Form PDES 8

THE CITY OF LOS ANGELES



CIVIL SERVICE COMMISSION

## **CLASS SPECIFICATION**

# 10/24/2013 SENIOR FIRE STATISTICAL ANALYST, 1639

**Summary of Duties:** A Senior Fire Statistical Analyst analyzes and researches various types of administrative and technical Fire Department data, accesses various Fire Department electronic data such as Fire Prevention Records, Fire Incident Reporting Systems, and Computer Aided Dispatch (CAD); extracts the necessary information from various databases and spreadsheets; analyzes data using both descriptive and inferential statistics; prepares statistical and narrative reports; makes recommendations based on the results of analysis; presents findings and recommendations to various groups including Department management, various Council committees, and other departments; may supervise administrative and/or clerical staff; and performs related work.

<u>**Class Characteristics</u>**: A Senior Fire Statistical Analyst performs difficult research and analysis of various Fire Department data, and also performs duties that require knowledge of research and design methodology, including quantitative analyses. The class of Senior Fire Statistical Analyst is distinguished from other classes in that the work involves the analysis of data extracted or compiled using various database and spreadsheet systems such as FIRESTATLA, that enable the Department to use leading-edge technology and innovative management techniques to enhance Department performance measurements. The work of this class is assigned in broad terms and is reviewed for results obtained.</u>

#### Examples of Duties:

- Compiles, manipulates and analyzes data from a variety of sources including databases and spreadsheets;
- Utilizes programs such as SQL and Excel macros to extract the necessary data;
- Plans and conducts statistical analyses, research, and other studies;
- Applies appropriate statistical measures to analyze data;
- Prepares reports, tabulations, charts and graphs in order to support recommendations;
- Represents the Department before Council Committees, the Fire Commission, and other groups;
- Provides technical assistance to personnel in the Department as needed;
- May supervise administrative and clerical personnel engaged in research and data analysis work; and
- May occasionally be assigned to other duties for training purposes or to meet technological changes or emergencies.

**Qualifications/Competencies**: Incumbents must have the following knowledge and abilities: **Knowledge of**:

- Basic computer programming and processing methods such as SQL and Excel macros to extract data;
- Use of computer software related to data analysis, interpretation, and presentation such as MS Access, Excel, Word and Powerpoint;
- Research design methodology and statistical analysis;
- Descriptive statistics including measures of central tendency and dispersion;
- Inferential statistics such as correlations, t-tests, and analysis of variance;
- Probability and non-probability sampling and sampling techniques;
- Data processing and computer-based systems capabilities as they relate to gathering, retrieving, storing and manipulating data;
- Organization, responsibilities, functions and procedures of the Los Angeles Fire Department; and
- Principles and practices of supervision.

## Ability to:

- Plan procedures and techniques for the statistical or mathematical analysis of a variety of data;
- Prepare and interpret statistical computations, charts, graphs, diagrams, and spreadsheets;
- Generate, organize and display a wide variety of complex statistical and other research data;
- Think logically and creatively in approaching research problems;
- Analyze and evaluate a variety of data and make logical, defensible conclusions or recommendations based on that data;
- Explain complex statistical techniques to non-technical personnel;
- Prepare and present oral and written reports in a clear, concise, logical and convincing manner;
- Deal tactfully and effectively with Department management representatives, supervisors and peers as well as with a variety of individuals from other City departments and agencies; and
- Lead large-scale research and data analysis projects involving various Department personnel.

#### Minimum Requirements:

- 1. Graduation from a recognized four-year college or university with a degree in computer science or information systems, including at least 12 semester or 18 quarter units in statistics, research design/methodology or quantitative analysis; <u>and</u>
- 2. Two years full-time paid professional experience conducting quantitative or qualitative research and/or statistical analysis.

# License:

A valid California driver's license and a good driving record are required.

#### Physical Requirements:

Candidates must meet such medical and physical standards as the Board of Civil Service Commissioners may prescribe.

Persons with disabilities may be able to perform the essential duties of this class with reasonable accommodation. Reasonable accommodation will be evaluated on an individual basis and depend, in part, on the specific requirements for the job, the limitations related to the disability, and the ability of the hiring department to reasonably accommodate the limitations.

As provided in Civil Service Commission Rule 2.5 and Section 4.55 of the Administrative Code, this specification is descriptive, explanatory and not restrictive. It is not intended to declare what all of the duties, responsibilities, and required qualifications of any position shall be.