Director of Information Systems

Department:	**Administration**	Location:	**Administrative Office**
Grade:	**17**	Date:	**10/2020**

DEFINITION:

Manages implementation of information and communications infrastructure. Plans for and pursues innovative strategies to develop technical infrastructure, implement appropriate software solutions and manage organizational change. Plans and directs new hardware and software deployments while controlling costs. Secures data, applications and sensitive data from external threats Performs Administrative, professional, and technical work, requiring the exercise of considerable judgment in collecting and analyzing data to provide critical information necessary for effective managerial decision-making. Develops and implements strategies and tools for data warehouse implementation, website deployment, data acquisition, automation, analysis, maintenance, dashboard development, reporting and visualization.

DISTINGUISHING CHARACTERISTICS:

Areas of responsibility include, but are not limited to, the full range of information systems and telecommunications activities, including developing, implementing, planning for and maintaining information systems.

Requires the exercise of considerable independent judgment in managing change and organizational adoption of effective IT solutions.

Establishes the strategic direction of CSWD's information Systems and executes this strategy in collaboration with the leadership team.

Strong data analysis skills with the ability to gather, store, interpret and display data.

Database administration and programming.

Strong attention to detail and quality with the ability to both process and understand the data.

Ability to sift through all incoming data with the goal of discovering previously hidden insight, which in turn can benefit CSWD's mission or address a pressing business problem.

Has access to confidential data records.

SUPERVISORY CHARACERISTICS:

Works under the administrative direction of the Executive Director.

Supervisors one full-time position, IT Specialist, and recruits and supervises interns and temporary staff as needed.

Negotiates and manages all IT vendor services and contracts of a highly technical nature.

EXAMPLES OF WORK PERFORMED:

Director of Information Services:
- Determines user requirements, recommending practical solutions, and leading district-wide efforts to improve the effective use of technology
- Develops and implements CSWD's data warehouse and ensures data quality.
- Manages change in reporting/analytics environment by training managers in the adoption of new reporting tools, providing better access to historical data, centralizing resource management and developing custom solutions to better meet District needs.
- Works closely with managers to prioritize needs and address key business strategies that will influence how the organization approaches future challenges and conditions.
- Maintains technical aspects of CSWD, Green Mountain Compost, and Vermont Product Stewardship Council web presence, including hosting agreements, host server space and transfer limits, website plug-ins, upgrades and fixes, troubleshooting, reporting analytics, upgrades, and contracts. Will work with web development contractor

- Manages and develops dashboard intranet website, enterprise data sharing, and custom software development to enhance District operations. Creates repository (Git) to establish source code version control management.
- Acquires data and maintains databases and data systems. Develops and maintains automation of data collection from District POS systems, scales, temperature probes, variable speed fans, and weather station.
- Coordinates changes to databases, and tests and implements the database applying knowledge of database management systems.   Analyzes data to ensure quality control in data received and entered.
- Identify historical inconsistencies in data warehouse, corrects and identifies improvements and/or opportunities to provide new quality control measures.
- Identifies, analyzes and interprets trends or patterns in complex data sets, both originating from the agency and from other public/private entities.
- Interprets data and analyzes results, using statistical techniques to prepare written summaries, visualizations, and formal reports to managers upon request to provide meaningful information to managers.
- Provides geospatial analysis of data as needed (i.e. service delivery analysis, facilities management, consolidated hauling analysis, etc.)
- Presents findings and reports to employees, managers, and to the Board of Commissioners upon request.
- Tracks and catalogs IT assets, user accounts, software and phones.
- Creates and maintains operation and procedure manuals for data warehouse and databases.
- .Works with outside vendors to implement security measures to safeguard IT resources.
- Evaluates and recommends, and budgets computer hardware, network hardware, peripheral equipment, telephony and software.
- Installing, configuring, maintaining personal computers, virtual machines and servers in conjunction with contractors.
- Troubleshooting user and software problems, identifying the source, determining possible solutions, and correcting issues in relation to computers and related devices.
- Installation and management of surveillance equipment (Cameras, NVR's and/or DVR's).
- Tracking and documenting computer problems and resolution for future reference.
- Planning, recommending, and coordinating computer training needs of CSWD staff.
- Working with outside vendors and contractors requiring considerable knowledge of computer systems.
- Wordpress deployment and webpage development including managing third party contracts.

Must adhere to District safety programs and policies.

Errors could result in confusion and delay, adverse public relations, a decreased level of services, and excessive costs for service delivery and could severely impact the organization with legal and financial repercussions, due to the possibility that errors may not be immediately detected.

Performs all other work as assigned.

ESSENTIAL DUTIES:

Ability to function under pressure and meet deadlines while maintaining a cheerful and helpful attitude.

Ability to Collaborate with Managers to facilitate change management and enhance access to information technology and services.

Ability to effectively and responsibly oversee the database systems.

Ability to install, develop/program, configure, and maintain computer systems and software.

Ability to deal efficiently and tactfully with employees, outside vendors, and the general public.

Ability to work independently and manage position initiatives, exercising independent judgment.

WORKING CONDITIONS:

Minimal physical effort with occasional moderate physical effort in carrying, lifting, or moving materials.

Good working conditions with occasional exposure to unpleasant elements.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Ability to write and speak clearly, communicate complex ideas and findings, and translate data into an understandable document.

Comprehensive knowledge of word processing, spreadsheets, relational database systems, statistical, and accounting software.

Knowledge of data governance practices, in data administration, in data integration, and in data modeling.

Knowledge of computer database management, networking management, and general computer skills.

Strong attention to detail as well as good problem solving, time management, and logic skills.

Minimum 5 years software programming and configuration experience (T-SQL, PHP, JavaScript, WordPress, Python, Visual Basic, and LAMP stack development)

Experienced with SQL Server, including scripts, ETL tools such as SSIS, and creating and running reports with tools such as Crystal Reports and SSRS.

General skills in programming in procedural SQL, Visual Basic/C#, Python, PHP and Javascript.

RECOMMENDED QUALIFICATIONS:

Master's degree in statistics, computer science, or business administration, or related field; seven to ten years of professional experience, or any equivalent combination of education and experience.