

# HOUSE BILL REPORT

## SSB 5812

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**As Passed House:**

March 1, 2024

**Title:** An act relating to responding to electric vehicle fires.

**Brief Description:** Concerning the response to electric vehicle fires.

**Sponsors:** Senate Committee on Transportation (originally sponsored by Senators Wilson, J., Nguyen, Lovick and McCune).

**Brief History:**

**Committee Activity:**

Transportation: 2/15/24, 2/21/24 [DP].

**Floor Activity:**

Passed House: 3/1/24, 96-0.

**Brief Summary of Substitute Bill**

- Directs the Washington State Patrol to conduct a study of electric vehicle fires with a reporting date of January 1, 2025.

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### HOUSE COMMITTEE ON TRANSPORTATION

**Majority Report:** Do pass. Signed by 28 members: Representatives Fey, Chair; Donaghy, Vice Chair; Paul, Vice Chair; Timmons, Vice Chair; Barkis, Ranking Minority Member; Hutchins, Assistant Ranking Minority Member; Low, Assistant Ranking Minority Member; Robertson, Assistant Ranking Minority Member; Berry, Bronoske, Chapman, Cortes, Dent, Doglio, Duerr, Entenman, Goehner, Griffey, Hackney, Klicker, Mena, Nance, Orcutt, Ramel, Ramos, Schmidt, Volz and Walsh.

**Staff:** Beth Redfield (786-7140).

**Background:**

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*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.*

The Washington State Patrol's (WSP's) Fire Protection Bureau has broad responsibility to ensure fire and life safety for the people of Washington. The WSP Fire Protection Bureau's divisions include fire services training, regional fire protection services, emergency mobilization, and fire code information services.

A 2021 National Transportation Safety Board investigation of three electric vehicle fire incidents found that vehicle manufacturers' emergency response guides were inadequate for minimizing risks to first and second responders, and that there are gaps in safety standards and research related to high-voltage lithium-ion batteries involved in high-speed, high-severity crashes.

**Summary of Bill:**

The WSP, in consultation with the Department of Ecology (Ecology), a representative of the towing and recovery industry, local fire protection districts, and other entities must conduct a study of electric vehicle (EV) fires reviewing the following:

- impacts to the environment and proximate residential areas;
- impacts to responding firefighters' health;
- best practices for fire response; and
- best practices regarding cleanup and disposal efforts.

By January 1, 2025, the WSP must report to the appropriate committees of the Legislature their study findings, and any resulting recommendations.

**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) Vehicular fires are nothing new, but EVs come with unique challenges that have never been seen before. The city of Seattle responded to 42 battery fires last year. It is important to understand how to prevent these fires and stop these fires. It is time that the WSP, fire department personnel, and the towing and recovery industry sat down to figure out best practices for something that is becoming more a part of the everyday driving experience.

Bellevue is proud to be among the few fire districts to receive the Ecology grants to purchase electric fire engines. These vehicles are important to building a healthier planet and communities. The retail market has taken off faster than first responders have become equipped to safely contain EV fires when something does go wrong. Last year there was a

Tesla fire that burned so hot and so long that the fire crew had to drag the burning vehicle away from trees. A typical fire engine carries 500 gallons of water and, in cases of EV fires, it takes 12 times that amount of water. Imagine if this had happened in a parking structure or near homes or businesses. The intense heat and toxic fumes released during these fires are serious concerns. Fire departments need more information and more tools today to safely contain EV fires.

As an emerging technology, EVs pose a hazard that fire departments are not prepared for. The fires cannot be extinguished by conventional means. Each vehicle has its own set of suppression guidelines, and fire responders need to learn each and every one. Electric vehicle batteries use stranded energy, meaning once the fire is out and the car is on a tow truck, the fire may rekindle. There are some documented cases where EV fires have rekindled as much as two weeks later. Fire departments must change their standard operating procedures. Washington has a framework which provides hazardous materials training and equipment for first responders. It is common sense to include EV fires in this framework. The public is asking questions. For instance, how to install chargers safely in parking structures? How to store large pallets of batteries? If there is a battery emergency, should the public evacuate or shelter in place? With technology changing rapidly, fire departments are at a disadvantage to provide the best answers. In a small jurisdiction, there is not enough time to sift through all the complicated, national studies. Fire departments need to maintain mission readiness.

(Opposed) None.

**Persons Testifying:** Senator Jeff Wilson, prime sponsor; Dave Tait, Bellevue Fire Department; Randy Collins, Washington State Association of Fire Marshals; and Kris Zachary, Towing and Recovery Association of Washington.

**Persons Signed In To Testify But Not Testifying:** None.