The Maryland-National Capital Park and Planning Commission

Title:IT Systems Manager/LeaderSeries:Information Technology

Grade: J Code: 2240 Date: 12/15/98 (rev.)

Class Definition

Under general direction, provides ongoing leadership and management to major information technology systems and/or management to Information Technology staff performing work in one or more technology areas of hardware, software, network, communications, systems, support, programming, analysis and specialized systems which provide services to a major department or group of departments. An employee in this position is responsible for: planning, organizing, reviewing, and evaluating work of information technology staff; analyzing short- and long-term technology needs; participating in development of department technology work program and budget; providing technical expertise and leadership in assigned area; designing, developing, evaluating, and testing systems, hardware, and software, individually or in conjunction with consultants and staff; ensuring adequacy and effectiveness of services provided by the unit; and identifying, diagnosing, and resolving technical problems. An employee in this position may function as a full-time expert in a highly specialized area of technology. The majority of work focuses on development, analysis and leadership and requires minimal maintenance work. Significant initiative and self-direction are required.

Examples of Important Duties

- 1. Provides leadership to technology staff; communicates departmental and division mission, goals, and objectives; establishes and monitors unit goals and objectives; plans, coordinates, supervises, reviews and evaluates work of staff; estimates and monitors expenditures; develops, implements, and oversees work program, policies, and procedures; establishes and monitors quality control measures.
- 2. Develops and/or oversees work plans for projects and initiatives; identifies project objectives, key milestones, target dates, and resources required; monitors project performance; notifies supervisors or others as appropriate, of deviations from project plans; monitors quality and effectiveness of project technical work; and provides technical guidance and expertise.
- 3. Interviews prospective employees and recommends selection; trains staff; plans, organizes, reviews, evaluates work of staff and/or consultants.
- 4. Establishes technical standards; reviews staff technical work for conformance with standards and accepted techniques and work methods; provides technical assistance; identifies, diagnoses, and resolves technical problems.
- 5. Conducts or oversees complex analyses of business processes, work flow, requirements and data management problems to define or re-engineer automation needs; coordinates

and/or participates in the design, development, and implementation of new systems using standard methodology and practices including a variety of programming languages and tools (See Appendix: Current Technology Industry Standards); determines feasibility of systems; develops system/modification specifications; selects/recommends appropriate hardware and software; selects/recommends vendors and consultants for installation of systems; directs or participates in the monitoring of systems to ensure accuracy, reliability, integrity, proper operation, and adequate system documentation.

- 6. Oversees and/or manages one or more major databases or data warehouses; provides technical expertise in implementation and maintenance, database design, application scripting, modeling, and data processing; designs, implements, and documents backup, archive, and procedures; develops and implements strategies for data management and distribution; coordinates efforts to link existing databases with external systems and vendor applications; ensures data integrity.
- 7. Provides expert knowledge and support of a system level product for a highly specialized area of technology such as Oracle Database Administrator, Systems Integrator(multiple platforms), Webmaster, or GIS Expert.
- 8. Collaborates with staff, vendors, users, managers, and others in accomplishment of program and development goals.
- 9. Coordinates and/or performs data conversion, maintenance, and quality control of data transfers.
- 10. Oversees and participates in the programming, modification and integration/adaptation of multiple platforms, networks, hardware and software environments, mini/main frame/ microcomputer applications to meet organizational and user needs; ensures all work is done using Current Technology Industry Standards (see Appendix).
- 11. Develops and implements long range automation plans for a department; researches and identifies new developments in computer hardware/software and evaluates cost/benefit to Commission; develops and recommends implementation strategy for applying latest technological developments for improving productivity and service; serves on committees to exchange information and make recommendations about new equipment and software for the department
- 12. Participates in the development of the departmental technology budget; monitors and accounts for unit expenditures.
- 13. Maintains up-to-date knowledge of technology trends, systems, hardware and software availability and capabilities through training, journals and other sources.

- 14. Oversees vendor maintenance contracts; participates in developing service specifications and contracts; monitors vendor performance; and recommends changes in vendors as necessary.
- 15. Directs, coordinates and develops WEB pages; may serve as Webmaster; researches potential applications and advises staff; recommends policy for Internet/intranet access and usage.
- 16. Represents the Division, Department, and the Commission on committees, task forces, and meetings.
- 17. Operates computer and peripheral equipment with office automation suite software (e.g., word processing, spreadsheet, graphics, statistics, database packages) to enter data, perform data analyses, design and produce reports, tables, graphs, and charts.

Important Worker Characteristics

Extensive knowledge of: 1) computer science/information technology principles, practices, procedures and applications with in-depth knowledge where appropriate; 2) systems analysis and design; 3) systems analysis and project management methods and principles; 4) technical methods and practices where appropriate; 5) computer programming methods; 6) database management systems(DBMS) and programming languages (see Appendix for 'Current Industry Standards'); 7) modern management techniques as applied to human resources and the operation of an Information Technology unit; 8) Commission organization, policies, and procedures.

Expert skill in: 1) Providing project leadership; 2) technical work of assigned area where appropriate; 3) diagnosing and resolving technical problems; 4) writing system needs & requirements analysis documents; 5) integration of data between diverse systems; 6) coaching, guiding, managing professionals and technicians; 7) working with various operating systems on the mini, micro and client/server platforms; 8)use of spreadsheets, word processing, graphics, communications, database management systems and integration of data between diverse systems; 9) reading, interpreting, and applying technical instructions from manuals and documentation.

Ability to: 1) analyze, design, develop, implement, and oversee operation of information technology systems; 2) develop, implement, and monitor short- and long-term work plans; 3) manage and lead a project or work unit; 4) develop, implement, and monitor technical work standards; 5) plan, organize, review, and evaluate work of others; 6) assimilate information and arrive at reasonable course of action; 7) communicate effectively, both orally and in writing; 8) deal tactfully, effectively, and equitably with people. 9) establish and maintain effective working relationships with intra- and inter-departmental staff and vendors; 10) recruit and train Information Technology staff; 11) work both independently and as a member of a team.

Minimum Qualifications:

- 1. Bachelor's degree in computer science or closely related field including courses directly applicable to assigned technology area.
- 2. Six years of directly related experience.
- 3. An equivalent combination of education and experience.

Special Requirements: Programming languages and hardware experience. See Appendix for 'Current Industry Standards'.

Working Conditions

Work is performed in an office setting. Works in an environment with considerable pressure to meet goals.