

**COURSE NUMBER**

FHWA-NHI-310122

COURSE TITLE**Introduction to Data Analysis**

In this age of information, FHWA's business requires skill to analyze, evaluate, and present data and information so that others understand, gain knowledge and have a greater ability to make decisions. Our agency has a unique perspective to help identify Federal Highway program improvements by analyzing the data available either in-depth and across many core highway programs including civil rights, finance, environment, planning, design, construction, operations, and safety. This perspective coupled with the Agency's stewardship and oversight role provides opportunities to interact with decision makers to improve the quality of the highway program. We use Program Reviews as a tool to manage program risk and assist our partners in identifying program improvements, and it is important to have the tools and techniques to analyze highway program data and be able to present it as easily understood information in our Program Review reports.

By taking this course tailored to the FHWA business context, participants will be better able to make data driven decisions in a performance measurement operating environment. FHWA staff will be better able to present information in Program Review Reports based on sound data analysis by applying the skills learned in data collection, analysis, sampling, and statistical analysis. As the agency continues to prepare for Performance Management, our agency staff would benefit from this suite of training modules that delve deeper into the above-referenced data oriented areas.

The overall goal of this course is to improve FHWA's ability to apply techniques and tools when evaluating and presenting data and information used to develop recommendations and solutions in the program improvement and performance measurement context. So much information is accessible and can be easily stored electronically. There will continue to be a need for skills and refresher training to do data analysis and evaluation. To make the best use of available data it is important to have fundamental statistical knowledge and be able to use tools when analyzing data. The data analysis skills gained by taking this course are expected to be applied during the conduct of program and process reviews and while implementing performance management strategies.

OUTCOMES

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

- Identify useful analysis models such as root cause analysis, six sigma model, and Plan-Do-Check-Act.
- Evaluate data and information that support recommendations for program improvements.
- Demonstrate an understanding of the tools and techniques for graphically presenting data and information so that others understand, gain knowledge, and have a greater ability to make decisions.

TARGET AUDIENCE

This course is appropriate for any individual that needs to apply techniques and tools for evaluating and presenting data and information.

TRAINING LEVEL: Basic

FEE: 2016: \$400 Per Person; 2017: \$400 Per Person

LENGTH: 1.5 DAYS (CEU: 0 UNITS)

CLASS SIZE: MINIMUM: 20; MAXIMUM: 30

NHI Customer Service: (877) 558-6873 • nhicustomerservice@dot.gov