Summary of Duties: Analyzes procedures, methods and operations of departmental computer-based information systems; designs, implements and recommends local area network information systems to improve efficiency and economy of City operations; performs cost benefit and feasibility analyses related to the modification of existing computer-based information systems, the maintenance and support of information systems, or, the implementation of new computer-based information systems; accesses information from automated files using high level retrieval languages; configures and coordinates departmental and personal computer systems; and performs related work.

Distinguishing Features: A Systems Analyst acts as a departmental resource providing technical and analytical expertise in automated system adaptation, design, implementation and support. Incumbents in this class perform analysis, planning, development, training, and support activities for automated, computer-based information systems used by departments Citywide. Employees are expected to conduct studies and make recommendations identifying departmental automation needs, design new applications using 4th generation languages, distributed systems and PC based application development, install, maintain and modify new and existing departmental systems, and, train users in system operation and use. Systems Analysts may act as lead workers and assign and review the work of other professional and technical employees. Assignments are received in general terms and work is reviewed in terms of results obtained.

Examples of Duties: Develops systems through use of departmental applications development software; conducts studies and surveys related to various system development options such as: evaluation of distributed system and personal computer requirements, transition from manual to computer operations, system trouble shooting, and data entry problems; identifies potential problem solutions; conducts vendor price and cost research; prepares detailed technical specifications such as computer memory size, keyboards, additional storage units and peripherals for local systems; prepares and evaluates cost/benefit analyses to provide support for department actions; interfaces with management regarding findings and recommendations;

Sets up and configures hardware and system components for local systems; prepares or upgrades system sites; loads and coordinates software such as operating systems, PC based distributed system application programs and utilities for local systems; designs input and output format and processing instructions for use by applications programmers; uses 4th generation applicationdevelopment tools such as FOCUS, SAS, PARADOX, D-Base 3 and Lotus to develop new systems and modify existing systems; prepares detailed descriptions of new local area systems including reports produced, data manipulation procedures and entry screens; tests new local area systems and applications, analyzing problems and implementing solutions; writes user manuals for local area systems;

Designs, coordinates and conducts end-user training programs; serves as trouble shooting consultant to PC and distributed system users by correcting errors and answering operating inquiries; assists end users to facilitate system operation; acts as technical liaison with end users and central data processing agency personnel, participating in network testing, proposing solutions and resolving minor communication problems; and may occasionally be assigned to other duties for training purposes to meet technological changes or emergencies;

Qualifications: A good knowledge of data processing fundamentals such as: types of hardware and their uses, communications principles and related equipment, and data processing (input/output) steps; a good knowledge of systems development methodology including: feasibility study requirements, analysis, systems design, testing, implementation and follow-up; a good knowledge of 4th generation application development tools such as SAS, Lotus, Symphony, D-base 3, Paradox, and Focus, a good knowledge of micro, mini and mainframe computers, peripheral equipment and their capabilities; a good knowledge of potential automation benefits; a good knowledge of the basic principles and concepts of data base design such as: field, record and file definitions, data field characteristics, and, differences between relational and hierarchical data base management systems; and a working knowledge of the basic components of the City's budget request process;

The ability to analyze and evaluate procedures, methods, operations and systems for the purpose of designing and recommending information systems to improve the efficiency and economy of departmental operations; the ability to recognize and operate basic system components such as printers, disk drives, tapes, plotters and related peripherals; the ability to access automated files and generate computer reports using high-level retrieval language; the ability to manipulate data from the central host computer; the ability to train and orient employees in the objectives, techniques and uses of computer-based information systems; the ability to read and comprehend technical material; the ability to communicate effectively both orally and in writing; the ability to prepare clear, concise and well organized written materials such as narrative and technical reports, user manuals, instructions, memos and budget documents; and the ability to deal tactfully and effectively with City officials, department management and other individuals, groups and agencies.

 Graduation from a recognized four-year college or university with a major in Computer Science or Information Systems; or, graduation from a recognized four-year college or university and two years of full-time paid experience in a class at the level of Management Assistant which provides experience in: (a) the development, analysis, implementation or major modification for new or existing computer-based information systems; or, (b) performing cost benefit, feasibility and requirements analysis for a computer-based information system; or, (c) performing system implementation activities including software and hardware acquisition, installation, modifications to

system configuration, and, system and application upgrade installation is required for Systems Analyst.

License: A valid California drivers' license and a good driving record may be required.

Physical Requirements: Strength to perform average lifting of less than 5 pounds and occasionally over 15 pounds; good speaking and hearing ability; and good eyesight.

Persons with medical limitations may, with reasonable accommodations, be capable of performing the duties of some of the positions in this class. Such determinations must be made on an individual basis in light of the person's limitations, the requirements of the position, and the appointing authority's ability to effect reasonable accommodations to the person's 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 and responsibilities of any
   position shall be.