Omnitracs

12 POINT BUYING GUIDE TO VIDEO-BASED SAFETY SYSTEMS

NOT ALL VIDEO-BASED SAFETY PROGRAMS ARE CREATED EQUAL.

These 12 criteria should be considered as part of your selection process. They can make the difference between a program you quickly outgrow and one that keeps pace with your business.

🖨 INCLUDES COMPARISON WORKSHEET

12 POINT BUYING GUIDE TO VIDEO-BASED SAFETY SYSTEMS

PRINT FOR COMPARISON	SMARTDRIVE	OTHER SYSTEM	OTHER SYSTEM
1 Combines video with integrated driving improvement program	☑	☐	☐
2 Triggers video events from multiple real-time data sources: accelerometers, vehicle data, active safety systems, and others	☑	☐	☐
3 Sampling volume is statistically relevant and measures all drivers	☑	☐	☐
4 Delivers a consistent number of reviewed videos each month	☑	☐	☐
5 Automatically offloads video within minutes of incident	☑	☐	☐
6 Flexible program that is configurable to your fleet policies & priorities	☑	☐	☐
7 Open platform that easily connects to other systems	☑	☐	☐
8 Includes variety of recording durations – including extended recording	☑	☐	☐
9 Separated camera with forward-facing only deployment option	☑	☐	☐
10 Directly integrates with back-office operational systems	☑	☐	☐
11 Delivers role-based management reporting and KPI's	☑	☐	☐
12 Ongoing product investment and active technology roadmap	☑	☐	☐

SMARTDRIVE   12-POINT BUYING GUIDE   ©2014 www.smartdrive.net 858.225.5550

1 FLEXIBILITY

2 SAMPLING VOLUME CONSISTENCY

3 COACHING WORKFLOW & TOOLS

4 CAMERA OPTIONS

5 LEVERAGING DATA

6 DATA SOURCES

7 VIDEO AVAILABILITY

8 MANAGEMENT METRICS & KPIs

9 MANAGED SERVICES/REVIEW

10 RECORDING OPTIONS

11 OPEN PLATFORM

12 BACK-OFFICE SYSTEMS INTEGRATION

① FLEXIBILITY

☑ CONFIGURABLE PROGRAM VS. ONE-SIZE-FITS-ALL

One size rarely fits all, especially when your fleet operates in a dynamic business environment.

- A program that combines a best-practice approach with customization options enables you to adjust the weighting for specific driving risks and determine what should be coached.

- The ability to fit the program to your safety policy minimizes the impact of change on your managers and your drivers, accelerating adoption and results.

- It also allows you to improve your safety program's effectiveness over time, focusing on specific opportunities for improvement.

- The freedom to choose a video safety program on your terms ensures your investment is protected. It also allows you to upgrade at any time with existing hardware when the time is right for you.

BOTTOM LINE: Selecting a "one-size-fits-all" solution locks you into a program that you could quickly outgrow. A fully configurable program drives maximum value by keeping pace with your business and your unique operating characteristics.

Fit the program to your safety policy and priorities.

YEAR 1 SAFETY PRIORITIES	YEAR 2 SAFETY PRIORITIES	YEAR 3 SAFETY PRIORITIES
Speeding	Stopping	Mobile Phone
Following too Close	Speeding	Food and Beverage
Stopping	Seatbelts	Speeding
Seatbelts	Smoking	
Mobile Phone	Lane Changes	

☑ DELIVERS A CONSISTENT NUMBER OF <u>REVIEWED</u> EVENTS EACH MONTH

A consistent monthly baseline of reviewed video events is key to measuring improvement. For example, if the program triggers and reviews ten videos one month, four the next month, and two the following, the only thing you know for certain is that you have fewer videos.
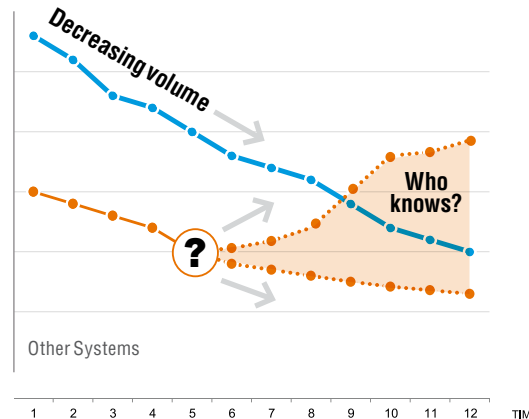
Is your fleet getting safer? Accurate measurement of risk is critical to answering this question.

- Some systems quantify risk reduction based on the number of videos being triggered – meaning if you have fewer videos each month, your fleet is getting safer.

- This approach overestimates improvement and relies on the trigger as the primary measure of risk.

- Triggering video is only the first step in the process. Expert review of that video is a necessary step to verify and quantify risk.

- The only way to know if your drivers are getting safer is to invest in a program that captures and reviews a consistent sample of videos each month across your site, and measures the reduction in risk against that monthly sample.

BOTTOM LINE: Fewer videos each month is not an accurate measure of risk reduction. If you select a system that follows this approach, the results will be misleading.
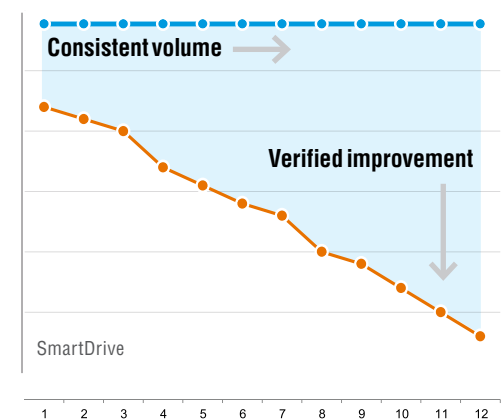
Decreasing reviewed videos
Risky driving could be going down or up

Decreasing volume

?

Who knows?

Other Systems

1 2 3 4 5 6 7 8 9 10 11 12

Consistent reviewed videos
Verifies risk is going down

Consistent volume →

Verified improvement

SmartDrive

1 2 3 4 5 6 7 8 9 10 11 12 TIME

3 COACHING WORKFLOW & TOOLS

☑ INTUITIVE COACHING WORKFLOW

☑ EASY-TO-USE TOOLS

Ensure continual improvement and bottom-line results

You can't make a difference if you can't coach. You can't coach if you don't have time.

- Reviewing videos and coaching drivers is key to improving driver behavior and reducing incidents.

- Reviewing and coaching every event can be overwhelming. You need a prioritized queue that focuses you in on the right drivers, right actions to take and makes it easy for you to coach with impact.

- An easy-to-use workflow facilitates coaching preparation – you want the ability to add notes for review by colleagues, if necessary, or give "kudos" for outstanding driver performance.

- Skills-based or event-based coaching options provide the flexibility to individualize sessions to the needs of the coach or driver.

BOTTOM LINE: Coaching is key to the success of any video-based safety program. An intuitive coaching workflow – combined with easy-to-use tools – helps ensure continual improvement and bottom line results.

Coaching is key to the success of any video-based safety program.

4 CAMERA OPTIONS

☑ **ROAD-FACING CAMERA ONLY OPTION**

☑ **MULTIPLE CAMERA OPTIONS, INCLUDING 360° VIEW**

Fleets have different operating environments – you should have more than one option for deploying cameras.

- While the combination of a road-facing and cab-facing camera is the most effective way to capture risky driving and identify root causes, a road-facing-only configuration still provides a lot of value – and can be helpful when dealing with driver concerns. A separated camera provides ultimate flexibility in the installation process. It also can help you position the camera in a location that mitigates your drivers' desire to cover the lens.

- Having the flexibility to add additional cameras provides insight around the vehicle to some of the common and costly collision risks that aren't visible from the front (side swipes, backing, etc.), along with reducing workers comp by ensuring compliance or policy-specific safety practices are followed. There are times when the value of a 360° view is incalculable.

- High-quality video images are paramount to understanding what happened in the cab and on the road – providing clear insight in nighttime driving, extreme weather, etc. Ensuring the highest quality eliminates questions and helps identify causes of risky driving.

BOTTOM LINE: Single-unit cameras lock you in to a one-size-fits-all deployment. Flexible camera configurations deliver an optimal fit for your vehicles and drivers.

Cab + road-facing deployment   Road-facing camera only

Multiple camera options provide the flexibility to deploy the combination that works best for your fleet and drivers.

5 LEVERAGING DATA

☑ **A SINGLE, UNIFIED VIEW OF DATA**

☑ **POWERFUL ANALYTICS THAT DRIVE RESULTS**

Discover hidden cost-saving opportunities.

- Video safety solutions generate enormous amounts of data – particularly when it's combining driver, video, vehicle and operating environment data.

- Accessing and understanding this information improves a fleet's ability to increase driver safety, manage cost and grow margins.

- But, with data located in several places, creating comprehensive, contextualized insight can be costly and often requires a team of BI experts.

- An open video and data analytics platform combines data from multiple sources and delivers a unified view of safety and performance trends to the right person at the right time.

- Built-in machine learning algorithms, predictive models and advanced analytics provide answers to the following types of questions: What actually happened? Where did it happen? And why? Did it matter? What was the operator's role? What is the likelihood of it happening again?

BOTTOM LINE: The data captured by video safety solutions offers significant opportunities for improvements only if it is integrated and actionable. An open platform with built-in management KPIs, reports and dashboards can be the answer to data access and insight delivery challenges.

6 DATA SOURCES

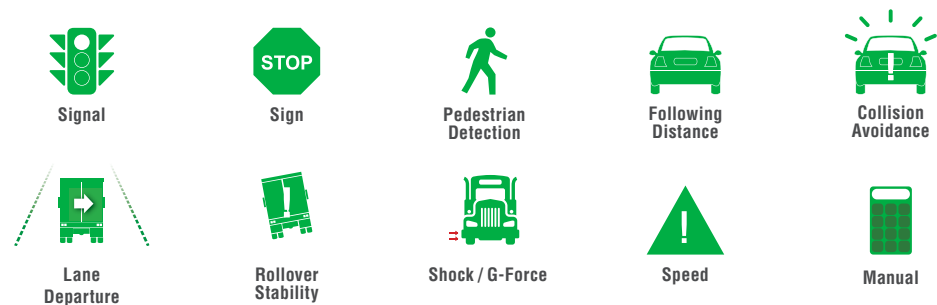☑ **REAL-TIME TRIGGERING FROM MULTIPLE DATA SOURCES**

Accelerometers + engine and vehicle data + active safety systems + speed + other risky driving maneuvers

It takes more than accelerometers to capture risk.

- Accelerometers are the traditional technology used to trigger event video. They rely on g-force events and algorithms to identify risky driving.

- Accelerometer-based algorithms have limitations regardless of "training" or "tuning," especially when there is limited or no g-force.

- To truly capture risky driving you need a system that connects to the vehicle engine, triggering in real-time when that vehicle is under stress, exceeds the posted speed limit, or when an on-board safety system has engaged.

- Today's intelligent vehicles have volumes of rich information, including collision avoidance and lane departure warning systems, ABS and roll-stability control, maneuver-based triggers (aggressive swerves, U-Turns, etc.) and more that identify risky driving specific to that vehicle.

- Leveraging this rich data, in combination with accelerometer data, captures the broadest spectrum of risk and is the fastest method to accurately identify your high-risk areas.

BOTTOM LINE: Systems that rely on accelerometers, alone, take longer to identify high-risk areas – and longer to produce results. Your vehicle has valuable safety data available directly from the engine and ADAS. Why wouldn't you use it? The faster you identify risk, the faster you can reduce it.

The broader the set of data sources used to trigger video events, the more effective the system is at identifying risky driving. Triggering should include data from:

Signal	Sign	Pedestrian Detection	Following Distance	Collision Avoidance
Lane Departure	Rollover Stability	Shock / G-Force	Speed	Manual

7 VIDEO AVAILABILITY

☑ AUTOMATIC OFFLOAD WITHIN MINUTES

Every second counts when it comes to safety.

- Video provides driving insight not possible from any other system. When something happens, you need to know what happened and why. Some on-board systems take hours to send video event data – offloading once per day at off-peak hours or requiring you to pay more to get the video more often.

- Automatic offload within minutes of the incident should be included as a standard offering of the program and your monthly investment, ensuring you have the information you need when you need it most.

- Quick access to the video can help get your vehicle back on the road and fulfill your delivery commitments.

- Components, like keypads, offer manual event recording options, and wireless key fobs provide drivers with the ability to initiate a manual recording, both inside and outside the vehicle, providing added security for the driver.

BOTTOM LINE: Having video within minutes of an incident can mean the difference between protecting your drivers and your company and putting them at risk – and you shouldn't have to pay extra to get that level of protection.

1 MINUTE AFTER THE COLLISION: Video automatically offloads

18 MINUTES LATER: Safety Manager alerted, has access to video

44 MINUTES: Law enforcement watch video, clear driver

90 MINUTES: Driver and freight back on the road

When a driver is accused and it wasn't their fault, you want that information now, not later. In a crisis, there is a big difference between access to video in minutes vs. hours or days.
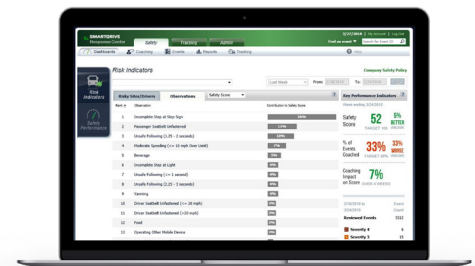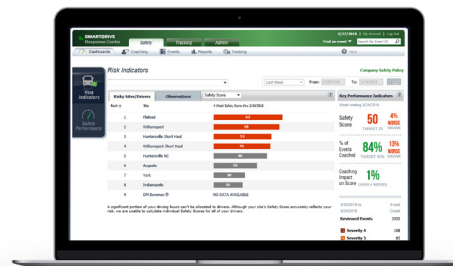
8 MANAGEMENT METRICS & KEY PERFORMANCE INDICATORS

☑ SAFETY, FUEL, OPERATIONAL ANALYTICS & BENCHMARKS

You can't manage what you can't measure.

- A robust set of Key Performance Indicators (KPIs) and analytics help you understand how your fleet is performing and answer key questions not just about safety performance, but also driving and coaching performance, fuel consumption, idling, vehicle use and much more.

- Reports are tailored to each level of your organization – from executive to driver – ensuring that they have the right information to make decisions and improve performance.

- Built-in leading performance indicators and predictive metrics help you determine which behaviors are contributing the most risk to your organization at the driver, site or company levels.

- Rich data and purpose-built analytics can also be used to support other strategic business needs such as Driver Incentive Programs, Fuel Tax Reporting, Accident Reconstructions and more.

- Benchmark reports enable CxO Executives, Regional Vice Presidents and Directors to compare their organization's performance against industry peers so they can determine how to improve performance in key risk areas.

BOTTOM LINE: Selecting a solution that delivers actionable insights through easy-to-use management reporting and KPIs is critical to understanding whether your investment is paying off.

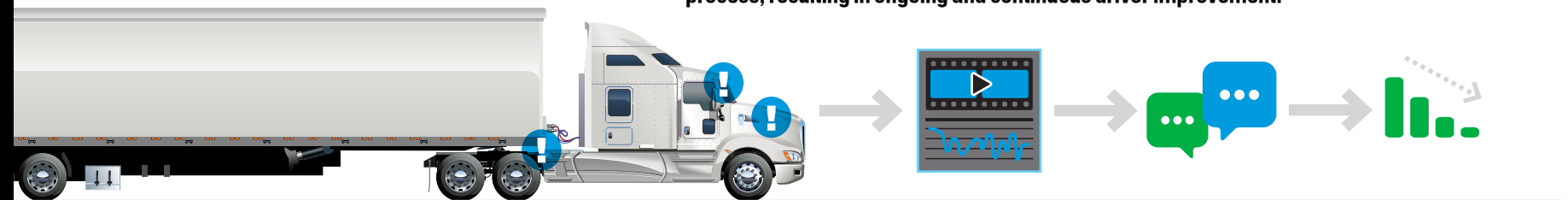Reports should include KPIs and trend metrics to measure your coaches and driver improvement.

9 MANAGED SERVICES/REVIEW

☑ **COMBINES VEHICLE DATA + VIDEO EVENT RECORDING WITH DRIVING IMPROVEMENT PROGRAM**

Video on its own is not enough.

- Video provides valuable insight that traditional tabular "critical event" reports cannot. But, eliminating risk requires an integrated program that includes a standardized and consistent process for identifying and coaching risky drivers.

- Adding video cameras, alone, does not make your fleet safer. Which drivers or operators need help and what skills should you focus on?

- Using third-party experts, rather than fleet managers, to review videos ensures each driver and event is evaluated consistently.

- Managed services provide a real-time stream of analyzed data that accurately measures a driver's exposure to risk based on the triggering event, observed behaviors, risk exposure metrics based on predictive algorithms and correlations to prior collision data.

- Fleet managers can quickly identify which drivers are more likely to be involved in an incident and can allocate time for coaching appropriately.

BOTTOM LINE: Lowering risk requires more than just a camera. You need an integrated managed services program that combines expert review with an easy-to-use coaching process, resulting in ongoing and continuous driver improvement.

A variety of sensors identify and capture risky driving.

Experts review and score incidents for risk. The program then prioritizes drivers for coaching.

Managers coach drivers on areas for improvement.

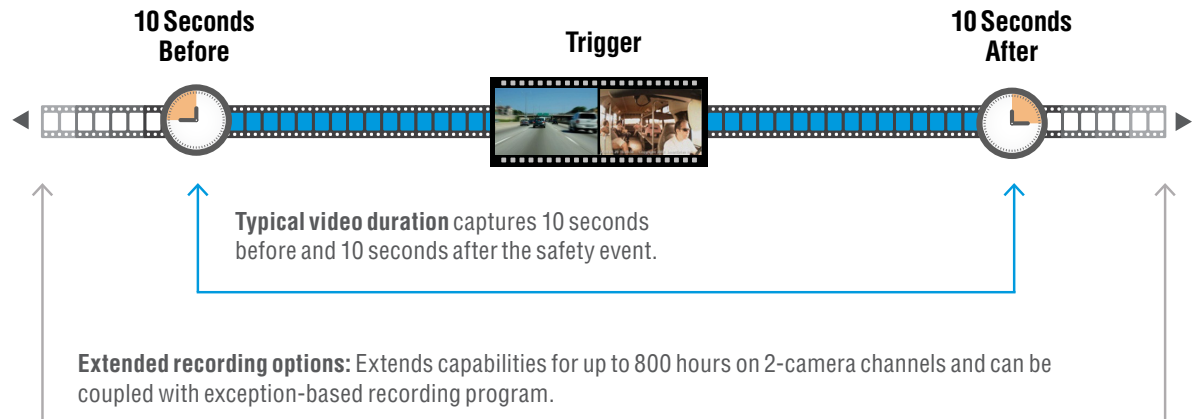The Results: Safer drivers, lower risk, fewer collisions.

10 RECORDING OPTIONS

☑ MULTIPLE VIDEO RECORDING OPTIONS, INCLUDING EXTENDED RECORDING

The flexibility to capture just what you want, including everything.

- Programs with a variety of options for recording duration provide the most flexibility.

- There are many types of safety events – some of which are "under the radar" (low or no g-force) and won't be captured by an accelerometer.

- Sometimes you need an extended recording option to get more information around incidents that exceed the typical 20-second video clip length.

- Continuous recording can be particularly helpful in capturing "mystery damage," understanding worker's compensation claims, identifying compliance-related issues and more.

- Sometimes you need video when you least expect it. Mobile support, shopping cart functionality and the ability to order up to 24 hours of video provide broad flexibility when necessary.

BOTTOM LINE: Flexible recording options offer more value for your investment. Continuous recording provides deeper insight around a broad range of safety and compliance-related incidents.

10 Seconds Before   **Trigger**   **10 Seconds After**

Typical video duration captures 10 seconds before and 10 seconds after the safety event.

Extended recording options: Extends capabilities for up to 800 hours on 2-camera channels and can be coupled with exception-based recording program.
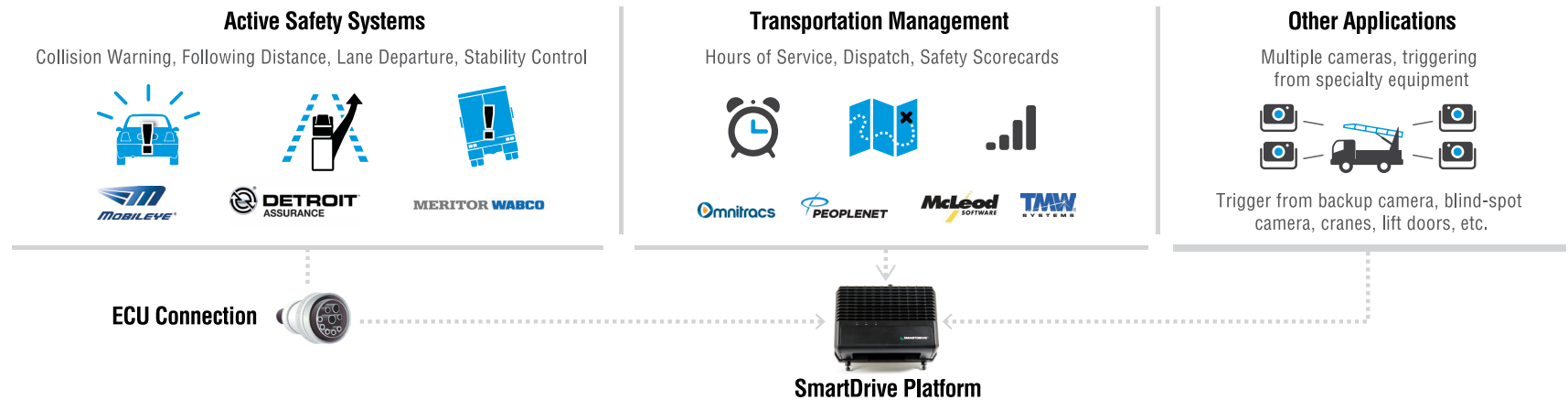
11 OPEN PLATFORM

☑ OPEN TECHNOLOGY PLATFORM

☑ INNOVATIVE "SINGLE BOX" ARCHITECTURE

Enables the convergence of data, devices and environment, lowering technology costs and reducing complexity

With a video-based solution, it's risky to focus only on the camera.

- Most systems are closed technologies offering limited or no integration and can quickly become outdated. Open platforms are designed to keep pace with technology and serve as a foundation on which to build as new technologies become available.

- Systems architected from the ground up to be open generate more value from your existing safety technologies by incorporating real-time data from multiple sources, which has proven to be more effective at identifying unsafe driving.

- Integrating to the ECU takes full advantage of the information available from the engine, vehicle components, Active Safety Systems and 3rd-party systems. This approach captures a broader spectrum of risk and offers long-term expansion capabilities – whether to other systems, other cameras or other data sources.

BOTTOM LINE: An open platform approach enables you to take real-time advantage of all of the data on your vehicle, providing a unified view of your risk and actionable insights that help you respond quickly and with confidence.

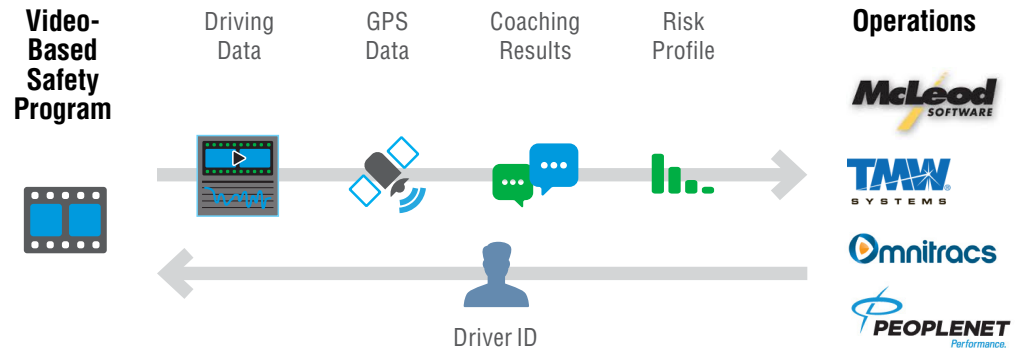### Active Safety Systems
Collision Warning, Following Distance, Lane Departure, Stability Control

MOBILEYE · DETROIT ASSURANCE · MERITOR WABCO

Transportation Management
Hours of Service, Dispatch, Safety Scorecards

Omnitracs · PEOPLENET · McLeod SOFTWARE · TMW SYSTEMS

Other Applications
Multiple cameras, triggering from specialty equipment

Trigger from backup camera, blind-spot camera, cranes, lift doors, etc.

ECU Connection

SmartDrive Platform

12 BACK OFFICE SYSTEMS INTEGRATION

☑ INTEGRATION WITH BACK-OFFICE SYSTEMS

Break down the walls between your safety and operational systems.

- Sharing information between your operational software and your video-based safety system streamlines operations and unlocks the hidden value in your data.

- For example, as a driver logs into one system, there should be a connection within your video-based program that identifies which driver is operating that vehicle, eliminating additional work and ensuring the accuracy of the data.

- For larger fleets, ensure vendor can handle Driver ID requirements, i.e., may require 6-digit Driver ID

BOTTOM LINE: The ability to share data between your video safety system and back-office systems eliminates redundant work, informs other reporting and safety scorecards, and improves planning and decision making.

Video-Based Safety Program — Driving Data — GPS Data — Coaching Results — Risk Profile — Driver ID — **Operations** — McLeod SOFTWARE — TMW SYSTEMS — Omnitracs — PEOPLENET Performance.

Data should be easily shared between the video safety system and other fleet operations systems.

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Find out more at
www.omnitracs.com/smartdrive

ABOUT OMNITRACS

Omnitracs, LLC is a global pioneer of trucking solutions for all business models. Omnitracs' more than 1,000 employees deliver software-as-a-service-based solutions to help over 14,000 customers manage nearly 1,100,000 assets in more than 70 countries. The company pioneered the use of commercial vehicle telematics 30 years ago and serves today as a powerhouse of innovative, intuitive technologies. Omnitracs transforms the transportation industry through technology and insight, featuring best-in-class solutions for compliance, safety and security, productivity, telematics and tracking, transportation management (TMS), planning and delivery, data and analytics, and professional services.

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🖨 **PRINT FOR COMPARISON**

		SMARTDRIVE	OTHER SYSTEM	OTHER SYSTEM
1	Flexible program that is configurable to your fleet policies & priorities	☑	☐	☐
2	Delivers a consistent number of reviewed videos each month	☑	☐	☐
3	Intuitive coaching workflow with easy-to-use tools	☑	☐	☐
4	Separated cameras with road-facing-only and full 360° options	☑	☐	☐
5	Provides powerful, predictive analytics that drive results	☑	☐	☐
6	Triggers video events from multiple real-time data sources: accelerometers, vehicle data, active safety systems, posted speed and others	☑	☐	☐
7	Provides manual event record options and automatically offloads video within minutes of incident	☑	☐	☐
8	Delivers actionable insights through easy-to-use roles-based management reporting and KPIs	☑	☐	☐
9	Combined vehicle data + video event recording with driving improvement program	☑	☐	☐
10	Includes variety of recording options – including extended recording	☑	☐	☐
11	Open platform architecture evolves with new technologies and easily connects to other systems	☑	☐	☐
12	Integrates with back-office operational systems	☑	☐	☐