

Fleet Safety Program Accident Prevention



The biggest priority in a fleet safety program is accident prevention. It is a critical responsibility and needs an understanding of various causative factors and the use of technology to mitigate the risks.

This white paper considers these concisely and outlines Azuga's proprietary Accident Risk Model, which helps fleet managers to assess their at-risk drivers, and also the most accident-prone situations they have to manage successfully.



Components of an integrated accident prevention plan

While operational efficiency is important to any fleet manager, accident prevention is still a major concern. It is the reason for formalizing and enforcing safety policies in the organization. GPS vehicle tracking has a proven role in collision prevention.

There is a direct relationship between driver's knowledge, vehicle maintenance and age, management initiatives, load weight and contents and the fleet's safety score. Fleet safety is an integral part of professional fleet management.

Fleets have come to rely upon a GPS fleet tracking solution to:

- Check poor driving habits and make drivers safety-conscious
- Eliminate phone use while driving
- Reduce speeding penalties
- Help in the event of a road emergency
- Implement their integrated fleet safety plan
- Provide route information, prevent unauthorized use, and reduce miles driven

Avert vehicle failures in your fleet to prevent accidents

Adhering to some of the simplest routines diligently can help avert accidents. A weekly walkaround inspection that comprises a few thorough checks goes a long way to keeping people and vehicles safe.



In 2015, as per data gathered by the DOT and NHTSA, vehicle miles driven rose by the highest year-over-year increase (3.5%) in nearly 25 years. According to National Highway Traffic Safety Administration estimates, large trucks were involved in 12% of all fatal crashes in 2013, and most of the deaths were passengers in the smaller vehicles.

Weekly Walk Around Checks:

- ➔ Driving panel lights (engine, brake, oil lights).
- ➔ Hoses and look out for drips
- ➔ Emergency brake, seat belts, horn, wipers, door locks and windows
- ➔ Fluids – coolant, transmission fluid, oil, brake fluid, steering fluid, etc
- ➔ Lights – brake lights, parking lights, headlights, high beam lights, reverse lights, tail lights, and turn signals are working
- ➔ Vehicle has safety supplies: Tool-kit, emergency aid, etc
- ➔ Tire wear and tire pressures

Owners and managers of truck fleets have a bigger challenge on their hands. It takes longer to bring a truck to a halt. A truck at 65 mph, takes six seconds to travel over 500 feet, while a car at 55 mph would have crossed 300 feet. Drivers also have less visibility around the vehicle.

Fleet drivers prevent accidents, fleet managers enable the drivers.

There is clearly a key human factor that has to be adequately addressed. Fleet managers need to be speaking to their drivers about compliance with safety policies. Drivers should know they will get additional coaching, if necessary, and about performance incentives related to their safety score.

Distracted drivers are a key concern for fleet managers. Since there are more high-tech features on-board the vehicle, drivers tend to get complacent and use smartphones while driving. Strict rules about cellphone usage while operating a vehicle have to be communicated clearly.

GPS fleet tracking enables fleet managers to track the driving records of their personnel and to take timely measures to avoid a major accident.



Real-time checks on unsafe driving behaviors



Odd as it may seem, about 30% of all accidents take place when the vehicle is reversing. Collisions happen so often that extra care has to be taken to avoid them. This is the reason that many vehicles sound an alert when they are backing to come out on to the road.

Fleet managers also have to be proactive about the dangers from speeding. Speeding drivers can cause extensive damage and add points to a driver's license that will cost the company more money in terms of insurance cost.

GPS fleet tracking solutions enable the fleet manager to exercise control on speeding in real time, and to do an in-depth assessment of drivers' performances over a span of a few weeks.

84% of customers say Azuga's solution helped improve fleet safety by **30%**, and saved the company between **8%** and **20%** on insurance premiums.

Improve fleet safety using Azuga's proprietary Accident Risk Model

Azuga developed its own risk model to assess levels of threats for drivers based on underlying behavior and external factors. This Accident Risk Model leverages the combined analysis of real accident data from over 6,000 vehicles with individual driver scores. Scores are determined based on the frequency of risky driving behaviors, such as hard braking, acceleration, posted speed limit violations, distractions and fatigue.

The objective of the Accident Risk Model developed by Azuga is to identify safety challenges that apply across fleets.

Some of its insights are:



Accident risk surges by

9.1%

for every mile driven during high-risk hours
(between midnight – 3 a.m.)



Accident risk increases by

8.3%

with fatigued driving
(drive time of more than 6 hours)



One hard braking incident per every

8.3% miles driven

increases the risk of a preventable accident by

16.9%

Azuga has studied data across various fleet sizes and SICs (industry types designated by number codes) to identify specific indicators which significantly increase the likelihood of potential accidents for all fleets. Risky behaviors are further aggravated under adverse weather conditions such as rain, poor lighting, and snow or when they are committed by drivers operating large, heavy vehicles.

Winning the safety battle – hurdle by hurdle



Today's fleet managers can not only view which unsafe driving behaviors their drivers are committing, they can also see when and where these dangerous behaviors occur. The availability of information also makes it possible to customize the coaching to target the specific improvements required from individual drivers. It is possible to pick out the bottom 20% for performance improvement, and to reward the best drivers based on accurate driver ranking systems.

Such a solution not only identifies the most susceptible or accident-prone drivers, the tracking data provides other valuable insights about the time of day, or specific locations or circumstances in which most incidents take place. Some locations have inherent complications or a change of speed limit that causes a lapse or oversight on the driver's part. The fleet manager can put out advisories in advance while the fleet vehicle is approaching such challenging locations. Other fleet manager aids include real-time notifications of unsafe behaviors, driver score cards, route retrieval and replay, and driving patterns.

While you implement a driver ranking system, you have to consider how drivers will perceive it and participate in it. Give early feedback, preferably immediate, to drivers on their behavior and habits.

Share with them your goals for the fleet safety score. Recognize and award incentives to your top drivers based on safety scores.

Your solution should present you with reports that reflect monthly trends in driver behavior so that you can identify changes and the extent of improvement. Your fleet's continuing success over the years in preventing accidents is the result of an unrelenting vigilance with state-of-the-art monitoring.

Accident Prevention can be wholly effective when the equipment, the road conditions including traffic, and the driver behavior are all continuously monitored and assessed. Today's advanced safety solutions can deliver all these to commercial fleets that are concerned about eliminating avoidable expenses.



About Bridgestone

Nashville, Tennessee based Bridgestone Americas Tire Operations is the U.S. subsidiary of Bridgestone Corporation, the world's largest tire and rubber company offering a wide range of Bridgestone, Firestone and associate brand tires, BATO maintains wholesale and original equipment sales operations across a broad line of products, including passenger, light truck, commercial truck and bus, agricultural, motorcycle, kart and off-the-road tires.

Additional US subsidiaries include Bridgestone Retail Operations which operates the largest network of company-owned automotive service providers in the world – nearly 2,200 tire and vehicle service centers across the United States – including Firestone Complete Auto Care, Tires Plus, Wheelworks and Hibdon store locations. Bridgestone authorized dealers consist of independent tire retailers that are authorized to sell and service Bridgestone or Firestone products. BATO's Commercial Solutions Group also has an extensive dealer network that also includes Truck, Bus, Radial Division. In summary the Bridgestone network consists of approximately 5,400 service locations for tire, automotive and fleet solutions.

Below is a complete list of links to our products for Commercial, Retreads and Consumer tires.

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Alenza, Blizzak, DriveGuard, Dueler, Ecopia, Potenza, Turanza
Bridgestone Consumer product

website: <https://www.bridgestonetire.com/>

Bridgestone Commercial product

website: <https://commercial.bridgestone.com/en-us/index>

Firestone Brand

All season, Champion, Destination, Firehawk, Transforce, WeatherGrip, Winterforce

Firestone Consumer product

website: <https://www.firestonetire.com/>

Firestone Commercial product

website: <https://commercial.firestone.com/en-us/index>

Bandag Retread

website: <https://www.bandag.com/en-us/index>

About Azuga

Azuga, a Bridgestone company, is a leading global connected vehicle platform, helping our customers turn data about vehicles and their use into intelligence that improves operations and safety while reducing costs and risk. Azuga provides reliable end-to-end solutions for commercial fleets, government agencies, insurance companies and automotive industry suppliers, encompassing hardware, the Azuga One platform, award-winning fleet applications and data analytics. Azuga is headquartered in Fremont, California.

Our award-winning Azuga Fleet solution is used by thousands of customers—from the small fleet of one or a few vehicles up to several thousand—and is lauded by our customers for its ease-of-use, robust features and affordable pricing.

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DRIVE



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