



METROPOLITAN LIBRARY SYSTEM Job Description

Job Title: Data Analyst
Reports To: Chief Operations Officer
Division: Operations

Position Code.: 1114-118
Classification: Exempt
Date: 03/2024

JOB SUMMARY:

Under general direction, serves a primary role in advancing the research and analytical needs of the Metropolitan Library System (MLS) by gathering, analyzing and using organizational information to help stakeholders and teams draw insights from the data to facilitate strategic decision-making; creates and manages data projects for the system; provides technical expertise to assist internal guests with their informational needs; assists in evaluating and improving library services by constructing forecasting models and scenario analysis, tracking industry trends, developing novel strategic solutions and creative action plans, and examining strategic performance.

ESSENTIAL JOB FUNCTIONS:)

- Provides excellent guest service to both internal and external guests.
- Plans data collection; analyzes and interprets large or complex data sets stored in databases, spreadsheets, or other formats using standard statistic methods; interprets the results and provides written summary of highly technical data analyses in an organized and easy-to-understand format.
- Applies sampling and statistical methods where appropriate with regard to their relevant assumptions and limitations.
- Provides technical assistance in the application of mathematical and/or statistical principles to a variety of library projects.
- Manages data projects including planning, implementing, and evaluating data projects.
- Manages the recording, analysis, and reporting of organization-wide, system-level statistical data to ensure consistency, accuracy, completeness and relevance to MLS goals and objectives. Tracks, analyzes, and provides feedback on trends.
- Coordinates the development of system-wide research reports and analysis, as directed, to ensure accuracy, completeness, and relevance to system goals and objectives. Track, analyze, and provide feedback on trends.
- Researches the impact of various proposals to provide scenario analysis and, where possible, optimal solutions.
- Adjusts and weighs raw data to compensate for seasonal patterns, errors and/or biases.
- Identifies, tracks, and reports on key operational and substantive metrics for the Library System.
- Creates dashboards, visualizations, algorithms, and business tools for use across the system.
- Provides functional analysis and support to various departments and stakeholder groups to realize operational excellence objectives.
- Develops and leads data projects that include a variety of advanced qualitative and quantitative analytics.
- Develops complex data analysis, methodologies, and predictive data models for assessing MLS service.
- Develops systems and tools for effective data management including the creation, restructuring and management of large datasets, files, and systems,
- Conducts market research or facilitates market research activities by others.
- Creates and implements surveys, questionnaires, and focus groups of guests and staff in accordance with accepted design principles.
- Provides internal and external guests with current and accurate data on the library use trends and population demographics.
- Assists with the development and annual update of the library's long-range, strategic plan and annual business plans.
- Prepares monthly, quarterly, and annual reports including by not limited to Library Usage Summaries, Annual Statistical Report, the Oklahoma Department of Libraries (ODL) report, the Public Libraries Data Services report, and many other reports, surveys, and requests for information ahead of fixed deadlines.
- Works with Information Technology and other departments on processes to streamline the collection and reporting of data.
- Writes technical memos that document data processing decisions and summarize the quality of the data.
- Assists in the design, implementation, and enforcement of data infrastructure, security, and system policies in collaboration with the Information Technology department.

- Carries out data validation and quality control checks.
- Develops sources and analysis of primary and secondary data for use in decision making and planning.
- Completes all required and assigned training on time.
- Champions the library's strategic goals and initiatives with the system's mission and core values in mind.
- Maintains awareness of related developments and trends through reading professional literature and participating in professional associations and continuing education.
- Keeps up to date with data management trends, practices, and technologies.
- Works in a manner safe to the individual and other people; follows safety rules and safe working practices; uses safety equipment as required.
- Defends the principles of the Citizen's Bill of Library Rights, the Freedom to Read Statement, the privacy of library guest records and the code of professional ethics.
- Performs other related duties as assigned.

FREQUENCY OF TRAVEL REQUIREMENTS:

- Occasional travel to other library locations.
- Occasional travel nationally for appropriate professional development and networking.

INTERACTION:

- Interaction with all levels of staff, Commission members, and community stakeholders.

MATERIAL AND EQUIPMENT USED:

- Computer(s)/Printer(s)
- General Office Equipment

MINIMUM QUALIFICATIONS REQUIRED:

Education and Experience:

- Bachelor's degree from an accredited college or university; and
- Two years of experience working with statistical, data visualization, and GIS software; and
- Two years of experience with SQL to write complex, highly optimized queries across large volumes of data.

Licenses and Certifications:

- None

HIGHLY PREFERRED QUALIFICATIONS AND COMPETENCIES:

- Master's degree from an accredited college or university
- Experience working with Tableau®.
- Programming experience
- Experience working in public libraries.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- Principles and practices of library science, technology, and management.
- Methods and techniques of research, statistical analysis, and report presentation.
- Mathematical principles necessary to understand and apply algebra, statistical methods, calculus, counting techniques and other qualitative tools.
- Administrative principles and practices, including goal setting and implementation.
- Record keeping, report preparation, filing methods and records management techniques.
- Correct English usage, including spelling, grammar, punctuation, and vocabulary.
- All computer applications and hardware related to performance of the essential functions of the job, including familiarity with the fundamentals of database systems, GIS software, data visualization software and SQL; advanced proficiency with Microsoft Access and Excel to utilize full functionality in analyzing complex data sets.
- Proper methods of visual display for qualitative information using various types of charts, maps, and other graphic representations.

Skill in:

- Using reverse engineering legacy reports, models, and/or algorithms.
- Constructing concise, accurate search statements.
- Researching, compiling, and summarizing a variety of informational and statistical data and materials.
- Explaining complicated or technical information in a simple way to non-technical audiences.
- Communicating clearly and effectively, both orally and in writing.
- Operating computer systems and creating documents and database files.
- Using macros to automate routine tasks and perform iterative calculations on a computer.
- Strong communication skills with the ability to interface with leadership and staff of all levels.

Mental and Physical Abilities:

- Ability to read, analyze and interpret professional periodicals and journals, technical procedures, and government regulations.
- Ability to travel to various locations and to access reliable transportation to do so.
- Ability to speak effectively before public groups and respond to questions.
- Ability to interpret a variety of instructions in written, oral, diagram or schedule form.
- Ability to integrate and interpret data from various sources and to plan, develop and implement strategies.
- Ability to apply technical knowledge to practical use in analyzing hardware and software applications, design system and program specifications for some applications; develop solutions and recommend courses of action.
- Ability to analyze and question the validity and accuracy of data.
- While performing the essential functions of this job the employee is frequently required to move from place to place, speak and hear and lift and/or move up to 10 pounds.
- While performing the essential functions of this job the employee is occasionally required to lift and/or move up to 25 pounds.

SUPERVISORY RESPONSIBILITY:

- This position has no supervisory responsibilities.

WORK ENVIRONMENT:

- Works in a normal office environment where there are little or no physical discomforts associated with changes in weather or discomforts associated with noise, dust, dirt and the like.
- This position is eligible for Core and Emergency telework.

SUMMARY STATEMENT:

This job description should not be interpreted as all inclusive. It is intended to identify the essential functions and requirements of this job. Incumbents may be requested to perform job-related responsibilities and tasks other than those stated in this description. Any essential function or requirement of this job will be evaluated as an interactive process, as necessary, should an incumbent or applicant be unable to perform the function or meet the requirement due to a disability as defined by the Americans with Disabilities Act (ADA). Reasonable accommodations for the specific disability will be made for the incumbent or applicant so long as accommodation does not create an undue hardship to the System or if doing so causes a direct threat to the individual or others in the workplace and the threat cannot be eliminated by reasonable accommodation.

NOTE: The System reserves the right to amend or change this job description from time to time and/or assign other tasks for the Employee to perform as the System may deem appropriate.