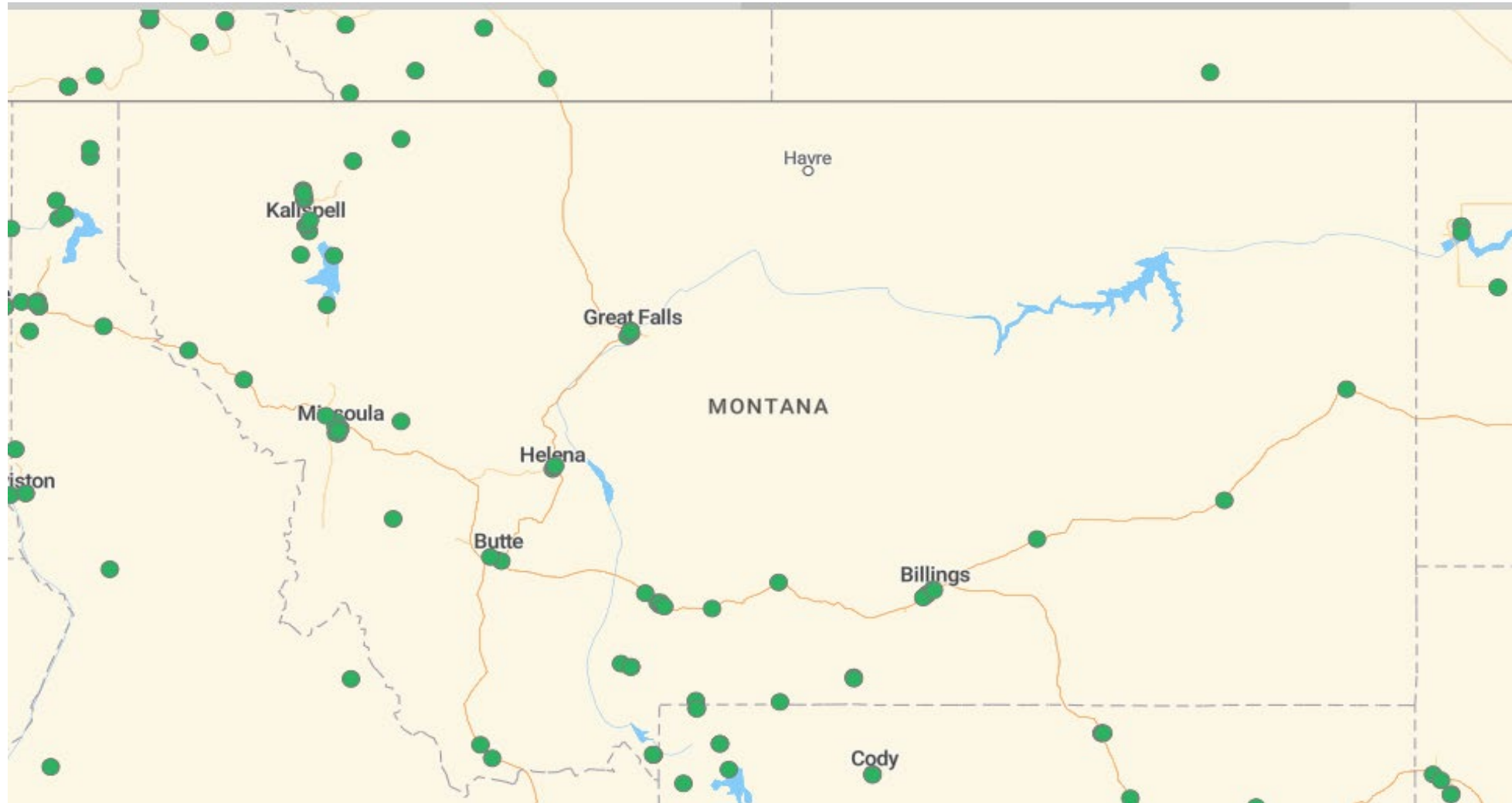


Electric Vehicles and Montana Highways

November 29, 2021

- Current registrations: 1,139 battery electric vehicles & 711 plug-in hybrid electric vehicles in Montana (as of a January 2021 snapshot).
- Charging Stations:

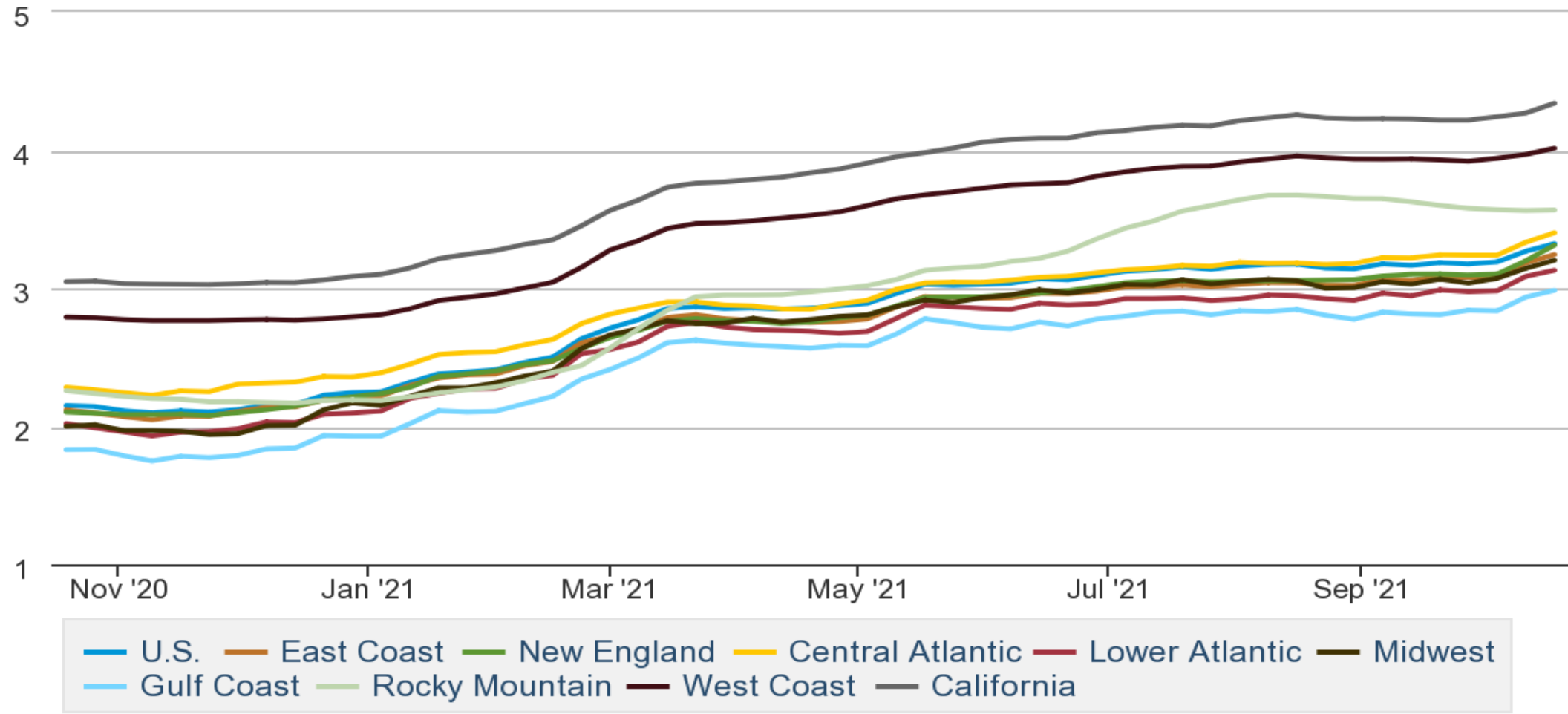


Trends that May Contribute to Potential Increase in Adoption of EV's:

- Increase in driving range of EV's (can go farther without having to charge as often).
- Total ownership costs may be cheaper (higher purchase cost – lower fuel cost), depending on the vehicle type & range.
- Increasing gas prices.
- More charging stations available.
- Increased electric truck & SUV model availability.
- Federal investment & incentives.
- Other states' incentives (tourist & pass-through traffic in Montana).
- Private sector investment (Hertz's Tesla purchase).
- Emission Reductions

Regular Gasoline Prices

(dollars per gallon)



Source: Energy Information Administration

Medium & Heavy Duty Trucks - California Advanced Clean Truck Regulation

Table IX-2: Estimated Number of Annual Sales per Vehicle Group

Model Year	Class 2b-3	Class 4-5	Class 6-7	Class 8	Class 7-8 Tractor	Total Sales
2024	53,761	6,436	7,556	1,119	4,686	73,559
2025	54,217	6,531	7,667	1,137	4,769	74,321
2026	54,753	6,649	7,806	1,177	4,918	75,302
2027	55,152	6,786	7,966	1,194	4,993	76,091
2028	55,765	6,904	8,105	1,216	5,075	77,064
2029	56,371	7,024	8,246	1,239	5,161	78,041
2030	56,968	7,147	8,390	1,264	5,263	79,032

Table IX-4: Advanced Clean Trucks ZEV Sales Percentage Schedule

Model Year	Baseline	Class 2b-3*	Class 4-8**	Class 7-8 Tractor
2024	0%	3%	7%	3%
2025	0%	5%	9%	5%
2026	0%	7%	11%	7%
2027	0%	9%	13%	9%
2028	0%	11%	24%	11%
2029	0%	13%	37%	13%
2030 and beyond	0%	15%	50%	15%

*Pickup trucks are excluded from Class 2b-3 requirements until 2027

**Excluding Class 7-8 tractors



Infrastructure Investment & Jobs Act (IIJA), 2021 – Electric Vehicle Funding

- National Electric Vehicle Formula Program – authorizes \$5 billion over the 5 year (\$1B annually) period to build EV charging capacity along the national highway system. 80% federal, 20% state match.
- Alternative Fuels Corridor Program – makes \$2.5 billion available in grants for additional charging stations along designated alternative fuel corridors.
- Montana’s current alternative fuel corridors: I-15, I-90, I-94, US-2, & US-93.
- Community grants – half of the annual appropriation under the Alt. Fuel Corridors Program will be available for charging stations on any public road. Rural areas to be prioritized.
- **\$43 million** anticipated for Montana over the 5-year authorization for electric vehicle charging stations.

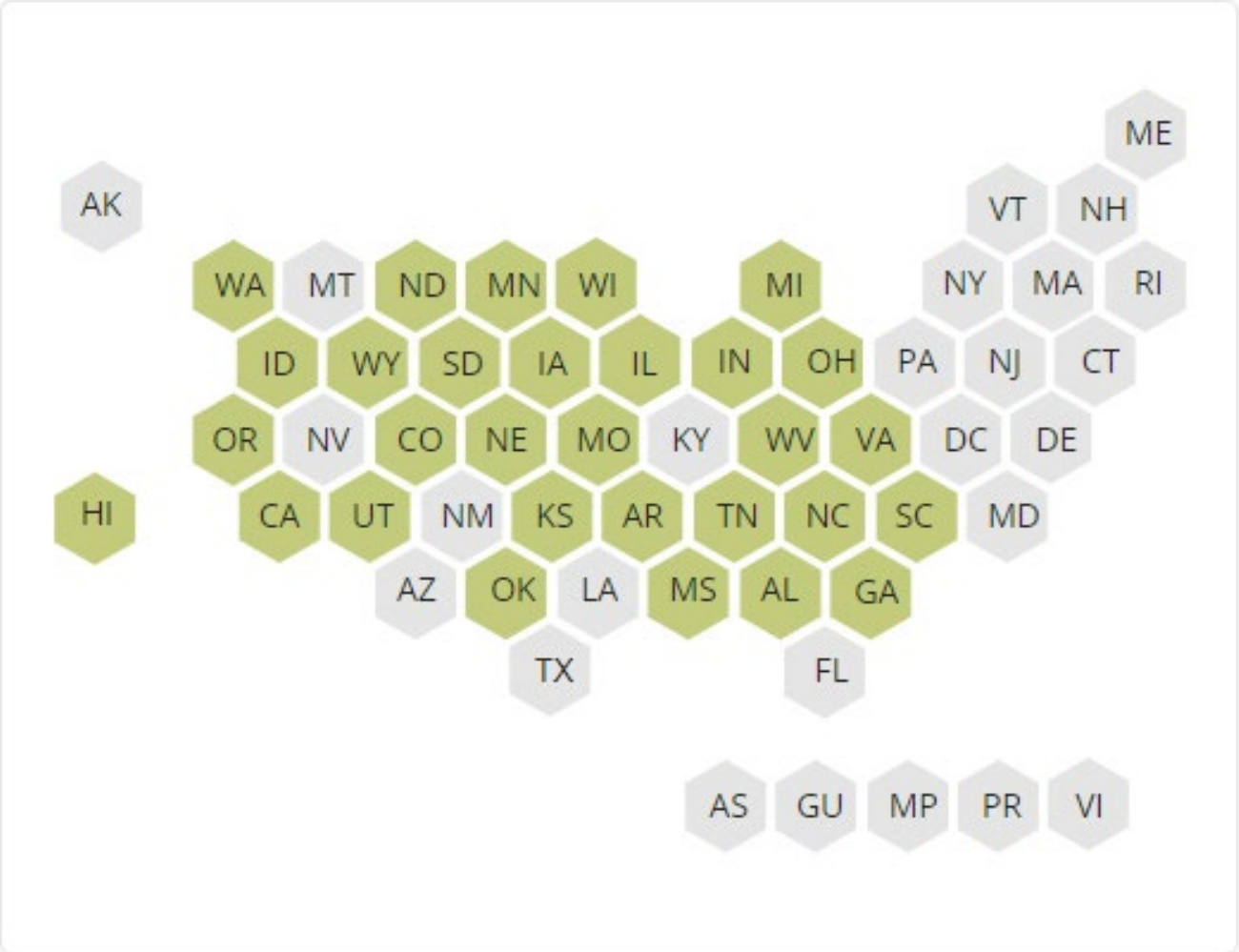
Estimated Annual State Fuel Tax Revenue Loss for Registered EV's

2021	Number of Electric Vehicles Registered	Estimated Revenue Impact*
Electric	1,139	\$177,684
Plug-In Hybrid Electric Vehicles (PHEV) Using 30% of Gas-Powered Vehicle Fuel Consumption	711	77,641
PHEV Using 60% of Gas-Powered Vehicle Fuel Consumption	711	44,366
<i>2025 (Projected Using 10% annual growth rate)**</i>		
Electric	1,690	263,628
Plug-In Hybrid Electric Vehicles (PHEV) Using 30% of Gas-Powered Vehicle Consumption	1,055	115,195
PHEV Using 60% of Gas-Powered Vehicle Consumption	1,055	65,826

* Calculated Using \$156 Annual State Fuel Tax Contribution Per Vehicle for Gas-Powered Vehicles (MDT's estimate)

**<https://www.atlasevhub.com/materials/ev-market-forecasts/>

States With Fees on Plug-In Hybrid and/or Electric Vehicles



Oklahoma's DRIVE Act 2021

Established annual electric vehicle registration fees ranging from \$82 for Class 1 vehicles to \$1,687 for Class 7 & 8 vehicles.

Established a \$0.03 tax per kilowatt hour or its equivalent used to charge or recharge electric vehicle batteries, beginning Jan. 1, 2024.

Charging tax not applicable for charging at private residences.

Public charging stations that did not previously charge fees and legacy charging stations are exempt until Nov. 1, 2041.

Statute allows a tax credit against the charging taxes imposed, not to exceed the total amount of registration fees for electric vehicles paid by the individual.

Aligning Transportation Revenue Options

Revenue Option	Revenue Generation	Pros	Cons
Fuel Tax Adjustment	\$8.5 million (\$5.5 million to MDT) per penny per gallon	<ul style="list-style-type: none"> - Administrative methods already established -Historically have been predictable 	<ul style="list-style-type: none"> Well... it's a <u>tax</u>... -Fossil fuel dependent
Fuel Tax Indexing	\$2.8 million (\$1.8 million to MDT) for each percentage point	<ul style="list-style-type: none"> -Administrative methods already established -Historically have been predictable -Keeps better pace with inflation 	<ul style="list-style-type: none"> -Still a tax... -Fossil fuel dependent -Methodologies can be complex
Hybrid/Electric Registration Fees	Suggested \$156 to for a full electric vehicle	<ul style="list-style-type: none"> -Supplement the cost of usage 	<ul style="list-style-type: none"> -Targets minor segment of fleet -Impacts in-state drivers only -Disregards other advances in fuel economy -Discourages environmentally friendly policies/behavior
Charging Station Surcharge	Suggested 4.3 cents per kWh	<ul style="list-style-type: none"> -Supplement the cost of usage -Captures out of state drivers 	<ul style="list-style-type: none"> -Targets minor segment of fleet -Disregards other advances in fuel economy -Discourages environmentally friendly policies/behavior -Isolating the metering of stations
Road User Charge (mileage based)	Undetermined	<ul style="list-style-type: none"> -More equitable among various types of vehicles -Not impacted by fuel economy 	<ul style="list-style-type: none"> -Administrative complications -Substantial costs -Privacy Issues -Modeling is unknown



Questions/Additional Information

- Electric Vehicles and Montana Highways (full report):
<https://www.leg.mt.gov/lfd/mara-2023-biennium/>
- Transportation Interim Committee:
<https://www.leg.mt.gov/committees/interim/tic/>
- Energy & Telecommunications Interim Committee (SJ 33 Montana Grid Capacity Study):
<https://www.leg.mt.gov/committees/interim/etic/>
- Montana Department of Environmental Quality – Alternative Fuels & Transportation:
<https://deq.mt.gov/energy/Programs/fuels>
- Montana Department of Transportation – Fuel Taxes:
<https://www.mdt.mt.gov/business/fueltax/allocations.shtml>