EMPLOYER-BASED BEHAVIORAL TRAFFIC SAFETY PROGRAMS

Project Objectives

Document the components of existing U.S. and international employer-based behavioral traffic safety programs for workers who operate motor vehicles.

Use behavioral change theories to identify essential components of programs.

Identify measures of program effectiveness.

Develop a guidance document and an interactive web-based guidance tool to plan, implement, and evaluate an employer-based behavioral traffic safety program.
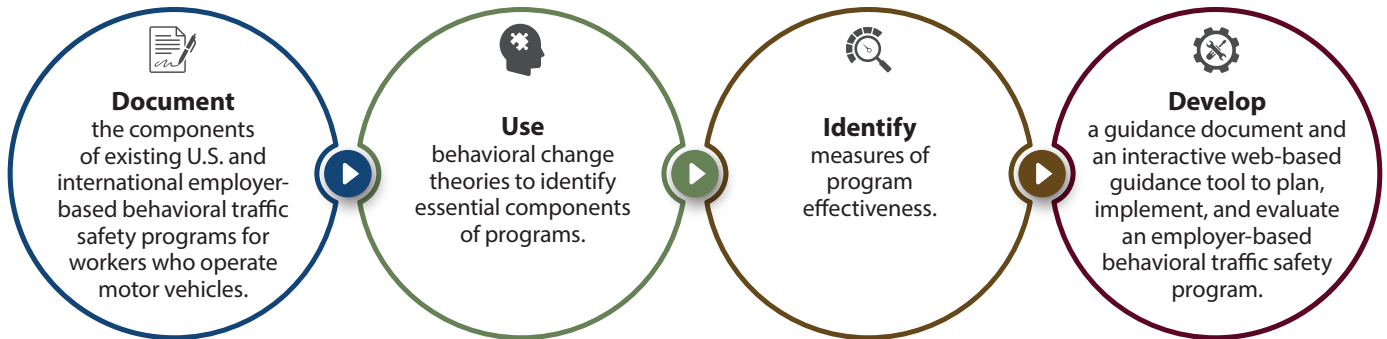
Findings: Employer Interviews

- **Safety culture was strong** and promoted among transit agencies and corporate trucking companies. There was more variation in safety culture observed among the employers of other types of drivers. However, the presence of a safety culture increased as the degree of driving hazards or risk increased.

- **Packaged programs were common** among trucking companies and transit agencies. Smith System dominated trucking, while selection of packaged programs for transit was heavily influenced by peer practice and prior experience in other agencies.

- **There were no traditional evaluations** of specific safety programs or whether to retain or terminate a program. Instead, employers monitored driver behavior and events to identify problems, and then modified safety programs to address these problems.

- **Common measures to assess safety program performance** included number of incidents (crashes, near misses, and behavioral triggers such as the frequency of speeding and hard braking), often augmented with in-vehicle monitoring data, and public complaints.

Findings: Literature Reviews

- There is limited explicit use of behavioral change theory in designing or evaluating employer-based driver safety programs.

- Evidence of the effectiveness of behavioral change theory in general exists but theories have not been broadly applied and evaluated in employer-based programs.

- Relatively few traffic safety programs have undergone rigorous evaluation using a formal experimental study design.

- Most of the measures of effectiveness were based on monitoring or examining program outcomes rather than the process of implementing the program or trainee reactions.
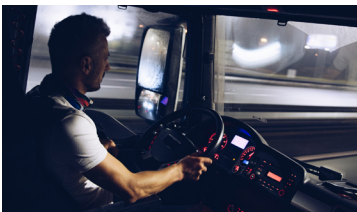
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Guidance Document and Interactive Web-based Guidance Tool

- An interactive web-based tool incorporates previous research, state-of-the-practice, and theory, along with planning aids such as an introduction to behavioral change theory, an overview of measures of program effectiveness, and a logic model template to aid program development and implementation.

- The tool provides employers with easy access to current practice and theory, along with resources for planning, implementing, and evaluating an employer-based behavioral traffic safety program.

- A guidance document presents the layout and flow of content in the web-based tool as a typical user would experience.

- The tool is fully interactive and uses four related categories of content—framed broadly as "What are you trying to learn?"—separated into four sub-questions to guide the user through the content:

  » *What are other people doing and what is available?* (A collection of case studies relating to current practice.)

  » *How do we change behavior?* (An overview of behavioral change theory with examples.)

  » *How do I know my program is working?* (Information on common measures of effectiveness and program evaluation practice.)

  » *What can help me plan my safety program?* (Visualizing the interactions of resources and outcomes using an interactive logic model.)

- Safety Innovations with sources are available adjacent to the four sub-questions.

- A glossary and resources page are also provided.

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Web Document: https://www.trb.org/Publications/Blurbs/182887.aspx

Web-based Tool: https://crp.trb.org/btscrpwebresource1/

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