## Case Study 22: Safety Program Design – by Industry Group

## Keywords: Program Design / Transit / Trucking / Safety Organizations / Other Organizations

<u>Transit Safety Programs</u>: There is a heavy reliance on packaged/commercial safety programs. Packaged programs, or slightly modified packaged programs dominate the industry. Transit agencies are highly networked with each other and highly risk-adverse. Industry practice is a common criteria and justification for selecting a given program, followed by previous experience with similar systems in other agencies. Modifications, when they are present, are usually hybrids of multiple packaged programs or a modest tailoring of a commercial package.

The primary traffic safety programs used by the transit industry are Smith System, TAPTCO (Transit and Paratransit Company, described as a bus version of the Smith System), and USDOT TSI (USDOT Transportation Safety Institute, TAPTCO is said to be TSI based). Programs are typically delivered as a mixture of classroom training, in-vehicle monitoring, and trainer/supervisor observation of revenue service (picking up fare-paying passengers).

<u>Trucking Safety Programs</u>: 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.

<u>Safety Organizations Safety Programs/Current State of Practice:</u> Safety organizations come in all sizes and shapes. Some are industry- or mode-specific (e.g., trucking/commercial vehicles). Others focus on the legislative and regulatory environment (e.g., helping companies comply with regulatory requirements). Still others approach safety through the lens of a particular certification (so-called compliance assistance). Finally, there are discipline-specific safety organizations, which advocate for a specific profession (such as EMS providers).

Safety organizations and the programs or approaches they provide are evolutionary. They respond to a need; in some cases an imposed need (e.g., government regulation); in others, an emergent need (e.g., increased crashes). As a result, there is no single monolithic view of "current practice" across "safety programs". Rather there are perspectives from different angles of a very complex and changing landscape. For more detail on safety organizations and

the services they provide see the case studies on program selection and program implementation.

<u>Other Organization Safety Programs</u>: By design, this group is diverse. However, for discussion purposes, it can be separated into sub-categories, based primarily on operating environment and client base. Safety programs are a reflection of an array of factors, including organization culture, industry practice, and the physical and regulatory operating environment. Our typology here focuses on the latter, but not to the exclusion of any of the other factors.

Hazardous Environment: The examples in this group all operate in obviously hazardous environments. One renders assistance to motorists on busy freeways. The other three frequent and do business in industrial environments, construction sites, and drilling sties. (EMS providers also fit this description, but are covered by related safety organizations due to the structure of the industry and other reasons noted.)

As diverse as the individual operating environments are, they all have one thing in common. They are dynamic and fraught with emergent properties. They are chaotic. Construction sites require attention at night and in inclement weather, as do industrial facilities, oil drilling operations and motorist aid. Driver safety programs for this group deal with atypical nonstandard conditions. (For example, making a U turn on a freeway or using a ramp in the wrong direction, or being in the middle of a construction incident in the middle of the night.) The standard driver safety programs or defensive driving curriculum is inadequate. Instead, all these programs have a more general approach for some elements and a more specific approach for others.

Examples may help illustrate this point. Situational awareness complements and supplements specific admonishments (like following too closely). The sharing of specific tactical information, as well as generalizing that information for application elsewhere supplements standard defensive driving tactics. For example, one company developed their own version of defensive driving. The concept of "defense" in defensive driving was carried to a higher level through supplemental modules to their basic Smith System program. A module evolved on how to drive in environments with distracted drivers, rather than the standard how to not be a distracted driver.

University Shuttle: In some ways, campus shuttles are similar to mainstream transit operations. (The mission mantra "Safety – Schedule – Service" remains applicable.) However, in other ways they are very different (demand and workforce). Both involve students. The buses are driven by students and they are driven among communities of students. Consequently safety programs cover everything that typical transit authority programs do (see the previous section on transit), but also modify their safety programs and initial training to accommodate that constituency and workforce. The safety programs/training is shorter and driver recruitment is virtually constant. Similarly, there are peaks of demand almost hourly (class changes) rather than the typical AM and PM peaks of conventional urban transit systems. This changes the style and tone of the safety programs, rather than their basic content.

Limo/Tour Bus: The example here is a tour bus, airport shuttle, and limo company. Their safety program content is relatively typical, however their application is not. At least two elements are exceptional, the use of peer groups as a metric for safety performance and the pervasive safety culture. These support the central role that safety plays in the business model, including the role in image and marketing. These are discussed in the relevant sections below.

Small Employer: The challenges for safety programs for this group are organizational and resource-based. They lack the "economies of scale" available to lager trucking companies to develop elaborate safety programs. However, they report recognizing the importance of safety and by extension adequate safety programs. They explicitly recognize the need to adhere to the formal regulations, often via "roadside education," meaning they failed a roadside inspection. Safety programs for this group are focused on meeting the basic regulatory requirements. In other words, these programs typically include all aspects of regulatory compliance, including but not necessarily primarily safety. The safety elements are basic "driver awareness." The program is a targeted refresher course designed to address specific concerns or problem areas.