

# **SYSTEMS MANAGER - DEPARTMENT OF EMERGENCY RESPONSE Tompkins County**

**Department:** Department of Emergency Response

**Classification:** Competitive

**Labor Grade:** 15

**Approved:** 0

## **MINIMUM QUALIFICATIONS:**

(a) Graduation from a regionally accredited or New York State registered four-year college or university with a Bachelor's Degree in Computer Science, Computer Engineering, or Communications Technology or a related field **AND** three (3) years of full-time paid (or the equivalent part-time) experience in computer application design and analysis using modern languages, database systems, radio communication systems or 9-1-1 dispatch; **OR**

(b) Graduation from a regionally accredited or New York State registered two-year college with an Associate's Degree in Computer Science, Computer Engineering, or Communications Technology or a related field **AND** five (5) years of full-time paid (or the equivalent part-time) experience in computer application design and analysis using modern languages, database systems, radio communication systems or 9-1-1 dispatch; **OR**

(c) Graduation from high school or possession of a high school equivalency diploma **AND** seven (7) years of full-time paid (or the equivalent part-time) experience in computer application design and analysis using modern languages, database systems, radio communication systems or 9-1-1 dispatch.

## **SPECIAL REQUIREMENTS:**

Must possess a valid New York State motor vehicle operator's license or otherwise demonstrate the ability to meet the transportation requirements of the job.

Tompkins County is Committed to Equity and Inclusion. We encourage those with similar values to apply.

## **DISTINGUISHING FEATURES OF THE CLASS:**

This is a technical position primarily responsible for developing, maintaining, researching, recommending installing, integrating, networking, maintaining, troubleshooting and repairing a variety of hardware and software in support of the public safety radio communications system, 911 phone system and Computer Aided Dispatch (CAD) system. Systems administration includes maintenance, planning and implementation of 9-1-1 phone system equipment, radio communications equipment and towers, and the CAD system. The incumbent will work closely with the Information Technology Services Department (ITS), GIS and other jurisdictions within Tompkins County, including local, state and federal agencies, as well as a variety of vendors, to support a collaborative public safety system. This position works under the general direction of the Director of the Department of Emergency Response with considerable leeway allowed for the exercise of independent judgment when planning and carrying out the duties of the position and supervises the CAD System Specialist. This position requires a high degree of autonomy and the ability to make daily independent judgments to ensure that all public safety systems are fully operational twenty-four hours per day, seven days per week, three hundred and sixty-five days per year. In support of these activities, the incumbent will perform all related duties as required.

## **TYPICAL WORK ACTIVITIES:**

- Receives, evaluates, prioritizes, schedules work and takes action on requests for repair, installation or modification of radio, 9-1-1 telecommunications equipment or CAD software;
- Conducts in-depth research as required to develop maintenance procedures with minimal disruption in service;
- Supervises the maintenance of the CAD system with minimal disruption in service;
- Maintains 9-1-1 telecommunications system with minimal disruption in service;
- Maintains public safety communications system with minimal disruption in service;
- Provides Project management related to the radio, 9-1-1 telecommunications equipment or CAD;
- Oversees maintenance of primary and back-up 9-1-1 centers and all related systems;

- Integrates radios, computer terminals and phone systems into a networked environment;
- Establishes technology standards, procedures and policies related to the implementation and use of hardware, software and collaborative data-sharing functions;
- Facilitates information and discussion and coordinates activities with end users and local agencies; partners and jurisdictions to assure seamless delivery, provide program analysis and reports;
- Coordinates activities with other agencies, partners and jurisdictions to assure seamless service delivery;
- Develops appropriate tests to assure system reliability and implements all programs in appropriate test environments for parallel operation with current system;
- Provides help desk support for dispatchers and other members and establish a system for 24/7 response to emergency calls for hardware, software, networking, troubleshooting and/or repair;
- Researches and develops cost estimates for telecommunications equipment, radio equipment, software and installation for departmental budgetary analysis and training;
- Trains and coordinates end users on the policies and use of radio equipment and/or communications systems or devices, including features, usage and capabilities;
- Assists end users to monitor security and compliance of information and communications systems and sensitive information;
- Coordinates with the Professional Development Coordinator to develop, communicate and distribute policies and best practice documentation for system usage and data of administered programs for county personnel and external agencies;
- Monitors and maintains a fixed asset inventory of software, hardware and related peripheral equipment;
- Determines need for tools, spares, support equipment and wire necessary to support the radio communications system;
- Develops, reviews and evaluates information and communication system technical requirements, bids, RFIs and RFPs along with related coordination and supervision of presentation, evaluation and testing. This position will also manage the installation and implementation of delivered solutions;
- Provides technical assistance with drafting, analyzing and negotiating contracts for equipment, systems and professional services;
- Assures vendor compliance with contract specifications and long-term system support and maintenance agreements;
- Communicates with vendors and other technical support personnel to resolve problems regarding microcomputer/mainframe/network equipment, maintenance, etc.;
- Manages network peripherals and server-based software to assure system functionality, compatibility, security, integrity and effective resource sharing;
- Installs and troubleshoots hardware, software and network connections;
- Develops, maintains and recommends computer hardware and software systems;
- Integrates telephones, radios, computers and network equipment;
- Conducts in-depth research as required to develop and maintain the computer systems with minimal disruption in service;
- Provides formal and informal user training on various microcomputer, radio and network hardware and software;
- Determines user requirements, analyzes data, plans, develops, tests and refines custom computer programs as required using diverse programming languages and environments;
- Manages the installation, testing and evaluation of delivered materials;
- Assures compatibility and coordinates the operation of microcomputer/network hardware and software;
- Responds to emergency calls from users or malfunctions in computer systems;
- Communicates with dissatisfied users to better implement future requests and solve immediate problems;
- Researches rapidly changing technology using trade journals and other forms of media to provide recommendations and input for future anticipated needs;
- Installs, configures, tests and trains users on system software and gateway interfaces including NYSPIN, Dialer Alarms, Radio, Mobile Data Terminals, DEK Status, Remote Printers, Net Clock, the E-9-1-1 system, CAD, and other distributed software components;

#### **FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:**

- Thorough technical knowledge of telecommunications including hardware and software;
- Thorough technical knowledge of microcomputers including hardware and software;
- Thorough technical knowledge of the operation of radios, two-way radio communications systems, including FCC regulations, computers and telephone equipment;
- Thorough knowledge of databases;
- Thorough knowledge of the geography of the county, including locations in the City of Ithaca, towns, villages, other special districts, police department, fire department and EMS operating areas;
- Good knowledge of the concepts, principles and methodology of systems analysis as applied to computer programming;

- Good knowledge of governmental functions;
- Good knowledge of the Incident Command System (ICS) and National Incident Management System (NIMS);
- Good knowledge of the Communications Asset Survey & Mapping (CASM) tool;
- Good knowledge of applicable laws, rules and regulations governing the use of software, as well as the judicial and administrative interpretation related to these;
- Good knowledge of computer network hardware, protocols, drivers, and related software;
- Good technical ability and knowledge of changing technology;
- Skill in the operation of computer and communications equipment;
- Ability to learn new technology;
- Ability to establish and maintain working relationships with department heads, computer users, software contractors and members of the public safety community requesting service;
- Ability to train users in the use of hardware, software, radio and telecommunications equipment;
- Ability to establish and maintain effective working relationships;
- Analytical reasoning ability, resourcefulness, dependability;
- Ability to communicate effectively both orally and in writing;
- Ability to write the technical portions of specifications for bid proposals;
- Good judgment;
- The employee's physical condition shall be commensurate with the demands of the position;