



BEYOND TELEMATICS

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INTRO

90%
of motor-vehicle
collisions are caused
by human error*

Many organizations rely on traditional telematics technology to gain insights into their drivers' performance. Telematics provides vehicle operation data like GPS and fuel data, as well as information on erratic driving events such as hard braking, sudden swerving, or collisions. However, telematics data often doesn't tell the whole story of what's happening on the road and inside your driver's vehicle—or, more importantly, why it's happening.



This is a story that often can be more accurately told by **video telematics, which collects and processes video and vehicle data together**—to deliver insights you can't obtain by other methods.

*Source: National Highway Traffic Safety Administration

IN THIS E-BOOK YOU'LL LEARN

1

How video telematics can help you understand the **root causes** of collisions and other road incidents →

2

How video-based data can help you **identify good driving behaviors** →

3

How to **predict which drivers are more likely to be involved in a collision**—so you can prioritize which drivers to coach →

1

ROOT CAUSES

How video telematics can help you understand the root causes of collisions and other road incidents

POP QUIZ

Q

Of the four hard-braking events shown here, only one was risky. Which one was it?

A

Traditional telematics suggests that all four were risky. But by capturing data that provides real-time context, video telematics reveals that, in fact, only “C” was risky.

(How’d you do on the quiz?)

*The pink line is charting acceleration and deceleration. A pink line going down means the vehicle is decelerating or braking.



A brake test is conducted in the morning as part of typical vehicle maintenance and testing. It registers as a severe event, but video shows that it’s just a good safety check, not risky driving.



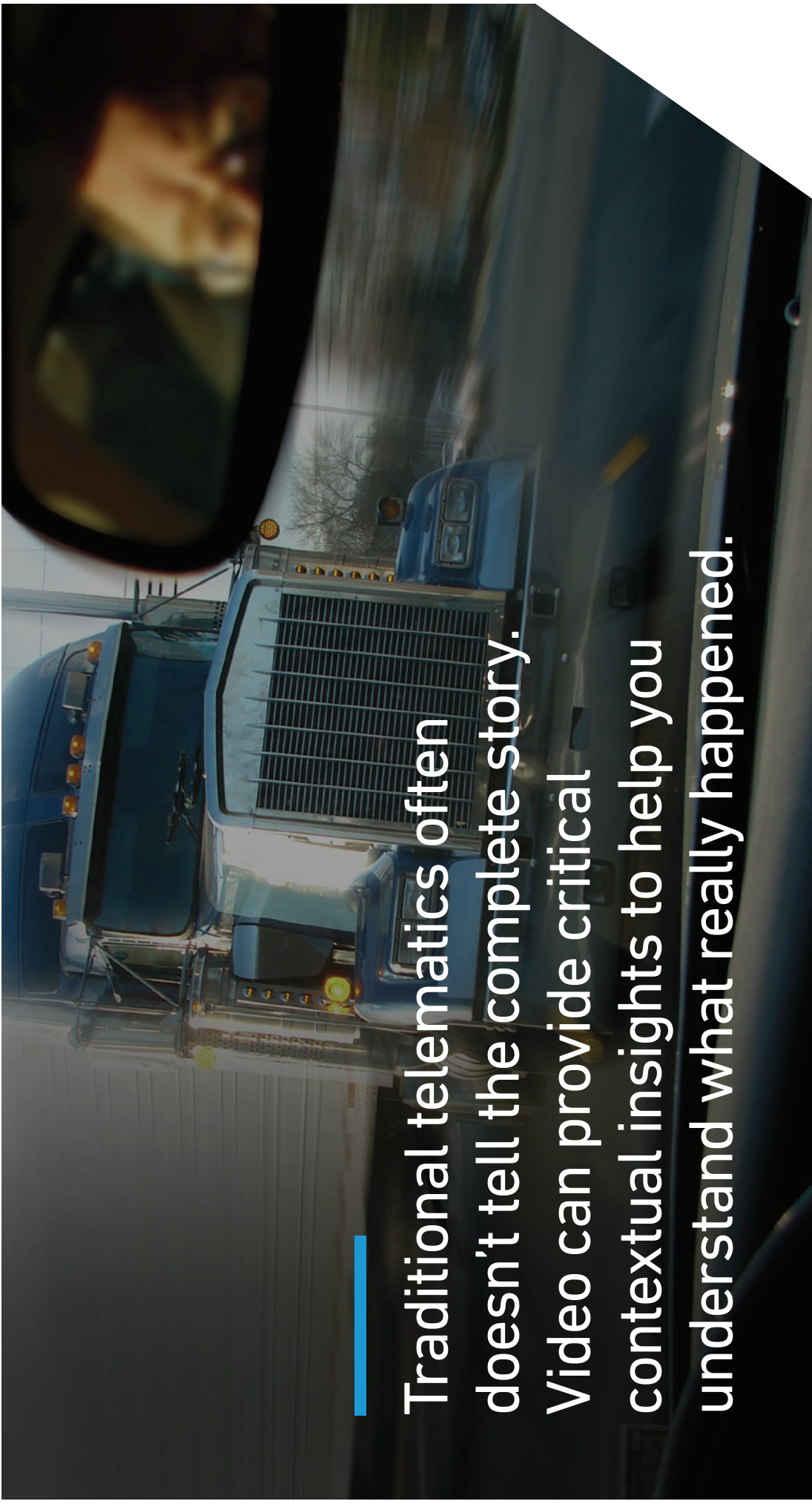
A commercial vehicle makes frequent stops. Although stopping a little abruptly could cause vehicle wear and tear, video reveals that this is part of the job and not considered risky driving.



A driver reacts abruptly to avoid a collision after maintaining only a one-second following distance—a common behavior that in this case was captured on video. Because this is not enough time to see a problem and smoothly respond to it, this is considered a risky driving event.



A driver demonstrates good defensive driving by skillfully avoiding a collision when a car suddenly cuts in front of his truck. Although the telematics data indicates that this is a risky event, video proved it was, in fact, an example of good driving.

A blue semi-truck is driving on a road, viewed from the driver's perspective through a side mirror. The truck is in the center of the frame, moving towards the right. The background is blurred, suggesting motion. The text is overlaid on the right side of the image.

Traditional telematics often
doesn't tell the complete story.
Video can provide critical
contextual insights to help you
understand what really happened.

HOW VIDEO CAN REVEAL THE ROOT CAUSE OF COLLISIONS

Compared to traditional vehicle telematics, video telematics technology provides a high level of data and insights that give organizations a more complete picture of what is occurring in their fleets—including how safely their drivers are operating on the road.

WHEN AN EVENT OCCURS:

- Telematics data tells us **when** and where something happened
- The forward view of an externally-facing video lens can tell us **what** happened
- The internal view provided by an in-cab video event recorder can tell us **why** it happened

Video enables fleet managers to identify and analyze patterns of risky driving behaviors, and to help coach drivers to change these behaviors before they lead to collisions.



DATA REVEALS A LINK BETWEEN RISKY DRIVING BEHAVIORS AND COLLISIONS

Lytx reviewed videos generated by hard-braking and cornering maneuvers to identify the root-cause behaviors of the maneuvers. We also identified significant behavior differences and calculated collision probabilities to correlate behaviors that show a higher likelihood of future collisions.

Understanding the data and **risky behaviors that video reveals can help you quickly identify the drivers who are most likely to be in a collision**, so you can focus on helping them improve their skills and avoid a collision altogether.

BEHAVIORS MOST CORRELATED WITH FUTURE COLLISIONS*

BRAKING EVENTS



Cell
Phone



Late
Response



Following too
closely



Driver
Unbelted

CORNERING EVENTS



Driver
Unbelted



Cell
Phone



Failed to
Stop



Incomplete
Stop

*According to a sampling of Lytx data

2

IDENTIFY RISKY BEHAVIORS

How video can help you identify good driving behavior and reduce the risky ones

FOCUSING ON THE GOOD

Video telematics helps pinpoint risky driving. But that's only part of the story.

It also highlights and documents good driving, like hard braking or other defensive maneuvers to avoid a pedestrian. Most drivers understand (and appreciate) that video telematics doesn't just record mistakes, but can help them become better drivers, exonerate them from false claims, and even save lives.

With video telematics, your company can also recognize and reward drivers who demonstrate a track record of safe driving. A little recognition goes a long way toward boosting employee morale and productivity.

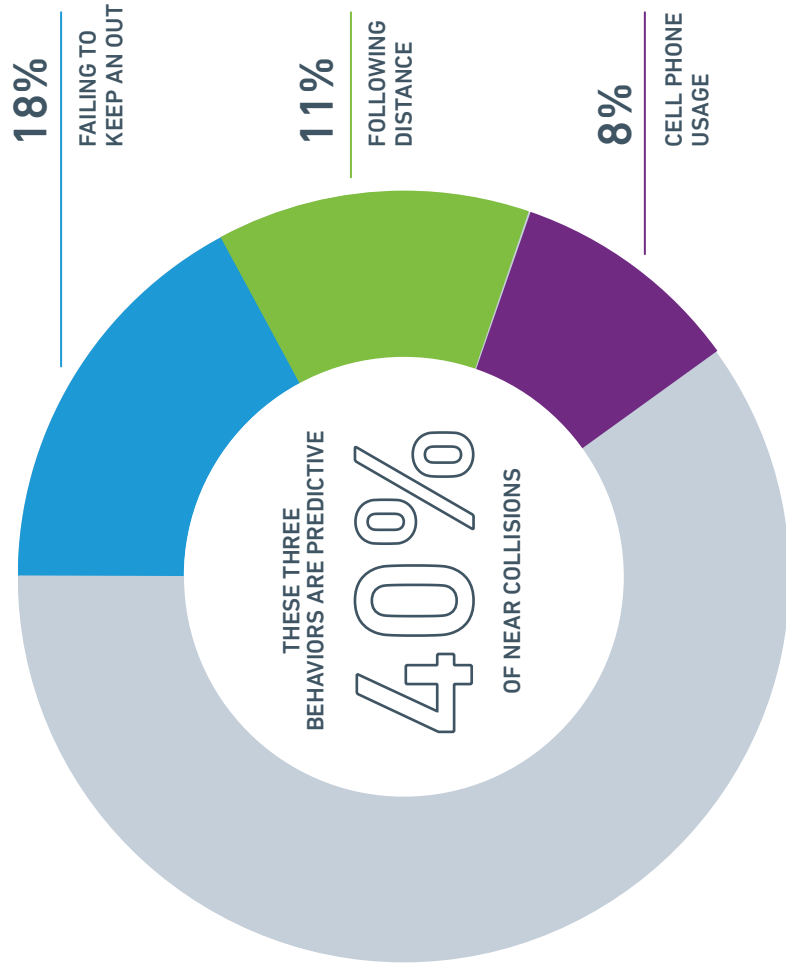
Imagine a culture of safety where drivers are passionate about safety and compete with each other for the safest driving performance every month.



HOW VIDEO HELPS PREDICT COLLISION RISK

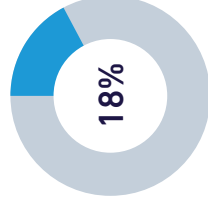
Near-collision events involve driving behaviors that are correlated with those near misses. When we analyzed a sampling of near-collision events of clients across all industries, we found that 18% of the events were correlated with drivers' failure to keep an out, and 11% were correlated with insufficient following distance. Combined with cell phone use, these three behaviors are correlated with nearly 40% of the near collisions studied.

Our analysis also showed that **drivers with a near-collision event are nearly six times more likely to be involved in a collision within six months** than a driver without a near-collision event.

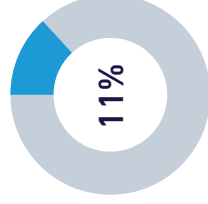


TOP BEHAVIORS RELATED TO NEAR-COLLISION EVENTS*

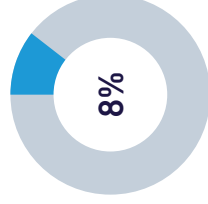
*According to a sampling of Lytx data



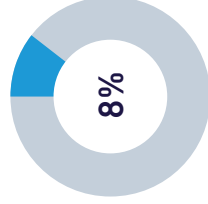
FAILING TO
KEEP AN OUT



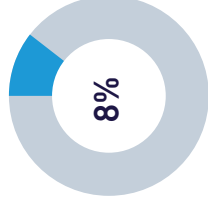
FOLLOWING
DISTANCE



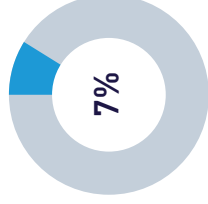
CELL PHONE
USAGE



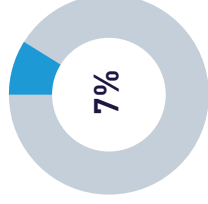
LATE
RESPONSE



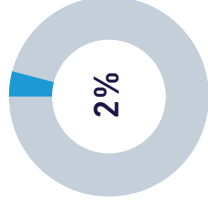
INTERSECTION
AWARENESS



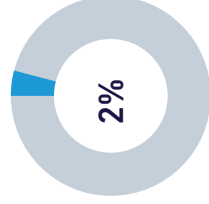
MIRROR
USE



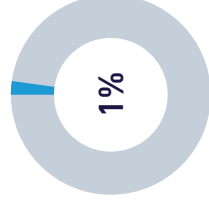
OTHER
DISTRACTION



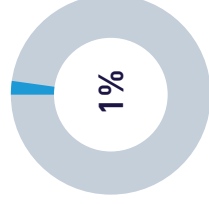
SMOKING



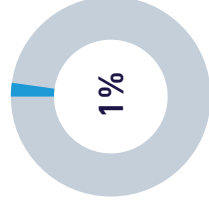
FOOD &
DRINK



RED
LIGHT



FAILED TO
STOP



POSTED SPEED
VIOLATION



3

PREDICT AND PREVENT

How to predict which drivers are more likely to be involved in a collision—so you can prioritize which drivers to coach, and coach them effectively

COACHING DRIVERS TO BE EVEN BETTER

Many professional drivers are sports fans. They know the value of good coaching and how critical video is in the coaching process. So, like professional athletes, **good drivers understand how video-based coaching can make them perform even better.**

A good coach also knows which of their players they need to focus on first. Video-based telematics can help predict which drivers are more likely to be involved in an incident, so coaches can focus on these drivers first.

THE GAME CHANGER: VIDEO-BASED TELEMATICS

WITH VIDEO-BASED COACHING, CARGO TRANSPORTERS ACHIEVED:

83%

DECREASE IN
NEAR
COLLISIONS

76%

REDUCTION IN
TRAFFIC
VIOLATIONS

33%

DROP IN
UNBELTED
DRIVERS

ORANGE COUNTY, FLORIDA ACHIEVED:

90%

REDUCTION IN
COACHABLE
EVENTS

74%

REDUCTION IN
TOTAL COST OF
COLLISIONS

40%

FEWER
COLLISIONS



We can look and see what's happening and change the behavior before the accident occurs. We can see that behavior, and instead of changing the driver through discipline, we can help them proactively see what they're doing"

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THE BOTTOM LINE

In this ebook, we discussed:

1

Video telematics can help you understand the root causes of collisions and other road incidents

3

Video provides coaches with information to predict which drivers are more likely to be involved in a collision, so they can prioritize their coaching efforts

2

Video-based data can help you identify and reward good driving behavior

Only video telematics can reveal the truth of what's happening on the road, delivering crucial insights to help you coach risky drivers to become safer drivers.

ABOUT LYTX

We protect more than 3,000 clients worldwide who drive billions of miles.

We enable our clients to realize significant ROI by lowering operating and insurance costs, while achieving greater efficiency and compliance. Most of all, we strive to help save lives—on our roads and in our communities, every day.

3,000+

clients worldwide

850,000+

drivers protected worldwide

1BILLION+

miles driven every two weeks



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