

**COURSE NUMBER**

FHWA-NHI-134001

COURSE TITLE**TCCC Principles of Writing Highway Construction Specifications (2-Day)**

This course addresses the engineering and legal aspects and linguistics of writing specifications. **THIS IS NOT A COURSE IN TECHNICAL WRITING!** The course addresses issues of how to draft new specifications or rewrite existing ones in clear, readable, and definitive statements of contract requirements. Classroom activities include lectures, case studies, workshops, and writing assignments.

The course is available in a 2-day, 3-day and 4-day version, and can be tailored to meet the needs of the host organization. The 2-day course consists of Modules 1 and 2, and one additional module selected by the host. The course instructor will assist the host in selecting the most appropriate modules for the target audience. The course modules are:

Included:

Module 1: Definitions, Forms, and Purpose of Specifications

Module 2: Specification Writing Principles

Select one additional module from among these options:

Module 3: In-Depth Practical Writing Exercise

Module 4: Method and End-Result Specifying

Module 5: Ensuring Specification Work in the Field

Module 6: General Provisions

Module 7: Specifications for Alternative Methods to Deliver, Procure, and Manage Construction

An additional resource for highway specifications: The National Highway Specifications Web site is now available at <http://www.specs.fhwa.dot.gov>

Developed in partnership with the Transportation Curriculum Coordination Council (TCCC).

OUTCOMES

Upon completion of the training, participants will be able to:

- Recognize and apply the principles of writing clear, concise, complete, and technically correct specifications

TARGET AUDIENCE

Personnel working in contract administration, design, materials selection and quality control, and the management of highway construction, including contribution of information in contract provisions. This includes specification writers who use the information in writing the formal contract documents. This course is also recommended for asset management team members.

Prerequisites: This course is not for beginners! Participants must have experience (five years minimum) in at least one of the following disciplines: contract administration, materials, specification writing, roadway or bridge design, roadway or bridge construction.

TRAINING LEVEL: Beginner**FEE:** \$320 Per Person**LENGTH:** 2.0 DAYS (CEU: 1.2 UNITS)**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30**NHI Training Information:** (703) 235-0534 • nhitraining@dot.gov**Subject Matter Contact:** Ken Jacoby • (202) 366-6503 • ken.jacoby@fhwa.dot.gov**NHI Training Program Manager:** Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov

**COURSE NUMBER**

FHWA-NHI-134001A

COURSE TITLE**TCCC Principles of Writing Highway Construction Specifications (3-Day)**

This course addresses the engineering and legal aspects and linguistics of writing specifications. **THIS IS NOT A COURSE IN TECHNICAL WRITING!** The course addresses issues of how to draft new specifications or rewrite existing ones in clear, readable, and definitive statements of contract requirements. Classroom activities include lectures, case studies, workshops, and writing assignments.

The course is available in a 2-day, 3-day and 4-day version, and can be tailored to meet the needs of the host organization. The 3-day course consists of Modules 1 and 2, and three additional modules selected by the host. The course instructor will assist the host in selecting the most appropriate modules for the target audience. The course modules are:

Includes:

Module 1: Definitions, Forms, and Purpose of Specifications

Module 2: Specification Writing Principles

Select three additional modules from among the following options:

Module 3: In-Depth Practical Writing Exercise

Module 4: Method and End-Result Specifying

Module 5: Ensuring Specification Work in the Field

Module 6: General Provisions

Module 7: Specifications for Alternative Methods to Deliver, Procure, and Manage Construction

An additional resource for highway specifications: The National Highway Specifications Web site is now available at <http://www.specs.fhwa.dot.gov>.

Developed in partnership with the Transportation Curriculum Coordination Council (TCCC).

OUTCOMES

Upon completion of the training, participants will be able to:

- Recognize and apply the principles of writing clear, concise, complete, and technically correct specifications
- Demonstrate appreciation for the importance of specifications for highway construction contracting

TARGET AUDIENCE

Personnel working in contract administration, design, materials selection and quality control, and the management of highway construction, including contribution of information in contract provisions. This includes specification writers who use the information in writing the formal contract documents. This course is also recommended for asset management team members.

Prerequisites: This course is not for beginners! Participants must have experience (five years minimum) in at least one of the following disciplines: contract administration, materials, specification writing, roadway or bridge design, roadway or bridge construction.

TRAINING LEVEL: Beginner**FEE:** \$420 Per Person**LENGTH:** 3.0 DAYS (CEU: 1.8 UNITS)**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30**NHI Training Information:** (703) 235-0534 • nhitraining@dot.gov**Subject Matter Contact:** Ken Jacoby • (202) 366-6503 • ken.jacoby@fhwa.dot.gov**NHI Training Program Manager:** Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov

**COURSE NUMBER**

FHWA-NHI-134001B

COURSE TITLE**TCCC Principles of Writing Highway Construction Specifications (4-Day)**

This course addresses the engineering and legal aspects and linguistics of writing specifications. THIS IS NOT A COURSE IN TECHNICAL WRITING! The course addresses issues of how to draft new specifications or rewrite existing ones in clear, readable, and definitive statements of contract requirements. Classroom activities include lectures, case studies, workshops, and writing assignments.

The course is available in a 2-day, 3-day and 4-day version, and can be tailored to meet the needs of the host organization. The 4-day version covers all seven modules. The Instructor will assist the host in selecting the most appropriate modules for the target audience. The course modules are:

Module 1: Definitions, Forms, and Purpose of Specifications

Module 2: Specification Writing Principles

Module 3: In-Depth Practical Writing Exercise

Module 4: Method and End-Result Specifying

Module 5: Ensuring Specification Work in the Field

Module 6: General Provisions

Module 7: Specifications for Alternative Methods to Deliver, Procure, and Manage Construction

An additional resource for highway specifications: The National Highway Specifications Web site is now available at <http://www.specs.fhwa.dot.gov>.

OUTCOMES

Upon completion of the training, participants will be able to:

- Recognize and apply the principles of writing clear, concise, complete, and technically correct specifications
- Write specifications in the active voice imperative mood
- Write specifications without ambiguities and with measurable standards
- Describe the difference between traditional methods specifications and statistically based quality assurance specifications
- Identify newer types of procurement and contracting methods
- Demonstrate appreciation for the importance of specifications for highway construction contracting

TARGET AUDIENCE

Personnel working in contract administration, design, materials selection and quality control, and the management of highway construction, including contribution of information in contract provisions. This includes specification writers who use the information in writing the formal contract documents. This course is also recommended for asset management team members.

Prerequisites: This course is not for beginners! Participants must have experience (five years minimum) in at least one of the following disciplines: contract administration, materials, specification writing, roadway or bridge design, roadway or bridge construction.

TRAINING LEVEL: Beginner

FEE: Check the NHI Web site for current pricing

LENGTH: 4.0 DAYS (CEU: 2.4 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Ken Jacoby • (202) 366-6503 • ken.jacoby@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov

**COURSE NUMBER**

FHWA-NHI-134005

COURSE TITLE**Value Engineering Workshop**

Value engineering is the systematic application of recognized techniques by a multi-disciplined team which identifies the function of a product or service; establishes a worth for that function; generates alternatives through the use of creative thinking; and provides the needed functions, reliably, at the lowest overall cost. Once a project has been identified for study, this systematic approach includes:

1. Investigating the project and analyzing project functions and costs
2. Creatively speculating on alternative ways to perform the various functions
3. Evaluating the best and/or least effective life-cycle alternatives
4. Developing acceptable alternatives into fully supported recommendations
5. Presenting the recommendations to the project owner and agency management

This workshop involves conducting a value engineering study in an interactive team environment on actual projects furnished by the host agency. The course also includes lecture and class discussion and some home study. Upon successful completion, course attendees will have the training necessary to successfully participate in future value engineering studies for their agencies.

OUTCOMES

Upon completion of the training, participants will be able to:

- Recognize the difference between value engineering and other cost-reduction or problem-solving techniques
- Understand the systematic value engineering process and identify areas where the techniques have potential for savings in financial or material resources
- Support and further promote the use of value engineering as an effective management tool for product improvement and cost reduction

TARGET AUDIENCE

FHWA and State highway agency/transportation department personnel. A class mix of management, administrative, and engineering disciplines, and representatives of all function areas from planning through design, construction, and operations is desirable.

TRAINING LEVEL: Accomplished

FEE: Check the NHI Web site for current pricing

LENGTH: 5.0 DAYS (CEU: 3.0 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Jeffrey Zaharewicz • (202) 493-0520 • jeffrey.zaharewicz@dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov

**COURSE NUMBER**

FHWA-NHI-134006

COURSE TITLE**Highway/Utility Issues**

This course is designed to include participants from highway agencies and from utilities. To maximize the effectiveness of the course, hosting agencies are encouraged to include participants from both communities.

This course presents the fundamentals of effective coordination of utility relocation and accommodation issues throughout the planning, design, construction, and maintenance phases of a highway project. Participants from both highway and utility communities will be involved throughout the course, sharing their knowledge and expertise, and collaborating in workshops, exercises, and other activities. The course includes methods for measuring the attainment of learning objectives. Two instructors will facilitate the course, one experienced in highway matters, the other in utility matters.

OUTCOMES

Upon completion of the training, participants will be able to:

- Locate utility issues and concerns during the project development process and flag opportunities for early coordination
- Identify the critical processes related to utilities for permits, relocation, and project construction
- Assess a plan and profile sheet
- Use templates for creating a simple plan for establishing the proper traffic control plan (TCP)
- Describe successful practices that might be considered as options for each phase of a project

TARGET AUDIENCE

Federal, State, and local highway agencies, and public/private utility companies responsible for highway/utility coordination.

TRAINING LEVEL: Intermediate

FEE: \$320 Per Person

LENGTH: 2.0 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Jeffrey Zaharewicz • (202) 493-0520 • jeffrey.zaharewicz@dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



Create your own NHI Web site User ID and account to get access to NHI's online services.



COURSE NUMBER

FHWA-NHI-134029

COURSE TITLE

TCCC Bridge Maintenance Training

This course focuses on cost-effective bridge maintenance and repair procedures performed by typical transportation agency crews. Included are step-by-step instructions for the preparation and performance of maintenance and repair on common bridge elements. Bridge preservation is emphasized throughout. While engineers often attend, the material is designed for bridge crew supervisors and technicians.

Developed in partnership with the Transportation Curriculum Coordination Council (TCCC).

OUTCOMES

Upon completion of the training, participants will be able to:

- Justify, develop and implement a cost-effective preservation strategy for a group of bridges
- Identify maintenance or repair needs and select the best remedial strategy. Understand properties and preservation options involving common bridge materials such as concrete, steel and timber
- Describe the step-by-step tasks required to accomplish proven preservation procedures on the various bridge elements
- Identify critical members and avoid procedures that might result in damage such as field welding repairs on fracture critical tension members
- Recognize problems that warrant specialized expertise, for example, soliciting the involvement of a qualified structural engineer when repairing structural damage
- Apply effective management techniques (such as planning, scheduling, monitoring and reporting) during daily bridge maintenance operations.

TARGET AUDIENCE

State and local bridge maintenance technicians and supervisors. This course is also recommended for asset management team members.

TRAINING LEVEL: Intermediate

FEE: Check the NHI Web site for current pricing

LENGTH: 4.0 DAYS (CEU: 2.4 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Wade Casey • (202) 366-4606 • wade.casey@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



If you're interested in this course, you may also want to take advantage of another NHI construction and maintenance course.

FHWA-NHI-130088 Bridge Construction Inspection



COURSE NUMBER

FHWA-NHI-134037A

COURSE TITLE

TCCC Managing Highway Contract Claims: Analysis and Avoidance

In partnership with the Transportation Curriculum Coordination Council (TCCC), this course was updated to include coverage of claims avoidance, claims handling, and preparation of legal actions by both the State and the individuals involved. The course is structured such that emphasis can be given to scheduling (using CPM) or to documentation and preparation of legal actions caused by claims. This option should be stated when requesting the course. The course manual and classroom instruction addresses the following areas:

1. Philosophy/concept of construction contracting, changes and claims competitive bidding/reliance on plans and specifications why claims have increased
2. Construction contracts in laymen's language basic contract principles significant contract clauses changes, differing site conditions, liquidated damages, suspension of work, termination, inspection, acceptance indemnification clauses
3. Strengths and weaknesses of State Highway Contracts
4. Preparing contract documents
5. Contract administration directed and constructive changes procedures (notice, equitable adjustment/force account, timelines scheduling cost evaluations, delay claims/inefficiency/damages exculpatory language, excusable and inexcusable delays acceleration, disruptions, interferences, performing delay analysis, damage calculations (mitigation)
7. Documentation and record keeping bid documents, periodic reports, schedules, internal and external correspondence, photographs; use as evidence
8. Managing claims identification, procedures, preparation/claim defense plan strategy, claim presentation
9. Negotiation timing, strategy, team approach (workshop)
10. Design consultant liability
11. Disputes resolution litigation, arbitration, administrative procedures alternate disputes resolution
12. How to prepare for trial/arbitration depositions, trial, preparation of exhibits/consultants working with attorneys

OUTCOMES

Upon completion of the training, participants will be able to:

- Define the recommended terminology associated with claims and the accompanying dispute resolution process
- Identify the three key elements of a claim
- Determine whether or not a change has occurred
- Measure the impacts of the change
- Calculate the resultant cost of the change
- Explain the value of a systems approach to claims avoidance
- Identify the dispute resolution procedures available to the host

TARGET AUDIENCE

This course is intended for FHWA, State, and local highway design and construction engineers, resident engineers, or individual one step above the project level involved in project development, specification writing, and individuals involved in the preparation for the defense of a construction claim.



TRAINING LEVEL: Intermediate

FEE: \$355 Per Person

LENGTH: 2.5 DAYS (CEU: 1.5 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Chris Newman • (202) 366-2023 • christopher.newman@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



NHI courses can be hosted by any organization - including transportation professional associations. Instructions for hosting a course can be found on page 8 or visit the NHI Web site at www.nhi.fhwa.dot.gov for more information.

**COURSE NUMBER**

FHWA-NHI-134042

COURSE TITLE**TCCC Materials Control and Acceptance - Quality Assurance (4.5-Day)**

This course was developed in partnership with the Transportation Curriculum Coordination Council (TCCC). It provides participants with an understanding of the basic elements of a statistically based quality assurance program. The course begins with an introduction to quality management and quality assurance. Through lectures, discussion, and workshops, participants learn techniques for collecting, organizing, analyzing, and interpreting data. Using the techniques taught in the course, participants assess the strengths, weaknesses, and risks of process control and acceptance plans. The course concludes with steps for successful implementation of quality specifications.

To accommodate varying needs, this course is available in a 4.5-day (FHWA-NHI-134042) or a 2-day (FHWA-NHI-134042A) format. The 4.5-day course sessions include: Introduction, Sampling Theory, Organization of Data, Analysis of Data, The Normal Distribution, Sources of Variability, Process Control, Acceptance Plans and Risks, Percent within Limits Acceptance Plans, Implementation and Summary.

OUTCOMES

Upon completion of the training, participants will be able to:

- Identify the importance of organizing data, necessary forms of data organization, and how to plot frequency histograms
- Explain how a sample relates to the population, including the myth of a single representative sample, and establish and use random stratified sampling plans
- Calculate population and sample means, standard deviation, and coefficient of variation
- Explain the relationship between single and multiple samples
- Describe basic probability concepts, illustrate the relationship of histograms to probability density functions, and calculate areas under normal distribution curves
- Explain the meaning of the terms precision, accuracy, and bias
- Identify sources of variability and how to use precision and bias statements
- Formulate and apply process control plans, including how to calculate control chart limits and plot and interpret statistical process control charts
- Explain the strengths and weaknesses of acceptance plans based on sample means and percent within limits
- Compare the different types of specifications and how they work, including the inputs to specifications and requirements for the use of contractors
- Identify the elements of acceptance plans, including buyer and seller risks
- Identify and employ procedures for verification of contractor tests used in the acceptance decision
- Indicate the importance of a sound, comprehensive program implementation plan

TARGET AUDIENCE

Federal, State, and local highway agency engineers in materials, construction, research and other highway fields and technicians involved in specification development, laboratory, and field testing of highway materials.

TRAINING LEVEL: Accomplished

FEE: Check the NHI Web site for current pricing

LENGTH: 4.5 DAYS (CEU: 2.7 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Michael Rafalowski • (202) 366-1571 • michael.rafalowski@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



COURSE NUMBER

FHWA-NHI-134042A

COURSE TITLE

TCCC Materials Control and Acceptance - Quality Assurance (2-Day)

This course was developed in partnership with the Transportation Curriculum Coordination Council. It provides participants with an understanding of the basic elements of a statistically based quality assurance program. The course begins with an introduction to quality management and quality assurance. Through lectures, discussion, and workshops, participants learn techniques for collecting, organizing, analyzing, and interpreting data.

Using the techniques taught in the course, participants assess the strengths, weaknesses, and risks of process control and acceptance plans. The course concludes with steps for successful implementation of quality specifications.

The 2-day format is a condensed version of the course that uses excerpts from the 4.5-day course session. A number of presentations and workshops are omitted in order to present the material in this shorter time frame.

OUTCOMES

Upon completion of the training, participants will be able to:

- Describe the importance of organizing data, necessary forms of data organization, and how to plot frequency histograms
- State how a sample relates to the population, including the myth of a single representative sample, and establish and use random stratified sampling plans
- Identify population and sample means, standard deviation, and coefficient of variation
- Explain the relationship between single and multiple samples
- Describe basic probability concepts, illustrate the relationship of histograms to probability density functions, and calculate areas under normal distribution curves
- Describe the meaning of the terms precision, accuracy, and bias
- Indicate sources of variability and how to use precision and bias statements
- Explain process control plans, including how to calculate control chart limits and plot and interpret statistical control charts
- Describe the strengths and weaknesses of acceptance plans based on sample means and percent within limits
- Classify the different types of specifications and how they work, including the inputs to specifications and requirements for the use of contractors
- Identify the elements of acceptance plans, including buyer and seller risks
- Identify procedures for verification of contractor tests used in the acceptance decision

TARGET AUDIENCE

Federal, State, and local highway agency engineers in materials, construction, research and other highway fields, and technicians involved in specification development, laboratory, and field testing of highway materials.

TRAINING LEVEL: Accomplished

FEE: Check the NHI Web site for current pricing

LENGTH: 2.0 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Michael Rafalowski • (202) 366-1571 • michael.rafalowski@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov

**COURSE NUMBER**

FHWA-NHI-134049

COURSE TITLE**TCCC Use of Critical Path Method (CPM) for Estimating, Scheduling and Timely Completion**

This course was developed in partnership with the Transportation Curriculum Coordination Council (TCCC). It is designed to educate State highway, FHWA, and industry project staff about the availability of effective construction and maintenance planning and scheduling tools that can help in providing visual representation of current project status, completed tasks, and expected completion of all activities. These tools can be focused to accelerate construction and minimize impact on the traveling public.

OUTCOMES

Upon completion of the training, participants will be able to:

- Create a CPM chart for a sample project using these basic components: a project definition, milestones and a Gantt chart, work schedules (including work breakdown schedules), and an activity network
- Calculate resource needs and reserves, and propose resource leveling strategies
- Prepare a risk analysis/management plan for the sample project
- Use a complex CPM to determine the status of the project, identifying slack or float and delays
- Describe methods for managing multi-project scheduling

TARGET AUDIENCE

Federal, State, local, and private contractor project engineers/managers and related field personnel.

TRAINING LEVEL: Beginner

FEE: \$320 Per Person

LENGTH: 2.0 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Celso Gatchalian • (202) 366-1342 • celso.gatchalian@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



NHI is fully accredited. See page 272 to read about the International Association for Continuing Education and Training (IACET).



COURSE NUMBER

FHWA-NHI-134055

COURSE TITLE

TCCC Construction Inspection, Workmanship, and Quality

This course was developed in partnership with the Transportation Curriculum Coordination Council (TCCC). It helps transportation professionals involved in the inspection of highway construction projects improve their understanding of the factors that contribute to high-quality products. Using workshops and real-life examples that are relevant to participants, the course covers the legal, liability, and risk issues, and quality assurance topics related to construction projects. Emphasizing stewardship and oversight roles, the course discusses the importance of fostering partnership, cooperations, and teamwork among stakeholders as well as the importance of quality decisions. With the goal of improving overall product quality and system performance, the course presents participants with approaches that help improve the quality of field decisions and the implementation of decisive actions in the field.

OUTCOMES

Upon completion of the training, participants will be able to:

- Identify the components of workmanship as they relate to highway and bridge construction and assess their own skills against standards and expectations for a job
- Describe the construction team (owner, inspector, contractor, engineer) and the roles and needs of each team member in achieving good communication and quality workmanship
- Link different types of specifications to the associated roles and responsibilities of the inspector, contractor, engineer, and owner
- Identify situations in which legal issues related to inspection and duties affect the performance of their assignments
- Apply the basic concepts of risk assessment to case examples from construction inspection and translate that into good decisions in the field
- Identify various successful State programs that provide training, methodology, and/or certification programs that lead to improved construction workmanship and quality and locate programs for certification and qualification in their jurisdiction

TARGET AUDIENCE

This course targets field personnel involved in all aspects of highway construction from engineers to technicians. The ideal audience will have a mix of experience and responsibility levels so that agency-specific practices can be shared by more experienced participants with those who are newer to the field. The course materials also are appropriate for project manager/resident engineer involvement.

TRAINING LEVEL: Intermediate

FEE: \$320 Per Person

LENGTH: 2.0 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Chris Newman • (202) 366-2023 • christopher.newman@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



COURSE NUMBER

FHWA-NHI-134056

COURSE TITLE

Pontis Bridge Management

Pontis is a computer software program, owned and licensed by AASHTO, designed to assist bridge managers and practitioners in analyzing bridge data to predict future bridge conditions and needs, determine optimal policies, and recommend projects and schedules within budget and policy limitations. The course covers entering and editing inspection data, developing a bridge preservation policy, performing bridge network level analyses, developing bridge projects, running Pontis and InfoMaker reports, and refining Pontis results. The course focuses on an agency's business process steps, key concepts of bridge management and their application to Pontis, using the software, instructor demonstration exercises, and practical student exercises. Each participant will receive a participant notebook. Six laptop computers containing the PONTIS 4.3 software and sample training database are furnished by the NHI for use in the training course. A 2-hour session has been developed as part of the course to serve as an introduction to the attributes and benefits of the Pontis program. This introduction is designed for Federal, State, and local executives and upper- and mid-level highway agency professionals responsible for an agency's bridge/highway program.



OUTCOMES

Upon completion of the training, participants will be able to:

- Use Pontis to support bridge management
- View, enter, and edit bridge inspection and inventory data
- Develop, update, optimize, and interpret a preservation policy
- Enter program simulation inputs, run network analyses and interpret results
- Create and rank bridge projects
- Generate and interpret reports
- Customize Pontis to support agency business practices

TARGET AUDIENCE

This course is designed for bridge program managers, bridge management engineers, bridge maintenance engineers, bridge inspectors, and project planning and programming personnel. This course is also recommended for asset management team members.

TRAINING LEVEL: Intermediate

FEE: \$355 Per Person

LENGTH: 2.5 DAYS (CEU: 1.5 UNITS)

CLASS SIZE: MINIMUM: 10; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Wade Casey • (202) 366-4606 • wade.casey@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



Find an FHWA Division or State Highway Agency representative on the contact list on page 257.

**COURSE NUMBER**

FHWA-NHI-134056A

COURSE TITLE**Pontis Bridge Management and InfoMaker Module**

This version of the course covers the 2.5-day Pontis material as well as the 1-day InfoMaker module. Pontis is a computer software program, owned and licensed by AASHTO, designed to assist bridge managers and practitioners in analyzing bridge data to predict future bridge conditions and needs, determine optimal policies, and recommend projects and schedules within budget and policy limitations. The course covers entering and editing inspection data, developing a bridge preservation policy, performing bridge network level analyses, developing bridge projects, running Pontis and InfoMaker reports, and refining Pontis results. The course focuses on an agency's business process steps, key concepts of bridge management and their application to Pontis, using the software, instructor demonstration exercises, and practical student exercises. Each participant will receive a participant notebook. Six laptop computers containing the PONTIS 4.3 software and sample training database are furnished by the NHI for use in the training course.

This 3.5-day version of the course includes an optional 1-day module which presents an overview of InfoMaker 9.0 as it relates to the Pontis bridge management system. It covers those aspects of InfoMaker that are most useful to and used by the Pontis user community in producing custom reports. Other aspects of the software that are introduced include the ability to query data, create a new report library, modify an existing Pontis structure list layout, and modify an existing Pontis report. This module is designed to be added to the end of the NHI training course on Pontis.

The InfoMaker module includes a mixture of lectures, software demonstrations and class exercises that give participants hands-on experience in using InfoMaker 9.0. The module can be added to the 2.5 day Pontis course for a total of 3.5 days of training. The training materials assume that participants have experience using the Pontis bridge management and understand general bridge management practices. Familiarity with the content and structure of the Pontis database and with Structured Query Language (SQL) is not required but is helpful.

OUTCOMES

Upon completion of the training, participants will be able to:

- Use Pontis to support bridge management
- View, enter, and edit bridge inspection and inventory data
- Develop, update, optimize, and interpret a preservation policy
- Enter program simulation inputs, run network analyses and interpret results
- Create and rank bridge projects
- Generate and interpret reports
- Customize Pontis to support agency business practices

TARGET AUDIENCE

Designed for bridge program managers, bridge management engineers, bridge maintenance engineers, bridge inspectors, and project planning and programming personnel; it is also recommended for asset management team members.

TRAINING LEVEL: Intermediate

FEE: \$420 Per Person

LENGTH: 3.5 DAYS (CEU: 2.1 UNITS)

CLASS SIZE: MINIMUM: 10; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Wade Casey • (202) 366-4606 • wade.casey@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



COURSE NUMBER

FHWA-NHI-134056B

COURSE TITLE

Pontis Bridge Management InfoMaker Module

If you have already taken Pontis Bridge Management, consider taking this new module. This 1-day version of the course offers the InfoMaker module only, which presents an overview of InfoMaker 9.0 as it relates to the Pontis bridge management system. It covers those aspects of InfoMaker that are most useful to and used by the Pontis user community in producing custom reports. Other aspects of the software that are introduced include the ability to query data, create a new report library, modify an existing Pontis structure list layout, and modify an existing Pontis report. This module is designed to be added to the end of the NHI training course on Pontis or act as a stand-alone training for those States that have already participated in the 2.5-day Pontis course and only want to train their employees on InfoMaker.

The InfoMaker module includes a mixture of lectures, software demonstrations and class exercises that give participants hands-on experience in using InfoMaker 9.0. The target audience represents a subset of the audience for the Pontis training course, and includes: bridge program managers, bridge management engineers, project planning and programming personnel, and asset management team members. The training materials assume that participants have experience using the Pontis bridge management and understand general bridge management practices. Familiarity with the content and structure of the Pontis database and with Structured Query Language (SQL) is not required but is helpful.

OUTCOMES

Upon completion of the training, participants will be able to:

- Use Pontis to support bridge management
- View, enter, and edit bridge inspection and inventory data
- Develop, update, optimize, and interpret a preservation policy
- Enter program simulation inputs, run network analyses and interpret results
- Create and rank bridge projects
- Generate and interpret reports
- Customize Pontis to support agency business practices

TARGET AUDIENCE

This course is designed for bridge program managers, bridge management engineers, bridge maintenance engineers, bridge inspectors, and project planning and programming personnel. This course is also recommended for asset management team members.

TRAINING LEVEL: Intermediate

FEE: \$220 Per Person

LENGTH: 1.0 DAY (CEU: 0.6 UNITS)

CLASS SIZE: MINIMUM: 10; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Wade Casey • (202) 366-4606 • wade.casey@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov





COURSE NUMBER

FHWA-NHI-134058

COURSE TITLE

Alternative Contracting

This course addresses the legal aspects, and potential program implications of using alternative project delivery strategies and nontraditional contracting practices. This includes alternative project delivery methods such as design-build, construction manager at risk, and performance contracting. It also includes the use of nontraditional contracting provisions such as warranties, multiparameter bidding, incentive-disincentive provisions for contract time, lane rental, alternate pavement type bidding, and many other nontraditional contracting techniques. The course has certain required modules; however, the requesting agency may customize the course by selecting from additional modules. Classroom activities include lectures, case studies, workshops, and writing assignments.

OUTCOMES

Upon completion of the training, participants will be able to:

- Identify alternative project delivery, procurement, and contract management methods for highway construction
- Identify objectives for the use of alternative project delivery, procurement, and contract management methods
- Differentiate among traditional design-bid-build and alternative project delivery, procurement, and contract management methods based on relative advantages and risks
- Define how project risks are reallocated using various project delivery, procurement, and contract management methods
- Select appropriate alternative contracting methods for use with a given project or select appropriate projects for use with a given alternative contracting method or methods
- Identify contract requirements appropriate for alternative contracting methods

TARGET AUDIENCE

Personnel working in contract administration, project development and design, and the management of highway construction, including contribution of information in contract provisions.

TRAINING LEVEL: Intermediate

FEE: \$320 Per Person

LENGTH: 2.0 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Jennifer Balis • (202) 493-7302 • jennifer.balis@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



Submit feedback through the NHI Web site at www.nhi.fhwa.dot.gov by selecting the Contact Us button at the top of each page.

**COURSE NUMBER**

FHWA-NHI-134060

COURSE TITLE**Partnering: A Key Tool for Improving Project Delivery in the Field**

This training will assist individuals involved in highway construction projects to create, participate, lead, champion, and evaluate partnered projects. The course also develops confidence to promote a partnering culture in an organization. In this course, you'll learn the background, purpose, principles, and processes of partnering; review a partnering charter, implementation checklist, and an issue resolution chart; as well as communicate to others the value of partnering.

OUTCOMES

Upon completion of the training, participants will be able to:

- Effectively integrate partnering at the project level
- Design, develop, and implement control documents required to effectively implement partnering
- Guide other project personnel to successfully integrate partnering at the project level

TARGET AUDIENCE

This course is designed for State and local public agency personnel and their industry counterparts involved in the delivery of, and decisionmaking process for, construction projects. Specifically, the course will target:

Those responsible for the delivery of multiple construction projects; personnel who are involved on-site on a daily basis and who are responsible for the delivery of a single contract; participants at the management level responsible for the delivery of a construction program through subordinate organizations; and invited individuals from specific States representing utilities, State and local partners, key permitting agencies, key local agencies, emergency services, and other stakeholders.

TRAINING LEVEL: Beginner

FEE: Check the NHI Web site for current pricing

LENGTH: 1.5 DAYS (CEU: 0.9 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Ken Jacoby • (202) 366-6503 • ken.jacoby@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov

**COURSE NUMBER**

FHWA-NHI-134062

COURSE TITLE**TCCC Bridge Evaluation for Rehabilitation Design Considerations**

The ultimate goal of this effort is the development of a nationally accepted program that will serve to improve quality, ensure uniformity and establish a minimum standard for bridge rehabilitation. The course will present innovative and state-of-the-art bridge rehabilitation technologies and procedures for a broad array of structural elements including bridge decks, girders, piers and abutments.

Core curriculum for the course is 4.5-days and covers the outcomes listed below.

Developed in partnership with the Transportation Curriculum Coordination Council (TCCC).

**OUTCOMES**

Upon completion of the training, participants will be able to:

- Describe conditions that suggest the need for rehabilitation
- Identify the need for and capacity of destructive and/or non destructive testing (NDT) for assessment of existing conditions
- Prescribe analysis and load testing to determine the effect of existing conditions on the structure
- Distinguish root causes of distress and deterioration
- Formulate appropriate rehabilitation strategies
- Select procedures and materials for rehabilitation
- Develop effective rehabilitation construction documents
- Prepare and implement quality assurance for construction
- Monitor and resolve construction and material problems

TARGET AUDIENCE

The target audience includes design engineers, field engineers, resident engineers, structural engineers, materials engineers, and other technical personnel involved in the construction and rehabilitation design of bridges. Participants with an engineering background are expected to constitute the target audience. People knowledgeable in new bridge design, but not necessarily bridge rehabilitation should attend.

TRAINING LEVEL: Intermediate

FEE: Check the NHI Web site for current pricing

LENGTH: 4.5 DAYS (CEU: 2.7 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Wade Casey • (202) 366-4606 • wade.casey@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



Get low-cost online training. Go to the NHI Web site to learn more about Web-based and Web-conference training solutions!



COURSE NUMBER

FHWA-NHI-134062A

COURSE TITLE

TCCC Bridge Evaluation for Rehabilitation Design Considerations

The ultimate goal of this effort is the development of a nationally accepted program that will serve to improve quality, ensure uniformity and establish a minimum standard for bridge rehabilitation. The course will present innovative and state-of-the-art bridge rehabilitation technologies and procedures for a broad array of structural elements including bridge decks, girders, piers and abutments.

The 5-day version of this course includes two additional modules, rehabilitation of Timber and Masonry structures. Developed in partnership with the Transportation Curriculum Coordination Council (TCCC).



OUTCOMES

Upon completion of the training, participants will be able to:

- Describe conditions that suggest the need for rehabilitation
- Identify the need for and capacity of destructive and/or non destructive testing (NDT) for assessment of existing conditions
- Prescribe analysis and load testing to determine the effect of existing conditions on the structure
- Distinguish root causes of distress and deterioration
- Formulate appropriate rehabilitation strategies
- Select procedures and materials for rehabilitation
- Develop effective rehabilitation construction documents
- Prepare and implement quality assurance for construction
- Monitor and resolve construction and material problems

TARGET AUDIENCE

The target audience includes design engineers, field engineers, resident engineers, structural engineers, materials engineers, and other technical personnel involved in the construction and rehabilitation design of bridges. Participants with an engineering background are expected to constitute the target audience. People knowledgeable in new bridge design, but not necessarily bridge rehabilitation should attend.

TRAINING LEVEL: Intermediate

FEE: Check NHI Web site for current pricing

LENGTH: 5.0 DAYS (CEU: 3.0 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Wade Casey • (202) 366-4606 • wade.casey@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



COURSE NUMBER

FHWA-NHI-134064

COURSE TITLE

Transportation Construction Quality Assurance

The Federal Highway Administration (FHWA) identified the need for transportation construction and materials personnel to increase their knowledge of the fundamentals of effective transportation construction Quality Assurance (QA). This course was developed to ensure that agency, contractor, producer, and consultant personnel responsible for interpreting and applying quality assurance specifications in transportation construction are properly qualified. The course will utilize a Quality Assurance Reference Manual, adapted from the current NETTCP manual.

This 1.5-day version of the course covers Chapters 1 through 6 and will be available to, and appropriate for, all audiences including management level personnel. The content covered in this first day includes how quality assurance is featured in a transportation construction quality assurance program, quality assurance program elements, the evolution of quality assurance specifications, measuring quality, and the roles and responsibilities of both contractor and agency personnel.

OUTCOMES

Upon completion of the training, participants will be able to:

- Consistently apply fundamental Quality Assurance concepts, terminology, and definitions
- Differentiate QA specifications from other specifications
- Explain each of the six core elements of a QA program and how each is essential to successful implementation of Quality Assurance
- Describe the respective roles and responsibilities of the project decision makers (Contractor QC and Agency Acceptance personnel) and how their interaction contributes to construction quality

TARGET AUDIENCE

This is an intermediate-level course for personnel who would be making decisions based on the data gathered from a QA program. Necessary background knowledge for participants includes: 3-5 years minimum in transportation construction specifications inspections; basic statistical knowledge/training; and some usage of tools necessary to the Quality Assurance process (contractor test results). The following is a suggested list of personnel that may consider attending, if they have the requisite background knowledge: Contractor/Consultant personnel: QC managers/QC plan administrators, senior production facility QC technician/inspectors, senior QC laboratory personnel, senior field QC technicians/inspectors; Agency Personnel: project managers/resident engineers, senior production facility acceptance, technicians/inspectors, senior acceptance laboratory personnel, and senior field acceptance technicians/inspectors.

TRAINING LEVEL: Intermediate

FEE: Check the NHI Web site for current pricing

LENGTH: Check the NHI Web site for current information

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Ken Jacoby • (202) 366-6503 • ken.jacoby@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov





COURSE NUMBER

FHWA-NHI-134065

COURSE TITLE

Risk Management

The Risk Management Framework (RMF) will situate FHWA in a risk context by identifying program area risks, clarifying the interdependence of risks, separating risk causes/effects, and facilitating the development of organizational controls. The RMF goal is to identify a consistent process that leads to effective allocation of resources, strategic planning and management of FHWA's risks at all organizational levels. The RMF should provide a consistent and uniform process to advance unit offices risk management practices. The Framework should enable division administrator's to make progressive, well-informed decisions based on local programs and non-prescribed areas of risk.

This course provides an understanding of Risk Management concepts and processes, to include terminology, benefits of use, risk management planning, and a framework for implementation. The course presents the cyclic risk management framework in a series of modules: information gathering; risk identification; risk event analysis; risk documentation; risk prioritization; identification of risk response strategies; incorporation of response strategies into a plan; and monitoring, evaluation, and adjustment to strategies. Tools and methods used in each step of the framework are explained. Participants will complete exercises intended to provide realistic, job-relevant practice in each of these areas.

OUTCOMES

Upon completion of the training, participants will be able to:

- At the end of this course, participants will be able to:
- Explain the overall organizational context, importance of risk management, and risk framework to others
- Follow a consistent process for managing risk
- Utilize standard risk terminology, tools and methods
- Implement appropriate risk identification techniques
- Write an effective and meaningful risk statement
- Accurately estimate likelihood and impact of each risk event
- Implement appropriate methods of documentation
- Create a consistent matrix to prioritize risk
- Determine the most important risk events
- Describe all possible "risk responses" and illustrate how to respond effectively to risks
- Work the overall process within 60 minutes
- Develop effective plans for dealing with risk events
- Develop a process for responding to unidentified risk events
- Develop a risk assessment report

TARGET AUDIENCE

The target audience for this course includes Federal, State and local highway employees who are responsible for directing and managing all aspects of highway related programs/projects such as planning, environment, project development, design, construction, operations, maintenance, and finance. In addition to its FHWA audience, the Risk Management course may also serve a number of audiences under the auspices of any agency that handles Federal monies and is tasked with infrastructure support. Audience experience, background, knowledge, skills and abilities are expected to vary widely.





TRAINING LEVEL: Beginner

FEE: Check NHI Web site for current pricing

LENGTH: 2.5 DAYS (CEU: 1.5 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Connie Yew • (202) 366-1078 • connie.yew@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



Have some time to attend training?

Use the advanced search features on the NHI Web site to find scheduled sessions in a specific date range.



COURSE NUMBER

FHWA-NHI-134065A

COURSE TITLE

Risk Management Executive Summary

This training is an overview of FHWA-NHI-134065 and covers principles of risk management.

OUTCOMES

Upon completion of the training, participants will be able to:

- Explain the overall organizational context, importance of risk management, and risk framework to others
- Follow a consistent process for managing risk
- Utilize standard risk terminology, tools and methods
- Implement appropriate risk identification techniques
- Write an effective and meaningful risk statement
- Accurately estimate likelihood and impact of each risk event
- Create a consistent matrix to prioritize risk

TARGET AUDIENCE

The target audience for this course includes Federal, State and local highway managers and executives who are responsible for directing and managing all aspects of highway related programs/projects such as planning, environment, project development, design, construction, operations, maintenance, and finance.

TRAINING LEVEL: Beginner

FEE: Check the NHI Web site for current pricing

LENGTH: 1.0 DAY (CEU: 0.0 UNITS)

CLASS SIZE: MINIMUM: 18; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Connie Yew • (202) 366-1078 • connie.yew@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov





COURSE NUMBER

FHWA-NHI-134068

COURSE TITLE

Addressing Uncertainty in Cost Estimating

The course covers consideration of risk and uncertainty in project cost estimates when using either a deterministic or probabilistic method. This course will provide participants with an overview of current cost estimating practice and an appreciation of the importance of cost estimating. The course will compare and contrast deterministic and probabilistic methods of cost estimating, including which method is most appropriate during the various phases of project development. Upon completion, participants will be able to select the most appropriate methodology based upon the project's characteristics and phase of development. Participants will be able to assist more experienced estimators in preparing either a deterministic or probabilistic estimate. Case studies and exercises will provide participants with an understanding of how to account for risk and uncertainty in an estimate; however, the course will not teach all of the mechanics on how to prepare complete cost estimates.

Various forms of Federal legislation and guidelines exist that define the role of FHWA in the review and acceptance of State DOT cost estimates, especially for FHWA major projects, which have a total project cost of \$500 million or more. While this course will specifically address cost estimating for large and complex projects, the concepts presented are applicable and scalable for developing estimates for all transportation projects.

OUTCOMES

Upon completion of the training, participants will be able to:

- Explain the principles of Probabilistic estimating
- List appropriate stages of estimating for using deterministic and probabilistic estimating methods
- Identify uncertainties and how to consider them in a cost estimate
- Quantify the likelihood of occurrence and consequence of risk events
- Determine how the results from a risk-based estimate can be applied to project development
- Determine when it is appropriate to use a deterministic, probabilistic, or combination of methods
- Analyze and evaluate the process of creating a cost estimate to determine if it is consistent with the FHWA Major Projects Cost Estimating Guidance
- Report cost and schedule estimates accurately and comprehensively to stakeholders

TARGET AUDIENCE

Target audience performs, or will perform, the following as part of their job responsibilities: preparing, analyzing and/or approving cost and schedule estimates; conducting pre-construction/early cost estimating that would be carried through the life of the project; and/or identifying risks/obstacles/red-flag issues that could trigger a cost increase or delay.

This training is designed for Federal and State DOT personnel, local government personnel, MPOs, design consultants as well as engineers and planners. This training is valuable for both new and existing employees.

TRAINING LEVEL: Beginner

FEE: Check the NHI Web site for current pricing

LENGTH: 2.0 DAYS (CEU: 1.2 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Jim Sinnette • (202) 366-0479 • james.sinnette@fhwa.dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



The participant workbook is available for download from the NHI Store.





COURSE NUMBER

FHWA-NHI-134069

COURSE TITLE

TCCC Ethics Awareness for the Transportation Industry

This training was developed by the Transportation Curriculum Coordination Council (TCCC) in partnership with NHI to provide good practices for ethical behavior of transportation employees. The training was prepared by State DOT personnel for State DOT personnel. It is the first training of its kind offered by NHI, and we would like to give special recognition to the TCCC for their efforts.

The training contains good practices from various agencies. The topics of discussion in this training are: conflict of interest, safety, fraud, falsification of documentation, reporting ethical concerns, gifts and favors, fairness, personal use of agency property, and consequences.

Not all State agencies' codes of conduct are the same but they all demand similar ethical behavior of their employees. Be sure to access to your agency's codes or check with your supervisor for more information specific to your organization. Each State agency/company has their own work rules, which the viewer needs to review and follow.

NHI is hosting this and other TCCC Web-based developments to serve a critical need for training. We need your feedback to determine whether we should continue posting other Web-based trainings like this one. Please take the time to complete the evaluation form provided at the end of the training, or e-mail NHIMarketing@dot.gov with your feedback.

OUTCOMES

Upon completion of the training, participants will be able to:

- Introduce participants to agency expectations on ethics
- Give an example of a current code of conduct policy
- Understand and practice good ethics as an employee in the transportation industry
- Realize the consequences when rules and regulations are not followed

TARGET AUDIENCE

This training is designed for Level I and Level II State and local public agency personnel and their industry counterparts involved in the construction, maintenance and testing process for highways and structures. Level I or Entry refers to employees/ trainees with little to no experience in the subject area and perform his/her activities under direct supervision. Level II or Intermediate refers to employees that understand and demonstrate skills in one or more areas of the entry level and perform specific tasks under general supervision.

TRAINING LEVEL: Beginner

FEE: FREE

LENGTH: 1.0 HOURS (CEU: 0.0 UNITS)

CLASS SIZE: MINIMUM: 1; MAXIMUM: 1

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Chris Newman • (202) 366-2023 • christopher.newman@dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



*Need help with the NHI Web site or enrolling in a Web-based training?
Call (703) 235-0556 or e-mail nhiwebmaster@dot.gov.*



**COURSE NUMBER**

FHWA-NHI-134071

COURSE TITLE

TCCC Basic Construction and Maintenance Documentation - Improving the Daily Diary

This training was developed by the Transportation Curriculum Coordination Council (TCCC) in partnership with NHI to help improve documentation on construction and maintenance projects. The training was prepared by State DOT personnel for State DOT personnel. It is the first training of its kind offered by NHI, and we would like to give special recognition to the TCCC for their efforts.

It contains good practices from various agencies. This training is intended to assist you with proper documentation on a construction or maintenance project. It is important that the information in the daily diary kept for projects are accurate, correct, and factual to insure proper payment and to avoid lawsuits.

Please note that the terminology may differ slightly from DOT to DOT; for example, the document may also be referred to as a Daily Work Report. Each State agency/company has their own requirements, which the viewer needs to review and follow.

NHI is hosting this and other TCCC Web-based developments to serve a critical need for training. We need your feedback to determine whether we should continue posting other Web-based trainings like this one. Please take the time to complete the evaluation form provided at the end of the training, or e-mail NHIMarketing@dot.gov with your feedback.

OUTCOMES

Upon completion of the training, participants will be able to:

- Compose a complete and correct daily diary
- Recognize the importance of daily diary entries

TARGET AUDIENCE

This training is designed for Level I and Level II State and local public agency personnel and their industry counterparts involved in the construction, maintenance and testing process for highways and structures. Level I or Entry refers to employees/ trainees with little to no experience in the subject area and perform his/her activities under direct supervision. Level II or Intermediate refers to employees that understand and demonstrate skills in one or more areas of the entry level and perform specific tasks under general supervision.

TRAINING LEVEL: Beginner

FEE: FREE

LENGTH: 1.0 HOURS (CEU: 0.0 UNITS)

CLASS SIZE: MINIMUM: 1; MAXIMUM: 1

NHI Training Information: (703) 235-0534 • nhitraining@dot.gov

Subject Matter Contact: Chris Newman • (202) 366-2023 • christopher.newman@dot.gov

NHI Training Program Manager: Ann Gretter • (703) 235-1260 • ann.gretter@fhwa.dot.gov



*Need help with the NHI Web site or enrolling in a Web-based training?
Call (703) 235-0556 or e-mail nhiwebmaster@dot.gov.*

