



Jamie Smith LH100

**91** Safety Score  
↑ 3 points

Distraction impacted your score the most



Barry Watkins DB350

**76** Safety Score  
↑ 3 points

Close following impacted your score the most



Isabella Baskin DB400

**59** Safety Score  
↓ 1 point

Speeding impacted your score the most



# Safety Score 101.

The customizable Safety Score evaluates driver performance over time for an accurate measure of driver risk.



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## Introduction

The customizable Safety Score evaluates driver performance over time, accurately measuring driver risk across more than 15 unsafe and positive driving behaviors. This helps determine **who** you should be coaching and **what behaviors** you should focus on. The score is 5x more predictive of accidents than the industry's leading safety score.

Safety managers have the option to fully customize the weight of each behavior or turn off specific behaviors to better manage their safety program. Drivers have full visibility into how they are scored with detailed behavior breakdown.

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## How is the Safety Score calculated?




It's simple. Drivers are scored based on the volume of unsafe events generated. Fewer events result in a higher score, with the maximum score being 100.

- Each new driver starts with a score of 100. Their personalized score is available after 100 miles of driving data is accrued.
- Scores update every Monday.
- The Safety Score assesses driving performance based on a 4-week rolling window, reflecting the most recent 4 weeks of data.

**To determine a driver's score, the model:**

- 1. **Aggregates all the events** that exceeded the minimum unsafe thresholds for that behavior in the past 4 weeks.

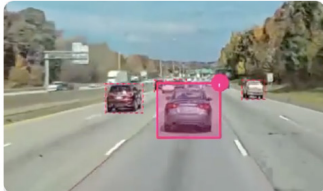
These calculations are made on a rolling basis.

Close Following		Exceeded threshold	Include in Safety Score
		Yes	Yes
		No	No

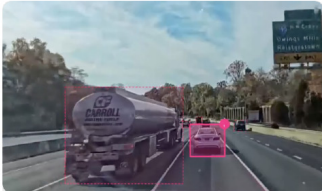
- 2. **Calculates the likelihood that unsafe behavior will emerge** per 1,000 miles traveled.

This normalized event rate makes the data easier to compare and ensures that drivers who drive more aren't unfairly penalized.

**Events / 1k miles = 1.3**



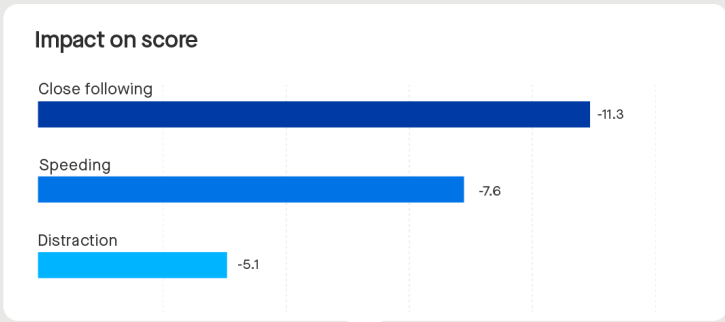
Close following  
Barry Watkins



Close following  
Barry Watkins

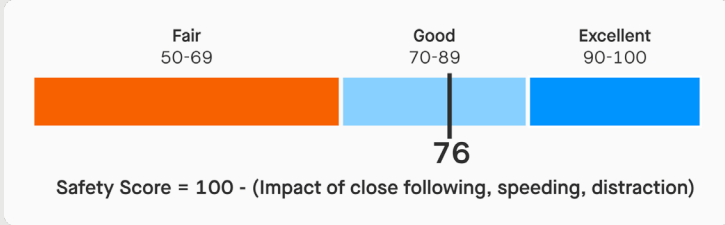
- 3. **Determines the behavior's impact on the score** based on the weight of the behavior and the likelihood that unsafe behavior will emerge per 1,000 miles.

Behaviors that are more likely to cause collisions are given greater weight.



- 4. **Calculates the final score** by subtracting the sum of impact across all behaviors from 100.

The resulting Safety Score provides an accurate risk profile of your driver.



Learn more about Safety Score inputs below.

## How do behaviors impact the score?

The simple, evidence-based score changes based on the frequency of unsafe behaviors. **Reducing safety events will directly improve the score**, making it easy to coach drivers and explain why scores are changing.

↓ Reduce safety events

↑ Improve Safety Score

The Safety Score incorporates **unsafe behaviors** only if they meet minimum unsafe thresholds. Included behaviors depend on whether dash cams are installed and if so, the camera type. For example, behaviors such as distraction or cell phone usage will not be factored into the score when only a road-facing dash cam is used, due to its inability to capture in-cab activities. If no dash cam is installed, only harsh driving and speeding behaviors are included.

For the Motive-defined score, our machine learning model assigns weights to behaviors based on their probability to cause a collision. Behaviors most likely to cause collisions are given greater weight.

### Impact on score (from highest to lowest):

- Hard brake
- Speeding
- Distraction
- Stop sign violation
- Cell phone usage
- Close following
- Seat belt violation
- Hard corner
- Hard acceleration

Check out [this article](#) to learn more.

You can also customize the weight of each behavior and its impact on your Safety Score.

# How can we customize our score?

Customize your Safety Score by modifying behavior thresholds, behavior weights, and performance ranges to focus on the behaviors that matter most to your business.

## 1. Choose the behaviors to detect and define when events are captured. Captured events impact the Safety Score.

The screenshot shows the 'Unsafe Behavior Detection' configuration window. It has a blue header with 'Cancel' and 'Save' buttons. The main content is titled 'Close following' and includes a sub-header 'All detection of driver tail-gaiting or following a Vehicle too closely at an unsafe distance'. There are two checked options: 'Event capture' and 'In-cab alert'. Under 'Event capture', there are three sliders: 'Time-to-hit' (0.7 sec to 0.2 sec), 'Speed' (35 mph to 75 mph), and 'Duration' (5 sec to 180 sec). A 'RECOMMENDED' icon is visible. Under 'In-cab alert', there is a dropdown menu set to 'Lowest (Default)' and a '55 mph/s' label.

## 2. Determine the weight each behavior has on the score. To remove a behavior from the score, set the weight to 0.

The screenshot shows the 'Custom Safety Score' configuration window. It has a blue header with 'Cancel' and 'Save' buttons. The main content shows '0 out of 100 pts to allocate' and three buttons: 'Start from scratch', 'Split equally', and 'Set to Motive default', along with a 'Reset' button. Below is a horizontal bar chart with 10 colored segments representing different behaviors. The 'Allocate maximum points a driver can earn for each behavior' section shows three behaviors with sliders and point values: 'Hard Brake' (Deceleration  $\geq 8.3$  mph/s, 19 points), 'Speeding' (6 mph over posted for 1 min, 15 points), and 'Distraction' (Acceleration  $\geq 0.4g$ , 13 points). A 'Motive Default' icon is visible.

3. Modify the performance range definitions.

**Performance Ranges** Cancel Save

**Adjust sliders to set new ranges**  
Modifying away from Motive's default values decreases the accuracy of predicting events.

Set to Motive Default Split equally Reset

Performance Range	Score Range
Fair	50 - 69
Good	70 - 90
Exc...	90+

Safety Score

Check out [this article](#) to learn more.

## How should we evaluate our score?

The Safety Score rating helps to determine how often you should have coaching conversations. Drivers who need improvement may require weekly conversations while good drivers only require a casual check-in every other month.

**Note:** Performance ranges vary by vehicle class and dash cam model. See example below for Motive-defined scores. Remember to establish an appropriate coaching cadence if you've customized your scores.

Rating	Score range	Likelihood to crash vs. excellent drivers	Suggested coaching
Excellent	90-100		1x every other month
Good	70-89	1.5x	1x/month
Fair	50-69	3x	1x/week

Based on Motive-defined scores, drivers with Fair scores are 3x more likely to crash than those with Excellent scores. We recommend coaching 1x/week.

Review your driver's safety profile to understand how specific behaviors are impacting your driver's score.

**Safety / Drivers / Kathryn Murphy** Message Driver View Driver Profile

**Kathryn needs coaching on Distractions and Speeding**  
[Coach Kathryn](#) [View behavior report](#)

**SAFETY SCORE** **76** (GOOD 70-90)  
 Nov 06 - Jan 29 vs. Prev. Score Period (Oct 30 - Jan 22) Last 12 Weeks

**Fleet Rank** 26 of 78 ↑2  
**Total Driving (mi)** 1.4K ↑2%  
**Events / 1k mi** 29.2 ↑2%  
**Speeding** 51% ↑2%  
**Collisions** 0 --

**Kathryn's Safety Performance** Safety Score

**12 Week Score Trend**  
 Kathryn's Score <<Group> Average Coaching

**Safety Score Factors** Switch to detail view View all behaviors  
 NOV 06, 2022 - JAN 29  
 These are the top 5 behaviors impacting Kathryn's score.

- Distraction -9.4
- Speeding -5.4
- Hard Braking -2.5
- Cell Phone Usage -1.4
- Stop Sign Violations -0.8

**Kathryn's Recent Events** View all speeding events View all events

**Details**  
 ASSIGNED COACH: Theresa Webb  
 GROUP(S): Group A, Group B, Subgroup B.1  
 LATEST VEHICLE: PT7483

**Coaching History**

- July 21** · 10:06 am  
 Coached on Traffic Violations, Close Following and Seat Belt Violations by Darrel Steward  
 "Kathryn has made some progress here but we need to see some more improvement."  
 Hard Accelerating was ignored  
 Kathryn acknowledged July 23, 11:32 am
- July 17** · 12:42 pm  
 Traffic Violation event shared with Kathryn by Motive Safety  
 Not reviewed by Kathryn
- May 4** · 12:42 pm  
 Hard Brake event shared with Kathryn by Brooklyn Simmons



## How can we use the Safety Score in our incentive program?

It's important to show appreciation for drivers so they understand how critical they are to the business. The Motive Safety Score makes it easy to:

1. Pinpoint exactly who your fleet's top performers are.
2. Highlight excellent drivers with recognition or bonuses.
3. Reward drivers who are consistently improving.

### Basic framework

There are two simple ways to incorporate the Safety Score into your incentive program. To receive recognition or bonuses, drivers will either:

1. Meet minimum score requirements, or
2. Get different rewards depending on where their score falls.

Assess performance over an extended period (e.g., monthly, quarterly) rather than a single moment to accurately reflect behavioral trends.

### Sample reward structure:

Fair (Score decreasing) 50-69	Fair (Score increasing) 50-69	Good 70-89	Excellent 90-100
—	☆	☆☆	☆☆☆

### Additional incentives

Since Motive provides full visibility into your driver's safety performance, you can layer additional bonuses to encourage specific driving behaviors.

For example, drivers get rewarded if they meet the challenge of the month:

1. Had zero speeding violations
2. Had zero cell phone usage events
3. Completed all coaching videos

Drivers can also earn bigger rewards if they meet annual targets, such as:

1. Had zero preventable accidents.
2. Had a "Good" Safety Score for the entire year.

## **Beyond safety incidents and collisions**

With Motive's all-in-one platform, you can also incorporate other parts of your driver's safety performance into your incentive program, including:

1. Performing well on roadside inspections.
2. Reducing HOS violations.
3. Completing DVIRs.

## **Incentivizing coaches**

Don't forget to recognize your top performing coaches as well. Easily measure and track the progress of your coaches with Motive's coaching reports. Reward those with top performing drivers or drivers who are consistently improving.

# Unlock Potential



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### About Motive

Motive builds technology to improve the safety, productivity, and profitability of businesses that power the physical economy. The Motive Automated Operations Platform combines IoT hardware with AI-powered applications to automate vehicle and equipment tracking, driver safety, compliance, maintenance, spend management, and more. Motive serves more than 120,000 businesses, across a wide range of industries including trucking and logistics, construction, oil and gas, food and beverages, field services, agriculture, passenger transit, and delivery. Visit [gomotive.com](https://gomotive.com) to learn more.