## **Case Study 1: Major Metropolitan Transit Authority**

Keywords: Training / Safety Culture / Communication / Metrics / Driver Health / Wellness / Transit

Transit is a complex undertaking. Large fleets of vehicles must move through public streets on coordinated routes and schedules, consistently and reliably, day after day. The operational challenge is monumental, even for a modest-sized agency. Transit is also a very public undertaking, being publicly funded, providing a public service, and operating large vehicles on public streets. Thus, the nature of transit operations (i.e., coordinated passenger movement in public) dictates an ever-present awareness and concern with safety. Phrases like "Safety – Security – Schedule" used by one transit authority to describe their philosophy capture this priority. Safety programs are usually (but not always) fully integrated into the driver hiring process (referred to as "on-boarding") and completion is a condition of employment. This situation creates a continuum between safety programs and individual performance/human relations concerns.

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).

The physical and physiological challenges of bus driving are recognized and well understood within the transit industry. Most agencies have some form of wellness program designed for bus operators. These are so fully integrated into the fabric of the transit business that they are not seen as elements of a safety program per se, though the link to safety is recognized.

Transit safety programs are of interest to other transit organizations or quasi-transit organizations (e.g., corporate shuttles) as benchmarks, and to general safety program managers for their use of packaged safety programs and the size of their operations.

This example is a transit system operating 537 buses, 106 light rail and 23 commuter rail vehicles. Safety is functionally separate from training at this organization. New operators get an 8 week basic training course with "the usual" defensive driving training, operation lifesaver material and Smith System basics. These are not considered safety programs. There is a modest safety add on at the end of the basic training which introduces some of the safety

programs (e.g., Hazard Id below). There are construction, maintenance shop and operations safety programs. Operations safety includes the public, riders, and operators. The safety group also investigates accidents (sic). (They call them accidents!)

Three safety program constitute the core of the bus operations safety function. They are functionally though largely informally linked. Each program is discussed separately, including the program structure and content, along with the metrics associated with the program. There are safety committees for bus operations and rail operations. Another committee of company executives meets quarterly. It is not clear if this is the same as the quarterly safety committee meeting.

Hazard Id Process: There is "work flow full access platform" available to all employees to identify hazards. This has been in place as long as anybody could remember. Reported hazards are referred back to the cognizant division for investigation and resolution. An example would be a stop sign down. The status of the hazards identified by the hazard id program are monitored and discussed at the Safety Committee, with special attention to those unresolved after 90 days. A Corrective Action Plan log is kept. Special and separate attention is given to rail safety issues because of regulatory and funding oversite requirements. This is not overtly an assessment of the Hazard Id program, rather it is a monitoring of the company's effectiveness at resolving the hazards identified.

Safety Minute Clinic: The Safety Minute Clinic is an informal quasi-impromptu unscripted visit to the operator ready room to talk about a previously identified safety issue (e.g., side swipes). These are based on operator reports, events, accidents, etc. The safety managers select which are to be brought forward. The format is intentionally informal, the tone conversational and there is no agenda other than the nominal topic. It is an open forum, only initially and nominally about the selected safety issue. Operator feedback and change of topic is encouraged. This program in its present form and format has been in place for about a year and a half. The Safety Minute Clinic is relatively new. It is said to be the product of brainstorming how to improve operator contact and feedback. (The inference is that safety was a natural topic because of its relevance to transit operations, but safety may not have been the only objective.) Hence the unstructured conversational tone and the driver ready room venue. There is no formal assessment of the program's effectiveness, consistent with the program's inception. However, there is an archive of initial topics and there is safety manager feedback (the nominal initiator of the clinics). There is the informal belief that it improves retention and morale, but no measures of either.

Quarterly Safety Meetings: Quarterly safety meetings of the safety managers and upper management monitor on-going safety issues. They are scheduled and structured with a formal agenda. Minutes are compiled, distributed and archived. The quarterly meetings are primarily administrative. They formally communicate the status of the various safety issues and initiatives among and to management. These meetings may also be the platform for hazard and clinic topic resolution tracking. There is no overt program assessment. These meetings are

arguably not programs in the usual sense, however, they do perform a function in linking and implementing the results of the hazard id and safety clinic programs.

Safety Culture / Safety Climate: As is typical of transit authorities, there is a profound commitment to safety. In this company it is recognized as such and actively promoted. While not explicitly articulated, it was immediately recognized that the three programs all functioned to construct and maintain an active safety culture throughout the organization. While the safety initiatives in other areas (e.g., construction, the maintenance area, machine shop, etc.) were not part of this interview, it was clear at the beginning that safety was not just driver safety or traffic safety. (There is also a major concern for passenger safety and security.)

Success is not directly defined by any of the nominal metrics described above. There is no consideration of Go / No Go decisions relating to any of the programs. When pressed on this point, the response was that the hazard id program was a prudent necessity and the identification and resolution of hazards was by definition success.

The Safety Minute Clinic, on the other hand, is seen as the evolutionary follow on to the hazard id program (a platform for communicating closure on the issues raised by the hazard id program), coupled with a deliberate outreach objective. While there is no formal assessment of the clinic, the fact that it does not have or need documentation is evidence of its success! Similarly, its open flexible format and the engagement it fosters are further demonstrations of its success. Functionally, it is seen as the glue that holds the safety culture together.

Regarding driver health and wellness programs, as is common at large transit agencies, there is a wellness program at this company. It includes the usual work out area and equipment, as well as a quiet room at all facilities. (The health and fitness challenges of bus operators, especially split shift operators, is widely recognized in the transit industry.) The wellness program is not overtly linked to safety culture or to any safety program.

## Comments & Takeaways

- → The Safety Minute Clinic informal visit to ready room to chat up a safety issue
- → The Safety Minute Clinic <u>Archives</u> the concept of saving and revisiting topics based on driver feedback to safety minute clinics
- → The Safety Minute the evolution of a program... it was a hazard ID program for communication that became outreach... that is now viewed as "glue" holding safety culture together