

Case Study 14: On-site Highway Construction and Maintenance Advisors

Keywords: Safety Culture / Program Design / Training / Hazardous environments / Wellness / 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 company that provides on-site highway construction and maintenance monitoring and supervision with a fleet of 40-50 vehicles (mostly light trucks) and approximately 40 employees, at least 30 of whom are active field agents, driving extensively in and around construction sites and work zones. Consequently, their employees have extremely high exposure to traffic risks, for frequency (driving a lot) and environment (construction sites).

This organization focuses on risk avoidance rather than reducing incidents. Program evaluation centers on leading indicators such as close calls and vehicle condition. They also consider the field environment and maintain a categorical ranking of driven roads and the level of risk which is then utilized in the form of additional traffic program modules.

Company management is extremely well versed in the history of the Smith System and traffic safety programs in general. They rely heavily on prevention metrics focused on leading indicators such as close calls and vehicle condition. So even though there were no metrics in the usual sense, there are analytics of a sort. The use of analytics is creative and directed back to the field environment rather than directly to the safety program. For example they have categorical ranking of roads and the level of risk, which was then fed back into the safety program in the form of additional / supplemental program modules. This is not a formal process.

There are also safety culture elements, though not described using those words. For example hazards and close calls were reported anonymously to encourage reporting. The underlying program strategy was characterized as relevance, skin in the game, and vigilance. The concept of defense in defensive driving in particular is carried to a higher level through supplemental modules. For example, a module evolved on how to drive in environments with distracted drivers! This kind of thinking is based on the recognition of the situational impact on the causal chain. So even though there was no formal use of theory, the practical aspects appear to have given rise to a relatively sophisticated understanding of causation! (Multiple factors and reducing any increases risk.) Which they recognize as being consistent with the Smith System’s 5 keys.

Program evolution is through operation genesis, rather than reflection on theory. Practical and real-world are frequent terms. The company's awareness of their situation and environment is also critical. Their employees have extremely high exposure to traffic risks, for frequency (driving a lot) and environment (construction sites). They use a rigorous pre-employment screening via strict insurance company protocols, so the program is to make good drivers better.

Driver health and wellness are addresses informally. The high risk and associated stress of working in hazardous environments is widely recognized and acknowledged. Addressing and reducing that stress through driver safety programs is seen as an essential part of driver health and wellness.

Comments / Takeaways

- Focus on risk avoidance rather than reducing incidents.
- Program evaluation is based on leading indicators (e.g., close calls and vehicle condition).
- The field environment is recognized as a factor, reflected in developing and maintaining a ranking of driven roads by level of risk which is then fed back into the safety program / training.