



THE STATE  
of **ALASKA**  
GOVERNOR MIKE DUNLEAVY

## Department of Transportation and Public Facilities

OFFICE OF THE COMMISSIONER  
PO Box 112500  
Juneau, Alaska 99811-2500  
Main: 907.465.3900  
[dot.alaska.gov](http://dot.alaska.gov)

April 7, 2025

The Honorable Jesse Bjorkman  
Chair, Senate Transportation Committee  
Alaska State Capitol, Room 427  
Juneau, AK, 99801

Dear Chair Bjorkman:

Thank you for the opportunity to provide follow-up responses to the questions raised during the Senate Transportation Committee hearing on March 13, 2025.

### **Vehicle Violations**

Senator Kiehl requested information on whether vehicle violations are categorized for the purpose of assessing carrier safety performance.

The Federal Motor Carrier Safety Administration (FMCSA) utilizes the Safety Measurement System (SMS) methodology to categorize violations as either driver- or vehicle-related. Each violation is then assigned severity points, which contribute to assessing a carrier's overall safety performance.

The attached spreadsheet outlines these violations in detail, including the federal violation code, violation severity rate, description, and violation type. This information enables a comprehensive and systematic approach to monitoring and improving carrier safety performance statewide.

Categories include, but are not limited to:

- Miscellaneous Parts & Accessories – Tires (e.g., flat tire, audible air leaks)
- Inspection, Repair, and Maintenance (e.g., defective brake systems)
- Lamps, Reflective Devices, and Electrical Wiring (e.g., inoperative brake lamps or turn signals)
- Brakes (e.g., defective or non-existent parking brake systems)

### **Road Maintenance Costs Attributed to Studded Tire Use**

Senator Shower inquired about the cost of roadway maintenance related to pavement degradation caused by studded tires. In response, the Department of Transportation & Public Facilities (DOT&PF) is providing a study titled "Economic Analysis of Pavement Impacts from Studded Tire Use in Alaska," which is enclosed for the committee's review.

This research, conducted in partnership with the University of Alaska Anchorage and funded by the Federal Highway Administration, analyzes data from twenty highway projects across

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Chair Bjorkman

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Southcentral and Southeast Alaska. It estimates that studded tire-related pavement damage costs the state approximately \$13.7 million annually, or \$203.2 million over 20 years (in 2019 dollars). The study further found that studded tires reduce pavement life from 15 years to as little as six to eight years, depending on conditions and materials used.

The report also highlights that passenger vehicles with studded tires cause significantly more rutting than heavy trucks under comparable conditions and that resurfacing costs far exceed revenues collected through the state's studded tire tax. Several mitigation strategies are presented, including the use of hard aggregate in pavement mixes, promoting non-studded winter tires, and adjusting seasonal regulations.

For detailed findings, methods, and policy considerations, please refer to the enclosed study.

**Island River Drive Maintenance Responsibility, Ditch Specifications, and Safety Concerns**

Senator Bjorkman raised questions about maintenance responsibilities for Island River Drive in Nikiski. Upon review, DOT&PF confirms that Island River Drive is State-owned.

Regarding constituent safety concerns about ditch depth and slopes along Island River Drive, DOT&PF standards emphasize deeper ditches for enhanced roadway resiliency. Standard minimum desired ditch depths are typically two to three feet to effectively drain water away from road subgrades, reducing long-term maintenance and extending roadway life. DOT&PF also acknowledges that ditch slopes on lower-classification, lower-speed, and lower-volume roadways, such as Island River Drive, commonly have steeper slopes compared to higher-speed, higher-volume roadways. These slopes often range between two horizontal to one vertical (2H:1V) and 2.5 horizontal to one vertical (2.5H:1V), aligning closely with the Kenai Peninsula Borough's road standards.

We appreciate the Senate Transportation Committee's continued oversight and partnership in advancing Alaska's transportation initiatives.

Sincerely,



Ryan Anderson P.E.  
Commissioner

Enclosure: FY2024 Violation Severity Spreadsheet  
Studded Tire Use in Alaska Study

cc: Andy Mills, Legislative Liaison, Alaska DOT&PF  
Jordan Shilling, Director, Governor's Legislative Office