

Data Analysis: Enhancing the Impact of Performance Audits (8 hours)

Course Overview

The increasing availability and usability of large data sets provides significant opportunities to help auditors more effectively assess agency performance, compliance, or detect fraud. To gain the greatest benefit from the data, however, auditors must properly understand how to think through what data they want to collect, how they will collect it, assess its reliability, and communicate the results of their analysis. This introductory class focuses on helping auditors better plan and manage their audits for using data and expands awareness of potential data sources and analysis methods (e.g., tabulations, combining data sets, statistical modeling, and geo-spatial analysis) that have been used by other audit agencies. It also provides examples of how results can be graphically displayed in reports. Note: It does not address how to conduct these types of data analysis. If delivered virtually, this course is offered over 2 half days.

CPEs: 8

Who Should Attend

Both new as well as seasoned auditors in team leader or team member roles will gain knowledge and new perspectives on how data can be used to achieve high returns on investment.

Course Objectives

Participants will be better able to

- Appreciate the range of data sets that auditors can utilize.
- Recognize the role that data can play in successfully planning, conducting, and reporting on high-impact audits
- Determine the resources necessary to conduct the analysis
- Understand key steps for testing and analyzing data

Course Topics

Overview of Data Analysis

- Benefits of using data in audits
- Challenges of using data in audits
- Designing audits that rely on data for findings, conclusions, and recommendations
- Presenting key findings that are based on data analysis

Design Considerations

- How to integrate data analysis into the audit design

- Advantages and concerns with using data
- Options for descriptive and advanced analyses
- Four-step process for conducting data analytics

Data Reliability and Sufficiency

- Overview of data reliability assessment process
- Key elements of data reliability and testing
- Documenting data reliability assessments

Implementation, Documentation, and Reporting

- Importance of a data analysis plan
- Types of analyses
- Common analysis issues and problems
- Interpreting data to report results
- Importance and types of visuals/graphics to gain greater understanding of results

Case Studies

- Examples of how selected audit agencies have used data analysis in audits