**GENERAL DESCRIPTION**

Performs advanced (senior-level) data analysis and data research work. Work involves conducting detailed analysis of and extensive research on data, providing results, and monitoring and implementing data quality. May supervise the work of others. Works under minimal supervision, with extensive latitude for the use of initiative and independent judgment.

**EXAMPLES OF WORK PERFORMED**

Analyzes data using standard statistical tools, methods, and techniques.

Consults with internal and external customers to identify user needs.

Compiles and queries data.

Identifies data gaps, errors, anomalies, inconsistencies, and redundancies by analyzing the content, structure, and relationships within data.

Interprets results to identify significant differences in data.

Identifies and interprets data patterns and trends and assesses data quality.

Develops data quality measures, analyzes data quality results, and implements necessary changes to ensure data quality improvement.

Cleans and prunes data to discard irrelevant information.

Prepares concise, comprehensive technical reports to present and interpret data, identify alternatives, and make and justify recommendations on data revisions.

Guides the selection of data management tools, and the development of standards, usage guidelines, and procedures for those tools.

Defines, develops and implements data standards.

Develops software applications or programming to use for statistical modeling and graphic analysis.
Develops and implements databases, data collection systems, data analytics, and other strategies that optimize statistical efficiency and quality.

Performs quality assurance and serves as a subject matter expert on data integrity, extraction, and compilation.

May supervise the work of others.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in data analysis, research, compilation, and/or reporting work. Graduation from an accredited four-year college or university with major coursework in data science, business analytics, computer science, computer information systems, management information systems, accounting, finance, mathematics, statistics, economics, or a related field is generally preferred. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of statistics and analyzing data sets; of running queries, report writing, and presenting findings; of data models, database design development, data mining, and segmentation techniques; and of record keeping, including security procedures for handling, protecting, and distributing confidential data.

Skill in the use of a computer and applicable software, in analyzing problems and devising effective solutions, in conducting data searches, in evaluating and translating large amounts of data, and in critical thinking.

Ability to compile, review, and analyze data; to prepare reports; to maintain accuracy and attention to detail; to communicate effectively; and to supervise the work of others.