

Instructor Guide



104: Introduction and Overview to Highway Grade Crossings



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Icons Used In This Guide



REVIEW slides



ASK



CLASSROOM ACTIVITY



SMALL GROUP ACTIVITY



INDIVIDUAL ACTIVITY



WRITE



Multimedia



REFER participants to

Agenda

Topic #	Topic Title	Duration
1	Overview	20 Minutes
2	Regulation	20 Minutes
3	Warning System Devices	60 minutes
4	Field Trip	90 Minutes
5	Crossing Control Circuits	60 Minutes
6	Warning System Malfunction	20 Minutes
7	Traffic Signal Preemption	60 Minutes
8	Field Trip	90 Minutes
9	Summary	30 Minutes
Total Time:		450 Minutes

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Overview

Purpose The purpose of this module is to:

- provide the participant with basic terminology, regulations and oversight specific to highway grade crossings, general highway grade crossing components, control circuits and warning systems.

Objectives

At the end of this lesson, the transit elevator/escalator trainee will be able to:

- Identify key highway grade crossing terminology & nomenclature
- Describe regulations pertaining to highway grade crossings
- Describe the principles of highway grade crossing operation
- Identify and describe highway grade crossing warning equipment
- Identify and describe highway grade crossing control circuits
- Describe highway grade crossing warning systems
- Identify three types of warning system malfunctions

Materials

Mandatory Make sure you have the following

- 1 Binder for Each Participant Including:
- Coursebook
 - PowerPoint Printout

- 1 Binder for Each Instructor Including:
- Coursebook
 - Instructor Guide(s)
 - Handout(s)
 - Quiz(zes)
 - Participant Survey

- On Computer or USB drive:
- PowerPoint Presentation
 - Videos
 - Pencils

Optional

You may also want the following for optional activities:

- Chalk board with chalk, large paper with marker, etc.
- Internet connection or downloaded video(s)
- Lab or simulator
- Handouts: NTSB Fox River Grove Reports

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Module Length: 450 min Time remaining: 450 min This section: 20 min (12 slides) Section start time: _____ Section End Time: _____

DO	SAY	Materials Needed
<div data-bbox="34 464 144 564"></div> <div data-bbox="154 499 618 542">REVIEW introduction slides</div> <div data-bbox="34 578 144 692"></div> <div data-bbox="164 614 357 656">Multimedia</div> <div data-bbox="28 792 444 835">Instructor's Notes</div> <div data-bbox="28 892 608 1242"> <hr/> <hr/> <hr/> <hr/> <hr/> </div>	<div data-bbox="676 421 1023 464">In your own words:</div> <div data-bbox="676 478 1391 571"> <p>Welcome to the course on Introduction and Overview of Highway Grade Crossings.</p> <p>Advance</p> <p>Riders depend on us.</p> <p>A Southbound Metro-North train sails through what may be America's safest grade crossing. Not only is it equipped with LED flashers, gates and an electronic bell, but also is protected by trees on one side and stone pilings and K-rail barriers on the other.</p> <p>This is the North Main Street grade crossing just south of Branchville that is still under construction on the Danbury Branch. The rubber crossing has not been installed yet, in fact the road has not been installed yet.</p> <p>Continued</p> </div>	<div data-bbox="1497 464 1787 506">✓PPT slides 1, 2</div> <div data-bbox="1535 528 1883 778"> </div> <div data-bbox="1535 792 1883 1049"> </div> <div data-bbox="1497 1085 1854 1128">✓Internet connection</div>