



THE FIRE SERVICE

Basic Excel for Fire and EMS Data Analysis & Presentation for Fire and EMS



City of Fresno (location to be determined)

Basic Excel for Fire and EMS

This one-day hands-on course is designed for fire and

EMS personnel with little or no prior exposure to Excel.

If you are planning to take the three-day Data Analysis class and want a leg up or just want a detailed primer

on the operation for the program for general use, this

This class is not required in order to take the three-day

class, so take it alone or in conjunction with the other.

A Class for any Fire Service Personnel wanting a comprehensive introduction to the use of Excel

Date and Time April 24, 2023 08:30-16:30

्रि Some Things You Will Learn In This Class

- ★ Basic operation/overhead
- ★ Basic math/formulas
- ★ Understanding and using variables of time
- ★ Summarizing data with graphs and tables
- 🖈 Pivot tables
- ★ Importing and manipulating raw data
- ★ Intermediate formulas (logic, arrays and lookups)

Data Analysis & Presentation for Fire and EMS (Using Microsoft Excel™)

Date and Time April 25–27, 2023 08:30–16:30

A Class for Fire Service Personnel with Responsibilities in Deployment Analysis, Data Presentation, and Resource Planning

Course Description

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is the class to start with.

This three-day hands-on course is designed to give fire and EMS personnel a comprehensive under-standing of the most commonly used analytic and statistical tools available for performance measurement and reporting.

The course will prepare the attendee for making better and more defensible policies and presentations on department operations and long-term planning and includes instruction in basic and inter-mediate-level Microsoft Excel and does not require any prior experience with Excel (although some proficiency is strongly recommended.)

\bigstar Some Things You Will Learn In This Class

- ★ An introduction to statistics for Fire and EMS (without the difficult math)
- ★ Use of Excel for analyzing Fire and EMS operations-related data
- ★ Visual representations (tables and graphs,) which to use and when
- ★ Understanding the special considerations with small data
- ★ Best practices in Fire and EMS data quality
- ★ Methods for setting realistic performance objectives
- ★ Methods for consistently identifying and handling outliers in data
- ★ Methods for calculating effective response force and unit concentrations
- ★ Understanding and calculating percentiles and NFPA compliance rates
- ★ Methods for evaluating units' order of arrival at scene, unit and system reliability
- ★ Understanding the basics of correlation & relationships between variables
- ★ Pivot tables, filtering, sorting and summarizing
- Methods and best practices for use of statistics in fire service performance measurements

Materials Required

Laptop computer with MS Excel

Aterials Provided

- All class data sets will be provided electronically in advance of the class
- Anthology of relevant writings on performance measurement in the fire service
- Access to video recoded evolutions of much of what is covered in the class

\aleph Course Instructor

<u>—</u> Course Format

Each class has a maximum of 20 students. The course includes lecture, demonstration, and hands-on application.

O Prior Experience and Knowledge Required

No statistics, advanced mathematics or Excel experience is required. A basic familiarity and comfort with computers is essential, however.

Paul Rottenberg is the president of FireStats, LLC., a management consulting firm providing ana-lysis and support to fire departments throughout the United States. Paul has an MBA from the University of San Francisco and a Master's in Public Health from UCLA and has worked for public and private entities in financial and operations analysis for over 25 years. Paul is the sole creator and instructor of all FireStats curriculum and has taught his classes to over 3,000 fire officers throughout the US. FireStats has worked on hundreds of fire department analysis projects including standards of cover, accreditation, strategic plans, EMS QI, and customized statistical and probabilistic analyses in support of engine and ambulance deployment and staffing models. Paul spent ten years as an active paid-call engineer/EMT with a combination fire department in Northern California and is a USFA subject matter expert in deployment analysis.

