

Bulletin 1.0: May 2024

Overview of the Risk Factor Score, Risk Factor Score Change Summary & Carrier Impacts

Background:

- All National Safety Code (NSC) carriers who are required to operate their vehicles under the authority of a Safety Fitness Certificate are monitored under Alberta's carrier monitoring program.
- The profile events monitored by the department depend on whether the carrier is provincially or federally regulated, i.e. SFC issued with "Provincial" or "Federal" operating status.
 - All events involving a federally regulated carrier that occur with a vehicle (or combination of vehicles) registered with a gross vehicle weight for more than 4,500 kilograms are included on the *Carrier Profile* and are used for monitoring purposes.
 - For provincially regulated carriers, only events involving a vehicle (or combination of vehicles) registered for 11,794 kilograms or more are considered.
 - Events involving a commercial passenger vehicle with an original manufactured seating capacity of 11 or more persons, including the driver, will be considered for both provincially and federally regulated carriers.
- The risk factor score is used to determine the 5% of Alberta carriers that present the greatest risk to the public based on carriers' on-road safety performance data.

What's New: Risk Factor Score Change Summary

As of May 1, 2024, the risk factor scoring process is refined to improve the precision of carrier monitoring to identify the 5% high-risk carriers operating in Alberta. Risk factor score refinements take effect for April 2024 month-end monitoring. Historic carrier data, past risk factor scores, and prior carrier monitoring outcomes will be unchanged.

Risk factor score refinements include:

- Greater precision in calculations of average fleet over a 12 month period, which aligns with the 12 month period for safety event data;
- Changes in fleet groupings for more equitable distribution of carriers; and
- Failure rate is displayed as CVSA inspection points per vehicle, and calculated based on the inspection results (e.g. pass, requires attention, out of service) and the carrier's average fleet.

Carriers may find that their risk factor score has changed from March 2024 to April 2024 month-end, as a result of the refinements. Changes in the risk factor score may impact carrier monitoring, and move the carrier on or off of monitoring, and/or move the carrier to a different stage of monitoring.

Overall, the risk factor scoring changes ensure that the department is able to identify and take intervention action with the highest risk carriers operating in Alberta.

Summary: How is the Risk Factor Score is calculated in Alberta?

- Safety events occurring in the last 12 months, including convictions, administrative penalties for impaired driving charges, Commercial Vehicle Safety Alliance (CVSA) inspections, and collisions.
 - Fleet Type (Bus or Truck); and
 - Fleet Size (Average Fleet over 12 month period).

- **Note:** A carrier will be considered a "bus" if 50% or more of their regulated fleet are buses. Once Truck or Bus has been determined, the carrier's average fleet size is calculated based on a 12 month period.
- Each safety event type has its own constant or weighting, which is included in the calculation process. Safety event types have different impacts on the risk factor score calculations. Safety event types with a higher constant/weighting will have a greater contribution to the overall risk factor score.
- Point values are assigned to a safety event type, such as in the case of convictions (e.g. tickets) and collisions, which also impacts the risk factor score.
 - Each conviction event is assigned 0 - 5 points based on a pointing system that aligns with national values set by the Canadian Council of Motor Transport Administrators (CCMTA), based on the safety severity.
 - The conviction points are combined and divided by the carrier's average fleet size.
 - Each collision event is assigned a point value of 2, 4, or 6 depending if the collision resulted in property damage (2), injury (4), or a fatality (6).
 - The collision points are combined and divided by the carrier's average fleet size.
- For CVSA inspections results, the *CVSA points per vehicle* is also calculated based on inspection results (Out of Service, Requires Attention, Pass) and the total number of inspections.
 - *CVSA Points per Vehicle (formerly known as Failure Rate):* (Number of OOS + 0.25RAT - 0.33 PASS) /Average Fleet
- All data on the carrier's fleet type, fleet size, and on-road safety event data works together to calculate the carrier's risk factor score.
 - A carrier's risk factor score is then compared to other carriers of a similar operation (truck or bus), and of a similar fleet size based on the fleet size grouping.
- The carrier monitoring program is designed to identify the 5% of Alberta carriers that represent the greatest risk to the public.
 - Each of those carriers are identified as on-monitoring, and are assigned a monitoring stage of 1 - 4 based on the carrier's risk factor score.
 - Carriers at monitoring stage 4 represent the greatest risk to the public.
- Since October 2021, the carrier monitoring program uses dynamic measurements that automatically adapt to carrier data changes, in order to compare a carrier's compliance based on other carriers with the same fleet type and fleet size grouping.
 - Monitoring thresholds can change on a monthly basis due to the carrier data in Alberta.
 - Monitoring thresholds are dynamically calculated every month based on the actual number of NSC carriers at month-end, and use the monitoring carrier percentages in each fleet range for increased data reliability and accuracy.
 - Modernized system tools ensure that the 5% monitoring target is consistently achieved by the department regardless of changes in the number of NSC carriers operating in Alberta, carrier fleet changes, and/or data fluctuations, which aligns the broader departmental NSC policies.

Questions?

If you have any questions about the risk factor score and/or carrier monitoring process, please contact: compliance.info@gov.ab.ca.

For more information on carrier profiles, online profile services, and carrier monitoring, visit our website at: [Carrier profiles and monitoring | Alberta.ca](#)