# Caroline County Board of Supervisors Special Meeting Agenda Executive Summary

Meeting Date:	September 14, 2021  Proposed New Full-Time Position in Information Technology Department	
Title:		
(Check Mark)		
x Consent x Action No Action (Information Only) Resolution		Closed Meeting Public Hearing Ordinance PowerPoint Presentation

Background: Broadband consulting services are urgently needed to assist Information Technology (IT) staff with the increased workload associated with the County's focus on expanding broadband service to County residents. The IT Department currently consists of the Director of Information Technology and one (1) IT Technician. It is impossible for existing IT staff to keep up with the ever-increasing cyber security challenges to the County's computer network, while simultaneously assisting in the preparation and administration of multiple VATI grant applications, acting as staff support to the Caroline Broadband Advisory Committee, helping to create a plan for universal broadband coverage in the County and completing special projects (such as the installation of the new phone system).

As a result, staff obtained a proposal for general broadband consulting services from Broadband Telecom (the company retained by the County to prepare the FY 2021 and FY 2022 VATI grant applications). Possible tasks identified for the consultant include:

- Identifying additional sources of funding for current and upcoming broadband expansion projects, including all state and federal outlays specifically allocated for broadband
- Reviewing and finalizing Caroline County's plan for achieving universal broadband coverage
- Assisting the Caroline County Broadband Committee with research, analysis and technical review

- Coordinating with Rappahannock Electric Cooperative (REC) and Atlantic Broadband (ABB) on a possible project to expand broadband service to citizens by utilizing fiber connections to REC substations
- Developing a plan to use the REC fiber utility network to interconnect County facilities
- Providing public training and awareness required under VATI grant guidelines

Analysis: County Administrator Charles Culley, Deputy County Administrator Alan Partin, Finance Director Tomeka Smith and Information Technology Director David Sadler reviewed a proposal from Broadband Telecom to provide the services described above. The proposal is presented in a monthly retainer format at a cost of \$10,000 per month (80 hours at \$125 per hour). The contract would remain in place for six (6) months with an option to renew or renegotiate at that time.

At \$10,000 per month, the cost of the services will total \$60,000 during the initial timeframe of the agreement. Many of the identified services will likely be ongoing beyond the initial six-month window of the retainer. Other services beyond the scope of the retainer (such as grant management) will be needed in the event the County's FY 2022 VATI grant application(s) are successful. As a result, obtaining general broadband services from a consultant will become prohibitively expensive over time. Further, it is unknown how many hours will actually be needed for each task per month, making it unclear whether a retainer style agreement is justified.

For these reasons, staff believes that hiring an additional full-time IT employee is a better option than entering into a six-month retainer agreement with Broadband Telecom. The creation of a new position along the lines of a Network Support Specialist that can take the day to day burden of managing and protecting the network off of Mr. Sadler while also assisting in the daily functions of the department is proposed. This would enable Mr. Sadler to spend more time focusing on the big picture, including the broadband expansion related duties (as described in the bullets in the background section) that he is already heavily involved and invested in.

Staff believes there was already a need for additional IT staff prior to the large time demands placed on the department by the County's various broadband initiatives. The City of Fredericksburg, for example, currently has 9 full-time (and one part-time) employees in its IT Department (excluding two GIS employees). Caroline County's need for employees in the IT realm will only continue to grow in the coming years. An opportunity currently exists to add badly needed staff while utilizing federal American Rescue Plan Act (ARPA) funds to cover the initial cost.

While the addition of a new full-time employee will help manage the existing and upcoming IT workload considerably, the services of Broadband Telecom will still be

needed for task specific functions such as identifying federal and state grant funding opportunities and managing the implementation of successful VATI grant applications.

**Update:** During the discussion of this item at the September 7 special meeting, the Board requested an opportunity to review the job description for the position before taking action on the request. A proposed job description for the Network Support Specialist I position is attached for the Board's review.

**Budget Impact:** The estimated cost to create the new full-time Network Support Specialist position is \$89,456, (\$60,000 salary, plus benefits). The proposed source of funds is the American Rescue Plan Act.

Actions Requested of the Board of Supervisors: The following actions are requested:

- 1) Authorize staff to create new full-time IT position at a Grade 21 (Minimum \$51,385.52 to Maximum \$82,216.83) on the County Pay Plan as described above and begin recruitment for the position immediately; and
- 2) Approve supplemental appropriation to the Fiscal Year 2022 IT Department budget in the amount of \$90,000.

Classification Title: Network Support Specialist I

**Department:** Department of Information Technology

**Reports to:** IT Director

## **JOB SUMMARY**

Under limited supervision, performs technical work to assist with administration and support of the County's local and wide area network systems. Work involves monitoring operations of critical equipment, reviewing log files and reports, assisting technicians with problem resolution, installing hardware/software, and reviewing and modifying hardware/software configurations. Work also involves maintaining system standards and network documentation, monitoring available resources for product updates and service notices, monitoring the firewall for possible intrusions, updating Intranet web site, and performing other related tasks. May be required to cover duties of or assist the computer technician in resolving P.C. related tickets as available.

This position is essential. Personnel occupying this position may be scheduled to work regardless of weather conditions and/or when general county offices are closed.

## **ESSENTIAL JOB FUNCTIONS**

- Monitors operations of critical equipment: reviews critical application log files and reports; reviews help desk tickets and error reports and takes appropriate actions; monitors and analyzes network traffic.
- Configures, maintains, and administers local area network (LAN) and wide area network (WAN) systems: installs switches, routers, and other hardware; installs operating systems, firmware, and other software; reviews and modifies hardware/software configurations; installs, tests, and repairs network cables and telephone cables; installs updates to software applications; conducts scheduled preventive maintenance of equipment.
- Provides technical support, information, and assistance to system users in operation of network systems, printers, hardware, or software: assists technicians with problem resolution; provides firewall software support.
- Consults with Network Engineer or other contractors, directors, county staff, and vendors to review projects/activities, review/resolve problems, and receive advice/direction; participates in IT staff meetings.
- Assists in the development of, and maintains, system standards and network documentation.
- Monitors available resources to obtain product updates and service notices.
- Determines resource(s) utilization; maximizes current resources; predicts future growth needs based on historical and current data.
- Works with users to ensure proper performance of the network and to resolve problems.
- Installs hardware and software, and configures as necessary.

- Enters information into support tracking software.
- Monitors inventory levels of equipment, supplies, tools, and other materials: ensures availability of adequate materials to conduct work activities; initiates requisitions for new/replacement items.
- Maintains logs/documentation of work activities, computer operations, system modifications, maintenance activities, installations, system configurations, procedures, and other activities. Update Help desk with all tasks performed and time spent on each task.
- Prepares or completes various forms, reports, correspondence, purchase requisitions, flow charts, user manuals, usage/bandwidth documentation, lists, schedules, presentations, or other documents.
- Receives various forms, reports, correspondence, help desk tickets, error reports, network
  documentation, user manuals, product specifications, web pages, policies, procedures,
  manuals, reference materials, or other documentation; reviews, completes, processes,
  forwards or retains as appropriate.
- Communicates with supervisor, employees, other departments, system users, vendors, service providers, consultants, the public, and other individuals as needed to coordinate work activities, review status of work, exchange information, or resolve problems.
- Participates in meetings with vendors and consultants, Information Services staff and administration.
- Maintains a working knowledge of a variety of computer languages, operating systems, and software programs associated with work activities, which may include word processing, spreadsheet, database, desktop publishing, presentations, scanning, web administration, network management, communications, diagnostic, utilities, Internet, and email; maintains working knowledge of various computer programs utilized by county departments.
- Maintains an awareness of new products, technologies, trends, and advances in the profession; reads professional manuals and publications to increase knowledge of computer operations; participates in product training or continuing education activities; attends workshops, seminars, and training sessions as appropriate.
- Performs basic maintenance of computer/network system: backs up computer data and replaces backup tapes; replaces paper, ink, or toner; cleans equipment and peripherals; troubleshoots printer problems.
- Performs general tasks, which may include making copies, sending/receiving faxes, binding documents, distributing documentation, or processing incoming/outgoing mail.
- Provides assistance to other employees or departments as needed.
- Performs other related duties as required.

To perform this job successfully, an individual must be able to perform the essential job functions satisfactorily. Reasonable accommodations may be made to enable individuals with disabilities to perform the primary job functions herein described.

Associate's Degree or Vocational/Technical Degree with training emphasis in Computer Information Systems and Networking Systems Administration or industry certifications such as-Microsoft Certified Azure Fundamentals, Net+, Microsoft Windows server administration or Cisco Certified Technician (CCT) either Datacenter or Routing & Switching; supplemented by one (1) to three (3) years of previous experience and/or training involving network administration, computer operations, hardware/software maintenance/repair, and technical support; or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. HP, Fortinet and Ubiquiti experience is preferred.

Possession of a valid driver's license issued by the Commonwealth of Virginia.

## KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of the policies, procedures, and activities of the County and of departmental practices as they pertain to the performance of duties relating to the position of Network Support Specialist.
- Knowledge of principles, practices, and methods associated with installation, configuration, and operation of various computer network systems, peripheral components, and software applications.
- Knowledge of the principles and practices associated with administration of local area network (LAN) and wide area network (WAN) systems.
- Knowledge of the operation of various computer languages, operating systems, and software programs.
- Previous HP/Aruba, Fortinet, and Ubiquiti experience a plus.
- Knowledge of the methods associated with analyzing, troubleshooting, and resolving problems involving operation of computer hardware and software, including preventive maintenance and general repair of computer components.
- Knowledge of the terminology, principles, and methods utilized within the department.
- Knowledge of the laws, standards, and regulations pertaining to the essential duties and responsibilities of the position.
- Ability to comprehend, interpret, and apply regulations, procedures, and related information.
- Ability to keep abreast of any changes in policy, methods, computer operations, equipment needs, policies, etc., as they pertain to departmental operations and activities.
- Ability to effectively communicate and interact with supervisors, members of the general public, and all other groups involved in the activities of the department.
- Ability to effectively provide training and technical support to system users.
- Ability to assemble information and make written reports and documents in a concise, clear and effective manner.
- Ability to use independent judgment and work with little direct supervision as situations warrant.

- Ability to exhibit mathematical ability to handle required calculations using percentages and decimals. Is able to read, understand, and interpret technical and computer reports and related materials.
- Ability to review, classify, categorize, prioritize, and/or analyze data. Includes exercising
  discretion in determining data classification, and in referencing such analysis to
  established standards for the purpose of recognizing actual or probable interactive effects
  and relationships.
- Ability to provide guidance, assistance, and/or interpretation to others regarding the application of procedures and standards to specific situations.
- Ability to read a variety of informational and technical documentation, directions, instructions, and methods and procedures.
- Ability to write reports with proper format, punctuation, spelling and grammar, using all parts of speech.
- Ability to speak with and before others with poise, voice control, and confidence using correct English and well-modulated voice.
- Ability to carry out instructions furnished in written, oral, or diagrammatic form. Involves semi-routine standardized work with some latitude for independent judgment concerning choices of action.
- Ability to utilize a wide variety of reference, descriptive, advisory and/or design data and information.
- Ability to perform addition, subtraction, multiplication and division; ability to calculate
  decimals and percentages; may include ability to perform mathematical operations with
  fractions; may include ability to compute discount, interest, and ratios; may include ability
  to calculate surface areas, volumes, weights, and measures.
- Ability to communicate professionally and respectfully.
- Must be adaptable to performing under minimal stress when confronted with an emergency.

#### PHYSICAL REQUIREMENTS

Must be physically able to operate a variety of office machines, tools and equipment, such as a personal computer, laptop computer, printer, plotter, network electronics, file servers, telephone equipment, general office equipment, cable tester, testing instruments, or hand tools. Tasks require the ability to exert light physical effort in sedentary to light work, but which may involve some lifting, carrying, pushing and/or pulling of objects and materials of medium weight (20 to 80 pounds). Tasks may involve extended periods of time at a keyboard or work station. Requires the ability to inspect items for proper length, width, and shape, visually with job-related equipment. Requires the ability to coordinate hands and eyes in using job-related equipment. Requires the ability to handle a variety of items, job-related equipment, control knobs, switches, etc. Must have the ability to use one hand for twisting or turning motion while coordinating other hand with different activities. Must have minimal levels of eye/hand/foot coordination. May require the ability to differentiate colors and shades of color. Requires the ability to talk and/or

hear (talking - expressing or exchanging ideas by means of spoken words; hearing - perceiving nature of sounds by ear).

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