

SENATE BILL REPORT

E2SHB 1287

As of March 29, 2021

Title: An act relating to preparedness for a zero emissions transportation future.

Brief Description: Concerning preparedness for a zero emissions transportation future.

Sponsors: House Committee on Transportation (originally sponsored by Representatives Ramel, Hackney, Bateman, Fitzgibbon, Berry, Goodman, Santos, Kloba, Macri, Bergquist, Ormsby and Pollet).

Brief History: Passed House: 3/3/21, 65-31.

Committee Activity: Environment, Energy & Technology: 3/18/21, 3/23/21 [DPA-TRAN, DNP].

Transportation: 3/29/21.

Brief Summary of Amended Bill

- Requires the Washington State Department of Transportation to develop and maintain a publicly available mapping and forecasting tool.
- Requires electric utilities to analyze how their resource plans account for modeled load forecast scenarios that consider anticipated levels of zero-emission vehicle use in the utility's service area.
- Requires the State Building Code Council to adopt rules exceeding the specific minimum requirements for electric vehicle infrastructure in buildings by July 1, 2024.
- Establishes a goal for the state that publicly and privately owned passenger and light-duty vehicles of model year 2030 and later sold, purchased, or registered in Washington be electric vehicles.

SENATE COMMITTEE ON ENVIRONMENT, ENERGY & TECHNOLOGY

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.

Majority Report: Do pass as amended and be referred to Committee on Transportation.
Signed by Senators Carlyle, Chair; Lovelett, Vice Chair; Das, Hobbs, Lias, Nguyen, Stanford and Wellman.

Minority Report: Do not pass.
Signed by Senators Ericksen, Ranking Member; Brown, Fortunato, Sheldon and Short.

Staff: Julie Tran (786-7283)

SENATE COMMITTEE ON TRANSPORTATION

Staff: Kimberly Johnson (786-7472)

Background: Zero-Emission Vehicles. Under the federal Clean Air Act (CAA), most states, including Washington, are restricted from enacting their own emissions standards for new motor vehicles, which is an authority generally reserved for the federal government. California is the only state allowed under the CAA to adopt state standards for vehicle emissions. Other states may adopt vehicle emissions standards identical to California's for specific vehicle model years.

In 2020, the Legislature required the Department of Ecology (Ecology) to adopt all of California's motor vehicle emission standards, which includes low-emission vehicle (LEV) and zero-emission vehicle (ZEV) program regulations.

Electric Vehicle Charging Infrastructure Pilot Program. A 2015 law, required the Washington State Department of Transportation's (WSDOT) Innovative Partnerships Office to develop a pilot program to support deployment of electric vehicle (EV) charging infrastructure. WSDOT is required to adopt rules to implement the pilot program and support current EV drivers as well as the anticipated growth in EV adoption. In 2019, the program expanded to include proposals for hydrogen fuel station infrastructure.

In 2019, the Legislature created an EV Account for expenditures on certain transportation electrification and alternative fuel related purposes. Revenues from an annual \$75 fee imposed on electric or hybrid vehicles are deposited into the EV Account.

Electric Vehicle Infrastructure Requirements. The State Building Code Council (council) maintains the State Energy Code (code) as a part of the State Building Code, which sets the minimum construction requirements for buildings in the state. The code provides a maximum and minimum level of energy efficiency for residential buildings and the minimum level of energy efficiency for nonresidential buildings.

The council is required to adopt rules to establish EV infrastructure requirements that require EV charging capability at all new buildings that provide on-site parking by July 1, 2021. These rules must provide that:

- where parking is provided, the greater of one parking space or 10 percent of parking spaces, rounded to the next whole number, must be provided with wiring or raceway size to accommodate 208/240 V 40-amp or equivalent EV charging;
- electrical rooms serving buildings with on-site parking must be sized to accommodate the potential for electrical equipment and distribution required to serve a minimum of 20 percent of the total parking spaces with 208/240 V 40-amp or equivalent EV charging;
- load management infrastructure may be used to adjust the size and capacity of the required building electric service equipment and circuits; and
- for accessible parking spaces, the greater of one parking space or 10 percent of accessible parking spaces, rounded to the next whole number, must be provided with electric vehicle charging infrastructure that may also serve adjacent parking spaces not designated as accessible parking.

Electric Utility Resource Plans. Electric utilities may be operated by municipalities (municipal electric utilities), public utility districts (PUDs), which are special purpose districts which may be formed to generate and distribute electricity, and privately owned electrical companies (investor-owned utilities). Investor-owned utility rates are subject to review and approval by the Utilities and Transportation Commission (UTC).

Each electric utility must develop a Resource Plan (RP). Utilities with 25,000 or more customers not fully served by the Bonneville Power Administration (BPA) must develop Integrated Resource Plans (IRPs). An IRP must include forecasts of projected customer demand and assessments of commercially available conservation and efficiency resources and renewable and nonrenewable technologies. Utilities with fewer than 25,000 customers or that are fully served BPA customers must complete a RP with fewer required components than IRPs. IRPs and other RPs must be updated at least every two years.

For electric utilities required to develop an IRP, the IRP must include the following:

- an assessment and 10-year forecast of the availability of regional generation and transmission capacity on which the utility may rely to provide and deliver electricity to its customers;
- a determination of resource adequacy metrics for the resource plan consistent with the forecasts;
- a forecast of distributed energy resources that may be installed by the utility's customers and an assessment of their effect on the utility's load and operations;
- an assessment, informed by the Department of Health's Cumulative Impact Analysis, of energy and nonenergy benefits and reductions of burdens to vulnerable communities and highly impacted communities; and
- a 10-year clean energy action plan for implementing the coal phase-out standard, the greenhouse gas (GHG) neutral standard, and the clean energy standard at the lowest reasonable cost, and at an acceptable resource adequacy standard, that identifies the specific actions to be taken by the utility consistent with the long-range IRP.

Electrification of Transportation Plan. The governing body of a municipal electric utility or PUD may adopt an electrification of transportation plan that, at a minimum, establishes a finding that utility outreach and investment in the electrification of transportation infrastructure does not increase net costs to ratepayers in excess of 0.25 percent.

An investor-owned utility may submit to the UTC an electrification of transportation plan that deploys electric vehicle supply equipment (EVSE) or provides other electric transportation programs, services, or incentives to support electrification of transportation, provided that such EVSE programs or services do not increase costs to customers in excess of 0.25 percent above the benefits of electric transportation to all customers over a period consistent with the utility's planning horizon under its most recent IRP.

The incentive rate of return on investment:

- applies to any EVSE project installed after July 1, 2015; and
- may be allowed by the UTC through December 31, 2030, on capital expenditures for EVSE deployed for the benefit of ratepayers, provided the capital expenditures do not increase costs to ratepayers in excess of 0.25 percent.

Washington Greenhouse Gas Limits. Washington enacted legislation in 2008 setting a series of limits on emission of GHGs within the state. Ecology is responsible for monitoring and tracking the state's progress toward the emission limits. Additional legislation in 2020 updated the state limits to the following:

- by 2020, reduce overall emissions of GHGs to 1990 levels, or 90.5 million metric tons;
- by 2030, reduce overall emissions of GHGs to 45 percent below 1990 levels, or 50 million metric tons;
- by 2040, reduce overall emissions of GHGs to 70 percent below 1990 levels, or 27 million metric tons; and
- by 2050, reduce overall emissions of GHGs to 95 percent below 1990 levels, or 5 million metric tons, and achieve net-zero GHG emissions.

Summary of Amended Bill: Electric Vehicle Infrastructure Tool. WSDOT must develop and maintain a publicly available mapping and forecasting tool (tool) that provides locations and essential information of charging and refueling infrastructure to support forecasted levels of EV adoption, travel, and use. When developing the tool WSDOT must consult with Ecology as well as the Department of Commerce and the state Office of Equity.

The tool must:

- be designed to enable deployment of charging and refueling infrastructure to support transportation electrification efforts that result in emission reductions consistent with state GHG emission limits;
- initially prioritize on-road transportation;
- incorporate WSDOT traffic data for passenger and freight vehicles;
- integrate population, health, environmental, and socioeconomic data; and

- integrate related analyses, such as the state energy strategy.

If feasible or to the extent feasible, the tool must also:

- provide the data necessary to support state agencies with a role in transportation electrification efforts;
- provide data at a scale that supports electric utility planning for system-wide impacts and for impacts on specific components of the distribution system;
- forecast ZEV use that would achieve state emission reductions consistent with state emission limits;
- evolve over time to support future transportation electrification programs;
- address specified elements, including the amount, type, location, and year of installation of EV supply equipment, the EV characteristics necessary to model future EV penetration levels and use cases, the estimated energy and capacity demand, political boundaries, and existing infrastructure;
- integrate scenarios including varying levels of public transportation and active transportation use; and
- incorporate infrastructure located at or near the border with neighboring states and provinces.

In this section, EV is defined as any craft, vessel, automobile, public transportation vehicle, or equipment that transports people or goods and operates, either partially or exclusively, on electrical energy from an off-board source that is stored onboard for motive purpose.

WSDOT must conduct a stakeholder process when developing the tool and must involve stakeholders early in the tool development process. WSDOT may contract with consultants or Department of Commerce to develop and implement all or part of the tool, and may rely on or contract for privately maintained data.

Funds in the EV Account may be used for the tool. To the extent the tool is used to recommend future EV charging sites, WSDOT must consider recommending sites co-located with small retailers and other amenities.

Electric Utilities' Resource Plans. Electric utilities' IRPs and RPs must account for:

- modeled load forecast scenarios considering the anticipated levels of ZEV use in a utility's service area, including anticipated levels of ZEV use in the utility's service area provided in the mapping and forecasting tool, if feasible;
- analysis, research, findings, recommendations, actions, and any other relevant information found in the utilities' transportation electrification plans; and
- assumed use case forecasts and the associated energy impacts, which may use the tool's forecasts, but this only applies to plans due to be filed after September 1, 2023.

Electric Vehicle Infrastructure Requirements. The council's EV requirements for buildings must exceed the minimum requirements established in 2019 for residential and commercial buildings to the extent necessary to support anticipated levels of ZEV use that result from the ZEV program implementation, and that result in emission reductions consistent with

state emission reduction limits.

The council must adopt rules to implement the EV infrastructure requirements by July 1, 2024 and the rules may be periodically updated thereafter.

Electric Vehicle Goal. A goal is established for the state that all publicly and privately owned passenger and light-duty vehicles of model year 2030 and later sold, purchased, or registered in Washington be EVs. This goal does not supersede any other law—any other law that conflicts with it is controlling. A state agency is not permitted to restrict the purchase, sale, or registration of vehicles on the basis of this goal. This goal does not change or affect the directive for Ecology to implement the ZEV program.

In this section, EV is defined as vehicles that use energy stored in rechargeable battery packs or in hydrogen and that rely solely on electric motors for propulsion.

EFFECT OF ENVIRONMENT, ENERGY & TECHNOLOGY COMMITTEE AMENDMENT(S):

- Establishes a goal for the state that publicly and privately owned passenger and light-duty vehicles of model year 2030 and later sold, purchased, or registered in Washington be electric vehicles.

Appropriation: None.

Fiscal Note: Available.

Creates Committee/Commission/Task Force that includes Legislative members: No.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Staff Summary of Public Testimony on Engrossed Second Substitute House Bill (Environment, Energy & Technology): *The committee recommended a different version of the bill than what was heard.* PRO: Electric utilities are in a unique position as they play an essential role in transportation electrification. This bill provides further direction and clarity to ensure utilities are proactively planning for new load growth and this mapping and forecasting tool is absolutely necessary for policy makers and those that will be planning and financing the deployment of the electric fleets. There may be a growth in EV sale in the future but a key challenge is the availability of charging. This bill addresses those concerns by identifying where charging is available and helping forecast where that charging will be needed. This bill will also extend planning for the infrastructure and supply needed to support the increase in low emission vehicles and enable more people who want to buy low emission vehicles to see a pathway to that goal. It will ensure that all communities can benefit from ZEV and have the realistic opportunity to access the required infrastructure. There is a request for the study to include avoided transmission and

distribution cost and for the study to consult with experts in hydrogen and utility infrastructure. There is an additional request for the utility planning requirement to be delayed.

CON: This will cost money and that cost will be passed down to the consumers. Electricity has to be produced and transported. There will also be substantial construction needed and it will take a lot of work to dig everything up.

OTHER: Information is important for a strategic approach to further advance the adoption of EVs in Washington. This tool would provide a comprehensive approach to statewide ZEV planning and help prioritize the state's EV charging and refueling investment. The tool could unlock federal funding for electrification projects and we can have a plan in place to put those federal funds to work in Washington. This bill will also help the state know where there are gaps of information in planning and it can facilitate the siting of EV charging stations to ensure an equitable distribution of charging stations to benefit all Washingtonians. Putting the charging stations in the right places is the key to growing the ZEV market and making the finances pencil out. The tool in this bill would create a centralized state resource that includes the information and data needed for planning is an efficient use of public funding, providing savings across state and local governments and utilities.

Persons Testifying (Environment, Energy & Technology): PRO: Representative Alex Ramel, Prime Sponsor; Karen Messmer, Thurston Climate Action Team; Carolyn Logue, Washington Food Industry Association; Scott Hazlegrove, Washington State Auto Dealers Association; Dave Warren, Renewable Hydrogen Alliance, Western States Hydrogen Alliance; Martin Gibbins, League of Women Voters of Washington; Annabel Drayton, NW Energy Coalition.

CON: Jeff Pack.

OTHER: Tonia Buell, Washington Department of Transportation; Kathy Taylor, Washington Department of Ecology; Michael Breish, Washington Department of Commerce; Don MacKenzie, Sustainable Transportation Lab, University of Washington.

Persons Signed In To Testify But Not Testifying (Environment, Energy & Technology): No one.

Staff Summary of Public Testimony on the Bill as Amended by Environment, Energy & Technology (Transportation): PRO: EVs will rapidly become an increasingly larger portion of the overall vehicle fleet. Auto dealers are comfortable with the stretch goal of EV vehicle sales by 2030 to keep in stride with California's goal of 2035. One thing we have noted with our customers looking at EVs is that they need to feel comfortable with the vehicle's range and that there is sufficient charging available out there. They need to know where the charging capacity will be available. The tool will help with this.

We support the tool because it looks at more than just electricity, but also where can these stations be located. This is an opportunity to not shut out our small businesses that support the current fueling infrastructure in this state. We need to include them in these discussions and they would like to be included in the new fueling infrastructure and green economy. You need more than just fueling infrastructure along the roads.

Electric utilities play a key role in planning for a clean transportation future. The benefits need to be for all Washingtonians, especially those that are low income and those that have been disproportionately impacted in the current system. This bill provides greater clarity to ensure that utilities are actively planning for reliable transportation fueling infrastructure. The new tool will help this. This bill will help enable widespread access to EV charging. A recent JTC study identified that to support 56,000 state vehicles we need 10,000 charging stations, half of which need to be DC fast chargers. Each DC fast charger is equivalent to a big box store's use of energy. One million EVs will need several hundred thousand stations. The infrastructure needs to stretch beyond the charging stations themselves. There needs to be transformer and wire upgrades to make this all possible.

OTHER: WSDOT is interested in zero emission transportation in both the movement of people and goods. This bill would provide a coordinated and comprehensive approach for electrification planning. The bill would help to prioritize the investments in electric vehicle charging and hydrogen refueling infrastructure. One million EVs will need to be driving on our roads by 2030 in order to meet our statutory green house emissions goals as laid out in our 2021 State Energy Strategy. The recharging and refueling infrastructure will need to accompany this growth. This aggressive infrastructure growth leads to an interesting challenge—how best can a utility plan for infrastructure that supports city and county fleets, private vehicles, transit buses, and household goods movement without the right information? The use of public funds for a planning tool is both efficient and appropriate. Ecology supports this bill. ZEV are an important part of addressing climate change. Knowing where there are gaps in information and planning will facilitate the installation of charging stations and ensure an equitable distribution of charging stations and benefit all Washingtonians.

Persons Testifying (Transportation): PRO: Representative Alex Ramel, Prime Sponsor; Scott Hazlegrove, Washington State Auto Dealers Association; Carolyn Logue, Washington Food Industry Association; Annabel Drayton, NW Energy Coalition; Dave Warren, Renewable Hydrogen Alliance, Western States Hydrogen Alliance.

OTHER: Tonia Buell, Washington State Department of Transportation; Kathy Taylor, Washington Department of Ecology; Michael Breish, Washington Department of Commerce.

Persons Signed In To Testify But Not Testifying (Transportation): No one.