City of San Rafael
Job Class Specification

Job Title: Data Analyst I/II/III

SUMMARY:
Reporting to the Infrastructure and Data Manager, the Data Analyst plays a key role in creating, managing and maintaining city-wide data sources, including the city geographic information system (GIS). The Data Analyst will work to formalize the process for releasing data to the public, build dashboards that track progress toward city-wide performance metrics, and assist on other data and analytics projects. Work assigned may be with a specific project, City departments, program area and/or to support City achieves its goals and objectives.

DISTINGUISHING CHARACTERISTICS:
Data Analyst I:
This is the entry level class in the Data Analyst series. This class is distinguished from the journey level by the performance of the more routine tasks and duties assigned to positions within this series. Employees at this level are not expected to perform with the same independence of direction and judgment on matters allocated to the journey level. Since this class is typically used as a training class, employees may have only limited or no directly related work experience. Employees work under immediate supervision while learning job tasks.

Data Analyst II:
This is the journey level class within the Data Analyst series. This class is distinguished from the Data Analyst I by the assignment of the full range of duties. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise.

Data Analyst III:
This is the most skilled level of the series, competent to work independently without direct supervision while performing the full scope of database design and management, advanced analysis, and acting as lead on major projects and initiatives.

ESSENTIAL DUTIES AND RESPONSIBILITIES:
Data Analyst I:
- Identify, analyze, and interpret trends or patterns in complex data sets, and provide ongoing reports data to relevant stakeholders
- Create data dashboards, graphs and visualizations
- Attends training sessions and staff meetings
- Communicate clearly and concisely, orally and in writing
- Makes presentations
- Trains and assists other staff with their interaction with data sources, e.g. GIS software and databases
- Other duties as assigned

Data Analyst II:
- In addition to duties and responsibilities outlined in Data Analyst I above,
- Identify new sources of data and methods to improve data collection, analysis, and reporting
- Plans, develops, coordinates and modifies systems to create and maintain a geographic and land information program
- Supports the design, implementation, and maintenance of Citywide performance measures
• Locate and define new process improvement opportunities
• Providing technical expertise on data storage structures, data mining, and data cleansing
• Maintain information about the City’s data including the data definitions and structures, data security, storage and use requirements
• Work alongside city teams and/or management to establish business and information needs
• Commissioning and decommissioning of data programs
• Provide quality assurance of imported data, exported data
• Analyze quantitative and qualitative data to determine selected program effectiveness
• Engage data producers (city departments) and other internal stakeholders to convey the strategic importance of sharing open data, both internally and externally
• Engage with external consumers of open data to ensure awareness of available data, solicit feedback on data quality and obtain new ideas for future data releases.

Data Analyst III:
• In addition to duties and responsibilities outlined in Data Analyst I & II above,
• Establish standards and procedures to provide optimum data response, access, integrity and security
• Develop and implement databases, data collection systems, data analytics and other strategies that optimize statistical efficiency and quality
• Develop standards for implementing websites, public facing APIs, applications and other technology projects by city agencies in a way that supports open data
• Develop policies and practices for departments to use to identify, review, publish and maintain open data sets for external consumers
• Anticipate future data needs and provide data base administration resources to foster innovation and growth

EDUCATION AND EXPERIENCE:
• Bachelor’s degree in mathematics, statistics, information technology, public policy, public administration, or related field
• Strong analytical capabilities
• Understanding of data gathering, inspecting, cleansing, transforming, and modeling techniques
• Experience with data structures, data sets, databases, and SQL
• Communication skills with the ability to distill complex subjects to a wider audience
• Keen attention to detail
• Willingness to solve problems

Data Analyst I:
• At least 1 year of experience in a data, analytics or related function involving quantitative data analysis to solve problems

Data Analyst II:
• At least 2 years of experience in a data, analytics or related function involving quantitative data analysis to solve problems

Data Analyst III:
• At least 4 years of experience in a data, analytics or related function involving quantitative data analysis to solve problems
KNOWLEDGE OF:
- Ability to translate business requirements into non-technical, lay terms
- Handling large datasets and relational databases
- High-level written and verbal communication skills
- Project management practices
- Applicable laws, codes and regulations
- Record keeping principles and practices
- Strong analytic, strategic, and problem-solving skills

ABILITY TO:
Identify useful information and suggest conclusions that support decision making; coordinate and implement programs to respond to customer requests; prepare written procedures and policies; work independently and make sound judgments; analyze current and future network and telecommunication technologies and needs; provide technical assistance and leadership to other support staff and contractors as required, work as a team player within the department.

LANGUAGE SKILLS:
Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of organization.

REASONING SKILLS:
Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret a variety of instructions furnished in written, oral, diagram, or schedule form.

PHYSICAL DEMANDS:
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential function of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. 

While performing the duties of this job, the employee is regularly required to sit and talk or hear. The employee frequently is required to use hands to finger, handle, or feel and reach with hands and arms. The employee is occasionally required to stand and walk. The employee must regularly lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus.

WORK ENVIRONMENT:
The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. 

While performing the duties of this job, the employee is regularly exposed to video displays and moving mechanical parts. The employee frequently works in evenings or weekends; typically, in inside environmental conditions. The employee occasionally may travel between worksites. The noise level in the work environment is usually moderate.