

## Case Study 19: Industry Group - Trucking

Keywords: Program Design / Metrics / In-vehicle Monitoring / Safety Culture / Wellness / Trucking

Overview of Industry Characteristics: At the highest level, trucking is divided into for-hire fleets and private fleets. Within that typology, fleets are divided into trucks (sometimes called straight trucks, meaning a single unit vehicle with no trailer) and tractors (the powered part of the common tractor-trailer “semi” commonly seen on roadways). Trailers are also included in fleet composition, counted separately. Within this typology, there are the various industries these fleets serve. Note that this typology is slightly different from the one used by the trucking industry itself, which distinguishes between truckload (TL, the entire load delivered to a single location) and less-than-truckload (LTL, the load delivered to multiple destinations, including but not limited to package delivery).

Traffic Safety Programs: The idea and importance of safety permeates the trucking industry. Every company interviewed is highly aware of the business impact of any negative publicity associated with trucking. This is also reflected in industry trade publications where public image is frequently mentioned and discussed. This is in addition to the obvious legal liability and regulatory impacts surrounding safety. Broad comprehensive safety programs (beyond those required for the commercial driver’s license [CDL]) are a condition of employment in virtually all trucking companies. There is a heavy reliance on packaged/commercial safety programs, but with a wide range of modification, elaboration, and tailoring. In one form or another, the Smith System dominates the industry. Modifications range from adjustments in focus and emphasis, to radical restructuring of the basic Smith System elements. For example, one company has a staff developed extension of the Smith System dealing with close quarter maneuvering which is unique to their business, fleet and operation.

Program Evaluation: Given the critical importance of safety in image as well as in fact, and the requirement of safety program/training completion as a condition of employment, the possibility of terminating a traffic safety program is not an option. Only incremental adjustments and/or re-training/remedial training elements are conducted.

Metrics for Program Success: Regulatory compliance and sound business practice require that incidents, including preventable crashes, be meticulously monitored and tracked in the trucking industry. Metrics often include near misses and behavioral infractions (called triggers in Smith System parlance). The line between individual performance (a human resources issue) and program evaluation (refine or refocus) is blurred and somewhat subjective. The two merge completely with re-training, which combines elements of both individual performance and program evaluation.

While all trucking companies are diligent with regard to safety and safety programs, some are aggressively pro-active, incorporating safety into the business plan as well as corporate culture.

One interviewee holds weekly “vertical alliance”/“safety tailgates” (Monday) and face-to-face safety meetings quarterly. Monday meetings are preceded by Sunday videos to all employees with a quiz. In some companies, on-board cameras are combined with metrics.

In-Vehicle Monitoring: In-vehicle camera monitoring is an important element of the safety strategies used by the corporate trucking industry. Lytx DriveCam or equivalent monitoring technology is used extensively in the trucking industry to monitor interior and exterior conditions (forward facing or cameras that record what the drivers see and interior/driver facing to record the actions of the driver). Monitoring technology is seen by those using it as “better than aggregated crash statistics” since it is incident specific and the reasons for the crash or other incident are documented. For one company, massive improvements in driver safety were realized with the introduction of this monitoring technology. Liability advantages were also realized when there were crash incidents. Another company installed both forward facing and driver facing event cameras in all the truck fleet vehicles. These monitor incidents (including but not limited to crashes), as well as Smith System trigger behavior. Videos are reviewed randomly in conjunction with vehicle maintenance, as well as in response to a crash incident, error, or complaint. Perhaps most importantly, these cameras are seen by drivers as supportive and not intrusive. They are frequently used to absolve drivers of alleged violations, companies reported that 80% to 90% of alleged violations are unfounded.

Safety Culture: Safety is integral to trucking company operations, especially for companies transporting hazardous materials. USDOT regulations and reporting requirements reinforce this. Consequently, all trucking companies have some level of safety culture (i.e., at least acknowledge the role and importance of safety to the business), even though it may not be formally recognized as a separate element. Leading edge/proactive examples of safety culture are reflected in programs like one company’s recognition and acknowledgment that peer-to-peer accountability is a critical element in the safety strategy, with broad support (especially top-down), a given necessity, including a driver committee that advises management on safety matters. Every supervisor coming in to contact with drivers going on duty has had “reasonable suspicion” training. (This is more inclusive than the required supervisor training under 49CFR382.603.) One respondent responsible for company safety proudly said “The safety department is the entire organization!” meaning safety is everybody’s responsibility. In addition, “psychological safety” (encouraging people to feel their job is safe and they will be free from retaliation if they speak up) is built on trust, and also builds trust.

Wellness Linkage: The physical and physiological challenges of truck driving are recognized and well understood within the trucking industry, in large part because of USDOT regulations. Whether this is integrated into a formal wellness program varies widely across companies, however. As is often the case, to ensure broad participation, a set of mandatory requirements displaces possibly more comprehensive voluntary measures.

### Key Points for Trucking Companies:

- The importance of driver safety is universally recognized throughout the trucking industry.
- Safety programs are integrated into day-to-day operations.
- Because of the integral nature of safety, no trucking companies interviewed are contemplating the possibility of terminating their traffic safety program.
- In-vehicle monitoring is an important element in trucking company safety programs.
- Innovative trucking industry safety programs exist.
- With modification for company and industry segment, elements of innovative practices are seen as being transferable across the industry.