into a multi-billion-dollar settlement with the federal government regarding diesel emissions reporting errors. As part of the settlement, North Dakota received \$8.1 million and set up a grant process to distribute the funds. In late 2019, the Department of Environmental Quality announced that grants have been awarded to construct **17 Level 3s (DC Fast Chargers)** across the state using VW Settlement Funds. During the time of the Interim study some of the Volkswagen settlement money has been awarded to a few locations in the State such as Williston, Dickinson, Minot, Coleharbor, Bismarck, Grafton, Grand Forks, Hillsboro, Fargo and Wahpeton to install Level 3 DC Fast Chargers. While these funds have been awarded, as of the writing of this document most of these chargers have not come online yet.

The Volkswagen settlement funding was a great boost to getting charging stations established in the state of North Dakota.

Tesla Charging Stations

In a separate development, Tesla Corporation is bringing a total of 32 Tesla Superchargers online in 2020, with eight each in Fargo, Jamestown, Bismarck, and Dickinson – which are now online and operational. Tesla also pulled permits in Grand Forks (6) and Pembina (8), but no time frame has been set for their construction.



The map above shows the electric charging infrastructure growth taking place in North Dakota. As of July 20, 2020, there are 29 operational Level 2 charging stations (blue car symbol); 17 Level 3 charging stations – which are identified for installation but not yet operational and are designated through the Volkswagen settlement funding (green car symbol); and 32 operational Tesla SuperCharger stations (red Tesla symbol.)

With these incredible developments, North Dakota is poised to be able to offer EV owners enough charging options to make both EV ownership and EV tourism much more viable across the prairie states. ***Please see Attachment C for a list of charging station locations.***

Electricity Costs for EV charging stations

How does the electricity get paid for when using an EV charging station? For the Level 2 chargers currently operating in North Dakota, the entity that hosts the charger provides the service at the rate set by their electric provider. The electricity is provided as a service for stopping at the mall, hotel, or other place of business. EV owners who have a Level 2 installed in their homes pay the electric provider directly at the rate set by the electric provider.

The Level 3 DC Fast Chargers will be part of a network (ZEF Energy, ChargePoint) and EV owners that plug into one of those networks are members of that network and billed directly for the electricity they use. The network then pays the electric provider. This arrangement is standard in the industry and is the cleanest in terms of accountability and regulation.

Tesla Superchargers operate in a similar fashion. Tesla owners are member of the Tesla network; they plug in to a Tesla charger to power up; and Tesla pays the electric provider. It's important to note that the host of the chargers has no role in the transaction.

Electricity Providers: Electric utilities or cooperatives provide the electric infrastructure for the charging stations in North Dakota. Electric cooperatives and investor-owned electric utilities may follow different regulations. Rural Electric Cooperatives (RECs) are governed by their board who are elected by their membership. The RECs are not regulated by the Public Service Commission (PSC), but there may be a few exceptions. Investor-owned utilities (IOUs) are regulated by the PSC, which falls under NDCC Chapter 49. Currently, the PSC, the IOUs, and the RECs are reviewing law and administrative rules in case any changes might be necessary to accommodate development and expansion of EV Charging infrastructure.

2. Make recommendations regarding EV charging infrastructure

NDDOT has done some analysis on coverage based on distance needed according to the FAST Act requirements where USDOT established a program to designate alternative fuels corridors across the U.S. and the guidelines to follow, which include - the EV stations must exist at no more than 50-mile intervals and be located within 5 miles of the corridor.

The FAST Act is currently scheduled to end September 30, 2020. There may be a possibility the next highway bill could change the spacing requirements for EV Charging Stations. Unfortunately, we will not find out about any changes until the next highway bill is officially passed by Congress.

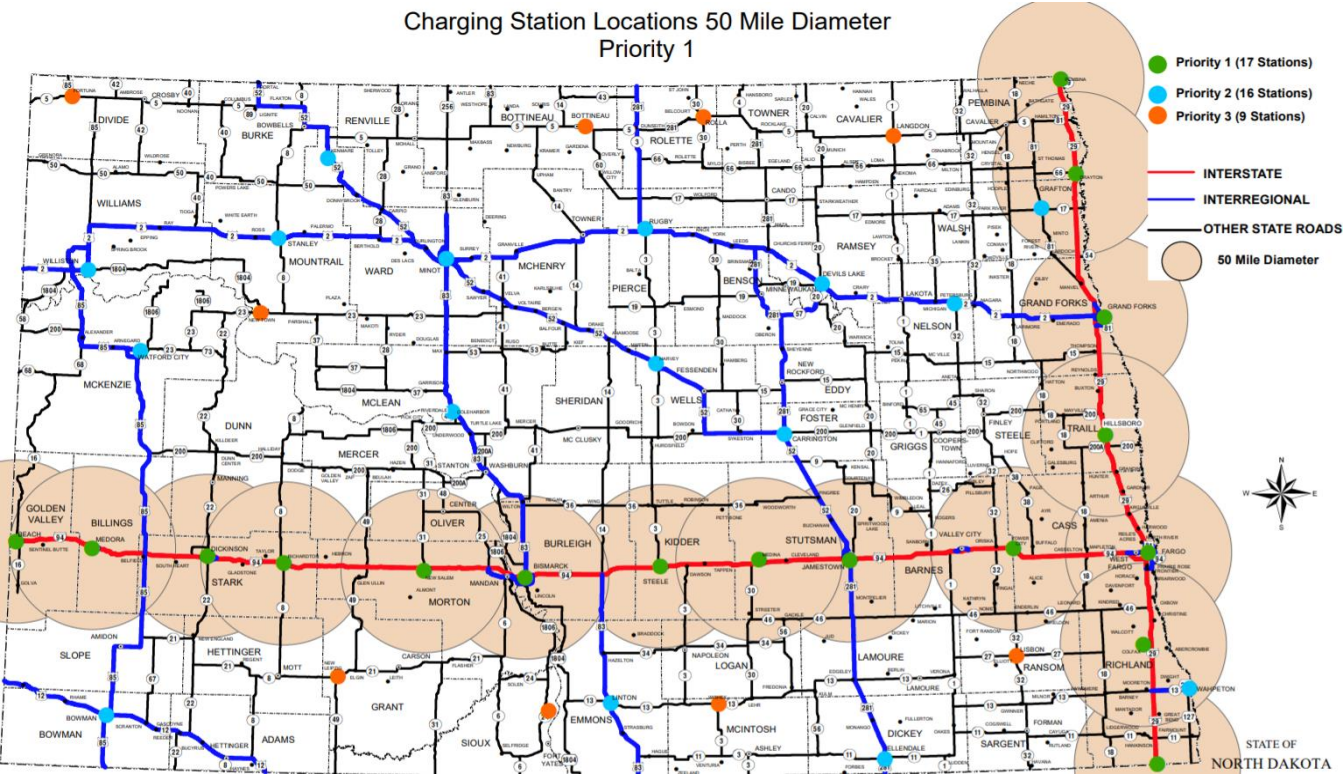
In order to determine the amount of infrastructure (charging stations) it would take to cover the state of ND meeting the federal 50-mile spacing requirements, the NDDOT looked at several options. The goal was to see how the state would be covered using different spacing scenarios.

In order to conduct this exercise, the state highways needed to be prioritized because some roadways carry higher traffic volumes than others. It was assumed that the Interstate System would be given the first priority since the interstate system has the highest traffic volumes and carries intrastate traffic. The second priority would be given to the Interregional System because those roadways typically carry regional traffic and have the second highest traffic volumes, and the third priority would be to fill in the gaps.

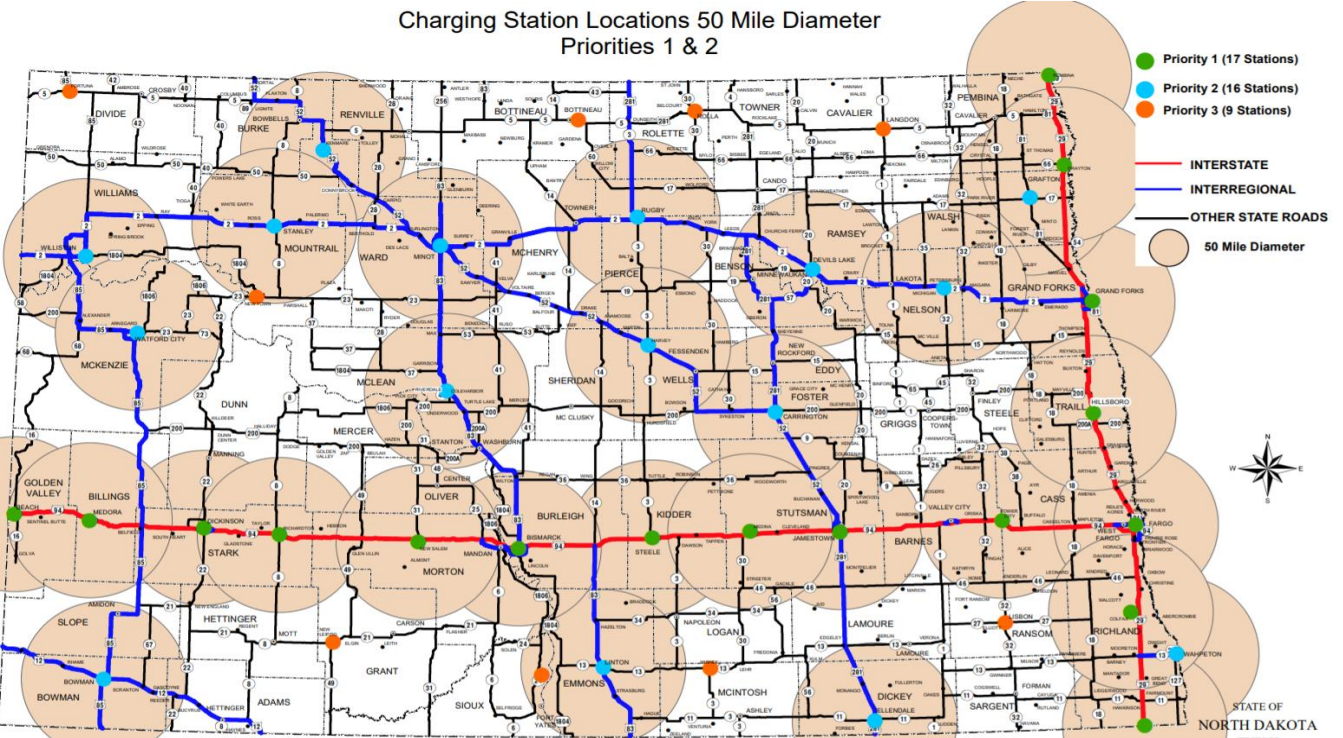
Since the Federal Guidelines require charging stations be located no more that 50-miles apart, it was decided to use a 50-mile diameter as the base model. We also tried to identify locations where charging stations could be located meeting these requirements and where the driver could take a break and get some food or drink while the vehicle was charging.

Maps 1,2, and 3 shown below illustrate coverage using a 50-mile diameter spacing.

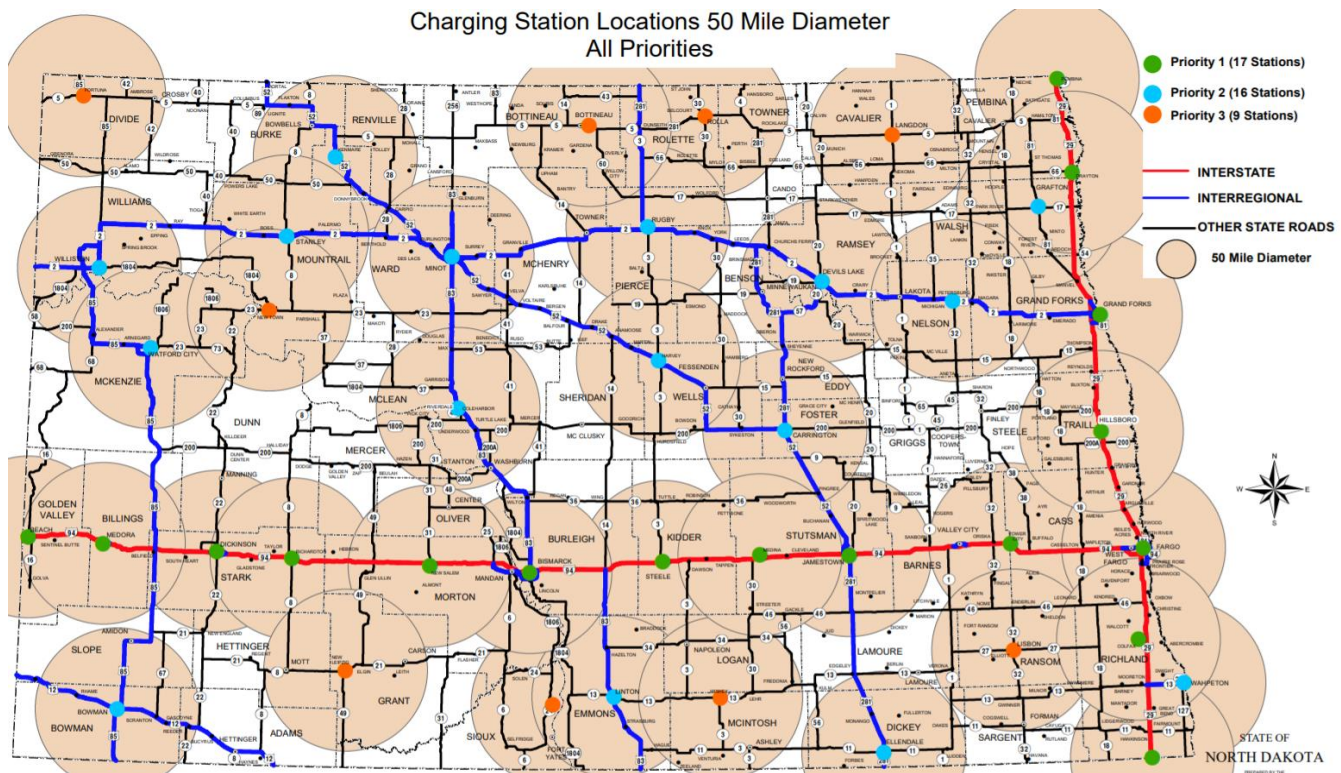
Map 1 - Interstate system coverage with a 50-mile diameter for EV charging stations



Map 2 - Interregional system coverage with a 50-mile diameter for EV charging stations



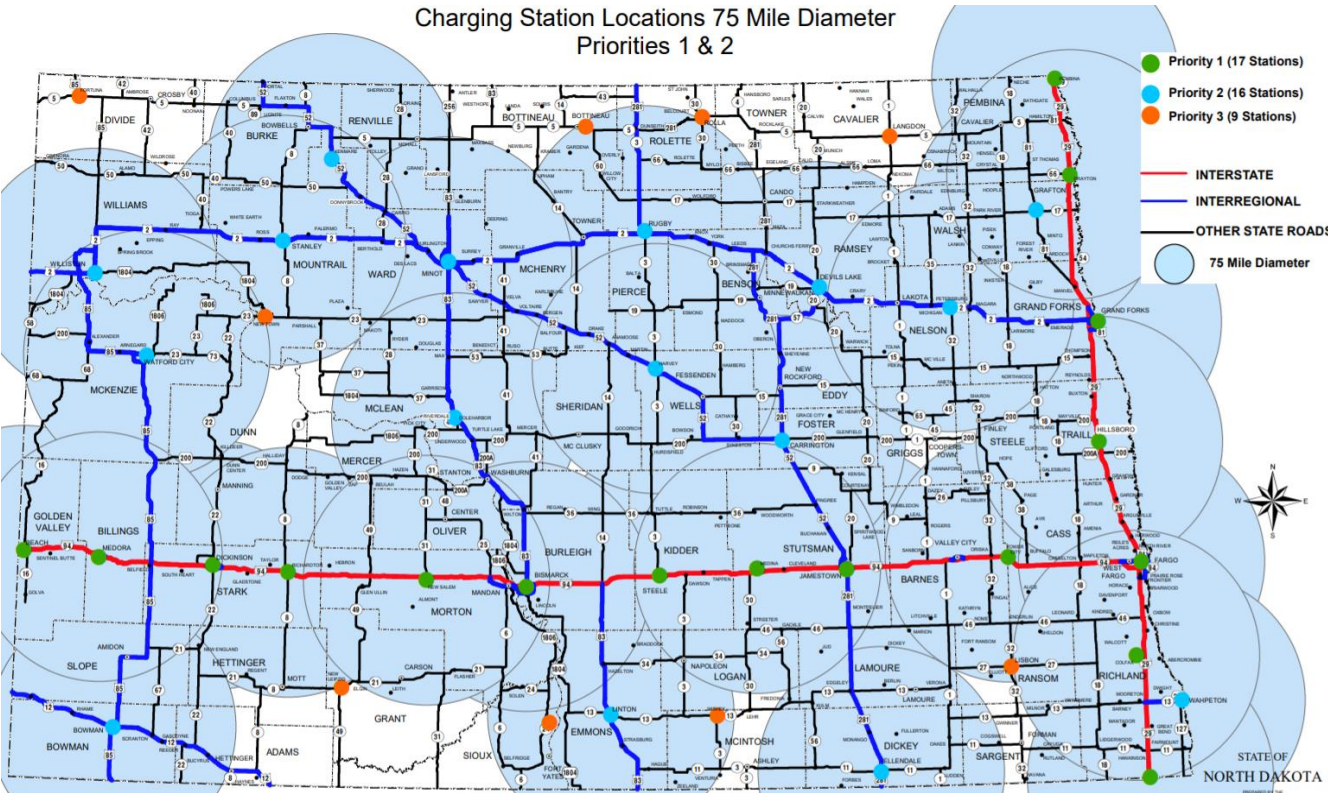
Map 3 - tries to fill in the gaps on other highway systems



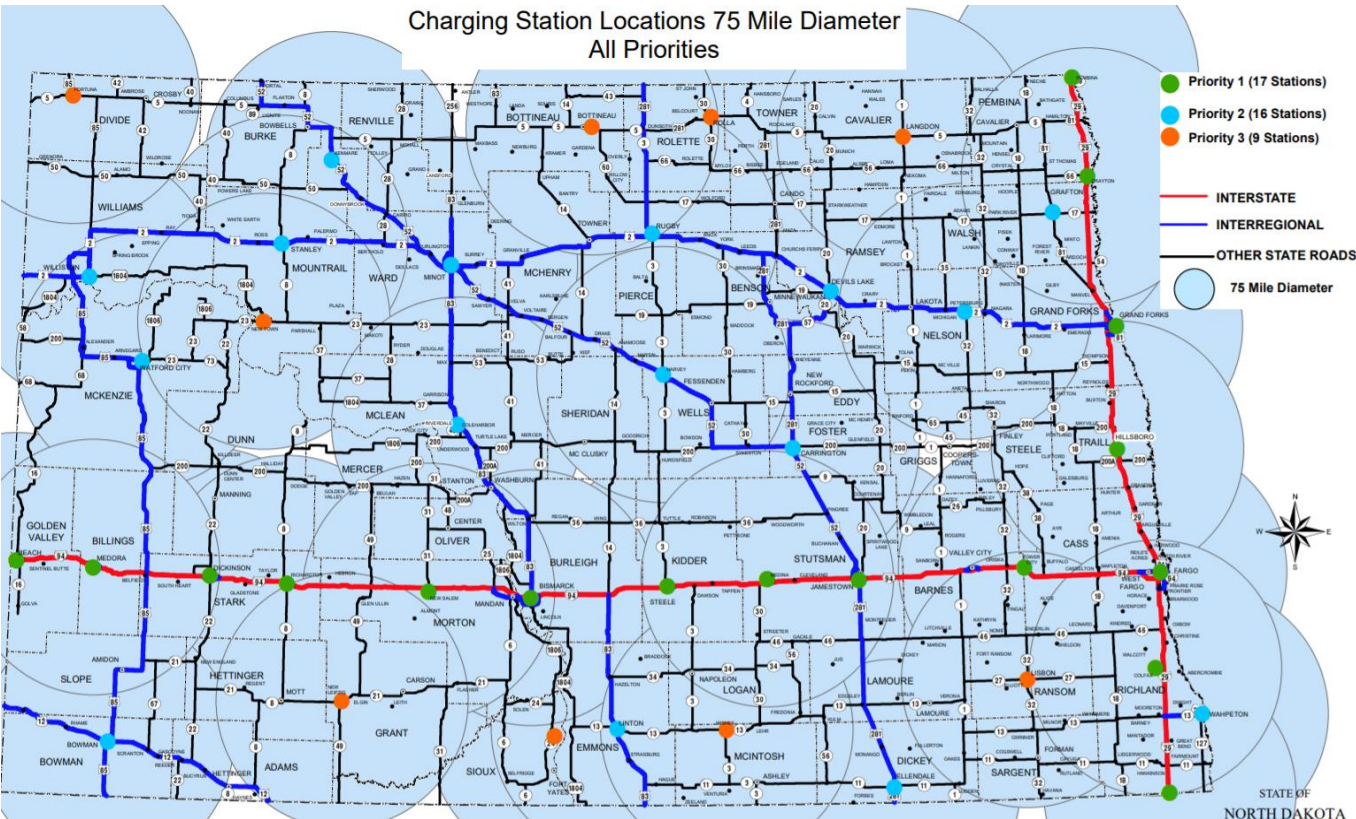
It was determined that to fully cover the state meeting the 50-mile spacing requirements may not be financially feasible.

We then increased the spacing to a 75-mile diameter using the same locations to see what the statewide coverage would be. Maps 4 and 5 shown on the next page illustrate how we are able to cover a vast majority of the state using a 75-mile diameter spacing.

Map 4 - Interregional system coverage with a 75-mile diameter for EV charging stations



Map 5 - tries to fill in the gaps on other highway systems



It is recommended ND adopt the most current federal spacing requirements for alternate fuels corridors for the interstate system. This will allow us the flexibility to increase the spacing requirements at a later date should the next highway bill increase the spacing requirements. Adopting a 50-mile spacing would require the installation of 17 charging stations for a total cost of approximately \$1.0 Million.

It may not be economically feasible to maintain a 50-mile spacing off the interstate system. It was decided to recommend a 75-mile spacing or adopt the most recent federal spacing guidelines, whichever is greater, off the interstate system. This 75-mile spacing would require the installation of approximately 25 additional charging stations for an additional cost of approximately \$1.5 Million.

Note: According to the PSC, which regulates Title 64's calibration of state weights and measures standards, the growth of EV charging stations shown in the various maps in this committee report, may require the agency to obtain additional equipment and staffing to provide regulatory oversight for an equitable transaction.

Note: Since there aren't a large number of electric vehicles in the state at this time, private industry struggles to fund and install EV charging stations without some sort of Grant program to offset the cost of installation.

Question: Should the state establish a grant program similar to what some other states have developed for EV charging stations? NDDOT could administer a grant program if the legislators wish.

Due to federal and state regulations an EV charging station cannot be located within a controlled access facility, for example, a rest area located on Interstate. (NDCC 24-01-45: Controlled Access Facility and Federal 23 U.S.C.111 Code which restricts commercialized activities in rest areas.)

3. Review costs and benefits of various options and future economic impact

SB2061 Cost Analysis - It was requested by the legislative committee that a cost analysis be completed on legislative study SB2061. Over the past few months data have been gathered and analyzed to come up with information to be offered as well as points to consider. Below are some highlights from discussions and findings dealing with the cost analysis.

- What is the private industries interest level? – Examining charging stations across different states shows minimal public dealing and mostly private operated charging stations.
- How do we calculate a road usage tax for electric vehicles? – Multiple options were discussed in order to overcome this problem such as increased registration fees or potentially an odometer-based reporting system. It is important to consider that electric vehicles will not be paying a fuel tax at the pump while still using the roadway so a way to recoup this usage tax is necessary.

Currently no states charge a road usage tax at an EV charging station. Several states are part of a national study being conducted by RUC West, which is an organization that

brings together leaders from state transportation organizations to share best practices, ideas, and information on Road Usage Charge. The RUC study is researching the possibility of implementing a per mile usage fee as a way to replace the gas tax.

- How is the customer billed? – Traditional electric vehicle billing methods are time based. Some companies have gone to unit-based charging and this is something to consider moving forward. Time based charging can also be an incentive to keep customers from leaving their vehicles at charging stations for longer than they need to be, so it may be beneficial to incorporate a mixture of both billing methods if possible. More states are moving to the energy rate basis (\$/KW-Hour).

At this time North Dakota does not allow KWH billing by retailers, so charging stations have to bill for time of use. One type of car can fill up in 20 minutes while another type of car could take a few hours for the same amount of electricity. Should the car that takes longer to charge pay much more for the same amount of electricity? This is something that may need to be addressed because without the ability to charge per KWH, there may be discrimination against the various vehicles based on their battery capacities.

Question: Should a non-utility company be able to resell energy per KWH?

Note: It should be determined if charging per time at EV stations conflicts with ND Century Code 39-01-09 – Parking Meters. Please see Attachment D.

Question: Should the state develop a mechanism to capture lost gas tax revenue from out of state EV drivers?

Recommendations: The study committee respectfully submits three recommendations for consideration.

- **Recommendation:** EV Charging stations should be privately owned and publicly available. Similar to how gas stations operate in the state.
- **Recommendation:** Century Code that may affect EV charging station infrastructure should be reviewed by state legislators. ***Please see NDCC items researched and recommended for review by Interim Study members in Attachment D.***
- **Recommendation:**
 - Adopt the most recent federal spacing requirements for the Interstate System
 - Adopt a 75-mile spacing or the most recent federal spacing requirements (whichever is greater) for the remainder of the state.

Thank you for your time and consideration of the report information submitted.

ATTACHMENT A

**North Dakota Department of Transportation
Motor Vehicle Division
Vehicle Data Counts by type as of May 28, 2020**

FUEL TYPE (includes motorcycle, passenger and truck)		
County	PLUG-IN HYBRID	ELECTRIC
ADAMS	0	0
BARNES	0	0
BENSON	0	0
BILLINGS	0	0
BOTTINEAU	3	1
BOWMAN	0	0
BURKE	0	0
BURLEIGH	34	26
CASS	66	78
CAVALIER	0	1
DICKEY	0	1
DIVIDE	0	0
DUNN	2	0
EDDY	0	0
EMMONS	0	1
FOSTER	3	0
GOLDEN VALLEY	0	0
GRAND FORKS	17	10
GRANT	0	0
GRIGGS	1	0
HETTINGER	0	0
KIDDER	0	0
LAMOURE	4	0
LOGAN	0	0
MCHENRY	1	0
MCINTOSH	0	0
MCKENZIE	2	3
MCLEAN	4	0
MERCER	0	2
MORTON	5	8
MOUNTRAIL	1	0
NELSON	0	0
OLIVER	0	0
OUT-OF-STATE	0	4
PEMBINA	2	2

PIERCE	0	1
RAMSEY	2	0
RANSOM	2	0
RENVILLE	0	0
RICHLAND	2	1
ROLETTE	2	0
SARGENT	0	0
SHERIDAN	0	0
SIOUX	1	0
SLOPE	0	0
STARK	3	9
STEELE	0	0
STUTSMAN	8	1
TOWNER	0	0
TRAILL	3	0
WALSH	1	1
WARD	15	13
WELLS	0	0
WILLIAMS	9	3
TOTAL	193	166



NCSL Hybrid and Electric Vehicle Fees

July 2020

Alabama

- Traditional fees ([Alabama Department of Revenue](#))
 - \$15-23 annual standard fee.
 - \$50 annual additional fee.
 - Additional ad valorem tax and local fees apply.
- EV fees (Ala. Code § 40-12-242 / [HB 2](#) (2019))
 - \$200 additional annual fee for battery electric vehicles (BEVs).
 - \$100 additional annual fee for plug-in hybrid vehicles (PHEVs).
 - Starting in 2023, the fee will increase by \$3 every four years.
 - The fees will be reduced by any forthcoming federal fee or surcharge up to \$50 per year for BEVs and \$25 for PHEVs provided those federal fees are used for highway transportation purposes in the state.
- Total fees
 - Annual fees of \$265-\$273 for battery electric vehicles in addition to all other fees and taxes.
 - Annual fees of \$165-\$173 for plug-in hybrid vehicles in addition to all other fees and taxes.

EV Definitions:

- “Battery electric vehicle” means a vehicle powered only by electricity.
- “Plug-in hybrid electric vehicle” means a vehicle with a hybrid propulsion system that operates on both combustible fuel and stored electric energy.

EV Fee Distribution:

- The first \$150 of fee revenues from BEVs and first \$75 of fee revenues from PHEVs is allocated as follows:
 - 66.67% to the state;
 - 25% to counties;
 - 8.33% to cities.
- The remainder is deposited into the Rebuild Alabama Fund, which funds electric vehicle charging infrastructure through the Electric Transportation Infrastructure Grant Program until total registrations of BEVs and PHEVs exceed 4% of total vehicle registrations. Once this threshold is reached, fees drop to \$150/year for BEVs, \$75 for PHEVs with revenues divided between the state, counties, and cities as noted above to fund construction, maintenance, and repair of public roads,

highways, and bridges and for any other purpose for which the Rebuild Alabama Fund may lawfully be used.

Arkansas

- Traditional fees ([Arkansas Department of Motor Vehicles Registration Fee Schedule](#))
 - Annual registration fees are dependent on vehicle weight
 - \$17 for vehicles 3,000 lbs or less.
 - \$25 for vehicles over 3,000 lbs but less than 4,500 lbs.
 - \$30 for vehicles more than 4,500 lbs.
 - Additional validation decal fee may apply
- EV fees (Ark. Stat. Ann. § 27-14-614 /[SB 336](#) (2019))
 - \$200 additional annual fee for electric vehicles.
 - \$100 additional annual fee for hybrid vehicles.
- Total fees
 - Annual fees of \$217, \$225 or \$230 for electric vehicles depending on vehicle weight in addition to all other fees.
 - Annual fees of \$117, \$125 or \$130 for hybrid vehicles depending on vehicle weight in addition to all other fees.

EV Definitions:

- “Electric vehicle” means a vehicle powered only by electricity;
- “Hybrid vehicle” means a vehicle with a hybrid propulsion system that operates on both traditional fuel and stored electricity.

EV Fees Distribution:

- Revenues are considered “special revenues,” distributed to the State Highway and Transportation Department Fund.

California

- Traditional fees ([Cal. Veh. Code § 9250](#); [California Department of Motor Vehicles](#))
 - The state implements a number of registration-related fees.
 - Base annual registration fee of \$53.
 - Transportation Improvement fee of \$27 to \$188 based on vehicle value.
- EV fees (Cal. Veh. Code § 9250.6/[SB 1](#) (2017))
 - \$100 additional annual fee for a zero-emission vehicles model year 2020 or later.
 - Effective January 2021 and every year after, the fee will increase in accordance with the consumer price index.
- Total fees
 - Annual fees of \$153 in addition to all other fees, including a Transportation Improvement fee.

EV Definitions:

- “Zero-emission vehicle” means a vehicle that produces no emissions of criteria pollutants, toxic air contaminants or greenhouse gases when stationary or operating, as determined by the state Air Resources Board (subdivision (d) of Section 44258 of the Health and Safety Code).

EV Fees Distribution:

- Following deductions from DMV administrative costs, revenues are deposited into the Road Maintenance and Rehabilitation Account.

Colorado

- Traditional fees ([Colo. Rev. Stat. § 42-3-306](#); [Colorado Department Revenue](#))
 - Annual registration fees are based on vehicle weight and type.
- EV fees (Colo. Rev. Stat. §42-3-304(25)(a)/[HB 1110](#) (2013).
 - \$50 additional annual fee for plug-in electric motor vehicles.
- Total fees
 - Annual fees include the \$50 annual fee in addition to traditional registration fees, which vary by vehicle weight and type.

EV Definitions:

- “Plug-in electric motor vehicle” means a motor vehicle that qualifies under the federal definition ([26 U.S.C. sec. 30D](#)). It also includes any motor vehicle that is propelled by a rechargeable battery pack capable of being recharged from any external source of electricity. [Colo. Rev. Stat.](#)

[§42-1-102](#).**EV Fee Distribution:**

- 60% of fee revenues (\$30 of \$50 additional fee) are deposited into the Highway Users Tax Fund.
- 40% of fee revenues (\$20 of \$50 additional fee) are deposited into the Electric Vehicle Grant Fund, which administers grants to install charging stations and to offset station operating costs.

Georgia

- Traditional fees ([Ga. Code Ann. §40-2-151](#))
 - \$20 annual registration fee for passenger vehicles
- EV fees (Ga. Code Ann. §40-2-151(19)(A)(i)/[HB 170](#) (2015)).
 - The [current additional annual fees](#) reflect a statutory base fee that is automatically adjusted according to a statutory formula (effective July, 2016). The fees applicable to vehicles registered July 1, 2019 and later are as follows:
 - \$212.78 for noncommercial alternative fueled vehicles (\$200 base fee).
- Total fees
 - Annual fees of \$232.78 for noncommercial alternative fueled passenger vehicles.

EV Definitions:

- “Alternative fueled vehicle” means any vehicle fueled solely by an alternative fuel, including electricity. The fees do not apply to hybrid vehicles unless the hybrid vehicle owner elects to use an alternative fuel vehicle license plate.

EV Fee Distribution:

- Revenues must be used exclusively for “transportation purposes,” including roads, bridges, public transit, rails, airports, buses, seaports; accompanying infrastructure and services necessary to provide access to these facilities; and paying general obligation debt and other multiyear financing obligations.

Hawaii

- Traditional fees ([Hawaii Rev. Stat. §249-31](#))
 - \$45 annual registration fee.
 - Additional vehicle weight taxes apply.
- EV fees (Hawaii Rev. Stat. §249-31/[SB 409](#) (2019)).
 - \$50 annual surcharge for electric vehicles.
- Total fees
 - Annual fees of \$95 in addition to other taxes.

EV Definitions:

- N/A

EV Fee Distribution:

- Revenues are deposited into the State Highway Fund.

Idaho

- Traditional fees ([Idaho Code §49-402](#); [Idaho Department of Motor Vehicles](#))
 - Annual registration fees depend on the age of the vehicle.
 - \$69 annual registration fee for vehicles 1-2 years old.
 - \$57 annual registration fee for vehicles 3-4 years old.
 - \$45 annual registration fee for vehicles 7 or more years old.
- EV fees (Idaho Code §49-457/[HB 312](#) (2015)/ [HB 20](#) (2017))
 - \$140 additional annual fee for all-electric vehicles.
 - \$75 additional annual fee for plug-in hybrid vehicles.
- Total fees
 - Annual fees of \$209, \$197 or \$185 for all-electric vehicles.
 - Annual fees of \$144, \$132 or \$129 for plug-in hybrid vehicles.

EV Definitions:

- “Electric vehicle” means a vehicle powered only by electricity.
- “Plug-in hybrid vehicle” means a motor vehicle with a hybrid propulsion system that operates on both electricity supplied through a rechargeable battery and traditional fuel.

EV Fee Distribution:

- All fees deposited into the Highway Distribution Account as follows:
 - 40% to localities for construction and maintenance of highways and bridges and to fund requirements on unpaid bonds.
 - 60% to the state highway account for construction and improvement of state highways.

Illinois

- Traditional fees ([625 ILCS 5 3-806](#))
 - \$148 annual registration fee.
 - \$1 surcharge deposited into the State Police Vehicle Fund.
 - \$2 surcharge deposited into the Park and Conservation Fund.
- EV fees ([625 ILCS 5 3-805](#)/SB 1939 (2019))
 - \$100 additional annual fee for electric vehicles.
 - Prior to 2020, the electric vehicle registration fee could not exceed a \$35 biennial rate, or \$18 per year. Beginning Jan. 1, 2020, the registration fee for electric vehicles will equal those for traditional motor vehicles.
- Total fees
 - Annual fees of \$251 for electric vehicles.

EV Definition:

- “Electric vehicle” is defined as a vehicle that is 8,000 lbs or less and is propelled by an electric engine and does not use motor fuel.

EV Fee Distribution:

- \$1 of the additional fee is allocated to the Secretary of State Special Services Fund and the remainder deposited into the Road Fund.

Indiana

- Traditional fees ([Ind. Code Ann. § 9-18.1-5-2](#); [Indiana Bureau of Motor Vehicles](#))
 - \$21.35 registration fee.
 - \$15 Transportation Infrastructure Improvement Fee.
 - Additional taxes may apply.
- EV fees (Ind. Code Ann. § 9-18.1-5-12/[HB 1002](#) (2017))
 - \$150 additional annual fee for all-electric vehicles.
 - \$50 additional annual fee for hybrid vehicles.
 - The fee is indexed to the same inflation mechanism as the motor fuel tax.
- Total fees
 - Annual fees of \$86.35 for hybrid vehicles in addition to all other fees.
 - Annual fees of \$186.35 for all-electric vehicles in addition to all other fees.

EV Definitions:

- “Electric vehicle” means a vehicle that is propelled by an electric motor powered by a battery or other electrical device and does not have a combustion engine.
- “Hybrid vehicle” means a vehicle that is capable of being powered with energy from both an internal combustion engine and an energy storage device, and also uses a regenerative braking system.

EV Fee Distribution:

- Revenues are deposited into the Local Road and Bridge Matching Grant Fund for projects undertaken by local units to repair/increase road and/or bridge capacity.

Iowa

- Traditional fees ([Iowa Code Ann. §321.109](#); [Iowa Taxes and Tags](#))
 - Based on vehicle weight and a percentage of the vehicle list price based on the vehicle’s age.
 - 40 cents per 100 pounds of vehicle weight; and
 - Fee of 1% of the list price if the vehicle is 1-7 model years old; or
 - Fee of .75% of the list price if the vehicle is 8-9 model years old; or
 - Fee of .5% of the list price if the vehicle is 10-11 model years old; or
 - Fee of \$50 if the vehicle is 12 or more model years old.
- EV fees ([SF 767](#) (2019))
 - \$65 additional annual fee for battery electric vehicles (BEVs).
 - \$32 additional annual fee for plug-in hybrid electric motor vehicles (PHEVs).
 - In 2021, the fee increases to \$97 for BEVs and \$48.75 for PHEVs.
 - In 2022, the fee increases to \$130 for BEVs and \$65 for PHEVs.
- Total fees
 - Annual fees include EV fees in addition to applicable registration fees.

EV Definitions:

- “Battery electric vehicles” are defined as those “equipped with electrical drivetrain components and not equipped with an internal combustion engine, that are propelled exclusively by one or more electrical motors using electrical energy stored in a battery or other energy storage device

that can be recharged by plugging into an electrical outlet or electric vehicle charging station.”

- “Plug-in hybrid electric vehicles” are defined as those “equipped with electrical drivetrain components, an internal combustion engine, and a battery or other energy storage device that can be recharged by plugging into an electrical outlet or electric vehicle charging station.”

EV Fee Distribution:

- Revenues are deposited into the Road Use Tax Fund. [Iowa Code Ann § 321.145](#).

Kansas

- Traditional fees ([Kan. Rev. Stat. § 8-143](#))
 - \$30 or \$40 depending on weight.
 - Additional county fees apply.
- EV fees ([Kan. Rev. Stat. § 8-143](#); [HB 2214](#) (2019))
 - \$100 *total* annual registration fee for all-electric vehicles.
 - \$50 *total* annual registration fee for electric hybrid and plug-in electric hybrid vehicles.
- Total fees
 - Because the state’s EV fees are total, not additional, electric and hybrid vehicles are not charged a separate or passenger vehicle registration fee, but instead are charged an increased fee of \$100 for all-electric vehicles and \$50 for hybrid electric vehicles.

EV Definitions:

- “Electric vehicle” means a vehicle that is powered by an electric motor drawing current from rechargeable storage batteries or other portable electrical energy storage devices, provided the energy must be drawn from a source off the vehicle, such as an electric vehicle charging station.

EV Fee Distribution:

- The majority of fee revenues are deposited into the State Highway Fund. [Kan Stat. Ann. § 8-145](#).

Michigan

- Traditional fees ([Mich. Comp. Laws Ann. §257.801](#); [Michigan Office of the Secretary of State](#))
 - Vehicles with a model year of 1984 or newer pay registration fees based on the **manufacturer’s suggested retail price**.
 - Additional fees may apply.
- EV fees (Mich. Comp. Laws Ann. §257.801(7)/ [HB 4736](#) (2015))
 - Michigan indexes its EV fees based on the motor vehicle fuel tax. Each 1 cent fuel tax increase above 19 cents increases the BEV annual fee by \$5 and the PHEV annual fee by **\$2.50. The current fees, calculated using a 26.3 cent per gallon gasoline motor vehicle fuel tax, are as follows:**
 - \$135 additional annual fee for “electric vehicles,” or BEVs, up to 8,000 pounds (\$100 base fee).
 - \$47.50 additional annual fee for certain PHEVs up to 8,000 pounds (\$30 base fee).
 - \$235 additional annual fee for “electric vehicles,” or BEVs over 8,000 pounds (\$200 base fee).
 - \$117.50 additional annual fee for certain PHEVs over 8,000 pounds (\$100 base fee).
- Total fees
 - Annual fees include the EV fees in addition to traditional fees, which vary depending on vehicle price.

EV Definitions: ([HB 5313](#), 2020, effective 9/29/2020)

- “Plug-in hybrid electric vehicle” means a vehicle that can use batteries to power an electric motor and use another fuel, such as gasoline or diesel, to power an internal combustion engine or other propulsion source, and that may use electricity from the grid to run the vehicle some or all of the time. Previously referred to as “*hybrid electric vehicle*.”
- “Electric vehicle” means a vehicle that is propelled solely by electrical energy and that is not capable of using gasoline, diesel fuel, or alternative fuel to propel the vehicle. Previously referred to as “*nonhybrid electric vehicle*.”

EV Fee Distribution:

- Some revenues are deposited into the Michigan Transportation Fund for road maintenance carried out by cities, villages, and counties.
- Other revenues are deposited into the Scrap Tire Regulation Fund.

Minnesota

- Traditional fees ([Minn. Stat. Ann. §168.013](#))
 - \$10 plus 1.25% of the vehicle’s base value.
- EV fees (Minn. Stat. Ann. §168.013/[HF 3](#) (2017))
 - \$75 additional annual fee for non-hybrid, “all-electric” vehicles.
- Total fees
 - Annual fees of \$85 in addition to 1.25% of the vehicles base value for all-electric vehicles.

EV Definitions:

- “All-electric vehicle” means an electric vehicle that is powered solely by an electricity supplied through a rechargeable storage battery, fuel cell or other portable source of electrical current. The definition excludes plug-in hybrid electric vehicles.

EV Fee Distribution:

- Revenues are deposited into the Highway User Tax Distribution Fund.

Mississippi

- Traditional fees ([Miss. Code Ann. §§27-19-5](#))
 - \$15 private passenger carriers’ tax.
 - Also subject to an ad valorem tax at the time of registration.
- EV fees (Miss. Code Ann. §§27-19-21; 23/[HB 1](#) (2018 First Extraordinary Session))
 - \$150 additional annual fee for electric vehicles.
 - \$75 additional annual fee for hybrid vehicles.
 - Beginning July 1, 2021, fees will be indexed to inflation.
- Total fees
 - Annual fees of \$165 for electric vehicles in addition to other applicable taxes.
 - Annual fees of \$90 for hybrid vehicles in addition to other applicable taxes.

EV Definitions:

- “Electric vehicle” means a vehicle that is used primarily for use on public roads that is powered solely by electricity supplied from a rechargeable battery, fuel cell or other portable source of electricity and required to have a license tag under Miss. Code Ann. §§27-19-1 et seq.
- “Hybrid vehicle” means a vehicle that is used primarily on public roads that is propelled by at least two forms of and is required to have a license tag under Miss. Code Ann. §§27-19-1 et seq.

EV Fee Distribution:

- Revenues are apportioned for the same purposes and in the same proportion as specified for gasoline and diesel fuel taxes during the previous state fiscal year and such funds must be used solely for the repair and maintenance of roads, streets and bridges.

Missouri

- Traditional fees ([Mo. Rev. Stat. §301.055](#); [Missouri Department of Revenue](#))
 - \$18.25 for a vehicle with a taxable horsepower of under 12 up to \$51.25 for a vehicle with a taxable horsepower of over 72.
 - Registration fees are assessed according to the vehicle's [taxable horsepower](#).
 - Additional processing fees apply.
- EV fees (Mo. Ann. Stat. §142.869/[SB 619](#) (1998)).
 - \$75 additional annual fuel decal fee for alternative fueled passenger motor vehicles up to 18,000 lbs.
 - \$37.50 additional annual fee for plug-in electric hybrid vehicles.
- Total fees
 - Annual fees of \$93.25 up to \$126.25 for alternative fueled passenger vehicles, depending on the vehicle's taxable horsepower.
 - Annual fees of \$55.75 up to \$88.75 for plug-in electric hybrid vehicles, depending on the **vehicle's horsepower**.

EV Definitions:

- "Plug-in electric hybrid" means any model year 2018 or newer hybrid vehicle that has not been modified and is equipped with an internal combustion engine and batteries that can be recharged by connecting to an electric power source.
- "Alternative fuel" means electricity, liquefied petroleum gas (propane), compressed natural gas, or a combination of liquefied petroleum gas and a compressed natural gas or electricity used in an internal combustion engine or motor.

EV Fee Distribution:

- Revenues are deposited into the State Highway Fund.

Nebraska

- Traditional fees ([Neb. Rev. Stat. §60-3,190](#); [Neb. Rev. Stat. §60-3,140](#); [Nebraska Department of Motor Vehicles](#))
 - \$15 annual registration fee.
 - Additional taxes and fees are collected at the time of registration.
- EV fees [Neb. Rev. Stat. §60-3,191](#)/LB 289 (2011)
 - \$75 additional annual fee for alternative fuel vehicles.
- Total fees
 - Annual fees of \$90 for alternative fuel vehicles in addition to all other annual fees and taxes.

EV Definitions:

- "Alternative fuel" includes vehicles powered by electricity, solar power and any other source of energy not otherwise taxed under the motor fuel laws. Alternative fuel does not include motor vehicle fuel, diesel fuel or compressed fuel. See [Neb. Rev. Stat. §60-306](#).

EV Fee Distribution:

- Revenues deposited into the Highway Trust Fund.

North Carolina

- Traditional fees ([N.C. Gen. Stat. §20-87](#))
 - \$36 annual registration fee.
- EV fees (N.C. Gen. Stat. §20-87(13)/[SB 402](#) (2013)/ [HB 97](#) (2015)).
 - \$130 additional annual fee for plug-in electric vehicles.
- Total fees
 - Annual fees of \$166 for plug-in electric vehicles.

EV Definitions:

- “Plug-in electric vehicle” means a motor vehicle used primarily on public roads that is powered by electricity supplied by a rechargeable battery with a capacity of at least 4 kilowatt-hours , has not been modified, and does not exceed 8,500 lbs.

EV Fee Distribution:

- 85% of revenues are deposited into the Highway Fund to supports existing transportation system, including resurfacing highways, replacing bridges, paving secondary roads.
- 15% of revenues are deposited into the Highway Trust Fund.

North Dakota

- Traditional fees ([N.D. Cent. Code § 39-04-19](#))
 - \$93 annual fee for vehicles greater than 3,200 lbs, but less than 4,500 lbs for the first six years of registration.
 - Fees vary depending on the year of registration and the weight of the vehicle.
- EV fees (N.D. Cent. Code § 39-04-19.2/[SB 2061](#) (2019)).
 - \$120 additional annual road use fee for electric vehicles.
 - \$50 additional annual road use fee for plug-in hybrid vehicles.
 - \$20 additional annual road use fee for electric motorcycles.
- Total fees
 - Annual fees of \$143 for plug-in hybrids, which varies depending on vehicle weight and year of registration.
 - Annual fees of \$213 for electric vehicles, which varies depending on vehicle weight and year of registration.

EV Definitions:

- “Electric vehicle” means a vehicle powered only by electricity.
- “Plug-in hybrid vehicle” means a vehicle with a hybrid propulsion system using an internal combustion engine and a chargeable energy storage device.
- “Electric motorcycle” means a vehicle with a saddle for the rider and no more than three wheels, powered only by electricity.

EV Fee Distribution:

- Revenues are deposited into the highway tax distribution fund.

Ohio

- Traditional fees ([Ohio Bureau of Motor Vehicles](#))
 - \$31 annual registration renewal fee.
- EV fees ([Ohio Rev. Code § 4503.10](#)/[HB 62](#) (2019))
 - \$200 additional annual fee for plug-in electric motor vehicles.
 - \$100 additional annual fee for hybrid motor vehicles.

- Total fees
 - Annual fees of \$231 for plug-in electrics.
 - Annual fees of \$131 for hybrid vehicles.

EV Definitions:

- “Plug-in electric motor vehicle” means a vehicle powered wholly or in part by a rechargeable battery.
- “Hybrid motor vehicle” means a vehicle with a hybrid propulsion system including a combustion engine and stored electricity.

EV Fee Distribution:

- 55% of revenues are deposited into the highway operating fund;
- 45% of revenues are deposited into the gasoline excise tax fund and are allocated as follows:
 - 19.3% to municipalities;
 - 16.7% to counties; and
 - 9% to townships.

Oklahoma

- *Traditional fees ([Oklahoma Tax Commission](#))*
 - *Registration fee amount varies depending on registration year.*
 - *\$96 for registration years 1-4.*
 - *\$86 for registration years 5-8.*
 - *\$66 for registration years 9-12.*
 - *\$46 for registration years 13-16.*
 - *\$12 for registration years 17 and over.*
- *EV fees [HB 1449](#) (2017) (struck down by the Oklahoma Supreme Court in Oct. 2017).*
 - *Oklahoma’s EV fee was [struck down](#) by the Oklahoma Supreme Court for failing to meet the constitutional mandates that govern the passage of a revenue bill: failing to receive three-fourths of the legislative vote and passing less than a week before the end of the legislative session.*
 - *\$100 additional annual fee for electric vehicles.*
 - *\$30 additional annual fee for hybrid vehicles.*
- *Total fees*
 - *Annual fees for electric vehicles are the same as those for standard passenger vehicles.*

EV Definitions:

- *“Electric vehicle” means a vehicle that is propelled solely by electrical energy and is not capable of using gasoline, diesel or any other fuel for propulsion.*
- *“Hybrid vehicle” means a vehicle that is capable of being propelled at least in part by electrical energy using a battery storage system of at least 4 kilowatt-hours, is capable of being recharged from an external source of electricity and is also capable of using gasoline, diesel fuel or alternative fuel to propel the vehicle.*

EV Fee Distribution:

- Revenues were to be deposited into the State Highway Construction and Maintenance Fund. The lesser of \$10,000 and 1.5% of this fund could be used to develop and maintain alternative fuel corridors as defined by the Federal Highway Administration.

Oregon

- Traditional fees ([Or. Rev. Stat. § 803.420](#))
 - \$43 annual registration fee.
- EV fees (Or. Rev. Stat. § 803.422/Or. Rev. Stat. § 319.885; 890/[HB 2017](#) (2017))
 - Additional fees are assigned by miles per gallon (MPG) as follows:
 - \$18 for vehicles with 0-19 MPG.
 - \$23 for vehicles with 23-29 MPG.
 - \$33 for vehicles with 40 MPG or greater.
 - \$ 110 additional annual fee for electric vehicles.
 - Note that these fees increase in 2021.
 - Electric vehicle owners can opt to participate in the state's road usage charge program, [OREGO](#), in lieu of the annual fee.
- Total fees
 - Annual fees of \$153 for electric vehicles.

EV Definitions:

- N/A

EV Fee Distribution:

- Revenues support state and local transportation systems through road and bridge improvements, enhanced safety measures, and increased transit options.

South Carolina

- Traditional fees ([S.C. Code § 56-3-620](#))
 - \$36-40 *biennial fee* depending on registrant age.
- EV fees (S.C. Code Ann. §56-3-645/[HB 3516](#) (2017))
 - \$120 additional *biennial* fee for electric vehicles.
 - \$60 additional *biennial* fee for hybrid vehicles.
- Total EV fees
 - *Biennial fees* of \$156-\$160 for electric vehicles.
 - *Biennial fees* of \$96-\$100 for hybrid vehicles.

EV Definitions:

- "Hybrid vehicle" means a motor vehicle powered by a combination of motor fuel and electricity, hydrogen or any fuel other than motor fuel.

EV Fee Distribution:

- Revenues are deposited into the Infrastructure Maintenance Trust Fund, to be used exclusively for repairs, maintenance, and improvements to the existing transportation system. [S.C. Code Ann. §57-11-20\(A\)](#).

Tennessee

- Traditional fees ([Tenn. Code Ann. § 55-4-111](#)(a)(1)(Table))
 - **\$23.75 annual registration fee.**
- EV fees (Tenn. Code Ann. §55-4-116/[HB 534](#) (2017)).

- \$100 additional annual fee for electric vehicles.
- Total fees
 - Annual fees of \$123.75 for electric vehicles.

EV Definitions:

- “Electric vehicle” means a passenger or commercial motor vehicle powered exclusively by electricity.

EV Fee Distribution:

- Revenues are deposited into the highway fund. [Ten. Code Ann. § 55-6-107](#).

Utah

Utah Code §41-1a-1206/[SB 136](#) (2018).

The current fees are as follows:

- Traditional fees ([Utah Rev. Code 41-1a-1206\(1\)\(b\)](#))
 - \$44 annual registration fee.
- EV fees (Utah Code §41-1a-1206/[SB 136](#) (2018)).
 - \$90 additional annual fee for electric motor vehicles.
 - \$90 additional annual fee for vehicles fueled by a source other than motor fuel, diesel fuel, natural gas or propane.
 - \$39 additional annual fee for plug-in hybrid electric motor vehicles.
 - \$15 additional annual fee for hybrid electric motor vehicles.
 - Fees increase in 2021 to \$120 for all-electric or other non-fossil fuel powered motor vehicles, \$20 for hybrid electric motor vehicles, and \$52 for plug-in hybrid motor vehicles.
 - Beginning Jan. 1, 2022, fees will be indexed to the consumer price index.
 - Electric vehicle owners can opt to participate in the state’s [road usage charge program](#) in lieu of the annual fee.
- Total fees
 - Annual fees of \$134 for electric vehicles.
 - Annual fees of \$83 for plug-in hybrids.
 - Annual fees of \$59 for hybrid vehicles.
 - Note that there is also an option to pay a six-month registration fee as opposed to an annual fee. Fee amounts for the six-month registration can also be found at Utah Rev. Code 41-1a-1206.

EV Definitions:

- “Electric motor vehicle” means a motor vehicle that is powered solely by electricity supplied by a rechargeable energy storage system.
- “Hybrid electric motor vehicle” means a motor vehicle that is capable of being powered by both an internal combustion engine and a rechargeable energy storage system.
- “Plug-in hybrid electric motor vehicle” means a hybrid electric motor vehicle that is capable of being charged by an external source.

EV Fee Distribution:

- Revenues are deposited in the Transportation Fund. [Utah Code §41-1a-1201](#).

Virginia

- Traditional fees [Virginia Department of Motor Vehicles](#)
 - \$40.75-\$45.75 depending on vehicle weight.
 - Note that additional local fees may apply.
- EV fees (Va. Code §58.1-2249(b)/[SB 127](#) (2014)).
 - \$64 additional annual license tax for alternative fuel vehicles or electric motor vehicles.
 - Note that Virginia's EV fee can decrease to \$50 if the receiving jurisdiction does not use the fee revenues for transportation purposes.
- Total fees
 - Annual fees of \$104.75 or \$109.75 depending on vehicle weight.

EV Definitions:

- "Alternative fuel vehicle" means a vehicle powered by a combustible gas, liquid or other source of energy that is neither a motor fuel nor electricity and excludes hybrid electric vehicles.
- "Electric motor vehicle" means a motor vehicle powered by electricity only.

EV Fee Distribution:

- Revenues are deposited into the Highway Maintenance and Operating Fund and must be used for district transportation purposes.

Washington

- Traditional fees ([Rev. Code Wash. 46.17.350](#); [Rev. Code Wash. 46.17.005](#); [Rev. Code Wash. 46.17.040](#); [Washington State Department of Licensing](#))
 - \$30 annual license tab fee.
 - Additional filing and service fees apply.
- EV fees (Wash. Rev. Code §46.17.323/[HB 2042](#) (2019); 2019 Ballot Initiative [976](#))
 - \$150 additional annual registration fee for electric vehicles (initially \$100 as enacted in 2012).
 - \$75 additional Hybrid Vehicle Transportation Electrification fee to fund electric vehicle charging stations (enacted in 2019).
 - The state currently imposes two separate additional fees on electric vehicle owners [pending the resolution of litigation](#) surrounding a state ballot measure that would limit total annual registration fees on electric vehicles to \$30, while leaving the \$75 transportation electrification fee in-tact.
- Total fees
 - Annual fees totaling \$255 for electric vehicles.

EV Definitions:

- "Electric vehicle" means a vehicle that is capable of being powered by electricity supplied by a rechargeable battery that can travel at least 30 miles relying exclusively on battery power.

EV Fee Distribution:

- Of the funds collected through the \$150 EV registration fee, 70% goes to the motor vehicle fund, 15% goes to the transportation improvement account, and 15% goes to the rural arterial trust account.
- The \$75 Hybrid Vehicle Transportation Electrification fee goes toward electric vehicle charging stations.

West Virginia

- Traditional fees ([Registration Fees Brochure](#))
 - \$51.50
- EV fees (W. Va. Code §17A-10-3c/[SB 1006](#) (2017))
 - \$200 additional annual fee on electric vehicles.
 - \$100 additional annual fee on vehicles operating on a combination of electricity and petrochemical fuels.
- Total fees
 - Annual fees of \$251.50 for electric vehicles.
 - Annual fees of \$151.50 for hybrid vehicles gas/electric vehicles.

EV Definitions:

- N/A

EV Fee Distribution:

- Revenues from fees on vehicles operated on hydrogen, natural gas or a combination of electricity and petrochemicals are deposited into the State Road Fund which pays the principal and interest due on state bonds issued for the fund, funding the administration expenses for the Division of Highways, and state road maintenance, construction, and improvement.
- Revenues from fees on electric vehicles are deposited into the state's Transportation Fund.

Wisconsin

- Traditional fees ([Wis. Stat. Ann. §341.25\(a\)](#); [Wisconsin Department of Transportation](#))
 - \$85 annual registration fee.
- EV fees (Wis. Stat. Ann. §341.25/[Act 59 §1895M](#) (2017); [Act 9 § 1987](#) (2019))
 - \$100 additional annual fee on nonhybrid electric vehicles.
 - \$75 additional annual fee on hybrid electric vehicles.
- Total fees
 - Annual fees of \$185 for nonhybrid electric vehicles.
 - Annual fees of \$160 for hybrid electric vehicles.

EV Definitions:

- "Nonhybrid electric vehicle" means a vehicle that is powered solely by electricity and that is not capable of using gasoline, diesel fuel or alternative fuel.
- "Hybrid electric vehicle" means a vehicle that uses gasoline, diesel fuel or alternative fuel and electricity.

EV Fee Distribution:

- \$75 annual fee for hybrid electric vehicles and \$100 for nonhybrid electric vehicle is disbursed to the state's Transportation Fund.

Wyoming

- Traditional fees ([Wyo. Stat. §31-3-102](#))
 - \$30
 - Additional county fees may apply.
- EV fees (Wyo. Stat. §31-3-102(a)(xxiii)/[HB 9](#) (2015)/ [HB 2](#) (2016)/[HB 166](#) (2019).

- \$200 *total* annual fee for plug-in electric vehicles.
- While the state initially enacted a one-time \$50 decal fee in 2015, the legislature clarified its intent that the fee be annual in 2016 and increased the fee amount in 2019.
- Total fees
 - Because the state's EV fees are total, not additional, plug-in electric vehicles are not charged a separate or passenger vehicle registration fee, but instead are charged an increased fee of \$200.

EV Definitions:

- "Plug-in electric vehicle" means any motor vehicle that is propelled by a rechargeable battery capable of being charged from any external source of electricity. "Plug-in electric vehicle" does not include a hybrid vehicle. *See Wyo. Stat. §31-17-301.*

EV Fee Distribution:

- Revenues are deposited into the state highway fund. *See Wyo. Stat. §31-17-303.*

List of EV Charging Station Locations in North Dakota**LEVEL 2 CHARGING STATIONS (2020)** *Red indicates private charger*

LOCATION	ADDRESS	CITY
Dakota Gasification Company	420 Co Rd 15	Beulah
Roosevelt Place Hotel	4403 Skyline Crossings	Bismarck
Nissan of Bismarck	1026 57th Ave NW	Bismarck
Basin Electric Power Coop HQ	1717 E Interstate Ave	Bismarck
Lignite Energy Council	1016 E Owens Ave	Bismarck
Lake Metigoshe State Park		Bottineau
North Central Electric Cooperative	538 11th St W #1	Bottineau
Dan Porter Motors	2391 I-94, Business Loop	Dickinson
International Peace Garden	10939 Highway 281	Dunseith
Happy Harry's Bottle Shop	4001 53rd Ave S	Fargo
Luther Family Ford	3302 36th St	Fargo
Gateway Nissan	441 38th St. SW	Fargo
Gateway Chevrolet	501 38th Street S.	Fargo
West Acres Mall	3950 13th Ave. S.	Fargo
Sanford Medical Center	5225 23rd Ave. S.	Fargo
Valley Imports	402 40 th Street S.	Fargo
Prairie Knights Casino & Resort	7932 Hwy 24	Fort Yates
Minnkota Power Coop	5301 32nd Ave S	Grand Forks
Best Western Harvest Inn & Suites	3350 32nd Ave S	Grand Forks
Nissan of Grand Forks	3220 S Washington St	Grand Forks
University of Jamestown	6000 College Ln	Jamestown
RM Stoudt Ford Lincoln	800 23rd St SW	Jamestown
National Buffalo Museum	500 17th St SE	Jamestown
NISC	3131 Technology Dr NW	Mandan
Ryan Nissan	3915 S Broadway	Minot
Minot Automotive Center	3615 S Broadway	Minot
Roosevelt Inn & Suites	600 2nd Ave SW	Watford City
West Fargo Sports Arena	520 32nd Ave W	West Fargo
Element Hotel	925 19th Ave E	West Fargo
Hornbacher's	2050 Sheyenne St.	West Fargo
Mountrail Williams Electric Coop	58th St W	Williston
Lewis & Clark Interpretive Center	(2020) 2527 8th St. SW	Washburn

Level 3 DC Fast Charging Stations *Round 1 – VW Settlement Grants*

Bismarck	City of Bismarck	Bismarck Airport, 2301 University Drive
Bismarck	City of Bismarck	BisMan CVB, 1600 Burnt Boat Road
Coleharbor	McLean Electric Coop	Totten Trail Bar & Grill, 2280 14 th St NW
Dickinson	ZEF Energy	Simonson Station Store 285 14 th St W

Fargo	Cass County Electric Coop	West Acres Mall, 3902 13 th Ave South
Fargo	Cass County Electric Coop	CVB, 2001 44 th St South
Fargo	Cass County Electric Coop	Hornbachers, 2050 Sheyenne St
Fargo	City of Fargo	Fargo City Hall, 225 4 th St North
Fargo	eSmart Systems Inc	
Grafton	ZEF Energy	Simonson Station Store, 45 E 12 th St
Grand Forks	NoDak Electric Coop	
Grand Forks	ZEF Energy	Simonson Station Store, 310 Gateway Dr
Hillsboro	City of Hillsboro	101 Sixth St, NW
Minot	Enerbase Cooperative Resources	Travel Center, 4750 Hwy 83 North
Minot	ZEF Energy	Simonson Station Store 1310 S. Broadway
Williston	ZEF Energy	Simonson Station Store, 2 nd Ave West
Wahpeton	ZEF Energy	Simonson Station Store, Dakota Avenue

ND Century Code Items To Review

Below are some sections of NDCC which may need changes.

NDCC §39-01-09 Parking meters prohibited. It is unlawful for the state of North Dakota, its political subdivisions, counties, cities, and the state department of transportation to establish and maintain any mechanical device or devices known as "parking meters", or by whatever name designated, requiring the deposit therein of coins or tokens for the privilege of parking cars or other vehicles upon the streets and highways in the state of North Dakota. Any and all ordinances and resolutions now existing authorizing the establishment and maintenance of such mechanical devices or parking meters, or by whatever name designated, are hereby declared null and void.

Suggested change - *This section does not apply to Electric Vehicle Charging Stations.*

NDCC §39-01-01.56 Park

56. "Park", when prohibited, means the standing of a vehicle, whether occupied or not, otherwise than temporarily for the purpose of and while actually engaged in **loading or unloading**.

Suggested change - *This section does not apply to Electric Vehicle Charging Stations.*

Concern - It's when prohibited, but it may be something to keep in the back of our mind as there is reference to what activity constitutes "parking" i.e. Loading/unloading. Maybe "charging" should be included depending on the scenario, since charging would be relatively "temporary". Need to define temporary.

Another section of NDCC which may need to be reviewed:

24-01-45 Controlled-access facility - Commercial establishments prohibited.

No automotive service station or other commercial establishment for serving motor vehicle users may be constructed or located within the right of way of, or on publicly owned or publicly leased land acquired or used for or in connection with, a controlled-access facility.

As referenced earlier on page 10 of the report, the PSC and utilities are reviewing law and administrative rules in case any changes might be necessary to accommodate development and expansion of EV Charging infrastructure. These sections include:

49-03-01 Certificate of public convenience and necessity - Secured by electric public utility.

1. An electric public utility may not begin construction or operation of a public utility plant or system, or of an extension of a plant or system, without first obtaining from the commission a certificate that public convenience and necessity require or will require the construction and operation. This section does not require an electric public utility to secure a certificate

for an extension within any municipality within which the electric public utility has lawfully commenced operations. If any electric public utility in constructing or extending its line, plant, or system, unreasonably interferes with or is about to interfere unreasonably with the service or system of any other electric public utility, or any electric cooperative corporation, the commission, on complaint of the electric public utility or the electric cooperative corporation claiming to be injuriously affected, after notice and hearing as provided in this title, may order enforcement of this section with respect to the offending electric public utility and prescribe just and reasonable terms and conditions.

2. An electric transmission provider may not begin construction or operation of an electric transmission line interconnecting with an existing electric transmission line owned or operated by an electric public utility without first obtaining a certificate that public convenience and necessity require or will require the construction or operation.

49-03-01.5 Definitions

As used in sections 49-03-01 through 49-03-01.5:

1. "Electric provider" means either an electric public utility or a rural electric cooperative.
2. "Electric public utility" means a privately-owned supplier of electricity offering to supply or supplying electricity to the general public.
3. "Electric transmission line" means facilities for conducting electric energy at a design voltage of one hundred fifteen kilovolts or greater phase to phase and more than one mile [1.61 kilometers] long.
4. "Electric transmission provider" means an owner or operator, other than a rural electric cooperative, of a transmission line the costs of which are recovered directly or indirectly through transmission charges to an electric public utility.
5. "Person" includes an individual, an electric public utility, a corporation, a limited liability company, an association, or a rural electric cooperative.
6. "Rural electric cooperative" includes any electric cooperative organized under chapter 10-13. An electric cooperative, composed of members as prescribed by law, shall not be deemed to be an electric public utility.
7. "Service area" means a defined geographic area containing existing or future service locations established by an agreement among electric providers and approved by the commission.
8. "Service area agreement" means an agreement between electric providers establishing service areas and designating service locations to be served by each provider under section 49-03-06.
9. "Service location" means the structures, facilities, or improvements on a parcel of real property to which electric service may be provided.

Administrative Rules

CHAPTER 69-09-02 - STANDARDS OF SERVICE – ELECTRIC

69-09-02-15. Resale and submetering. Electric service furnished by a public utility under established rate schedules shall not be resold or sub-metered by a customer unless the rate schedule under which the customer receives service specifically so provides.