

RESULTS SUMMARY

This project produced a comprehensive package of training materials, train-the-trainer resources and process guidance to help transportation agencies comply with the requirements of the new federal CDL training rule.

PROJECT DETAILS

Project Title: Entry-Level Driver Training (CDL) for Maintenance Equipment Operators

Project Number: CR20-01

Project Cost: \$199,986

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CDL TRAINING RESOURCES FOR TRANSPORTATION AGENCIES

Need for Research

Operation of heavy equipment such as snowplows and material spreaders by drivers without adequate training can have serious safety consequences. Commercial driver's licenses (CDLs) are generally required to operate winter maintenance equipment and other large trucks, but for decades, there were no minimum national training requirements to obtain a CDL. Applicants might receive formal training from agencies or schools, or a driver might pass the test with only informal training from employers, friends or family. Many state DOTs developed their own training programs covering topics important for student drivers to know for their specific jobs.

A recent federal rule, however, now requires standardized, and in some cases more extensive, training for CDL applicants. The rule requires entry-level driver training (ELDT) based on specific knowledge and skills proficiencies. Additionally, all training facilities must be listed on a new federal [Training Provider Registry](#). While the new rule is designed to lead to safer roadways nationwide, Clear Roads member agencies needed guidance and training resources to ensure that they meet the new requirements.

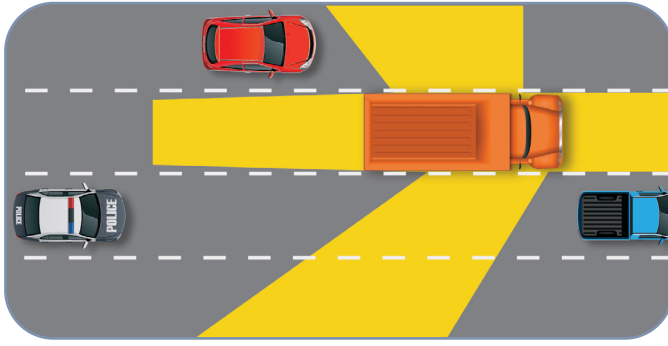
Objectives and Methodology

The goal of this project was to develop CDL training materials and a process to guide transportation agency efforts to comply with the training and registry requirements of the ELDT rule. Investigators began by reviewing published literature related to CDL training and guidance. Next, they conducted a short online survey of Clear Roads agencies to understand existing CDL training, lessons learned and needed revisions. Finally, investigators carefully reviewed the ELDT rule requirements in preparation for producing the training package.

Results

Investigators produced a comprehensive package of driver training materials, train-the-trainer resources and process guidance to help transportation agencies comply with the requirements of the ELDT rule. The classroom (theory) training

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Training graphics help CDL applicants learn where a dump truck driver's blind spots are. (Graphic courtesy of Virginia Tech Transportation Institute.)

is provided in two formats: PowerPoint presentations (for instructor-led courses) and eLearning files (for use with a learning management system).

Driver Training Curriculum

The training curriculum has two components: classroom (theory) training and behind-the-wheel training. Following the federal requirements, the classroom training materials cover 30 topics in five areas:

- **Basic operations** of a commercial truck, its systems and basic maneuvers.
- **Safe operating**, such as dealing with distracted driving, visual impairments and nighttime driving.
- **Advanced operating**, including dealing with hazards, skidding and railroad crossings.
- **Vehicle systems and malfunctions**, including roadside inspections and maintenance.
- **Nondriving activities**, such as handling and documenting cargo and post-crash procedures.

The behind-the-wheel training curriculum provides lesson plans for training CDL applicants in 19 skill areas, including parking, vehicle controls and driving in extreme conditions.

Train-the-Trainer Resources

To help instructors prepare, investigators developed three train-the-trainer modules outlining the new federal regulations and providing instructional strategies for both the classroom and behind-the-wheel requirements. Unit outlines, PowerPoint presentations and instructor notes are provided to guide trainers through the process, along with exams, answer keys and checklists.

Process Guidance

Investigators produced a [fact sheet](#) that includes a task list, flowchart and timeline to help agencies navigate the process of complying with the new federal requirements. Training providers must register with the federal registry and self-certify that they have met the ELDT rule's requirements. They must also enter each new CDL driver into the registry and biennially update trainer and driver information.

Agencies need to ensure that they have the technical and organizational capabilities and resources to meet the rule's requirements. For example, agencies may want to adapt their IT systems to expedite transferring driver data to the federal registry. Tasks such as facilitating the registration process and coordinating the training program may require restructuring or new hires. Finally, training programs will need to comply with local and state regulations.

Implementation and Benefits

This project provides everything a state DOT needs to deliver entry-level CDL training to its employees. By following the comprehensive training curriculum and step-by-step process guidance, agencies can feel confident that their training programs comply with the federal rule's rigorous directives. This will allow agencies to continue to provide employee CDL training in-house—an approach that is less expensive than third-party training and maximizes flexibility and oversight for agencies.

Project benefits extend beyond winter maintenance and Clear Roads agencies. The training materials are free to any public agency, including local agencies, through an online [request form](#). Clear Roads also contracted with the research team to provide train-the-trainer [webinar guidance](#) to help agencies implement the training.

"The new federal rule requires a lot of material to be covered. When agencies use the Clear Roads training materials and follow the process guidance, they can be confident that they're delivering training that meets all of the requirements."

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