

## Case Study 16: Public University Campus Shuttle

Keywords: Program Design / Training / Communication / Packaged Programs / CDL / Other Organizations

For this study, “other organizations” are defined as organizations that do not fit in the other three categories (Transit, Trucking and Safety Organizations). The definition included organizations employing other types of professional drivers, as well as employees who drive for their work, but who are not professional drivers. Examples from the “Other Organizations” category can be helpful for all organizations who have the freedom and/or the need to implement new and creative ideas. They may also be helpful for those organizations who are growing and want to think outside the “standard safe driving” box to customizable proactive safety programs.

*This example is a campus shuttle operating 27 vehicle fleet of 30 and 40 foot buses (no paratransit vans) with a maximum of 84 staff of which all but 2 are drivers. In some ways, campus shuttles are similar to mainstream transit operations. (The mission mantra “Safety – Schedule – Service” remains applicable, as does the overarching concern with safety.) 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 cases involving 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.*

*As with most campus shuttles, all vehicle operators (drivers) are students. Furthermore, all operators are CDL qualified. Some have their CDL when they are hired, however, most receive their CDL (with passenger endorsement and no air brake restriction) as part of their on-boarding training. The training is Transit and Paratransit Company (TAPTCO) based (unmodified) administered by dedicated TAPTCO certified trainers, combined with elements of the urban transportation safety program designed for UMTA /FTA and administered by a transportation research center housed at the university. The TAPTCO training package as applied consists of twelve videos with tests and F2F interaction with a trainer. This classroom training is supplemented by an in-vehicle test. This includes passenger interaction skills and the operation of on-board vehicle equipment (such as ITS vehicle tracking). The training concludes with route practice on all seven routes (two days each) with passengers and a trainer on-board.*

*There is continuing education / refresher training between semesters. This consists mostly of vehicle maneuvering (backing, parking, intersection negotiation, etc.) and involves both field work and video training. The topics are cyclical as well as incident pattern based (virtual triggers) of preventable accidents. Preventable accident patterns are categorized in terms of behaviors, locations, specific drivers, etc. Where appropriate, this feedback is the basis for*

*adjusting or re-focusing the training and refresher training. This is not used to formally evaluate the basic program or make decisions about the continued use of TAPTCO.*

*Periodic retraining of all drivers on a subset of the CDL basics has also been implemented. This is interesting because it is based on an explicit analysis of the experience between those entering with a CDL versus those obtaining their CDL upon hire. The prior CDL holders self-reported hypothetical difficulty passing the current exam if they had not had the in-house training. This analysis was the result of the standard accident / incident tracking that all transit operations do. The accidents / incidents are analyzed by group, topic, routes (stops, intersections) etc.). The comparison of the two CDL categories within this typology led to the asking of the hypothetical question, which in turn led to the periodic retraining decision.*

*Regarding the initial selection of the TAPTCO package, it was identified by the Assistant Director based on her assessment of the appropriateness / accessibility of the approach and content, as well as cost, from among four contenders. There is no formal assessment in terms of a Renewal / No Renewal decision. However, there is a virtual continuous assessment in conjunction with the safety culture / safety communication mechanisms and protocols discussed below.*

*Safety board / safe practices: Measures consistent with TAPTCO's "Triple L C" (Look Ahead, Look Around, Leave Room, and Communicate) approach have been adopted. A Safety Board strategy focusing on the dissemination of information stimulates discussions among drivers. Specifically, there is a Days Accident Free posting and a Hot Topics Board. These provide context and content for stand-up meetings between shifts.*

*The Hot Topics board conveys current issues such as road condition, route changes, problem areas, and other general "real time" operational information. These topics are the basis for guided discussions between shifts. Leadership of the discussions rotates randomly among drivers and shift supervisors. The Days Accident Free posting shows day since the last preventable accident. Only preventable incidents are considered for inclusion. (Incident and accident are somewhat interchangeable in this context. Incident being the lower threshold.) When the Days Accident Free posting goes to zero, meaning there has been an accident / incident, it immediately becomes a topic for the Hot Topics discussion, as well as and more importantly the subject of extensive impromptu conversation and discussion among the drivers.*

#### Comments & Takeaways

- Review of preventable accidents are used to refocus training on a staff that always turns over (since students eventually graduate).
- Refresher training for busy times (here it's the semester but for other organizations it might be the Holiday seasons).
- The hot topic boards with real time information.