



Refresher Course for RSP Level 1 Exam

The RSP Refresher Course provides an overview of topics, key references, and independent study materials by topic for individuals in the transportation, safety, and health professions who intend to take the Road Safety Professional (RSP) Level 1 certification exam. This course includes a suite of five (5) 90-minute live webinars on foundational elements of road safety, the collection and application of crash data and associated safety measures, human factors and their impact on roadway safety, safety management and the use of countermeasures, and the development and implementation of strategic safety plans.

These webinars are being recorded and will be available on-demand shortly following the conclusion of the last webinar.

About the Instructor



All modules are taught by Dr. Steven Lavrenz, Technical Programs Manager on staff at ITE. Dr. Lavrenz has led a number of safety programs and publications within ITE, including the Vision Zero Task Force, the FHWA Speed Management ePrimer for Rural Transition Zones and Town Centers, and the *Implementation Guide for Context Sensitive Design on Multimodal Thoroughfares: A Practitioner's Handbook*. He also has an extensive publication record in transportation safety, and will be leading the safety research program at Wayne State University as an assistant professor, beginning in August 2018. Dr. Lavrenz has a B.S. and an M.S. in civil engineering from Iowa State University, and a Ph.D. in civil engineering from Purdue University.

Course Schedule – [Click here to register](#)

Module #1: Foundations of Road Safety

This webinar covers a broad spectrum of road safety topics at a high level, to introduce the transportation professional to basic concepts and terminology and understand the scope of what is commonly considered to be major elements of the road safety genre. The specific areas covered include a basic definition of road safety, evidence-based road safety, crash causation and severity, road user characteristics, road safety partners, approaches to road safety management, economic analysis of safety, road safety culture, and future trends in safety policy and technology.

Module #2: Measuring Safety

The collection of high-quality crash data, and its quantitative analysis to discover trends and factors associated with different crash types, is a critical skillset for the modern safety professional. This webinar provides an overview of the important considerations that must be made when collecting safety data and using it for policy decisions, or for quantitative analysis in crash modification factors (CMFs) and safety performance functions (SPFs). The specific areas covered include safety data basics, ensuring the collection of quality safety data, crash frequency and severity factors, and basic quantitative safety analysis.

Module #3: Human Behavior and Road Safety

Human factors, or how users of the roadway system interact with the environment, is a critical element to understand the causes of many fatal and serious injury crashes. This webinar explores how human factors work for or against roadway safety, and how various tools and educational strategies can be used to influence human behavior. The specific areas covered include human factors basics, safety strategies to address human behavior, road user education strategies, law enforcement strategies, roadway design impact on human behavior, the importance of incorporating human factors into safety planning and programming, positive guidance principles for user safety, and the driving task model and road user error.

Module #4: Solving Safety Problems

Effective safety management; that is, accurately identifying safety problems and developing effective solutions, is at the core of roadway safety training. This webinar provides an overview of the safety management process, and explores some of the decision-making tools and techniques to evaluate countermeasures and other treatments. The specific areas covered include data-driven safety management, systemic approaches to safety management, sources for crash countermeasures, road safety diagnostic tools, multidisciplinary approaches to road safety, collision patterns and crash contribution factors, user-focused road safety interventions, countermeasure cost effectiveness evaluation, countermeasure effectiveness evaluation, and tradeoff analysis for safety performance.

Module #5: Implementing Road Safety Programs

Preparing road safety programs, including the development of strategic safety priorities, communications strategies, and champions within and outside of an agency, is an important part of ultimately being able to conduct effective safety management. This webinar focuses on strategic-level elements associated with policy setting and safety planning, including outreach to various stakeholder groups. The specific areas covered include basics of strategic safety plans, elements of successful road safety policies and programs, road safety champions, road safety stakeholder communications, multidisciplinary teams and partnerships in road safety, and safety program evaluation.