



# *Road-Aware* Safety Systems LLC



Decreasing  
Fatalities and  
Increasing  
Trucking Company  
Profitability

Fatal Rollover on I80 in  
Nevada



This presentation is the property of **Road-Aware** Safety Systems LLC. It is proprietary and confidential to **Road-Aware** and is not to be copied or distributed without the prior written authorization of Raelock. It contains information about a **Road-Aware** proprietary product called **Road-Aware** which also may not be disclosed to others without the written authorization of **Road-Aware**

# Overview

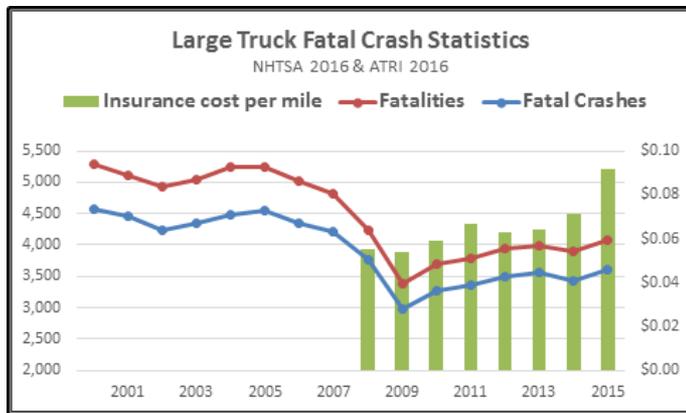
TODAY – large truck crashes will cause

- 10 deaths and 220 injuries
- Economic losses will be over \$75M.
- Average cost of a fatal rollover \$4.3M.



**Road-Aware** can reduce crashes by providing the driver alerts and safe speeds:

- Truck and trailer configuration specific,
- Load type and weight specific, and
- Specific to the upcoming road geometry



"Our vision is simple – zero fatalities on our roads," said U.S. Transportation Secretary Anthony Foxx.

Washington, Oct. 5, 2016

[http://www.nhtsa.gov/About-NHTSA/Press-Releases/nhtsa\\_zero\\_deaths\\_coalition\\_10052016](http://www.nhtsa.gov/About-NHTSA/Press-Releases/nhtsa_zero_deaths_coalition_10052016)

# The Road-Aware Safety Systems Team

## ➤ **Brian L Bullock**

- Former CEO of two technology companies, 30 plus years as an engineer and Mapping Professional and Executive, Inventor and owner of US Patents #8554468 and #9613466 for **Road-Aware**

## ➤ **Garth R Lawrence**

- Former Senior Vice President at two technology companies, 30 plus years in the mapping and remote sensing profession.

## ➤ **Tim Coyne**

- Senior Engineer and software architect with 20 plus years' experience, former Software Engineering Manager at several technology companies.
- The **Road-Aware** Team has worked together in GIS and mapping applications for 20 plus years. Both Mr. Bullock and Mr. Lawrence have successfully lead the development of new technologies and brought them into the commercial market. Mr. Bullock has taken two companies through the IPO process and into the public sector. All members have years of experience in the geospatial mapping profession and completely understand the underlying fundamentals of the **Road-Aware** product.

Patented

# Road-Aware Design Fundamentals



- Driver in the Loop

- The driver is responsible for the safe management of the vehicle and controls the vehicle
- **Road-Aware** provides the driver with location specific and truck specific alerts and safe speeds

- Driver Performance is Measured

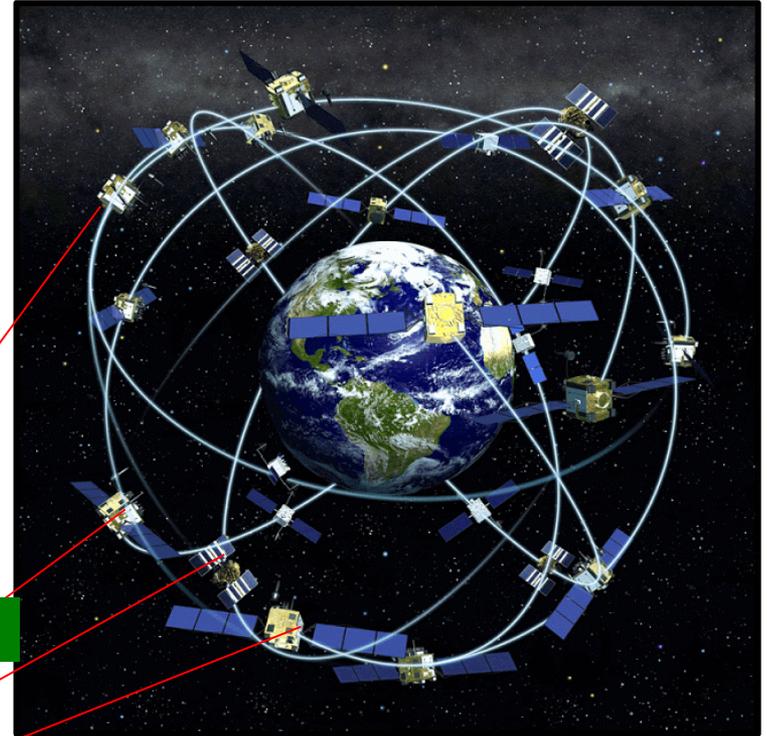
- Speed & position of the vehicle is continuously recorded through the entire journey
- Driver performance is scored for each trip
- Excessive speeds are flagged and recorded in the journey log

Patented

# Road-Aware

A knowledge based system that provides alerts and safe speeds to the driver that are:

- Location specific
- Road Geometry specific
- Vehicle and load specific



Position

Speed

Direction

GPS Information

Horizon View Panel

Vehicle Speed Control



Top Marker Control

Bottom Marker Control

Patented

# Road-Aware

The alerts are progressive and safe speeds are provided audibly and visually to the driver

Information Alerts – green  
Warning Alerts – yellow  
Critical Alerts - red



Slope



Curve Radius

Horizon View Panel

Vehicle Speed Control

The screenshot shows a software window titled "RoadAware Horizon" with a yellow background. On the left, it displays "65 Actual" in large black text. In the center, it shows "55 RSS" in red, with "Beginning In ¼ mi" and a progress bar below it. To the right is a yellow diamond warning sign with a black 'Y' shape. Below this, it shows "10 RSS" in red and a yellow diamond sign with a black plus sign. At the bottom left of the window is an "Update Horizon" button.

Top Marker Control

Bottom Marker Control

Accurate Road Geometry

Patented

# Road-Aware

Trucking company executives set safety margins for the alerts and safe speeds provided to the driver.

Road-Aware also records vehicle speed & location for the entire journey which permits Safety Managers to score driver performance



Horizon View Panel

The image shows a tablet displaying the Road-Aware Horizon interface. The screen has a red background. On the left, it shows '65 Actual' in large white text. In the center, there's a yellow box with '55 RSS' and 'Beginning In 800 ft.' below it, accompanied by a yellow diamond warning sign with a black 'Y' shape. Below that, there's a black progress bar. At the bottom, there's another yellow box with '10 RSS' and a yellow diamond warning sign with a black plus sign. The interface is titled 'Road-Aware' at the top. There are labels 'Top Marker Control' and 'Bottom Marker Control' pointing to the top and bottom sections of the interface respectively. A small 'Update Horizon' button is at the bottom left of the screen.

Vehicle Speed Control

Safety Margins

Journey Data



# Installation Options

**Road-Aware** will be offered as an application on 'Fleet Management Systems'



**Road-Aware** can also be installed on a tablet computer with other trucking apps

# Road-Aware is Patented & Proprietary

- Patent Protection
- Software Copyright
- Proprietary Data Base

➤ The **Road-Aware** offering is protected by US patents issued to Brian Bullock - US Patents #8554468 (Oct 2013) and #9613466 (April 2017) titled “Systems and methods for driver performance assessment and improvement”

➤ The **Road-Aware** Horizon module, In Cab software, Work Bench software and 3D road database are proprietary to **Road-Aware** Safety Systems LLC and protected by copyright.



Patented

# Road-Aware

was tested on AZ 87 "The Beeline"



Tested on Samsung Tab A Tablet Android



# *Road-Aware* Safety Systems LLC



Garth Lawrence  
Managing Director & Principal  
[glawrence@road-aware.com](mailto:glawrence@road-aware.com)

Brian Bullock  
Principal  
[bullock@road-aware.com](mailto:bullock@road-aware.com)

