

**Register online/mail or fax to:**  
Rail Training (Attn: Diana Webb)  
Center for Transportation Research  
The University of Tennessee  
309 Conference Center  
Knoxville, TN 37996-4133  
Tel: (865) 974-5255 Fax: (865) 974-3889

Railroad Track Inspection  
& Safety Standards  
Galveston, TX• September 19-23, 2022

Name \_\_\_\_\_  
Title \_\_\_\_\_  
Organization \_\_\_\_\_  
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City \_\_\_\_\_  
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Payment of \$900 by (choose one):  
\_\_\_ Check payable to The University of  
Tennessee

\_\_\_ Bill/Invoice my organization

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## Railroad Track Inspection & Safety Standards

The workshop begins each day at 8:00am.  
Activities on days 1–4 end no later than 5:00pm;  
day 5 will be completed by 11:00am.

### Day 1

Introduction and overview  
Part 213 Subpart A-General  
Part 213 Subpart B-Roadbed  
Part 213 Subpart C-Track Geometry

### Day 2

Part 213 Subpart C-Track Geometry  
(cont.)  
Part 213 Subpart D-Track Structure  
Field Exercises - Geometry Measurement

### Day 3

Part 213 Subpart D-Track Structure  
(cont.)  
Part 213 Subpart E-Track Appliances  
Part 213 Subpart F-Inspection

### Day 4

The Inspection Process  
Field Inspection and Review

### Day 5

Review and Conclusion

27 PDHs (Professional Development Hours) are  
available for those completing the course. All  
attendees who successfully finish the course receive a  
certificate of completion.

# Railroad Track Inspection & Safety Standards

**September 19-23, 2022**  
**Galveston, TX**

The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment and admission without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, genetic information, veteran status, and parental status.

**Call 865-974-5255 if you are  
interested in hosting the course in your area.**  
[ctr.utk.edu/rail-courses/](http://ctr.utk.edu/rail-courses/)

THE UNIVERSITY OF  
**TENNESSEE**  
KNOXVILLE



CENTER FOR  
TRANSPORTATION RESEARCH



## Overview

Track is the foundation of the railroad's physical plant. Although railroad track components are relatively simple in concept, they interact in a complex fashion to form a system capable of withstanding the extremely large forces applied by rail vehicles. Safe and reliable train operations rely upon the track system remaining within established specifications. Because the combined effects of traffic and environment degrade track, regular inspection is essential to identify defects and initiate remedial action before problems develop. This course describes track defects and acceptable corrective actions, presents a recommended methodology for conducting inspections, and discusses in depth the Federal Track Safety Standards in 49 CFR, Part 213.

In this class, you will

- learn how to organize, conduct, and document track inspections;
- learn how to measure track parameters;
- develop a clear understanding of the Federal Track Safety Standards and the FRA track inspection process; and
- learn how to use inspection results to identify track maintenance needs and plan maintenance activities.

This course has been reviewed and approved by the Federal Railroad Administration (FRA) under CFR Part 243 of the new training rule. This course is intended for safety-related railroad employees or independent students who seek employment with a railroad and/or a railroad contractor and who may be tasked with the application of Federal regulation 49 DFR Part 213, Track Safety Standards, Subparts A-F. The course does not contain an on-the-job training (OJT component). This is the only comprehensive course on track inspection providing sufficient time to discuss this complex subject in detail and to demonstrate the measurement techniques needed. Hundreds of attendees through the years have increased their understanding of the track inspection process as a result of this class.

## Date & Location

**September 19-23, 2022 (Galveston, TX)**

Galveston Railroad Museum  
2602 Santa Fe Place  
Galveston, TX 77550  
Tel: 409-765-5700 for directions

This 4-½ day workshop includes classroom lecture, exercises and field track inspection activities. If you need additional information, please call 865-974-5255.

## Who Should Attend

Track inspection personnel from shortline, regional, and Class I railroads; railroad contractors and consultants; state and local government officials associated with railroad operation, finance, and regulation; and railway engineers have all benefited from attending this workshop.

## Equipment

Because this workshop is designed to be hands-on, registrants should bring approved safety footwear for field track inspection activities. Attendees who possess track inspection tools, such as a track level or stringline, are encouraged to bring them. Pocket calculators will be helpful in certain exercises. Field exercises are conducted rain or shine.

## PDHs Available

27 PDHs (Professional Development Hours) are available for those completing the course. All attendees who successfully finish the course receive a certificate of completion.

## Fee

The course registration of \$900 includes course materials and refreshments. Registration fees must be received to guarantee your place in the class. Attendees are responsible for meals and lodging. Registrants will be provided information on available lodging in the course vicinity.

## Cancellation Policy

If you cannot attend, notification by August 29, 2022 is required. You may enroll a substitute at any time before the course starts. There will be no refunds for no-shows.

## Limited Enrollment

To ensure that COVID-19 guidelines are followed, this workshop will be limited to 40 participants.

## Instructor

**David B. Clarke, Ph.D., P.E.**

Dr. Clarke, formerly Director of the University of Tennessee's Center for Transportation, brings nearly 40 years of experience encompassing a variety of railroad design, inspection, research and education activities. He has taught railway related courses including this one, to college students and professionals since 1990. Dr. Clarke is well versed in the Federal Track Safety Standards covered in this course, and is frequently engaged as an expert to assess track conditions. As a licensed civil engineer, Dr. Clarke prepares specifications and designs for railroad track construction and maintenance. He is active in railroad related committees of AREMA, ASCE and TRB.