

Program Development

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Fleet Safety

A systematic approach for fleets not regulated by DOT

By Peggy E. Ross

MANY FIRMS PROVIDE FLEET VEHICLES, such as cars, SUVs and small vans, to their employees. Employees often drive company-owned/leased vehicles for work and personal use. An employee's spouse and/or family may drive such vehicles as well.

A comprehensive fleet management program must incorporate all aspects of a business. "It not only involves effective management of vehicles, but more importantly effective management of people while driving" (Daecher, 2004, p. 1). Fleet safety is important because "more worker fatalities are caused by vehicle crashes in the U.S. than by any other incident type" (McKillips, 2003, p. 22).

Furthermore, a fleet crash costs on average \$21,000 per incident (McKillips, p. 22). This article outlines a systematic approach to ensuring the safety of fleets not regulated by DOT (Figure 1, p. 36). Establishing a comprehensive safety approach is a proactive way to reduce motor vehicle incidents and associated losses.

Identify Stakeholders

The first step in developing a comprehensive approach to fleet safety is to identify the key stakeholders/partners in the business operation. Forming partnerships with these stakeholders helps ensure the necessary resources, expertise and commitment. Partners and their roles may include risk management (insurance), fleet management (sourcing and vendor contracts), sales and technical support (receive vehicles as part of compensation), human resources (hiring, background checks, discipline) and safety (risk control, loss prevention expertise, including root-cause analysis). As with any safety program, the success of a fleet safety program requires management commitment and support. Identifying a champion can help sell and sustain the program.

Define Needs & Establish a Baseline

To establish a baseline, start by determining the number of vehicles in the fleet. Then, identify who is considered to be an authorized driver (e.g., employ-



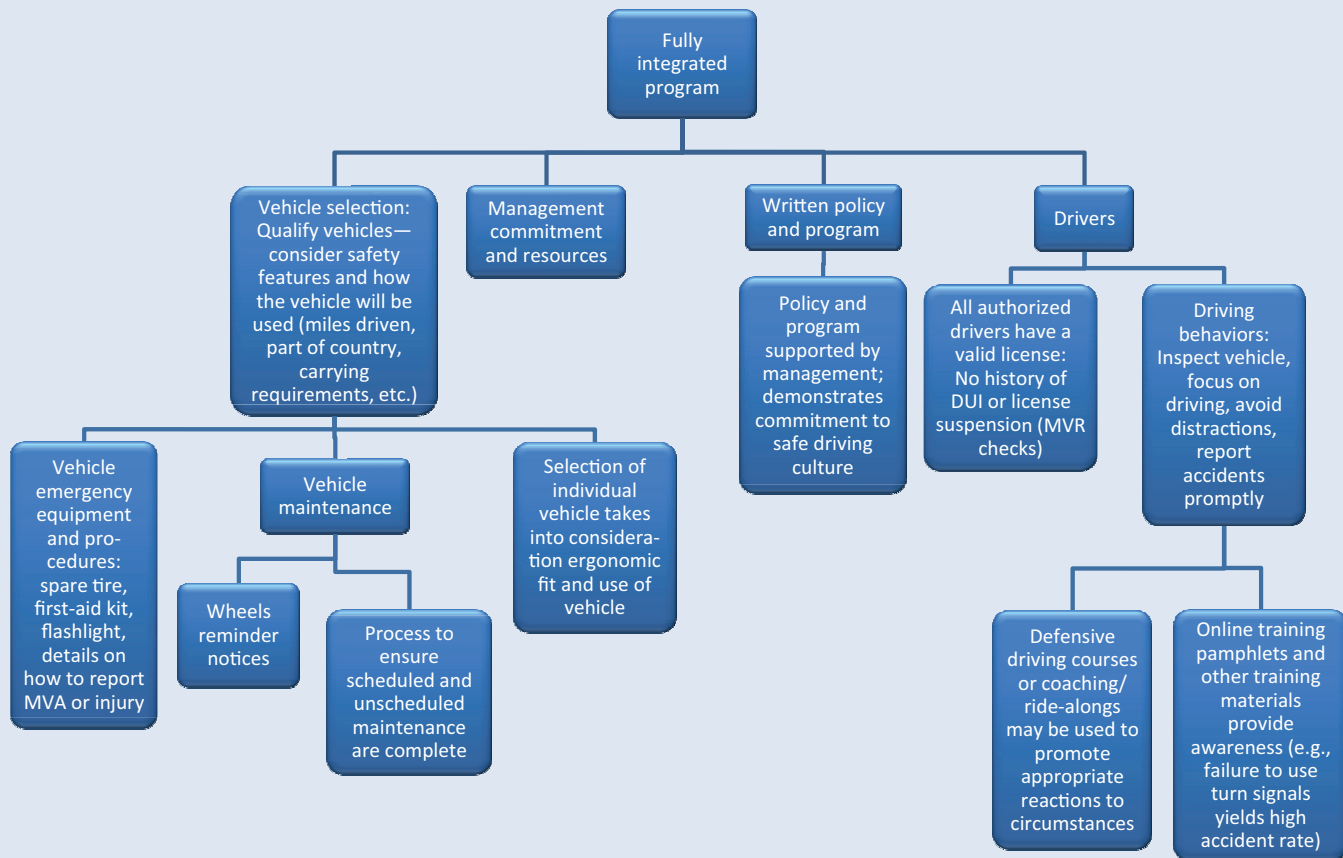
ee, spouse). While many companies permit spouses and/or significant others to drive a company vehicle, it is important to recognize that allowing these extra drivers presents additional risk and increases insurance costs. The organization also should identify those who are not allowed to drive company vehicles. For example, a company's policy may exclude anyone without a current valid driver's license, children and drivers younger than age 18.

A company should evaluate fleet users and their needs. What are some typical driving patterns? Are long trips or short trips the norm? How many miles are driven per year? How often must drivers park in and/or drive through unsafe areas or locations?

Vehicle use is another consideration. Are vehicles used to carry materials or samples? How much space is required? What weather conditions are

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Peggy E. Ross, M.S., RN, COHN-S/CM/SM, CSP, is EHS manager for corporate occupational health and safety with Baxter, where she has worked since 2002. She has worked in the occupational safety and health field for 20 years. Ross was recently selected to represent Baxter on the ANSI/ASSE Z15.1 Committee, Safe Practices for Motor Vehicle Operations. She is a member of the American Board for Occupational Health Nurses' board of directors. She holds an M.S. in Occupational Safety and Health from Columbia Southern University and is a professional member of ASSE's Northeastern Illinois Chapter.

Figure 1**A Systematic Approach to Safety for Unregulated Fleets**

Abstract: Companies that operate fleets not regulated by DOT would be well-served by implementing a systematic strategy for ensuring the safety of those fleets. Doing so requires having baseline data, established and enforcing policies and procedures, addressing vehicle use and maintenance and providing training.

commonly encountered? A company also may conduct a satisfaction survey to assess the level at which existing vehicles meet current driver needs.

Baseline data should include statistics on motor vehicle incidents and collisions for the past 3 years. Incident reports also provide valuable insight. Look for trends such as multiple incidents involving the same employee and the cost of incidents. Evaluate incident patterns such as no-fault (e.g., parked car) versus at-fault/moving infractions. The following formula is useful for determining accident frequency rates:

$$\frac{\text{Number of collisions} \times 1 \text{ million}}{\text{vehicle miles driven}}$$

Other rates can be used to determine the incident rate based on the number of vehicles operated. Injury incident rates or work-hour calculations also may be considered (ANSI/ASSE, 2006, p. 30).

Policies & Procedures

Policies and procedures are the foundation of a fleet safety program. Evaluate existing policy to identify areas to improve. The written fleet program establishes how the company complies with the policy. For example, if the policy states that only authorized and licensed drivers may operate a company vehicle, it

should clearly identify who is authorized to drive a company vehicle. If spouses and/or family members are authorized to drive, they should be subject to the policy requirement that permits only those with a valid driver's license to operate a company vehicle.

The policy also should require drivers to comply with applicable state laws. Since these laws vary, the company may consider setting specific requirements. For example, some states do not require all occupants to wear seatbelts (Hinderks, 2008), while New Hampshire has no seatbelt requirement at all (B. Hinderks, personal communication, Jan. 14, 2009). However, company policy may require seatbelts for all occupants.

The policy also may address the use of electronic devices (e.g., cell phones) when the vehicle is in operation. Studies confirm that these distractions are associated with a decline in safe driving behavior and increased incident frequency (Curry, 2002).

A company should consider implementing a mechanism to verify that a driver has a valid license. It should also require that all authorized drivers (e.g., employee and spouse) have valid drivers' licenses. Some employers keep a copy of the current driver's license on file. In these cases, the company must adhere to laws designed to protect privacy and prevent identity theft.

Some employers also obtain moving violation reports. Checks of a motor vehicle record (MVR) provide vital insight about an employee's driving habits. "An MVR check reveals, among other important information, insurance lapses, traffic violations, accidents, license revocations and most importantly, DUI charges that may not appear on criminal records" (Alaniz, 2008).

If this is part of the program, the company should determine what criteria trigger retraining, removal of vehicle or disciplinary action. Many companies use a system that assigns points/values for anything that might show up on an MVR. This allows a company with employee drivers in multiple states to evaluate using a standard set of criteria. The point system also can help ensure consistency in discipline decisions, including whether an employee remains eligible for a vehicle. A company should also evaluate frequency and severity of moving violations.

A company may elect to follow section 383.51 of DOT regulations and not permit any drivers convicted of a DUI to operate a company vehicle. Establishing clear criteria for disciplinary action in advance and consistently applying policy requirements will prevent future problems.

Company policy should clearly state whether the company permits personal use of the vehicle and by whom, and it also should define what notifications are required. In addition, company policy should require employees to notify the employer of medical conditions (e.g., seizures, medications) that could interfere with safe driving. It should also require notification if an employee is involved in an incident or has his/her license suspended.

ANSI Z15.1-2006 includes sample policies for fleet and rental vehicles that a company can use as a guide. To solidify fleet safety requirements, a company should provide employees with a copy of the policy and require them to sign it before receiving vehicle keys.

Vehicle Selection & Acquisition

To improve vehicle selection and acquisition, a company first should identify the number, make, model and year of vehicles currently in its fleet; document whether vehicles are leased or owned; and determine who is responsible for their maintenance. Review available maintenance records to verify whether those responsible have performed proper routine and nonroutine maintenance.

Next, a company should consider future leases and acquisitions. Vehicle specifications must be appropriate for the job requirements. In addition, a company should consider safety requirements as part of the vehicle selection process as this demonstrates commitment to safety, which supports a strong fleet safety culture.

According to ANSI/ASSE Z15.1 (2006), general safety considerations include crashworthiness, cargo capacity, towing capacity and ergonomics. Safety features include antilock brakes, front and side airbags, stability systems, rear vision or detection

devices, collision avoidance, event data recorders, night vision devices and exterior mirror systems (p. 18). A company also may consider laminated safety glass for side windows (Batzer, 2007). Tires should be evaluated for safety ratings and recalls. Another consideration is whether all-wheel drive, front-wheel drive or four-wheel drive is more appropriate than rear-wheel drive given the typical weather conditions encountered.

Other considerations include fuel type (cost and environmental impacts) and the ability to adjust equipment to promote comfort and support ergonomic improvements. A company should prequalify/approve vehicles for future acquisition. It also should clearly define procedures for acquiring and/or replacing vehicles following an incident or based on a prescribed mileage or time frame. The policy also should indicate what vehicle modifications are permitted. In addition, a company should specify and provide emergency equipment (e.g., spare tire, first-aid kit, flashlight, cold-weather items) as appropriate.

Vehicle Maintenance

"Vehicle maintenance is critical to ensure safe and roadworthy vehicles" (Daecher, 2004, p. 3). A company should teach its drivers how to perform a basic vehicle inspection. It also should ensure that its vehicles as well as rental cars are checked to ensure that lights are working and tires are properly inflated. In addition, a company should require performance of scheduled and unscheduled maintenance. A comprehensive program incorporates reminders for scheduled maintenance as well as a mechanism to ensure that it is performed as scheduled. Vehicle maintenance may be incorporated as an element of employees' performance plans (linked to compensation).

Driving Behaviors & Training

Because driving occurs away from company premises, driving behavior is perhaps the most difficult aspect of a fleet program to control. Drivers makes choices each day—such as whether to drive while drowsy, wear a seatbelt, use a cell phone or drive under the influence of drugs or alcohol. Drivers also have varying levels of skill and alertness.

Research has identified three critical driving behaviors: 1) looking ahead of the vehicle to adjust to what is happening; 2) expecting other drivers to make mistakes—being aware and ready to respond; and 3) using turn signals to alert other drivers when changing lanes or turning (Huang, Roetting, McDevitt, et al., 2005, p. 27). A company should use training to promote safe driving behaviors. While pamphlets, computer-based and online training provide valuable insight, they often lack a mechanism to provide feedback and coaching on behaviors as they do not involve active participation. Conversely, simulators, defensive driving courses and train-the-trainer coaching programs provide an interactive approach that encourages appropriate driving behaviors.

Many defensive driving programs are available. For example, Abbott Laboratories delivered a 1-day

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Potential Hazards Faced by Drivers of Company Cars

Mechanical Hazards

- Tires: under-/overinflated/tread depth
- Wiper blade failure/lack of washer fluid
- Oil: inadequate amounts may lead to mechanical failure
- Brake failure
- Vehicle (engine) condition
- Blind spots that impact visibility
- Ergonomic "fit" of the vehicle
- Vibration: seat and steering wheel
- Road noise/radios (noise increases when driving with windows open)
- Static electricity when fueling vehicle
- Lighting: fog lights/headlights

Road Hazards

- Barriers on the road
- Debris (e.g., fallen branches)
- Pavement issues/potholes/slippery conditions
- Inadequate or confusing signage
- Poor lighting/visibility
- Barriers
- Construction zones
- Pedestrians
- Other vehicles
- Moving water (flooded roadway)
- Wind
- Animals entering roadway
- Trains
- Bicycles

Behavioral Hazards

Habits/Behaviors/Training

- Failure to use left turn signals
- Improper lane usage
- Aggressive driving behaviors
- Frequent lane change
- Speeding
- Inappropriate response to an unanticipated event (signals lack of experience or training)
- Failure to inspect vehicle
- Failure to wear seatbelt
- Method of entering and exiting vehicle
- Driving while drowsy
- Driving under the influence of drugs or alcohol
- Distracted driving habits (e.g., cell phone)
- Behaviors of the other driver
- Road rage/threat of violence

Physical Hazards

Adverse Weather/Work Environment

- Cold
- Heat
- Ice/icy bridges
- Lightning
- Snow
- Poor visibility/fog/darkness
- Insects/animals

Ergonomic Hazards

- Design of controls
- Equipment fit (seat, height, reach distance)
- Posture and fatigue
- Manual carrying/lifting required
- Duration of driving required
- Lighting
- Vibration
- Comfort and temperature
- Long work hours

Impact Hazards/During Accident

- Crushing metal caused by impact forces
- Flying debris/glass
- Air bag deployment
- Rolling vehicle
- Being thrown from vehicle (not wearing seatbelt)
- Spills: gasoline
- Fire
- Exposure to the elements (e.g., cold)
- Water: drowning potential
- Projectile objects in car
- Delayed medical response

Companies with fleets must consider a wide range of hazards that their drivers may encounter.

course aimed at enhancing skills that included behind-the-wheel and ride-along training. This program yielded "nearly a 50% reduction in third-party liability expenses on a cost-per-employee basis" (McKillips, 2003, p. 26).

Incident Reporting & Investigation

A company's insurance carrier investigates motor-vehicle incidents to determine and manage liability. The carrier, not the company fleet program, is responsible for each claim. Conducting internal root-cause analysis on motor vehicle incidents can help identify hazards that lead to fleet incidents. Once a company identifies these hazards, it should conduct a risk assessment to help prioritize and set future goals and define a strategy for the fleet safety program.

Conclusion

Building a solid fleet safety program makes good business sense and its development requires the involvement of key stakeholders. Start by evaluating the current policy and program. Decide what the future state will be and work toward it. To assess the current status, examine incident frequency and costs, identify gaps and needs, and review vehicle selection

and maintenance. Establish a baseline and set goals, and define a training strategy. When a company establishes a solid fleet safety program, it will yield positive results that impact the bottom line. ■

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