

Request for Qualifications

IP Telephony System



Brunswick County, North Carolina

MIS Department

(Date)

Table of Contents

Section 1	RFQ Timeline.....	6
Section 2	General Information.....	7
2.1	Purpose & Scope.....	7
2.2	Coverage & Participation.....	7
2.3	Original RFQ Document.....	7
2.4	Professional Expectations.....	8
2.5	Proposal Contents.....	8
2.6	Warranty.....	8
2.7	Condition of Goods.....	8
2.8	Delivery.....	8
2.9	Time for Opening Responses.....	9
2.10	Considerations.....	9
2.11	Proposal Evaluation.....	9
Section 3	Insurance and Indemnity.....	10
3.1	Indemnity.....	10
3.2	Minimum Insurance Coverage Requirements.....	10
3.3	Additional Insurance and Indemnification Requirements.....	10
Section 4	Current Voice Communications.....	12
4.1	Remote Locations.....	12
4.2	Current Voice Mail.....	12
4.3	Unified Communications.....	12
4.4	Analog.....	13
4.4.1	Faxing.....	13
4.4.2	Modems.....	13
4.4.3	Analog Devices.....	13
4.5	Station Distribution.....	13
4.6	Dialing Plan.....	13
4.7	Data Environment.....	13
4.8	Network Infrastructure.....	14
Section 5	Future System Requirements.....	14
5.1	General Description.....	14

5.2	Architecture.....	14
5.3	Remote Locations.....	14
5.4	Network Infrastructure.....	15
5.4.1	IP Station Power over Ethernet (POE).....	15
5.4.2	IP Station Quality of Service (QoS).....	15
5.5	Virtualization.....	15
5.6	Industry Standards.....	16
5.7	Session Initiated Protocol (SIP).....	16
5.8	E911 Services Support.....	16
5.8.1	PSAP Interface.....	16
5.8.2	Notifications.....	16
5.8.3	Relocations.....	16
5.8.4	Virtual Office Users.....	17
5.8.5	E911 Unavailability.....	17
5.9	Analog.....	17
5.9.1	Faxing.....	17
5.9.2	Modems.....	17
5.9.3	Analog Devices.....	17
5.10	System Features.....	17
5.11	Station Features.....	18
5.12	Gigabit Ethernet Connectivity.....	19
5.13	Firmware Updates.....	19
5.14	Push Features.....	19
5.15	Desktop Instrument Options and Add-On Modules.....	19
5.16	Wireless Devices.....	20
5.17	Mobile Cellular Extension Option.....	20
5.18	IP Station Discovery.....	20
5.19	Conferencing.....	21
5.19.1	Multi-Party.....	21
5.19.2	Conference Bridges.....	21
5.20	Additional System Features.....	21
5.21	Security Features.....	21
5.22	Reporting.....	21
5.22.1	VOIP Monitoring.....	21
5.22.2	Call Detail Records.....	22

5.22.3	Customizing Reports.....	22
5.23	Unified Communication Solution.....	22
5.23.1	UC Functionality.....	22
5.23.2	UC Hardware/Software.....	22
5.23.3	Mobile Clients.....	22
5.23.4	Third-Party Integration.....	22
5.23.5	Multiple Line Appearance.....	23
5.23.6	UC Administration.....	23
5.23.7	UC Administration.....	23
5.23.8	Presence.....	23
5.23.9	Instant Messaging.....	24
5.24	Call Recording.....	24
Section 6	Automatic Call Distribution.....	24
6.1	Basic ACD Call Center Requirements.....	24
6.2	ACD Station Equipment.....	24
6.2.1	Supervisor Workstation.....	24
6.3	Basic ACD Features.....	24
6.4	Announcements.....	25
6.5	Routing & Queuing.....	25
6.6	Call Processing Functions.....	26
6.7	Agent Functions.....	26
6.8	System Call Prompts.....	27
6.9	ACD Reporting.....	27
6.10	Real Time Reports.....	28
Section 7	Reliability & Availability.....	28
7.1	Server Failure Events.....	28
7.2	Failure Mode Operation.....	28
7.3	Redundancy.....	28
7.4	Call Survivability.....	28
7.5	Alarms.....	28
7.6	Survivability Options.....	29
Section 8	Security.....	29
Section 9	Enterprise Management Solution.....	29
9.1	User Interface & Tools.....	29
9.2	Virtualization.....	29

9.3	Administration Functions.....	29
9.4	Monitoring.....	30
9.5	Upgrades.....	30
9.6	Active Directory Integration.....	30
9.7	Storage & Backup.....	30
Section 10	Training.....	30
Section 11	Maintenance.....	31
Section 12	Timeline for Completion.....	31
Section 13	Vendor’s Understanding of the RFQ.....	31
Section 14	Vendor Incurred Costs.....	31
Section 15	Guidelines.....	31
Section 16	Submission of Request.....	32
Section 17	Additional Information.....	33
	Acceptance of Terms.....	34

Table of Figures

Figure 1	County Complex Map.....	35
Figure 2	Station Distribution.....	36
Figure 3	Analog Lines/Devices.....	38
Figure 4	Remote Locations.....	41

1. RFQ Timeline

Advertisement/Release of RFQ	September 1, 2016
Pre-response Meeting	Sept. 16 th , 2016; 10:00 AM EST David Sandifer Admin Building 2 nd floor Conference Room 30 Government Cntr Dr., Bolivia
First Deadline for Receipt of Questions	September 20, 2016 3:00 PM EST All questions must be emailed to Deborah.isenhour@brunswickcountync.gov County will respond by Sept. 23, 2016 3:00 PM EST
Second Deadline for Receipt of Questions	September 27, 2016 3:00 PM EST All questions must be emailed to Deborah.isenhour@brunswickcountync.gov County will respond by September 30, 2016 3:00 PM EST
Deadline for Receipt of Responses	October 7, 2016 3:00 PM EST

2. General Information

2.1 Purpose and Scope

Brunswick County, hereinafter known as “County”, seeks an experienced firm to provide a solution for an on premise/virtual VOIP telephone and voicemail system to replace all Nortel telephone and voicemail systems that are currently being used.

The primary goals of replacing the current telephone system are:

- Providing users with integrated, uniform functionality for all telephone stations across the County.
- Providing a resilient communications network with high fault tolerance, capable of rapid restoration and redeployment in the event of a disaster.
- Reducing monthly recurring costs by leveraging existing network infrastructure and eliminating disparate leased lines
- Improving work efficiency by offering unified communications to end-users
- Investing in a communications system that is scalable to grow with the County well into the future.

The new system shall include Unified Communications and integrate with the county’s Microsoft 365, Exchange, and Active Directory systems. All existing telephones should be replaced with equivalent IP phones.

The county requires that any system have the capability to service remote locations with the same features and functionality as the main office.

The county also requires a plan for redundancy, either due to emergency, power outage or capacity issues.

The system purchased is expected to have a supported service life of at least 8-10 years and to be compatible to the maximum extent practical with evolving technological innovations that can be reasonably foreseen.

2.2 Coverage & Participation

Any IP telephony solution and agreement resulting from this RFQ shall apply to all Brunswick County locations and facilities. Should the selected solution be implemented on a limited basis, Brunswick County reserves the right to add and/or delete elements and participation locations at any time without prior notification and without additional liability or obligation of any kind to the solution provider.

2.3 Original RFQ Document

All stated terms and conditions, exhibits and other attachments in the original form of the RFQ are to remain unaltered in respondents’ proposals. Each stated term and condition, exhibit and other attachments should be addressed in the response. Alternate proposals to the stated terms and conditions, exhibits and

other attachments are to be stated in comparative relation to the original RFQ requirements. Brunswick County reserves the right to reject any and all proposals.

2.4 Professional Expectations

The Contractor acknowledges that Brunswick County Government will rely on Contractor's ability, expertise and knowledge to provide a solution for Brunswick County. The contractor shall be obligated to exercise the highest standard of care in performing their obligation. Also the Contractor will direct its personnel to respect and abide by the authority of Brunswick County Government and/or its consultants on all matters related to the Contractors operation at the Site, including but not limited to: Use of site resources such as elevators and loading docks, and the coordination of same; Connection to and use of utilities; Safety issues; Trash removal and site cleanliness; Site security.

2.5 Proposal Contents

A complete list of all equipment proposed must be provided, specifying manufacturer and individual model numbers. All equipment and component parts furnished shall be new, meet the requirements stated herein, and be in operable condition at the time of delivery.

2.6 Warranty

Proposer warrants that all goods furnished shall be free from all defects, and shall conform in all respects to the technical specifications established by the County.

Proposer shall submit with the proposal form a copy of the manufacturers' warranties against defects in materials and workmanship covering the goods proposed.

2.7 Condition of Goods

All goods shall be new and in no case will used, reconditioned or obsolete parts be accepted.

2.8 Delivery

On -time delivery of goods and services is an essential part of the consideration. Upon notification of delivery delay, Brunswick County at its sole option, may cancel the order or extend delivery times. Such extension of delivery times will not be valid unless extended in writing by an authorized representative of the County. To mitigate or prevent damages caused by delayed delivery, County may require contractor to deliver additional quantity utilizing express modes of transport, and or overtime, all costs to be contractor responsibility. Brunswick County reserves the right to procure from alternate source, and/or refuse receipt of or return delayed deliveries, at no cost to the County.

2.9 Time for Opening Responses

Responses will be opened promptly after the submission closing date. Any responses received after the scheduled closing time for the receipt of responses will not be considered.

2.10 Considerations

In determining the most qualified respondent in accordance with NCGS 143-129.8, Brunswick County will consider, among other factors:

- 1) modern, accepted practices
- 2) engineering, design, efficiency and workmanship
- 3) maintenance costs
- 4) availability of service and parts inventory
- 5) operation costs
- 6) delivery time
- 7) warranties provided
- 8) Proposer's experience, design skills and production capabilities
- 9) completeness and appropriateness of response submitted with the County's stated goals
- 10) performance (based on County's previous use of the same or similar equipment made by the manufacturer).

Proposals will be evaluated for conformance to the specification requirements. To be considered a responsive Proposer, the Proposer must submit with the proposal documentation demonstrating Proposer's capability and experience in the design and implementation of similar systems. A significant weight of the evaluation will be the expertise, customer support structure, training program for users, customer response record, and financial stability of the Proposer.

An evaluation committee will study proposals.

Finalists may be invited to an interview, telephone consultation, or receive requests for clarifications. The evaluation committee's final recommendations will be based upon an analysis of the total package offered to the County.

2.11 Proposal Evaluation

Proposals shall be evaluated to determine which response is most advantageous to the County. The County reserves the following rights:

- 1) To waive informalities in the proposal or proposal procedure
- 2) To reject the response of any persons or corporations that have previously defaulted on any contract with Brunswick County or who have engaged in conduct that constitutes a cause for debarment or suspension
- 3) To reject any and all responses
- 4) To re-advertise for proposals previously rejected
- 5) To otherwise provide for the purchase of such equipment, supplies materials and services as may be required herein

6) To increase or decrease the quantity herein specified

3. Insurance and Indemnity

3.1 Indemnity

The Selected Vendor shall indemnify and hold the County, its agents and employees, harmless against any and all claims, demands, causes of action, or other liability, including attorney fees, on account of personal injuries or death or on account of property damages arising out of or relating to the work to be performed by Vendor hereunder, resulting from the negligence of or the willful act or omission of Vendor, his agents, employees and subcontractors.

3.2 MINIMUM INSURANCE COVERAGE REQUIREMENTS

At contractor's expense, contractor shall procure and maintain the following recommended lines of insurance according the scope of work. The County may choose to elect higher or lower coverages according to the work performed. Contractors must be insured by a licensed agent in North Carolina and rated A-VII or better by A.M. Best.

COMMERCIAL GENERAL LIABILITY

Covering all operations involved in this Agreement.

\$2,000,000 General Aggregate
\$2,000,000 Products/Completed Operations Aggregate
\$1,000,000 Each Occurrence
\$1,000,000 Personal and Advertising Injury Limit
\$ 5,000 Medical Expense Limit

WORKERS' COMPENSATION

Statutory limits covering all employees, including Employer's Liability with limits of:
\$500,000 Each Accident
\$500,000 Disease - Each Employee
\$500,000 Disease - Policy Limit

COMMERCIAL AUTOMOBILE LIABILITY

\$1,000,000 Combined Single Limit – Any Auto

PROFESSIONAL LIABILITY

\$1,000,000 Per Occurrence

3.3 ADDITIONAL INSURANCE AND INDEMNIFICATION REQUIREMENTS

Contractor agrees to defend, indemnify, and hold harmless Brunswick County, its officers, employees, and agents from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees, or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind in connection with or arising out of this Agreement and/or the performance hereof that are due in part or in the entirety of Contractor, its employees or agents. Contractor further agrees to investigate, handle, respond to, defend and dispose of same at its sole expense and agrees to bear all other costs and expenses related thereto.

Before commencement of any work or event, Contractor shall provide a Certificate of Insurance in satisfactory form as evidence of the insurances required above.

Contractor shall have no right of recovery or subrogation against Brunswick County (including its officers, agents and employees), it being the intention of the parties that the insurance policies so affected shall protect both parties and be primary coverage for any and all losses covered by the above-described insurance.

Brunswick County shall have no liability with respect to Contractor's personal property whether insured or not insured. Any deductible or self-insured retention is the sole responsibility of Contractor.

All certificates of insurance must provide that the policy or policies shall not be changed or cancelled without at least thirty (30) days prior written notice.

The Certificate of Insurance should note in the Description of Operations the following: Department: _____

Contract #: _____

Insurance procured by Contractor shall not reduce nor limit Contractor's contractual obligation to indemnify, hold harmless and defend Brunswick County for claims made or suits brought which result from or are in connection with the performance of this Agreement.

In the event Contractor receives Notice of Cancellation of Insurance required pursuant to this Agreement, Contractor shall immediately cease performance of all services and shall provide Notice to Brunswick County's Legal/Risk Management personnel within twenty-four (24) hours.

Certificate Holder shall be listed as follows;

ATTENTION: Brunswick County Risk Manager
30 Government Center Dr. NE
P.O. Box 249
Bolivia, NC 28422

If Contractor is authorized to assign or subcontract any of its rights or duties hereunder and in fact does so, Contractor shall ensure that the assignee or

subcontractor satisfies all requirements of this Agreement, including, but not limited to, maintenance of the required insurances coverage and provision of certificate(s) of insurance and additional insured endorsement(s), in proper form prior to commencement of services.

4. Current Voice Communications

Brunswick County currently runs a Nortel Opt61 PBX and a CPPM Signaling Server at its main campus. The system was originally installed in 2003. The County utilizes analog, digital, and VOIP devices. The local carrier (Atlantic Telephone Membership) provides the DID numbers and 4 PRI's. Long distance is provided by ITS.

4.1 Remote Locations

1. Supply, NC - Brunswick County has a Nortel SRG50 at an offsite location. The unit is connected back to the County network by a metroE connection. There are 4 analog lines at this location, installed for redundancy, provided by the local carrier.
2. Leland, NC - Connected back to the County through VPN tunnels via Cisco ASA firewalls.
3. Shallotte, NC - Connected back to the County through VPN tunnels via Cisco ASA firewalls.
4. Water Treatment Plants

Currently there are 8 analog lines from the PBX building on the County Complex that run to a communications Tower. (see Figure 1 for locations of PBX building and Tower) The lines are punched down on a 66-block. From there they are converted to IP and sent out to the water plants where they are then converted back to analog to provide dial tone to each plants phone system. There are 4 plants throughout the County (2 lines for each plant) and they all have a mix of outdated phone systems.

Please see Station Distribution (Figure 2) and Analog Lines/Devices (Figure 3) for station counts and locations.

4.2 Current Voice Mail

The current voice mail system is a Nortel Call Pilot system and provides a voice mailbox to the majority of users. The County currently has 605 voicemail boxes and 34 Auto Attendant programs in use.

4.3 Unified Communications

Nortel Desktop Messaging is currently used for Unified Communications. It integrates with Microsoft Office 365 and includes faxing with DID numbers.

4.4 Analog

4.4.1 Faxing

The County currently has 93 fax machines throughout the main complex and 1 remote location. There are also 60 Desktop Messaging users that have faxing capabilities.

4.4.2 Modems

See Figure 3 for numbers and locations.

4.4.3 Analog Devices

These devices include cordless handsets, loudspeakers and bells to indicate an incoming call, breathalyzer machines, etc. The County currently utilizes Valcom paging equipment. See Figure 3 for numbers and locations.

4.5 Station Distribution

Figure 2 shows the distribution of telephone stations and types of stations to be served at each site. There are four tiers of telephone stations required:

Tier 1 – A limited function telephone that has 1-2 programmable keys. Typically used in common areas.

Tier 2 - A full-function telephone station that includes, but is not limited to, two-way speakerphone, full display with scrollable directory, and programmable soft keys. This telephone station will serve the majority of users in the County.

Tier 3 – This station is for users that answer a high volume of calls. It should have all of the Tier 2 functionality plus multiple line appearances and additional features used in an attendant, primary answer station scenario.

Tier 4 – This station is for a conference room setting. It should offer all of the Tier 2 functionality plus enhanced audio quality for hearing and speaking in a conference room environment.

4.6 Dialing Plan

The vast majority of stations have direct inward dialing (DID) numbers. The county has a large block of numbers leased from the local telephone company and will continue to lease these numbers. The system must support 4 digit dialing between departments.

4.7 Data Environment

Brunswick County currently utilizes the following appliances:

1. Cisco Unified Computing System (UCS) for our host servers in a virtual environment.

2. EMC VNX SAN for storage
3. Cisco firewall switches

4.8. Network Infrastructure

The majority of the County's current network infrastructure has been upgraded and is capable of fully supporting VOIP end devices, to include gigabit Ethernet, POE, and QOS.

5. Future System Requirements

5.1 General Description

Describe your communications system solution. Summarize any features that are included within your proposed solution, such as mobility, contact center, unified messaging, conferencing/collaboration, redundancy or resiliency, etc. The system must be on-premises and virtual.

5.2 Architecture

Describe the communications system architecture. Explain how failures are handled. Indicate whether the architecture supports distributed or centralized deployments.

5.3 Remote Locations

There are several satellite locations currently connected back to the County through VPN tunnels via Cisco ASA firewalls. The locations are as follows:

1. Landfill
2. WIC Leland
3. WIC Shallotte
4. EMS bases 1-8
5. EMS Shallotte HQ
6. Sheriff Calabash
7. Town Creek Park

There are many remote locations which are not currently connected to the County. See Figure 4 for the locations and addresses.

Please provide a VOIP solution for **all of the remote locations**, to include locations which are currently connected to the County, as well as those not currently connected to the County. The plan should provide for Internet and/or VPN connectivity where required, and eliminate existing outdated equipment while providing 4 digit DID dialing. The Vendor shall perform site visits to ALL locations in order to determine necessary hardware and software requirements, as well as to identify any potential roadblocks which would prevent a seamless VOIP rollout.

5.4 Network Infrastructure

It will be the responsibility of the vendor to perform a site survey in order to verify network infrastructure support requirements are met throughout all applicable locations, for all VOIP devices. Some, but not all, requirements that must be met are listed below:

5.4.1 IP Station Power over Ethernet (PoE)

The County requires that the power option to support IP telephones conform to IEEE 802.3af Power over Ethernet (PoE) standards.

5.4.2 IP Station Quality of Service (QoS)

Describe the proposed solution capabilities to provide Layer 2 and Layer 3 QoS to IP stations to ensuring end-to-end quality of service. Include in the response what industry standards are deployed.

5.5 Virtualization

Describe how your solution addresses virtualization by addressing the following:

1. Does the solution fit into the data center environment?
2. Indicate what hardware is required for your solution to run in a virtualized environment. Does the hardware have to be purchased from the solution manufacturer or does your company provide minimum server specifications for customer sourcing?
3. Is software for the solution available in Open Virtualization Format (OVF)?
4. The solution installation must be optimized for a virtual environment. Describe how this is accomplished.
5. Indicate the minimum hardware and software specifications for your solution to be deployed in a VMware virtual environment. What virtual functionality native to VMware does your solution support and leverage (fault tolerance, high availability, etc.)?
6. Is call control, applications, and system management supported within a VM environment? Describe in detail anything that is not supported or if any additional hardware or software is required over and above the current VM environment.

7. State whether the manufacturer carries and approved certification or deployment and software packaging in a VM virtual environment. State whether staff in your direct employ carry certifications for the latest software revisions from VMware.
8. Does virtualization positively affect your solutions system availability?

5.6 Industry Standards

State the industry standards (both voice and data) supported natively by your communications system. Note if any specialized gateways or additional hardware or software would be required to support these standards.

5.7 Session Initiated Protocol (SIP)

The County requires that the proposed system support SIP-compatible stations and trunk networking.

Does your solution support both SIP end points and SIP trunks? Provide the following details:

- a) Which SIP end points and trunks have been certified to work with your solution?
- b) Describe your process for qualifying additional third-party equipment on your communications system via SIP.
- c) List call features supported via SIP.
- d) Is separate licensing required to connect a SIP device or service?

It will be the responsibility of the vendor to evaluate the current ISP Bandwidth and provide recommendations to support SIP trunking.

5.8 E911 Services Support

5.8.1 PSAP Interface

The proposed system must include E-911 services that comply with the governing laws at each location. Please describe how your solution interfaces to the PSAP and whether it supports identification of specific location, floor, quadrant within a facility.

5.8.2 Notification

Will the proposed system provide information to the switchboard and/or any other display telephones as soon as a 911 call is originated? What information is provided?

5.8.3 Relocations

Are station relocations reported to the E-911 provider? Describe how this information is dynamically or manually synchronized with the E-911 database.

5.8.4 Virtual Office Users

Does the emergency system address virtual office users?

5.8.5 E-911 Unavailability

Identify a situation where E-911 reporting is unavailable to a system user (softphone user, work-at-home user, etc.)

5.9 Analog

5.9.1 Faxing

Provide a brief description of how all faxing will be supported, identifying all intermediary hardware or software elements necessary.

5.9.2 Modems

Provide a brief description how modem terminals will be logically and physically supported, identifying all intermediary hardware elements necessary.

5.9.3 Analog Devices

Provide a brief description how analog telephones/lines will be logically and physically supported, identifying all intermediary hardware elements necessary.

5.10 System Features

Minimum required features in a system

- Automated Attendant
- Automatic Call Distribution
- Automatic Alternate Routing
- Call Center
- Call Detail Recording
- Call Log
- Classes of Restriction
- Classes of Service
- Direct Inward Dialing
- Find Me-Follow Me
- Hunting
- Hunt Groups
- Active Directory Compatibility
- Music on hold

- Pickup Groups
- Time of Day Routing
- Office 365 Integration
- Call Recording
- Bridge Conferencing Ports
- Unified Messaging

Provide, as an attachment, a listing of proposed standard generic software system features that are not included in above system features that Brunswick County may find of use and benefit.

5.11 Station Features

Tier 1 Station Features

- Auto Self Discovery/DHCP
- IEEE 802.af POE support
- QoS Support
- Internal & External Call Programming
- Time of Day/Day of Week/Holiday Programming
- Call Forwarding: Off Premises, All Calls, Busy, Don't Answer
- Call Hold
- Call Transfer
- Hands-Free/Speakerphone
- Volume Controls

Tier 2 Station Features

Must include all features as Tier 1 stations and the following:

- Call Answer Groups
- Caller Id Programming
- Call Park
- Call Pickup: Individual & Group
- Message Waiting/Call Ringing Indicators
- Echo Cancellor
- LDAP Access
- Bluetooth or USB interface
- Compatible with all Plantronics headsets

Tier 3 Station Features

Must include all features as Tier 1 and 2 and the following:

- Capable of supporting an optional add-on key module (12 line/feature, minimum) with soft label/status indicators

All tiers of stations must be part of the proposed IP voice network, SIP compatible, and take advantage of call detail reporting and restriction programming. The quantities provided are accurate at the time of RFQ publishing. Proposers should note that quantities may vary.

Confirm that your proposed model satisfies at the listed minimum requirements. Provide a brief description of the proposed telephone instrument, including all supported communications protocols and the extent that any requirement is not fully satisfied, e.g., soft feature key substituted for fixed feature key requirement.

Each station user's work area will be supported by at least a single Cat5 to the local wiring closet. The RJ-45 connectors will be either wall mounted or mounted in the modular furniture throughout the office environment.

5.12 Gigabit Ethernet Connectivity

Does your desktop portfolio support Gigabit Ethernet (Gig-E) connectivity? Do the proposed stations support Gig-E?

5.13 Firmware Updates

Is the firmware update process for your desktop portfolio/stations automated?

5.14 Push Features

The County desires the system to be able to broadcast announcements to groups of users or all users through the stations speaker.

Can "push" information, such as corporate news or emergency information, be sent to your IP phones?

5.15 Desktop Instrument Options and Add-on Modules

Provide a brief description of all hardware/software options and/or add-on modules currently available with the proposed station models. Options/modules may include key modules, display modules, Bluetooth interface, USB interface, Gigabit Ethernet connectors, et al. necessary to satisfy the above telephone model requirements. Indicate the specific models that support the individual option/module.

5.16 Wireless Devices

Do you support wireless devices or systems for in-building or campus mobility? If so, describe the wireless device portfolio and its systems. Clearly identify the wireless technologies used by the portfolio (IP-DECT, Bluetooth, Wi-Fi, etc.). Is your in-building mobility solution highly scalable? Include the number of devices that can be supported and the maximum number of simultaneous user calls that can be supported.

5.17 Mobile Cellular Extension Option

Brunswick County desires that the proposed communications system solution support a mobile cellular extension option.

- The option should be capable of working with almost any cellular carrier network and supported mobile handsets/PDAs;
- The mobile handset/PDA should be able to receive incoming calls directed to the station user's primary system directory number, and calling party information should be displayed at the mobile handset;
- Calls placed from the mobile handset/PDA to other communications system subscribers should appear to look like calls from the station user's primary desktop voice terminal, including calling party name/ID display;
- Methods available for notification of voicemail on the mobile handset/PDA.
- System subscribers should be able to program incoming calls to ring simultaneously or sequentially at the desktop instrument and mobile handset/PDA as required;
- Are basic telephony features supported in mobile extension mode, including Hold, Transfer, Conference, and Forward to IPTS voice mail system on no-answer?
- Can call detail records be collected and stored for mobile extension calls?
- Ability to answer a call on mobile device and continue call on desktop device and vice versa.

Brunswick County currently has 325 mobile cellular extension users.

Confirm that your proposed communications system solution supports mobile cellular extension capabilities as listed above, and is included in the system configuration. Include a brief description of any hardware/software requirements, including peripheral application servers, necessary to support the option and provide a list of standard feature/function capabilities. Also, include any additional features available with your solution that are not listed.

5.18 IP Station Discovery

How do IP communications devices learn about their voice VLAN, including IP addresses, default gateways, call controller, TFTP server, QoS settings, VLANs, and other parameters? Does the proposed system solution employ proprietary

protocols for IP communications devices to learn their voice VLAN or is an industry standard, such as Dynamic Host Control Protocol (DHCP) used?

Provide how the proposed solution will learn about the network and the how it will accomplish this task.

5.19 Conferencing

5.19.1 Multi-Party

Define the max number of parties available per conference call. The explanation should identify any and all hardware and software requirements necessary to support multi-party add-on conference call requirements.

5.19.2 Conference Bridges

Brunswick County currently does not have the capability to provide a conference bridge. Provide in your proposal a solution for conference bridging to support 30 simultaneous users.

5.20 Additional System Features

Provide as an attachment a listing of proposed standard generic software system features that are not listed that Brunswick County may find of use and benefit.

5.21 Security Features

Unauthorized access to the communications system is a major concern. Briefly describe the security features that are embedded in the proposed management system to prevent unauthorized access and operation. Specify if media encryption is used for command signaling transmissions. What, if any, Denial of Service (DoS) and user authentication mechanisms are supported for the systems management application?

5.22 Reporting

5.22.1 VoIP Monitoring

The management system should collect and store data to track usage and performance data of IP gateway devices, IP phones, and VoIP intercom/trunk calls. VoIP information reports may include: tracking of IP gateway devices and calls that pass through each gateway; gateway congestion; assignment of services or routes to gateways; tracking of phone numbers dialed or originating off-site numbers; and IP gateway addresses.

Briefly describe all VoIP monitoring information records and reports that are available. Specify if VoIP QoS parameters such as jitter, call delay/latency, and packet loss are tracked and reported, and if a system administrator can monitor VoIP calls in real-time for QoS observing? Indicate if any third party equipment is being proposed as part of your solution.

5.22.2 Call Detail Records

Call Detail Record (CDR) data should be compiled for all successful incoming and outgoing calls. Call record fields typically include the following:

- Date
- Time
- Call Duration
- Dialed Number
- Calling Number
- Department Code
- Call Bandwidth
- Time in Queue

Identify all available CDR reports that can be generated for any or the entire call record field data listed above.

5.22.3 Customizing Reports

Confirm the proposed reporting system supports customized reporting capabilities and provide a brief description of how customized reports can be defined and generated.

5.23 Unified Communications Solution

Brunswick County desires a full UC solution. The County has implemented Microsoft 365 for email, Skype for Business, Exchange, and Active Directory. The County would require 650 licenses for Unified Communications.

5.23.1 UC Functionality

The solution should support unified communications (UC), defined as a presence-enabled system that integrates voice, e-mail and chat/instant messaging. Describe the capabilities of the system UC function.

5.23.2 UC Hardware/Software

List the hardware and software requirements for your UC solution.

5.23.3 Mobile Clients

Do you support a mobile UC client for smartphones/devices? If so, which mobile operating systems are supported?

5.23.4 Third-party Integration

Does the standard UC client integrate with third-party applications?

5.23.5 Multiple Line Appearance

The UC client must support multiple line appearances. Describe how your solution handles this.

5.23.6 UC Administration

List the administration tools included with the UC client solution.

5.23.7 UC Client

Describe the key features of your UC client. Does it support the following elements?

- Integration with desktop phone (e.g., Can the client manage the phone, including programming buttons on the user phone?)
- Support for a corporate directory search
- Search modes for directory lookups
- Full soft-phone capability
- Chat between clients
- Integration with Active Directory
- Visual call pad with ability to drag callers into window to add to existing call.
- Bluetooth-enabled audio devices
- Drag & Drop to transfer calls

5.23.8 Presence

Describe your presence solution. Include the following details:

- Does your solution offer an embedded presence engine or leverage a third-party engine to offer presence?
- Does your solution provide presence indication for all users across the enterprise?
- Can users manually change or customize their presence status? Can the console operator change a user's presence?
- Does presence indicate whether a user is on a call or on the phone even if answered with a secondary or "twinned" device (i.e., cell phone)?
- Is your presence engine integrated with automatic call distribution (ACD) or contact center applications?
- Does your presence solution provide calendar integration, and automatically update presence based upon the calendar schedule?

5.23.9 Instant Messaging

Does your solution support instant messaging (IM)? Describe how this is addressed. Identify if your IM solution includes the following details:

- multi-user chatting support
- the ability to transfer or share files or documents to other users
- coordination with other modes of communication

5.24 Call Recording

Brunswick County currently does not have call recording capabilities but desires the option to do so. Please provide a solution for call recording. Include storage location and minimum storage requirements.

Does the proposed system record all calls or are users able to record a call with a push of a button? If the user starts recording the call after the conversation has already begun, will the system “back up” and record the entire call?

6. Automatic Call Distribution

6.1 Basic ACD Call Center Requirements

Brunswick County currently has multiple ACD groups for several departments. The proposed solution must support the ACD-based contact call center solution including items such as call screening, call prompts, automatic distribution routing, call queuing, announcements, call handling, agent mobility, management and reporting, feature configuration and programming (support of Holiday/Inclement weather table programming for different contact center groups) administration.

6.2 ACD Station Equipment

The County requires that the proposed ACD solution be capable of supporting IP stations and PC client softphones for agents and supervisors.

6.2.1 Supervisor Workstation

Briefly describe the proposed supervisor workstation solution in your ACD solution proposal, including telephony and ACD-specific feature and functions, toolbars, and report screens. The Supervisor **must** be able to log agents in or out from his/her desktop.

6.3 Basic ACD Features

The proposed ACD solution should include, at minimum, the following basic features:

- Multiple Agent Groups

- Call Flow
- Applications/Skills-based Routing
- Call Overflow and Interflow
- Redirect on No Answer
- Predictive Overflow
- Recorded Announcements
- Music between Recordings
- Dial out of Queue
- Make Agent Position Busy
- Agent Help Request to Supervisor
- Silent Monitoring
- Supervisor Assist During an Active Call
- Threshold Alerting
- Queue status

Confirm that the proposed ACD solution supports each of the listed listed-above features/functions and identifying any feature/function not supported. Identify and briefly describe reports that are available to a supervisor. State how often data is updated on supervisor monitor display.

6.4 Announcements

Confirm that the proposed ACD solution has fully integrated announcement capabilities and provide answers to the following:

- How many different announcements can be provided?
- How many announcements can be played concurrently?
- Can time in queue and/or placement number in queue be provided to caller?

6.5 Routing & Queuing

Confirm the proposed ACD solution can support, at a minimum, each of the following call flow routing & queuing decision criteria; identifying any not supported.

- First In/First Out (FIFO)
- Time of day (TOD) / Day of week (DOW) / Day of year (DOY)
- ANI/DNIS/CLID
- Call prompt response
- Number of calls in queue
- Abandoned Calls
- Longest held call in queue
- Estimated wait time
- Available agents (number, skill)
- Agent idle time
- Agent handle times

- Agent Skill Level
- Caller directed routing

6.6 Call Processing Functions

Provide brief answers to each of the following questions regarding the proposed ACD solution call processing features and operations.

- Describe how call control and agent handling methods can be administered locally and changed on demand if necessary in response to system activity.
- How many callers can concurrently listen to a particular ACD recorded announcement?
- Can announcements played for a caller be defined as “uninterruptible” even when agents are available to handle the incoming call?
- Can callers maintain their position in queue while interacting with an IVR?
- Can information entered by the customer while interacting with an IVR system and then transfers out to a Customer Service Representative be used to screen pop information when the agent answers? For example, can a caller enter an account number and the information show up on an agent’s screen?
- Describe any other unique call routing features available on your ACD system that you believe Brunswick County would be interested in knowing about.

6.7 Agent Functions

The proposed ACD solution must support a variety of agent functions. Provide answers to each of the following agent function requirements.

- Describe the process for an agent to request supervisor assistance during an active call, and specify if the caller must be on hold or if the agent/supervisor can talk without the caller hearing the conversation. After the supervisor consultation can the caller be transferred or conferenced?
- Identify and provide a brief description of ACD system information (calls in queue, average time in queue, personal call handling statistics, et al) that can be retrieved and displayed on the agent desktop telephone instrument.
- Identify and provide a brief description of ACD system information and reports (calls in queue, average time in queue, personal call handling statistics, et al) that can be retrieved and displayed on the agent PC monitor. Attach samples of available display screenshots.

- Describe each of the available “states” an agent can be in, e.g., logged in; available to take calls; after call work time; etc.
- Can agents be made automatically available immediately after each call?
- Can agents be members of multiple groups/splits/skills?
- Can agents be made automatically unavailable after each call in order to complete work associated with the call before the next call is delivered? Can this time be specified and controlled and is this unavailable state measured and tracked in ACD reports?
- Can agents make themselves unavailable temporarily and have this unavailable state measured and tracked in ACD reports? Can the ACD agent enter a reason code to indicate why they are unavailable and have this unavailable state measured and tracked by reason code on ACD reports?
- Can calls that ring at an available agent’s station, but are not answered automatically, be redirected to the next available agent rather than letting the call ring unanswered until abandonment? For example, if an agent left their station without logging out, will the system automatically log the agent out or make them unavailable and notify the supervisor? Will this event be tracked by the reporting system?
- Can agent’s login with their agent ID from any system endpoint and take ACD calls?
- Can the system automatically record agent calls for quality and monitoring purposes?

6.8 System Call Prompts

Brunswick County desires that the proposed ACD solution prompt the caller to enter or say digits to determine how a call should be routed and then route based upon their response.

Confirm if the proposed ACD solution has a fully integrated call prompt (call director) feature that does not require optional hardware/software equipment. If yes, identify how call prompt announcements are programmed, scripted and recorded; the maximum number of programmable call prompts; and the maximum number of concurrent activated call prompts for incoming calls.

6.9 ACD Reporting

The ACD reporting system must be able to support a wide variety of report categories, including, as a minimum, the following:

- Single Agent Reports
- Summary Reports
- Agent Group Reports Summary Reports
- Call Profile (answered, abandoned, etc.)
- ACD Queue Reports

- Abandoned Calls Report
- Daily Total Reports
- Log in / Log out
- Ongoing Status Reports
- Ring on No Answer Reports (RONA)
- Call Transfer Reports

Confirm the proposed fully integrated reporting system satisfies this requirement, and identify any listed report type not supported.

6.10 Real Time Reports

Provide a list of all standard and optional real time monitoring reports. At minimum should provide:

- Dashboard capabilities that are automatically updated.
- Status of Agents
- Calls Waiting
- How long calls have been in queue

7. Reliability & Availability

7.1 Server Failure Events

Describe how the communications system would handle server failure. Include whether any active voice calls would be dropped and whether any user or manual intervention would be required to perform the failover or to allow call control and/or devices to rehome back to primary controller once services have been restored.

7.2 Failure Mode Operation

Are communications capabilities or services preserved, even if all call processing and signaling servers are down? Are any features unavailable during system failover?

7.3 Redundancy

Describe the proposed design's level of redundancy (sub-systems, PRI, control, multiple Ethernet ports within controllers)

7.4 Call Survivability

Describe how the proposed design's call survivability strategy maintains the voice conversation between two IP end points during a failure.

7.5 Alarms

Describe how the communications servers and the LAN components report troubles/alarms.

7.6 Survivability Options

Does your solution provide for local site survivability? Assuming there is a WAN failure, describe the potential options that are included or available within your solution architecture?

8. Security

Brunswick County requires a secure network solution to optimize system performance and reduce the probability of toll fraud, restricted calls, and illegal system and network access. Please address the following:

1. Does the IP solution's authentication process prevent unauthorized access to common control elements and data resources?
2. Does the solution support call barring?
3. Does the IP solution's embedded features able to secure communications privacy and counter packet sniffing attempts? How does your solution accomplish this?
4. Briefly describe any embedded features/functions in the proposed solution that will identify the incidence of toll fraud and other types of Long Distance toll service abuse/misuse (e.g. LD voice calls on fax lines) in real-time, and alert and/or block such activity to reduce financial losses.

9. Enterprise Management Solution

9.1 User Interface & Tools

Any supplied management applications should support decentralized access from any distributed PC client across the LAN infrastructure. It is also desirable for the applications to support a browser based user interface for intensive remote operations.

The management system should be operated using GUI tools, formatted screens, pull down menus, valid entry choices, templates, batch processing & transactions scheduling, and database import/export.

Describe the proposed solution's systems management capabilities and interface.

9.2 Virtualization

Does the systems management application work in a virtual server environment? If so, will the solution run in a virtualized environment without additional hardware?

9.3 Administration Functions

The proposed systems management solution must support:

1. station user moves, adds, and changes;
2. call restriction assignments;

3. class of service definitions and assignments;
4. password resets
5. group definitions and assignments;
6. dial plan;
7. feature access codes;

Confirm the proposed systems management solution supports each of the listed administrative functions. Identify any function not supported.

9.4 Monitoring

The solution should include tools to proactively monitor and ensure network health and performance, and analyze and report system faults.

9.5 Upgrades

Does your enterprise management solution support centralized scheduled upgrades? If so, address the following questions:

1. Describe the steps required to upgrade the proposed voice solution to the latest software release.
2. Does this upgrade require down time to plan?
3. Can the upgrade be performed remotely?
4. Can prior loads be preserved and recovered post upgrade?

9.6 Active Directory Integration

The solution must be interoperable with Microsoft Active Directory. Which Active Directory versions are supported? Is Lightweight Directory Access Protocol (LDAP) supported? Does the solution support multiple Active Directory domains?

9.7 Storage & Backup

How long are historical reports stored and archived by the system, and describe data backup operations.

10. Training

The Proposer shall conduct administrative and maintenance training to the technical staff as well as end-user training at the County’s locations, tailored specifically to the County’s particular requirements (e.g. administrator, message center operator, secretary, and professional). The County will employ the “train the trainer” approach and training class sizes are projected as follows:

Technical system, maintenance, administrative, device configuration and UC client install:	3 County staff
Train the Trainer:	25 County staff

Proposer shall describe the training program proposed. Included in this section shall be a copy of example training materials to be used as well as applicable user manuals.

11. Maintenance

Proposer shall submit a complete maintenance and warranty agreement, including all options available for extended coverage over 1, 3, and 5-year periods.

Proposer shall identify the location of the vendor's local service center and the number of service personnel trained on the proposed system.

Proposer shall describe the proposed repair commitment from time of trouble discovery through the time the trouble is cleared.

Proposer shall guarantee a response time of no more than 1 hour for all major system problems and a maximum of 4 hours' response to other system problems with ongoing hourly status to customer contacts.

Proposer shall describe in detail their definition of major and minor problems.

12. Timeline for Completion

The migration from the legacy system must be done with minimum disruption and be coordinated at a level that eliminates any adverse impact to end-user operations and the customers they serve. It is the Proposers responsibility to provide a detailed proposed project schedule as part of their proposal.

13. Vendor's Understanding of the RFQ

In responding to this RFQ, the vendor accepts the responsibility fully to understand the RFQ in its entirety, and in detail, including making any inquiries to Brunswick County as necessary to gain such understanding. Brunswick County reserves the right to determine, at its sole discretion, whether the vendor has demonstrated such understanding. Such disqualification and/or cancellation shall be at no fault, cost, or liability whatsoever to Brunswick County.

14. Vendor Incurred Costs

All costs that may be incurred to prepare proposals, attend meetings, attend site inspections, provide requested follow-up information, make formal and informal presentations, and for the entire contract negotiations process if applicable, shall be the sole responsibility of each Proposer. Brunswick County is not responsible under any circumstances for reimbursement of any costs that may be incurred by Proposers during the proposal preparation, subsequent selection or negotiation stages.

15. Guidelines

Configure your system design to satisfy all stated RFQ requirements, including any and all system hardware and software elements necessary to satisfy a requirement. All products and

solutions proposed for this RFQ must be included at time the completed RFQ is returned to Brunswick County. Omissions will be deemed nonresponsive.

16. Submission of Request

A written proposal specifying services and materials compliant with the requirements in this document should be mailed or hand delivered to Deborah Isenhour. Please include **four** copies for review.

Mail: Brunswick County MIS
Attn: Deborah Isenhour
PO Box 249
Bolivia, NC 28422

Hand Delivered: Deborah Isenhour
45 Courthouse Dr.
Building E
Bolivia, NC 28422

In order to expedite the evaluation of proposals, each Proposer shall organize its proposal as follows:

1. Submittal shall include a "Table of Contents" and give page numbers for each part of the requirements.
2. The pages shall be numbered sequentially using Arabic numerals (1, 2, 3, etc.).
3. Company Overview

Provide a brief overview of your company and the services offered including:

1. Full legal name of the company
 2. Year the business was established
 3. Number of employees
 4. An outline of your current financial status
 5. An outline of your current partnerships
 6. List the qualifications and experience of the project manager(s) and engineer(s) that will be working on the project
4. Vendor References

Please provide information about your current clients, including:

1. Total number of current clients
2. A list of clients where you have installed a similar VOIP system
3. Evidence of successful completion of a project of a similar size and complexity
4. References: Please provide a client reference list consisting of three customers presently using the proposed system. References from other governmental organizations using equipment similar to what is being

proposed are preferred. The list should include organization name, name of contact with address and telephone number, and a brief description of the system, platform, length of time using the system and number of users.

17. Additional Information

Proposer may use this section to provide any additional information that is not addressed by the other sections of the proposal.

Figure 2
Station Distribution

Building	Address	Department	Tier 1	Tier 2	Tier 3	Tier 4
A	25 Courthouse Dr., Bolivia	Health	6	88	18	
		Social Services (Legal)		2		
B	60 Government Center Dr., Bolivia	Social Services		139	8	2
C	3325 Old Ocean Hwy, Bolivia	Emergency Services	3	7	6	
D	35 Courthouse Dr., Bolivia	Cafeteria		1		
E	45 Courthouse Dr., Bolivia	MIS		14	1	1
F	10 Referendum Dr., Bolivia	Veterans Services	1		3	
		Soil & Water	1	4		
G	20 Referendum Dr., Bolivia	Sheriff's Dept.		16		
H	75 Stamp Act Dr., Bolivia	Board of Elections		14	1	
		Wellness Clinic		1	1	
I	76 Courthouse Dr., Bolivia	Code Administration		10	10	1
		Engineering		6		
		Planning/Economic Dev		5	5	
		Register of Deeds	1	12		
		Tax		3		
		Utility Billing		12		
J	80 Stamp Act Dr., Bolivia	Emergency Comm. (911)		6	1	1
K	35 Referendum Dr., Bolivia	Board of Education				
L	179 March 9, 1764 Dr., Bolivia	Operations	1	7	6	1
M	69 Stamp Act Dr., Bolivia	Parks & Recreation		9	2	
N	25 Referendum Dr., Bolivia	Co-Operative Extension	2	17	3	
S	310 Government Center Dr., Bolivia	Courthouse	1	4		
Carpentry Shop	196 March 9, 1764 Dr., Bolivia	Operations	1	1		
County Warehouse		Operations	1	1		
		Board of Elections	1			
David Sandifer Bldg.	30 Government Cntr Dr., Bolivia	Administration		2	3	1
		Commissioners Office		4		1
		Finance		12	1	1
		GIS		8		
		Human Resources		6		
		Legal		2	1	
		Mail Room		1		
		Tax			45	3

K-9		Sheriff's Dept.		3		
LEC/Jail	70 Stamp Act Dr., Bolivia	Sheriff's Dept.	6	59	6	2
Service Center	194 March 9, 1764 Dr., Bolivia	Operations	2	5	3	1
Utilities Warehouse (Paint/Sign Shop)		Operations		3		
	Offsite Locations					
Utilities Operations Center	250 Grey Water Rd., Supply 28462	Utilities	5	36	2	2
WIC	1492 Village Rd. NE, Leland 28451	Health		3		
WIC	150-9 Holden Beach Rd., Shallotte 28470	Health		4		
	Water Plants					
211	4305 Southport Supply Hwy, Southport	Public Utilities		4		
West Brunswick	235 Grey Water Rd. NE, Supply	Public Utilities		6		
NorthWest	3954 Clearwell Dr. NE, Leland	Public Utilities		6		
NorthEast	10480 Royster Rd., NE, Leland	Public Utilities		2		
Totals			33	591	84	14

Figure 3

Analog Lines/Devices

Building	Address	Department	Line Ext Module	Analog Fax Lines	Analog Modem	Analog Device	Paging Units
A	25 Courthouse Dr., Bolivia	Health		13			1 Unit 2 Zones
		Social Services (Legal)		1			
B	60 Government Cntr Dr., Bolivia	Social Services		5			1
C	3325 Old Ocean Hwy, Bolivia	Emergency Services	4	1			
D	35 Courthouse Dr., Bolivia	Cafeteria		1		1	
E	45 Courthouse Dr., Bolivia	MIS		1		1	
F	10 Referendum Dr., Bolivia	Veterans Services	1	1		1	
		Soil & Water		1			
G	20 Referendum Dr., Bolivia	Sheriff's Dept.		2			
H	75 Stamp Act Dr., Bolivia	Board of Elections	1	1			
		Wellness Clinic		2			
I	76 Courthouse Dr., Bolivia	Code Administration	2	2		1	
		Engineering		1			
		Planning/Economic Dev		1			
		Register of Deeds		3	1	5	
		Tax		1			
		Utility Billing		1			

J	80 Stamp Act Dr., Bolivia	Emergency Comm. (911)				1	
K	35 Referendum Dr., Bolivia	Board of Education		7	2	1	
L	179 March 9, 1764 Dr., Bolivia	Operations	3	2			
M	69 Stamp Act Dr., Bolivia	Parks & Recreation	2	1			
N	25 Referendum Dr., Bolivia	Co-Operative Extension	3	1		1	
S	310 Government Center Dr., Bolivia	Courthouse		1		2	
Carpentry Shop	196 March 9, 1764 Dr., Bolivia	Operations		1			
Child Nutrition		Board of Education		1			
County Warehouse		Operations		1			
David Sandifer Admin Bldg.	30 Government Cntr Dr., Bolivia	Administration		1			
		Commissioners Office		1			
		Finance		1			
		GIS		1			
		Human Resources		1			
		Legal		1			
		Mail Room				1	
		Tax		4			
Fuel		Operations			1		
LEC/Jail	70 Stamp Act Dr., Bolivia	Sheriff's		23		5	1
School Bus Garage		Board of Education		2			
School Operations		Board of Education		1			

Service Center	194 March 9, 1764 Dr., Bolivia	Operations		1		1	
Tower		Public Utilities				8	
		Offsite Locations					
Utilities Operations Center	250 Grey Water Rd., Supply 28462	Utilities		3	1	3	1
Totals			16	93	5	32	5

Figure 4
Remote Locations

Landfill		172 Landfill Rd., Bolivia
Animal Protective Services		429 Green Swamp Rd, Supply
EMS Bases	Base 1	110 Clover Lane, Supply
	Base 2	8605 Trade St, Leland
	Base 3	7061 Old Georgetown Rd, Ocean Isle Beach
	Base 4	4280 Committee Dr, Southport
	Base 5	3053 George II Hwy, Boiling Spring Lakes
	Base 6	9031 Beach Dr., SW, Calabash
	Base 7	4151 Vanessa Dr, Oak Island
	Base 8	6147 Ocean Hwy. East, Winnabow
	Headquarters	40 Nabor Dr, Shallotte
Libraries	Harper	109 West Moore St, Southport
	Rourk	5068 Main St, Shallotte
	Leland	487 Village Rd, Leland
	Barbee	8200 E. Oak Island Dr, Oak Island
	Hickmans Crossroads	1040 Calabash Rd, Calabash
Treatment Plants	Northwest	3954 Clearwell Dr. NE, Leland
	211 Plant	4305 Southport/Supply Rd. SE, Southport
	Kings Bluff	246 Private Rd, Riegelwood
	Carolina Shores	24 Gate 5, Carolina Shores
	Ocean Isle	6049 Yarborough St, Ocean Isle
	Shallotte	349 Forest St. Ex., Shallotte
Parks	Brunswick Nature	2601 River Rd, Winnabow
	Cedar Grove	700 Grove Trail SW, Supply
	Dutchman Creek	4750 Fish Factory Rd, Southport
	Leland Community	1490 Village Rd., NE, Leland
	Lockwood Folly	430 Green Swamp Rd, Supply
	Navassa	800 Park Ave, Navassa
	Northwest	1937 Andrew Jackson Hwy NE, Leland
	Ocean Isle	6483 Old Georgetown Rd, Ocean Isle
	Shallotte	5550 Main St, Shallotte
	Smithville	8340 River Rd SE, Southport
	Town Creek	6420 Ocean Hwy East, Winnabow
	Waccamaw	5855 Waccamaw School Rd NW, Ash

Sheriff Substations	Calabash	10176 Beach Dr, Calabash
	Leland	1379 River Rd, Leland