# NORTH CAROLINA 911 BOARD MEETING
Friday, March 26, 2021
Via Simultaneous Communication
Join Microsoft Teams Meeting
984-204-1487 Conference ID: 465 009 394#
10:00 AM – Noon

North Carolina Next Generation 911

Status
- Live on ESINet
- Active Projects
- Approved for Migration

Map Date: March 18, 2021

Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS
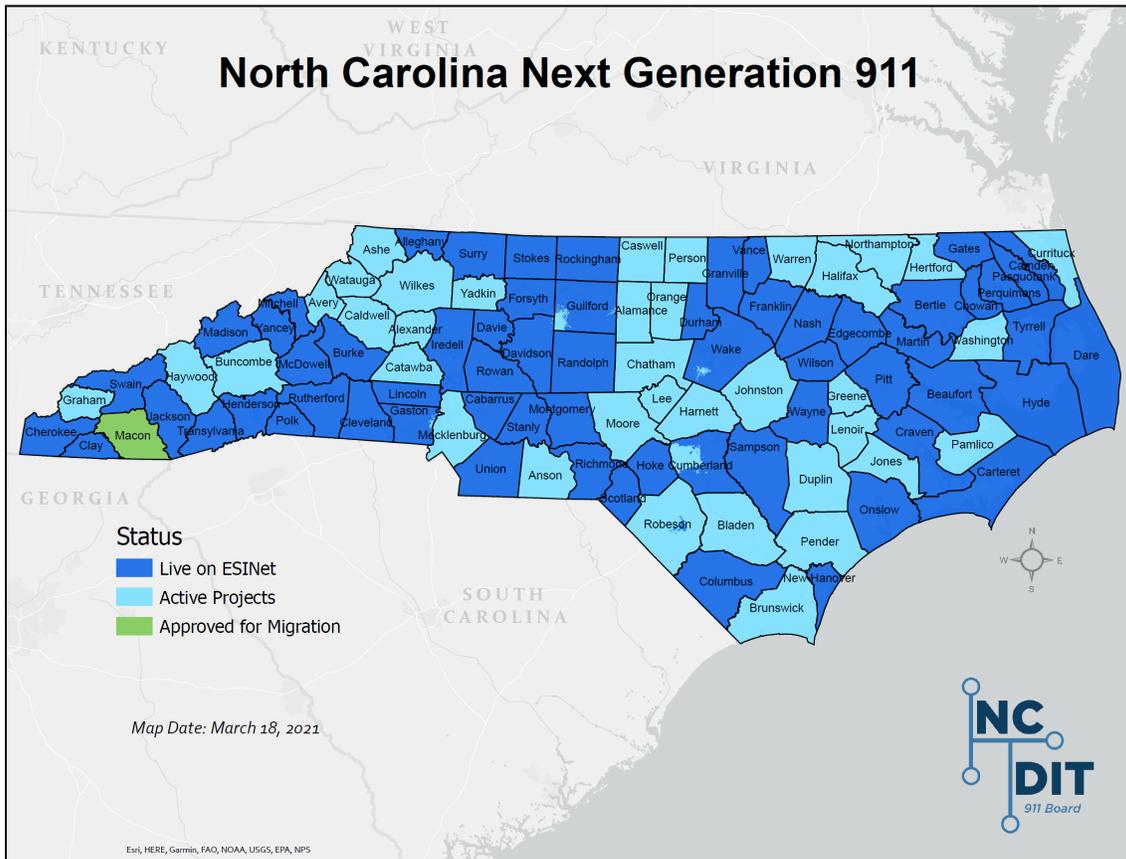
Call to Order
Eric Boyette

Roll Call
Pokey Harris/Stephanie Conner

Tab 1
Chair's Opening Remarks
Eric Boyette

Comments from Secretary DIT/State CIO
Jim Weaver

Tab 2
Ethics Awarness/Conflict of Interest Statement
Eric Boyette

In accordance with G.S. 138A-15, It is the duty of every Board member to avoid both conflicts of interest and potential conflicts of interest. Does any Board member have any known conflict of interest or potential conflict of interest with respect to any matters coming before the Board today? If so, please identify the actual or potential conflict and refrain from any undue participation in the particular matter involved.

Tab 3
Public Comment
Eric Boyette

The NC 911 Board welcomes comments from state and local government officials, first responders, finance directors, 911 directors, citizens and interested parties about any 911 issue(s) or concern(s). Your opinions are valued in terms of providing input to the NC 911 Board members. When addressing the Board, please state your name and organization for the record and speak clearly into the microphone.

Tab 4
Consent Agenda
Pokey Harris
(Roll Call Vote Required)

Tab 4 a)
**Minutes of Meeting
February 26, 2021**

North Carolina 911 Board Meeting
MINUTES
Friday, February 26, 2021
Via Simultaneous Communication
Microsoft Teams Meeting
10:00 AM – 12:00 PM

NC DIT
911 Board

NORTH CAROLINA 911 BOARD MEETING
ROLL CALL
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NC DIT
911 Board

NC 911 BOARD MEMBERS	IN PERSON	PRESENT VIA MS TEAMS OR PHONE	
		YES	NO
David Bone, County Manager, Davie County (NCACC)		Y	
Secretary Eric Boyette, 911 Board Chair (NC DOT)		Y	
Greg Coltrain, VP Business Development, Wilkes Communication/River Street (LEC)			N
Brian Drew, Manager of Customer Design and Implementation, CenturyLink/Lumen (LEC)		Y	
Bo Ferguson, Deputy City Manager, City of Durham (NCLM)			N
Greg Foster, Director of Communications, Alexander County (NC Association of Rescue EMS)	N/A AT THIS TIME	Y	
Chuck Greene, Director of Government Affairs, AT&T (LEC)		Y	
J.D. Hartman, Sheriff, Davie County (NC Sheriff's Association)		Y	
Jeff Ledford, Chief, City of Shelby Police Department (NCACP)			N
Buddy Martinette, Fire Chief, City of Wilmington (NCSFA)		Y	
John Moore, Regional Manager, Government and Education Sales, Spectrum Communications (VoIP)			N
Melanie Neal, Director, Guilford-Metro 911 (APCO)		Y	
Jude O'Sullivan, Chief Customer Officer, Carolina West (CMRS)			N
Jeff Shipp, Vice President of Operations, Star Telephone (LEC)		Y	
Earl Struble, Sr. Manager Verizon Response, Verizon Wireless (CMRS)		Y	
Donna Wright, Director (Retired), Richmond CO Emergency Services (NENA)		Y	
NC 911 BOARD STAFF			
Rick Blumer, NMAC Technician			N
Richard Bradford, (DOJ) NC 911 Board Legal Counsel		Y	
Chris Carlin, NMAC Technician		Y	
Stephanie Conner, Western Regional Coordinator		Y	
Kristen Falco, Financial Review Specialist		Y	
Kenneth Fullwood, NMAC Technician	N/A AT THIS TIME		N
Tina Gardner, North Central Regional Coordinator		Y	
Saman Gharib, NMAC Technician		Y	
Pokey Harris, Executive Director		Y	
Jesus Lopez, (NC DIT) NC 911 Board PM		Y	
Gerry Means, Network Engineer/NG 911 Project Manager		Y	
Stanley Meeks, NMAC Manager		Y	
David Newberry, South Central Regional Coordinator		Y	
Marsha Tapler, Financial Analyst		Y	
Sarah Templeton, Financial Review Specialist		Y	
Angie Turbeville, Eastern Regional Coordinator		Y	

NORTH CAROLINA 911 BOARD MEETING
ROLL CALL
Friday, February 26, 2021
Via Simultaneous Communication with Microsoft Teams Meeting
10:00 AM – 12:00 PM

NC DIT
911 Board

GUESTS	IN PERSON	VIA MS TEAMS/PHONE	ORGANIZATION
Rodney Pierce		Y	Davie County
Jeff Williford		Y	Wilson County
Ellis Frazier		Y	High Point
Lisha Stanley		Y	Henderson County
Josh Briggs		Y	AT&T
Brenda Womble		Y	Wilson County
Del Hall		Y	Stokes County
Doug Workman		Y	Town of Cary
Jen Johnson	N/A AT THIS TIME	Y	NC DIT
Kyle Thaggard		Y	High Point
Rob Wilson		Y	Davidson County
Corrine Rust		Y	Charlotte Medic
Drew Allvine		Y	AT&T
Emily Hughes		Y	NC DIT
Jeff Kulp		Y	Bladen County
Mike Reitz		Y	Chatham County
Ron Adams		Y	Southern Software
Suzanne Walker		Y	Raleigh-Wake

PHONE NUMBERS		VIA MS TEAMS/PHONE	ORGANIZATION
336-753-6320 – Rodney Pierce		Y	Davie County
919-578-4646 – Craig Shultz	N/A AT THIS TIME	Y	Mission Critical
919-754-6635 – Did Not Identify		Y	Did Not Identify

Call to order — Chairman Boyette called the meeting to order at 10:02 AM and asked Ms. Harris to proceed with the roll call.

Roll Call – Ms. Harris advised Ms. Conner would call the roll of attendees and Ms. Templeton would conduct any roll call votes during the meeting. She also advised they would monitor the chat area and Mr. Newberry would serve as technical facilitator for the virtual meeting. Ms. Harris also offered condolences to Ron Adams and his family on the recent loss of his daughter.

1. Chair's Opening Remarks — Chairman Boyette thanked everyone for attending and for their dedication to the Board. He also noted there are several action items to be addressed today.

2. Ethics Awareness/Conflict of Interest Statement — Chairman Boyette read the Ethics Awareness/Conflict of Interest statement as published in the agenda. Ms. Neal stated she would abstain from item 8c.

Saman Gharib and Chris Carlin joined the meeting.

3. Public Comment — Chairman Boyette read the invitation for public comment as published in the agenda. No one had preregistered to speak, and no one virtually present had comments.

4. **Consent Agenda** — Chairman Boyette asked Ms. Harris to proceed with the consent agenda.
   a) Minutes of Previous Meeting – December 4, 2020
   b) NG 911 Reserve Fund

November 2020 Account Balance	$83,025,951
November 2020 Disbursement	$115,207
December 2020 Account Balance	$82,535,784
December 2020 Disbursement	$1,232,492
January 2021 Account Balance	$80,325,755
January 2021 Disbursement	$5,755,069

   c) CMRS Account

November 2020 Account Balance	$5,405,498
November 2020 Disbursement	$26
December 2020 Account Balance	$5,407,430
December 2020 Disbursement	$0
January 2021 Account Balance	$5,140,190
January 2021 Disbursement	$268,943

   d) PSAP Account

November 2020 Account Balance	$2,871,801
November 2020 Disbursement	$040,729
December 2020 Account Balance	$429,611
December 2020 Disbursement	$3,997,572
January 2021 Account Balance	$4,107,926
January 2021 Disbursement	$3,997,090

   e) PSAP Grant/Statewide Projects Account

November 2020 Account Balance	$6,858,895
Grant Funds Committed	$30,525,190
December 2020 Account Balance	$7,090,375
Grant Funds Committed	$30,118,355
January 2021 Account Balance	$8,358,866
Grant Funds Committed	$30,004,332

   f) Grant Project Updates per Reports

Mr. Shipp made a motion to accept the consent agenda as presented. The motion was seconded by Ms. Neal. Ms. Templeton conducted the roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*

5. **Executive Director Report**
   a) Announcement of New Secretary Department of Information Technology/State CIO – Chairman Boyette spoke of new Secretary of DIT/State CIO Jim Weaver as an experienced CIO and a strong leader.
   b) 911 Board Appointment Status – One seat is currently vacant that is to be filled by a CMRS provider. Sprint/T-Mobile has advised Ms. Harris they hope to present someone next week for consideration of appointment.
   c) COVID-19 Update – Today marked day 354 of the state COVID response. Staff remains in telework status at least until the end of June. Ms. Harris encouraged those eligible to schedule an appointment for the vaccine. Regional Coordinators continue their weekly outreach to PSAPs.
   d) Staffing Update – Ms. Harris worked with HR on reclassifying the Admin Support and User Support Specialist positions into a combined position of Administrative and Logistics Coordinator. She is in the process of reviewing applications and hopeful to schedule interviews by the end of March.
   e) 2020 PSAP Managers Virtual Continuity Planning Workshop Series (December) – The workshop had over 100 attendees each day of the 3-day workshop. Should there be an expressed interest other such workshops will be planned.

f) NextGen 911 Migration Status – Live Status Map – Currently 68 PSAPs have migrated. The most recent (Concord PD/Kannapolis/Cabarrus County and Davidson County) are not in the Board packet as they just took place in the past week.

- Granville County 911 ESInet Migration (11/30/2020) – Migrated as i3. First live call at 1105 Hours EST. PSAP #60/physical location #94 (including backups) to migrate.
- Wayne County 911 PSAP Ribbon Cutting (12/2/2020) – Ribbon cutting for their new facility. The almost 12,000 square feet of space will house the new 911 center which will occupy approximately 2,500 square feet. Wayne County was the recipient of a $1.5M PSAP grant that allowed for a portion of the construction, workstation furniture and chairs, radios, CAD, and logging equipment that will serve as the primary PSAP for Wayne County and the backup PSAP for Duplin County.
- Davie County 911 ESInet Migration (12/2/2020) – Migrated as i3. Vesta hosted call handling equipment. First live call at 1045 Hours EST. PSAP #61/physical location #96 to migrate.
- Beaufort County 911 ESInet Migration (12/14/2020) – Migrated as i3. First live call at 1053 Hours EST. PSAP #62/physical location #97 (including backups) to migrate.
- Hendersonville PD 911 ESInet Migration (12/16/2020) – Migrated as i3. Viper hosted call handling equipment. First live call at 1154 Hours EST. PSAP #63/physical location #98 (including backups) to migrate.
- Henderson County 911 ESInet Migration (12/16/2020) – Migrated as i3. Viper hosted call handling equipment. First live call at 1627 Hours ES. PSAP #64/physical location #99 (including backups) to migrate.
- Stokes County 911 ESInet Migration (01/20/2021) – Migrated as i3. Vesta hosted call handling equipment. First live call at 1122 Hours EST. PSAP #65/physical location #100 (including backups) to migrate.
- Eastern Band Cherokee Indians 911 ESInet Migration (01/27/2021) – Migrated as i3. Vesta hosted call handling equipment. First live call at 1101 Hours EST. PSAP #66/physical location #104 (including backups) to migrate.
- Gates County 911 ESInet Migration (02/10/2021) – Migrated as i3. Vesta hosted call handling equipment. First live call at 1350 Hours EST. PSAP #67/physical location #104 (including backups) to migrate.
- Montgomery County 911 ESInet Migration (02/17/2021) – Migrated as i3. Vesta hosted call handling equipment. First live call at 1058 Hours EST. PSAP #68/physical location #106 (including backups) to migrate.
- Cabarrus County 911/Concord PD 911/Kannapolis PD 911 (02/23/2021)
- Davidson County 911 (02/24/2021)

g) NextGen 911 GIS Status – All 100 jurisdictions are engaged in uploads of their GIS data.

h) State 911 Plan Update – Staff is working with legal and procurement to secure the services of the vendor. The goal is to have the first internal working meeting in July. Ms. Harris will be reaching out to Board members for considerations of those to serve on the work group. She also encouraged members to advise her of potential work group members.

i) Upcoming Biennial Audit – Ms.Tapler is in the process of documentation preparation for the audit and there are no anticipated issues.

j) Legislative Update – FCC 911 Fee Diversion NPRM (Notice of Public Rule Making) – Mr. Bradford reported. On February 17, 2021, the FCC proposed new rules to eliminate 911 fee diversion. Over the past ten years the FCC has tried to curtail diversion of 911 fees raised among the states. A few states have diverted funds year over year, triggering criticism of the FCC for not acting. After given the authority to make a change, the FCC implemented the NPRM. The Commission was directed to implement rules within 180 days of the federal legislation, which would be on June 25, 2021. Mr. Bradford believes many states will choose to file comments, although he does not think it will cause any potential changes for our state. There are policy issues to be considered by the Board, which he identified and those have been included in the Board agenda book. The FCC provided examples of acceptable and unacceptable purposes and functions for fee use. One unacceptable use being "equipment or infrastructure for law enforcement, firefighters, and other public safety/first responder entities, including public safety radio equipment and infrastructure, *that does not have a direct impact on the ability of a PSAP to receive or respond to 911 calls or to dispatch emergency responders.*" He said this was consistent with NC Board law but not necessarily with the law in some other states and will probably receive comments from other states. If the Board

wishes to file comments Mr. Bradford will draft them on behalf of the Board and present them to the Commission for consideration. He also spoke about the unusual wording of a section of the rules that requires the Commission to create an "interagency strike force" to study "how the Federal Government can most expeditiously end diversion" by states and taxing jurisdictions.

6. **Executive Committee Report** — Ms. Wright reported the committee has discussed potential language for legislative changes but determined there is nothing significant to put forth at this time.

7. **Education Committee Report**
    a) Cumberland County – Priority Dispatch 2 Day Refresher Class for EMD, EFD and EPD – A brief overview of the refresher course was presented by Ms. Turbeville. The committee unanimously approved the course at their last meeting and brought it to the Board in the form of a motion. Ms. Templeton conducted a roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*
    b) Hoke County – Priority Dispatch "Online Universal Telecommunication Essential Course" – Ms. Turbeville gave a summary of the course. The committee unanimously approved the course at their last meeting and brought it to the Board in the form of a motion. Ms. Templeton conducted a roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*
    c) Wilson County – Denise Amber Lee "Best Practices of a Successful CTO; Training the Adult Learner" – Ms. Turbeville summarized the communication officer training The committee unanimously approved the course at their last meeting and brought it to the Board in the form of a motion. Ms. Templeton conducted a roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*
    d) General Report – Mr. Greene reported. One additional course, FBI Basic Crisis Negotiation Course, was brought before the committee by Pasquotank-Camden 911. The committee and staff felt it was not within the statute to allow for reimbursement and therefore unanimously voted not to approve. The committee did not meet in February, but Staff continued to work on committee goals. The website project has been delayed due to an update to DIT's website platform. Once that migration is complete, they will resume work on the Board website. The information aid for 911 ESInet/ NextGen is being drafted and a 1-page FAQ on the NMAC is being drafted. These should be presented at the next committee meeting for approval. Staff is meeting with representatives from the state of Washington to discuss their public service announcement (PSA) project and are excited about the possibility of replicating it here in North Carolina.

8. **Funding Committee Report**
    a) Carteret County 911 Priority Dispatch Training Licenses – Mr. Bone reported. Carteret County requested $8,700 in funding for 4-Priority Dispatch ProQA Training Licenses. The production licenses are an eligible expenditure and are on the approved use of funds list. The training licenses are not on the approved use of funds list. The training license request before the Board is for all 3 call-taking disciplines/protocols, meaning Emergency Medical Dispatch (EMD), Emergency Fire Dispatch (EFD) and Emergency Police Dispatch (EPD). The training licenses are meant to be used solely in a training environment and not for live calls. Staff recommendation is to approve the Priority Dispatch ProQA training license as an eligible expenditure. The committee voted unanimously at their last meeting to approve the staff recommendation and brought this forward as a motion. Ms. Conner conducted a roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*
    b) Currituck County 911 Funding Reconsideration – Mr. Bone reported. Currituck County 911 submitted a funding reconsideration request for radio console dispatch workstations. Staff recommended approval of the funding reconsideration request in the amount of $74,869.26. The committee voted unanimously at their last meeting to approve the staff recommendation and brought this forward as a motion. Ms. Connor conducted a roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*
    c) High Point 911 Funding Reconsideration – Mr. Bone reported. High Point 911 is in the process of completing a new primary PSAP project. They are moving operations from the Hamilton PSAP to the Westchester PSAP. High Point 911's current approved back-up is Guilford Metro. They want to

develop the current, primary PSAP into a back-up PSAP. High Point 911 asked for a funding reconsideration in the amount of $1,920,661.61. Their reconsideration request involved equipment for their new primary PSAP (i.e., Westchester) and replacement of end-of-life equipment for the Hamilton PSAP as the backup. Staff recommended funding for the new, Westchester primary PSAP, not including equipment for the proposed Hamilton backup PSAP. The staff recommendation is for the reconsideration request in the amount of $1,177,218.40, for the Westchester primary PSAP only. The committee voted unanimously at their last meeting to approve the staff recommendation and brought this forward as a motion. Ms. Conner conducted a roll-call vote. All attending Board members voted except Ms. Neal who had earlier recused herself, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*

    d) General Report – Mr. Bone reported. The committee and staff continue efforts in reviewing PSAP fund balances and how they relate to the PSAP's 5-year Technology Replacement Plans. Previously, they reviewed higher-than-average PSAP fund balances. This culminated in decisions in December about the FY2022 PSAP Estimated Funding Distribution. The committee plans on looking next at lower-than-average PSAP fund balances. As discussed in December, their goal is to help PSAPs utilize their fund balances and plan for their technology needs, ensuring a high level of 911 service statewide. The committee asks staff to provide additional details of this effort to assist PSAPs with low fund balances during their reports. Ms. Harris noted that staff will be reporting about higher- and lower-than-average fund balances periodically to the Funding Committee.

9. Finance Team Report — Ms. Tapler has been working with the Office of State Auditors on the biennial audit of the Board finances. She reported the engagement letter was signed and they are moving forward with the entrance meeting, scheduled for March 1st. They will discuss the requirements and timeline for the audit. She anticipates working with OSA over the next 6 to 8 weeks to complete the audit, with OSA releasing the final report to the Board by May 2021. She also spent time working with PSAPs to complete cost shifts and reconsideration requests, and with AT&T to reconcile billing. She is compiling the costs for the billing into a spreadsheet that will reflect the cost billed per PSAP. It will also include legacy charges, which will help PSAPs forecast for those in future years, until the time those charges end. She has also worked on the Board's FY2022 budget and the service charge forecast, which will be presented at an upcoming meeting. She continues to work on Board financial operations to ensure funds are reported and expensed properly.

Ms. Falco said she and Ms. Templeton had attended several working PAT meetings to review revenue/expenditure reports and PSAP technology needs to anticipate upcoming funding reconsideration requests for budgeting purposes. They helped to prepare for the upcoming grant cycle by assisting with revisions to the grant workshop presentation and grant evaluation form updates. They also made progress on the CRM financial module/scope of work, with assistance from Mr. Bradford. She also provided an update on 2018/2019/2020 revenue/expenditure reports. For FY2018, there are 119 finalized, 7 awaiting the signed revised report and 1 in the clarification process. For FY2019, there are 60 finalized, 55 in the clarification process, and 12 awaiting the signed revised report. For FY2020, there are 6 finalized, 25 in the clarification process, 3 awaiting the signed revised report, and 93 awaiting review.

10. Grant Committee Report — Mr. Shipp reported the committee is preparing for the new grant cycle and there are currently 37 registrations for the grant workshop. He also mentioned Greg Dotson has joined the committee, replacing Brett Renfrow that stepped down. Ms. Harris noted some changes were made to the grant application and that Staff would present those to the committee the following week for review. She also welcomed Mr. Dotson to the committee.

11. Standards Committee Report
    a) Telecommunicator Training Requirement and EMD Requirement Policies – Ms. Conner reported. A joint ad-hoc committee between the Education Committee and the Standards Committee was tasked with drafting a policy for tracking through the Peer Review process EMD and telecommunicator training to meet the legislature requirements. The policy is as follows:

Emergency Medical Dispatch (EMD)

Authority: G.S. 143B-1406(f)(4a) requires each primary PSAP dispatching emergency medical services to develop policies and procedures for implementing an Emergency Medical Dispatch (EMD) program approved by the North Carolina Office of Emergency Medical Services (NC OEMS). EMD instructions must be offered by a Telecommunicator who has completed an emergency medical dispatch course approved by the Office of EMS.

Policy: The PSAP shall document and maintain policies and procedures and a verifying roster of Telecommunicators' EMD certifications. Records may be maintained in electronic or other forms. Proof of certification will be presented to peer reviewers during the PSAP review process; or may be requested by the Board at any time to enable financial reviews, etc.

Telecommunicator Training Requirements

Authority: G.S. 143B-1406(f)(5b) requires persons employed as Telecommunicators who are not required to be certified by the NC Sheriffs' Education and Training Standards Commission to successfully complete a minimum of 40 hours in a nationally recognized training course for 911 Telecommunicators or a basic Telecommunicator course offered by the NC Sheriffs' Education and Training Standards Commission within one year of the date of their employment or a substantially similar minimum training acceptable to the Telecommunicator's employer.

Policy: The PSAP shall present to the peer reviewers during the PSAP review process, a Telecommunicator certificate of course completion or roster of one of the approved courses that includes Association of Public Safety Communications Officials (APCO), International Academy of Emergency Dispatch (IAED) or the NC Sheriffs' Education and Training Standards Commission. For any course not listed, the course must be submitted to the Education Committee for review. Documentation should be maintained on file either electronically or manually. Proof of training and/or certification may be requested by the Board at any time to enable financial reviews, etc.

The committee voted unanimously at its last meeting to approve the policy and brought it forward as a motion. Ms. Conner conducted a roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*

Chairman Boyette stepped away for a few minutes asking Vice Chair Wright to continue in his absence.

b) General Report – Ms. Wright advised there were no general items to report.

12. Technology Committee Report
a) General Report – Mr. Means reported. There are 72 PSAPs are live on ESInet, with 8 more scheduled over the next month. They hope to complete 55 more before the end of the calendar year. Two are in on-hold status due to potential changes in design/building. The process is becoming more streamlined, with the latest cutover taking only 2 hours. The infrastructure is nearly complete for the SIP admin lines offering, with staff conducting meetings about how it will affect the billing process and accounting for offsets and charges, as well as processes to implement. They plan to finalize the framework and reach out to the 5 target PSAPs to begin the process later this month. Mr. Means then moved on to GIS, reporting there are 38 PSAPs i3 with progress being made to go back and pick up additional sites that are RFAI and convert them to i3. Staff continued work with CGIA and GeoComm, with 71 jurisdictions having fully met i3 standards and have their data residing in the AT&T EGDMS database, with 20 still in the process. The cybersecurity assessments are still underway with around 102 PSAPs completed, 61 final reports have been issued. Both Mr. Means and Ms. Harris feel this effort will need to be extended past the original contract with End-to-End Computing, scheduled to end in March. More on this topic is to be discussed in the next agenda item. In overall aggregation of the data, they are finding areas of weakness that need to be addressed and obtaining helpful information in developing a GIS governance model to decide what needs to be structurally implemented at a PSAP level to maintain security of the ESInet. Mr. Means plans to share more in-depth data with the committee,

who will then share with the rest of the Board at a future meeting. He also discussed initiatives the committee will be working on in the future including CAD, continuity planning, and additional capabilities of the ESInet.

During the report Chairman Boyette returned to the meeting. Mr. Foster briefly left, then returned.

b) End-to-End Computing Contract Extension/Budget Amendment – Mr. Means reported. In developing a strategy around ESInet cybersecurity assessment, an estimated completion date of March 2021 was established. Due to changes made to accommodate PSAP requests for additional time to address administrative and operational concerns, End-to-End Computing expended extra hours in additional coordination efforts. The original Statement of Work and subsequent project plan did not factor in this customization. A 90-day extension for additional hours will allow the project to be completed with the intended assessment analysis that the Board requested. Both the Technology Committee and the Funding Committee were provided an update regarding this extension. They concur with staff and recommend granting the extension and associated costs. Mr. Shipp made a motion to grant a 90-day extension to the cybersecurity assessment contract awarded to End-to-End Computing with an additional cost in the amount of $296,243.68, making the total project cost $1,481,218.40 to conclude no later than June 30, 2021. This motion also included approval for the necessary amendment to the 911 Board FY2021 budget. Mr. Bone seconded the motion. Ms. Conner conducted a roll-call vote. All attending Board members voted, and the motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*

13. 911 Regional Coordinator Reports — The Regional Coordinators gave brief reports. Ms. Conner had several PSAPs cutover to ESInet in her region. She also participated in PAT and project calls, assisted new PSAP managers with questions about financials and expenditure reports, and contacted her region for COVID outreach. Ms. Gardner was in contact with PSAPs in her region during their inclement weather incidents and worked on the grant application with Ms. Conner. She also spent time gathering information for committees and scheduling PAT meetings. Mr. Newberry assisted PSAPs with their technology plans, virtually attended PAT meetings and ESInet migrations in his region. He is also working to assemble the hosted CAD ad-hoc committee. Ms. Turbeville congratulated the PSAPs in her region that cutover in the past month and was busy with status calls in advance of them going live. She and Ms. Conner worked on updating the definitions for implemental functions, and met with several PSAPs regarding their fund balances, seat count and legacy phone billing. She also worked with PSAPs on their funding reconsiderations and grants.

14. Election of 911 Board Vice Chair for 2021 — Ms. Harris advised she received a nomination for Mr. Shipp as Vice Chair of the 911 Board. Chairman Boyette opened the floor for other nominations. Mr. Bone made a motion to close nominations. Ms. Wright seconded the motion. Ms. Conner conducted a roll-call vote. All attending Board members voted except Mr. Shipp, who abstained. The motion carried unanimously. Chairman Boyette called for a vote for Mr. Shipp as the 911 Board Vice Chair for 2021. Ms. Conner conducted a roll-call vote. All attending Board members voted except Mr. Shipp, who abstained. The motion carried unanimously. *Roster of roll call votes for all action items for this meeting included below as part of these minutes.*

15. Other — No other items were presented.

NORTH CAROLINA 911 BOARD MEETING
ROLL CALL
Friday, February 26, 2021
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10:00 AM – 12:00 PM

NC DIT 911 Board

NC 911 Board Members	4. Consent	7. a.) Cumberland - IAED EMD EPD, EFD Refresh	7. b.) Hoke - IAED Online Univ. TC Essential Course	7. c.) Wilson - DAL – Best Practice CTO Training Adult Leader	8. a.) Carteret County IAED Training License	8. b.) Currituck County Funding Reconsideration	8. c.) High Point Funding Reconsideration	11. a.) TC Training and EMD Req. Policies	12. b.) End to End Contract Ext./Budget Amendment	Close Nominations for 911 Board Vice Chair	14. Election of Jeff Ship as 911 Board Vice Chair
David Bone	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Secretary Eric Boyette	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Greg Coltrain	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Brian Drew	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Bo Ferguson	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Greg Foster	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Chuck Greene	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
J.D. Hartman	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Jeff Ledford	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Buddy Martinette	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
John Moore	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Melanie Neal	Y	Y	Y	Y	Y	Y	Recused	Y	Y	Y	Y
Jude O'Sullivan	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P	N/P
Jeff Shipp	Y	Y	Y	Y	Y	Y	Y	Y	Y	Recused	Recused
Earl Struble	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Donna Wright	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

The next Board meeting will be held on Friday, March 26, using simultaneous communication via Microsoft Teams Meeting.

Adjourn — Chairman Boyette adjourned the meeting at 11:48 AM.

NC DIT 911 Board

Tab 4 b – e)

b) **NG 911 Reserve Fund**
      February 2021 Account Balance   **$ 82,108,669**
      February 2021 Disbursement   **$ 416,409**

c) **CMRS Account**
      February 2021 Account Balance   **$ 4,717,130**
      February 2021 Disbursement   **$ 424,458**

d) **PSAP Account**
      February 2021 Account Balance   **$ 4,859,670**
      February 2021 Disbursement   **$ 3,998,608**

e) **PSAP Grant/Statewide Projects Account**
      February 2021 Account Balance   **$ 9,190,811**
      Grant Funds Committed   **$ 29,778,064**

Next Generation 911 Reserve Fund

FY2021 beginning Fund Balance: $65,426,679.57

28% Allocation	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	February 2021
Service Charge Receipts	$1,395,092.02	$2,085,230.33	$2,230,932.17	$2,319,928.70	$2,283,366.72	$712,657.19	$3,519,036.33	$2,177,477.96
Interest allocation	$64,893.33	$57,000.91	$48,171.13	$41,868.24	$36,337.94	$29,666.57	$26,004.53	$21,844.43
PSAP Grant/Statewide Project Allocation (In)			$14,000,000.00					
NG 911 Reserve Fund Disbursement	-$2,615,169.69	-$210,751.08	-$1,224,925.34	-$2,797,496.25	-$115,207.19	-$1,232,491.74	-$5,755,069.03	-$416,408.60
NG 911 Reserve Fund Balance	$64,271,495.23	$66,202,975.39	$81,257,153.35	$80,821,454.04	$83,025,951.51	$82,535,783.53	$80,325,755.36	$82,108,669.15

CMRS Account

FY2021 beginning Account Balance: $5,964,801.21

	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	February 2021
CMRS Service Charge Receipts	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Interest allocation	$5,916.18	$4,942.46	$4,058.58	$2,876.10	$2,470.26	$1,931.48	$1,703.72	$1,397.86
CMRS Allocation (out)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
CMRS Disbursement	-$397,838.09	$0.00	$0.00	-$90,502.16	-$91,226.45	$0.00	-$268,942.79	-$424,458.48
CMRS Account Balance	$5,572,879.30	$5,577,821.76	$5,581,880.34	$5,494,254.28	$5,405,498.09	$5,407,429.57	$5,140,190.50	$4,717,129.88

PSAP Account

FY2021 beginning Account Balance: $16,064,101.34

	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	February 2021
Service Charge Receipts	$3,703,957.11	$3,037,143.02	$2,887,243.71	$3,161,764.33	$2,991,754.65	$244,161.92	$5,193,795.98	$3,165,184.02
Wireline Service Charge Receipts	$614,662.16	$499,831.63	$465,005.38	$392,418.16	$458,439.36	$257,467.79	$606,566.46	$427,329.44
VOIP Service Charge Receipts	$1,000,935.69	$787,998.26	$733,878.84	$688,776.70	$737,779.53	$283,473.29	$1,228,238.54	$710,994.99
Prepaid Wireless Service Charge Receipts	$1,499,829.23	$1,020,790.25	$779,694.47	$816,971.03	$792,212.33	$769,253.18	$646,668.61	$445,726.50
Interest allocation	$15,933.15	$16,542.96	$14,575.60	$425.36	$868.41	$1,026.14	$135.36	$1,117.14
Subtotal	$6,835,317.34	$5,362,306.12	$4,880,398.00	$5,060,355.58	$4,981,054.28	$1,555,382.32	$7,675,404.95	$4,750,352.09
PSAP Allocation (out)			-$20,093,503.00					
PSAP Distributions	-$4,246,371.10	-$3,983,693.48	-$3,993,019.11	-$3,954,415.97	-$4,040,728.69	-$3,997,572.33	-$3,997,090.43	-$3,998,607.54
PSAP Account Balance	$18,653,047.58	$20,031,660.22	$825,536.11	$1,931,475.72	$2,871,801.31	$429,611.30	$4,107,925.82	$4,859,670.37

Certified by OSC/Cash Basis Reporting

		Total Disbursed									Remaining
PSAP Grant-Statewide 911 Projects Account		YTD	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Expenditures
			$29,744,439.97	$29,346,605.94	$30,103,477.33	$36,490,172.45	$36,851,064.39	$37,384,084.52	$37,208,698.88	$38,363,197.32	
FY2017	**Award Amount**										
Martin G2017-7 (048)	5,196,315.00	-4,724,784.53	-118,276.34					-36,429.50			0.00
Mitchell G2017-9 (049)	3,163,000.00	-2,909,389.86	-105,095.10			-110,718.43					0.00
Pasquotank G2017-11 (051)	1,010,779.00	-990,194.27						-14,540.00			0.00
FY2018	**Award Amount**										
Iredell G2018B-3 (063)	2,361,230.00	-2,211,577.73									0.00
FY2019	**Award Amount**										
Pender G2019-02 (068)	361,760.00	0.00									361,760.00
Greene G2019-03 (069)	841,964.00	0.00									841,964.00
Wayne G2019-04 (070)	1,530,693.00	-300,000.00									1,230,693.00
Rutherford G2019-05 (071)	1,161,548.00	-624,506.15									537,041.85
FY2020											
Davie G2020-01 (074)	232,767.00	0.00						-232,767.00			0.00
NC State Highway Patrol G2020-02 (075)	1,102,933.00	0.00									1,102,933.00
Pender G2020-03 (076)	45,873.00	0.00									45,873.00
Currituck G2020-04 (077)	583,655.00	0.00									583,655.00
Franklin G2020-05 (078)	3,958,873.00	0.00									3,958,873.00
Cumberland G2020-06 (079)	2,251,387.00	0.00									2,251,387.00
Chatham G2020-07 (080)	2,339,608.00	0.00									2,339,608.00
FY2021											
Bladen Co 911 G2021-01 (084)	$334,937.99	0.00									334,937.99
Clay County G2021-02 (087)	2,500,000.00	0.00									2,500,000.00
Lumberton PD (City of) G2021-03 (082)	$99,241.52	0.00									99,241.52
Sampson County G2021-05 (088)	$5,571,543.00	0.00									5,571,543.00
Surry County G2021-06 (085)	$238,127.00	0.00									238,127.00
Union County G2021-07 (086)	$484,021.00	0.00									484,021.00
Wilson County G2021-08 (083)	$35,900.00	0.00									35,900.00
STATEWIDE PROJECTS:	**Award Amount**										
E-CATS II (012)	2,688,500.00	-361,640.00	-535,017.38			-166,443.18		-117,125.18	-70,041.34	-160,592.84	1,277,640.08
Interpretive Services (042)	323,873.94	0.00	-23,979.75			-73,711.50		-23,768.25	-43,982.25	-21,833.25	136,598.94
Ortho Project III Image 20 (073)	4,108,739.00	-1,756,468.06	-80,199.60		-525,464.40	-134,187.60	-299,027.40	-18,625.00			1,294,766.94
CRM Statewide One-time Development	700,000.00	130,473.30	-734.10	-725.00	-9.10	-9.10	-9.10	-9.10			828,977.80
Ortho Project III Image 21 (081)	3,723,908.00	0.00				-1,386.00					3,722,522.00
	Approved Allocation from PSAP & CMRS			0.00	6,093,503.00							
	Transfer out to NG 911 Fund											
	Interest		29,501.97	26,026.83	21,904.13	18,801.78	16,568.52	13,357.96	11,723.34	10,432.80	
	Revenue 5%		435,966.27	731,569.56	796,761.49	828,545.97	815,488.11	254,520.43	1,256,798.69	777,670.69	
	Total Ending Fund Balance	$ 29,744,439.97	$29,346,605.94	$30,103,477.33	$36,490,172.45	$36,851,064.39	$37,384,084.52	$37,208,698.88	$38,363,197.32	$38,968,874.72	

Committed: $ 29,778,064.12

Grant Account Total **$9,190,810.60**

CASH BASIS REPORTING
OSC Certified

Tab 4 f)
Grant Project Updates per Reports

County of Bladen

NORTH CAROLINA
Office of Emergency Services
Public Safety IT/ GIS and 911 PSAP
299 Smith Circle; PO Box 396
Elizabethtown, North Carolina 28337
Jeffrey Kulp, Supervisor

March 5, 2021

<u>Bladen County 911/ Central Communications – Project Meloriem</u>
<u>NC 911 Board 2021 Grant monthly update – February 2021</u>

Greetings to all. I hope you are staying safe and healthy. This past month has been the month of negotiations and paperwork. I feel we have made considerable progress in nailing down numbers, making sure we have software options we need and finalizing agreements.

Some February highlights include:

- Southern Software – We received updated costs for all options needed by all agencies involved in this project. We are awaiting receipt of the final contract for review by our County Attorney and Commissioners.
- Southern Software & 911 Board Staff – I have been in communication with Angie T. about the vendor adjusting their server requirements. The result is a net change of minus one server (5 total to 4 total), but an increase in the individual price of each of those 4 servers (with overall total server cost still below original). This is a change from a dedicated/ stand-alone SQL server pair to SQL being installed on CAD and on RMS directly.
- NeverFail – We received updated costs on their solution. Prices increased slightly due to NeverFail increasing their costs, and the cost of installation has been rolled into their purchase price. With the new server configuration/ proposal, there would still be 2 server pairs. CAD/ SQL on one set of servers and RMS/ SQL on another set of servers to provide redundancy/ failover.

We are very excited about this project, and it is certainly a priority for us. We look forward to continuing this good progress in March with the signing of software contracts and the ordering (and maybe even receipt!) of hardware.

Sincerely,

Jeff Kulp
911 PSAP Manager
County of Bladen

Activities – February 2021

- Hosted virtual presentations for four architectural firms – February 10
- Selected architectural firm for negotiations
- Requested fee from selected architectural firm
- Received fee proposal from architectural firm

Anticipated Activities – February 2021

- Review architectural fee proposal
- Negotiate with selected firm, if necessary

Franklin County, NC
Grant Report – February 2021

Activities – February 2021

- Continued design development work
- Continued work on construction specifications
- Conducted design development status meetings – February 9 and 23
- Completed structured cabling design

Anticipated Activities – March 2021

- Continue work on construction specifications
- Conduct design development status meetings – March 9 and 23
- Complete construction documents
- Define technology timeframe
- Hold tower discussion
- Communicate regularly with project team (ongoing)

The tasks listed below will be tracked throughout the project duration and will be updated monthly. New additions are shown in the salmon highlighted rows. At this time, the project remains on schedule.

Work Plan

Task	Projected Timeframe[1]	Actual	Completed
Contract for project oversight	Months 1-2	November 2019	x
Issue RFQ for architectural services	Months 2-3	December 2019	x
Select architect and contract for services	Months 4-5 (February – March 2020	Selection: February 2020	x
Negotiate fee with architect	Months 5-6 (March – April 2020)	March 2020	x
Receive Commissioners' approval to proceed with contract for architectural services	Month 6 (April 2020)	May 4, 2020	x
Enter into contract for architectural services	Month 6 (April 2020) Revised: Month 8 / June 2020	June 5, 2020	x
Define technology needs in conjunction with building design	Months 13-19 / November 2020 – April 2021		
Facility design and construction document process	Months 9-19 (July 2020 – April 2021)	July 30 – Began	

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[1] As the grant agreement was signed in late October 2019, month 1 is considered November 2019.

Task	Projected Timeframe[1]	Actual	Completed
Establish lead times for major technology systems, including NG911			
Bid and award construction project	Months 17-19 (March 2021 – May 2021) Revised: Months 18-21[2] (April 2021 – July 2021)		
Proceed with construction, including coordination with migration to the State ESInet NG911 network	Months 20-32 (June 2021 – June 2022) Revised: Months 22-34 (August 2021 – August 2022)		
Procure new technology and furnishings	Months 26-30		
Substantial completion of construction, address any facility punch list issues	Month 30 (April 2022)		
Install, test, and accept new technology: existing equipment and the CAD system will be relocated to the new site prior to and during go-live to ensure that the old and new center remain operational until the transition is complete	Months 30-34 (April – July 2022)		
Go-live / Physically transition the Franklin County primary PSAP to the new facility and the State ESInet NG911 system	Months 34-36 (July – September 2022)		

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[2] Follow on dates will be adjusted once the timeframes are more clearly defined.

Task	Projected Timeframe[1]	Actual	Completed
Monitor systems post cutover	Months 32-36 (May – September 2022)		

Greene County, NC

Activity	This Period	Next Period
1. Design	• No activities	• None expected
2. Permits	• No activities	• None expected
3. Construction	• Continue framing • Continue work on new roof • Begin electrical rough-in • Begin plumbing rough-in • Begin mechanical rough-in • Begin grounding • Start on windows • Prep for clean agent system • Duct work • Masonry around windows • Prep for dry-in • Begin prep for generators	• Continue framing • Continue electrical rough-in • Continue plumbing rough-in • Continue mechanical rough-in • Continue grounding • Continue working on windows
4. Communications Systems	• Continue meetings with AT&T • Continue technology migration planning and vendor out-reach • Receive dispatch furniture proposals • Evaluate options for radio consoles	• Continue meetings with AT&T • Continue technology migration planning and vendor out-reach • Award dispatch console project • Prep for telecom circuits • Begin procurements of technology needs
5. Other Activity	• Routine project meetings to coordinate design and technology needs	• Continue to hold project meetings to discuss next steps and coordinate project needs

Project Update
2-1-2021 to 3-15-2021

NG 911 Statewide Project

Progress items since last report;

- AT&T has completed the installation of the AVPN Router routers at Troop A/C/D, Yonkers Road Back-Up location and Troop E. AT&T technicians still must complete the installation of additional network connectivity to each telecommunicator position at Troop A/C/D and Troop E.
- SHP has completed the installation of additional network connectivity to each telecommunicator position at the Yonkers Road Back-Up location.
- TSU has identified two communications center locations that will require upgrades to UPS's. SHP has issued purchase orders and received the hardware for both locations and is awaiting a schedule from the contractor to complete the hardware installations. The two affected locations are;
    - Troop H Communications Center (Monroe)
    - Troop B Communications Center (Elizabethtown)
- AT&T has fully completed the installation of the connectivity from the EsiNet to SHP's TSU location, however issues with the MACV installation at JFHQ have delayed the project such that the initial go live date for Troop A/C/D has been pushed back from 4/17/2021 to 5/19/2021.
- SHP has delivered a fully functioning Layer 2 WAN connection at each of the SHP communications centers and AT&T has successfully connected the TSU connection to the SHP Layer 2 WAN.
- AT&T has delivered the VESTA CPE equipment to the SHP warehouse for Troop H (Monroe).
- AT&T has modified the order for switches for certain co-located communications centers from 24 port to 48 port and is awaiting there delivery (Troops A/C/D and F/G)
- AT&T and NC911 Board have provided to SHP an additional VESTA CPE rack that was located at Brevard PD for use at the Training Academy location in Raleigh to facilitate the temporary installation of VESTA workstations at TSU. This will afford SHP with the ability to provide a centralized training location for both Admin and Agent VESTA call handling equipment.
- SHP has retrieved the above equipment from Brevard PD and is working to install the equipment at TSU.
- Training dates are being finalized between AT&T and SHP.

Findings to date;

- All locations require additional wiring to support the backroom CPE equipment.
- All locations require additional cabling to support CPE at T/C workstations.
- Rack Space is available at all locations with the exception of the Back Up location at Yonkers and Troop B Communications Center.
- Troop B and H require upgrades to electrical capacity or capabilities
- Troop A/C/D and F/G required switch upgrades to support multiple troops in one communications center (24-48 port).

Mitigation Strategy for above;

- SHP has reached an agreement with AT&T to install required wiring and appropriate connections in each location.
- SHP has developed a work around at Troop B Communications Center to resolve the rack space issue by removing certain equipment no longer needed and performing a re-rack of all remaining equipment.
- SHP has engaged National Power to provide quotes for upgrading the UPS's at Troop B (Elizabethtown) and Troop H (Monroe.
- AT&T has agreed to provide upgraded switches (24-48 ports).

Other action items;

- SHP has concluded its review of the data collection and reporting options provided by Intrado (ECATS), which is the vendor of choice with NCDIT-911 Board. SHP has received pricing and is working to place orders for both the up front and recurring portions of ECATS so that it will be operational in line with the final go live dates currently set for 21 July 2021.
- After reviewing the Text to 911 feature offering and receiving a confirmation from AT&T that should SHP NOT elect to receive text that the transferring PSAP will receive an "unable to send" message rather than sending "blind" that SHP has decided to decline the service offering at this time.
- To avoid any delays with the go live schedule, SHP and AT&T have agreed to shift Troop B and Troop H to later into the current schedule to allow ample time for the upgrades mentioned above to be complete.
- SHP requested and the 911 Board approved a grant extension on the basis of delays associated with COVID-19. The grant extension was approved, and the new grant end date is now 31 October 2021. The "go live" schedule however did not change. SHP and AT&T remain committed to completing all go live dates by the end of July 2021.

Respectfully submitted,

Mike

Michael Hodgson,
Project Manager, NCSHP NG911 Project.

Activities – February 2021

- Finalize review of contractor bids
- Begin negotiations with selected contractor
- Continue review of budget / funding

Anticipated Activities – March 2021

- Finalize budget / funding
- Prep for construction kick-off

The tasks listed below will be tracked throughout the project duration and will be updated monthly. At this time, the project remains on schedule.

Work Plan

Task	Projected Timeframe	Actual	Completed
Bid construction project	Month 1	December 2020	x
Contract with construction firm	Month 5 (April 2021)		
Construct new 911 facility	Months 5 - 19 (April 2021 – June 2022)		
Procure equipment and infrastructure for the new facility	Months 7 - 19 (June 2021 – June 2022)		
Develop migration / transition plan	Months 15 - 19 (February – June 2022)		
Test and validate all new equipment infrastructure	Months 19 - 20 (June – July 2022)		
Migrate any equipment, if feasible, while operating from backup center	Month 21 (August 2022)		
Transition operations to new facility	Month 21 (August 2022)		
Test back capabilities for Carteret County	Months 22 – 23 (September – October 2022)		

Sampson County, NC
Grant Report – February 2021

Activities – February 2021

- Finalize review of contractor bids
- Begin negotiations with selected contractor
- Continue review of budget / funding

Anticipated Activities – March 2021

- Finalize budget / funding
- Prep for construction kick-off

The tasks listed below will be tracked throughout the project duration and will be updated monthly. At this time, the project remains on schedule.

Work Plan

Task	Projected Timeframe	Actual	Completed
Bid construction project	Month 1	December 2020	x
Contract with construction firm	Month 5 (April 2021)		
Construct new 911 facility	Months 5 - 19 (April 2021 – June 2022		
Procure equipment and infrastructure for the new facility	Months 7 - 19 (June 2021 – June 2022)		
Develop migration / transition plan	Months 15 - 19 (February – June 2022)		
Test and validate all new equipment infrastructure	Months 19 - 20 (June – July 2022)		
Migrate any equipment, if feasible, while operating from backup center	Month 21 (August 2022)		
Transition operations to new facility	Month 21 (August 2022)		
Test back capabilities for Carteret County	Months 22 – 23 (September – October 2022)		

Union County, NC
Grant Report – February 2021

Activities – February 2021

- Review/update of grant management contract assistance and oversight with county staff

Anticipated Activities – March 2021

- Review grant project schedule
- Validate task items
- Execute contract for grant management assistance and oversight
- Begin development of procurement schedule

The tasks listed below will be tracked throughout the project duration and will be updated monthly. Highlighted information denotes changes in report since last submitted report.

Work Plan

Task	Projected Timeframe[1]	Actual	Completed
Contract for project oversight	Months 1-2	Execution underway	
Determine procurement schedule based on facility project schedule	Month 2 (March 2021)	Delayed awaiting facility project schedule update from architect	
Outline and finalize a procurement strategy based on expected installation schedules	Months 5-6 (May – June 2021)		
Install generator (dependent on construction contract)	Month 6 (early summer 2021)		
Procure equipment and schedule installations	Month 11+ (November 2021 onwards depending on procurement lead times)		
Install structured cabling systems and datacenter needs	Month 12 (December 2021 - construction dependent)		

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[1] As the grant agreement was signed in mid-December 2020, month 1 is considered January 2021.

Task	Projected Timeframe[1]	Actual	Completed
Install backroom supporting technical systems	Month 16 (April 2022 - construction dependent)		
Test and validate – (pre-go-live decision)	Months 18 - 19 (June – July 2022)		
30-day burn-in – (prior to go-live)	Months 18 – 19 (June – July 2022)		
Train – (just prior to cutover)	Month 19 (July 2022)		
Go-live	Month 19 (July 2022)		
30-day post-cutover monitoring	Month 20 (August 2022)		

Grant Award Equipment Procurement Status

Item	Grant Award Amount	Expended Amount	Reimbursement Amount Requested / Submitted	Approved / Reimbursed Amount	Award Funds Remaining	Comments
Generator	$160,000.00	$0.00	$0.00	$0.00	$160,000.00	Design review completed & included within facility bid package
Radio Tower	$150,000.00	$0.00	$0.00	$0.00	$150,000.00	Preliminary design completed; awaiting site permitting approval from City/Monroe
Microwave Link	$125,000.00	$0.00	$0.00	$0.00	$125,000.00	Preliminary path review completed
Structured Cabling	$39,000.00	$0.00	$0.00	$0.00	$39,000.00	Design review completed; Awaiting compilation of bid documents by county;
Radio Distribution Surge Protection	$5,016.00	$0.00	$0.00	$0.00	$5,016.00	Facility grounding design review completed & included within facility bid package
Racks for Equipment	$5,005.00	$0.00	$0.00	$0.00	$5,005.00	Rack design for data center completed & included in facility bid package
Totals:	$484,021.00	$0.00	$0.00	$0.00	$484,021.00	

Facility Construction Activity Status[2]

Facility Bids Update
- GMP change order approved by Board of Commissioners 2.15.21

Construction Schedule
- Updated schedule with revised start and completion date pending execution of GMP and permit approvals

Permitting
- Facility site and building permits resubmitted to City of Monroe and NCDEQ; under review

---

[2] Facility construction summary is provided as reference only for showing alignment with grant award equipment integration.

Owner (Union County) Contracted/Owner Furnished Items
- Structured Cabling
    - Awaiting bid process start from County
- Audio Visual System(s)
    - Awaiting bid process start from County
- Facility Security (Access Control/CCTV) Packages
    - Awaiting bid process start from County
- Communications Tower
    - Awaiting site permitting approval.

Wayne County, NC

911 New Facility   MCP Project Number 18-117

Monthly Progress Report – February 2021

Activity	This Period	Next Period
1. Design	• No action expected	• No action expected
2. Permits	• No actions required	• No actions expected
3. Construction	• No actions expected	• No actions expected
4. Communications Systems	• ANI/ALI interface installed on new CAD positions in new facility • CAD clients final testing • Time synchronization equipment installed • Access control installations completed • Radio equipment installations finalized and tested • Recording system installed and tested • Final testing with AT&T on call handling equipment • AV System installation • Final acceptance testing conducted and documented • Successful facility/technology cutover on February 22	• Install UPS annunciator • Begin EMD program • Final punch list for technology
5. Other Activity	• MCP held routine meetings with the County for project coordination	• Continue monthly coordination meetings for final report and grant closing.

March 02, 2021

Ms. L.V. Pokey Harris
Executive Director
North Carolina 911 Board

Ms. Harris,

This letter is progress report #3 for Wilson County's tower site generator replacement grant. This report represents February 01 – 28, 2021.
The generator vendor, Gregory Poole, confirms we are still on track for the project to be completed by the May 2021 deadline. They are still expecting the generator to arrive at their facility in Garner, NC the week of April 20, 2021. They have received the tap box and have been in contact with the manufacturer who doesn't foresee any delays. They will provide us notice when the generator is ready to ship from the manufacturer.

Please let us know if there are questions.

Sincerely,

Jeffrey T. Williford

Jeffrey T. Williford
Assistant Director

L21-005

Tab 5
Executive Director's Report
Pokey Harris

Tab 5 a)
911 Board Appointment Status

Tab 5 b)
Staffing Update

Tab 5 c)
Biennial Audit Status

Tab 5 d)
State 911 Plan Update

Tab 5 e)
COVID-19 Update

Tab 5 f)

NextGen 911 Migration Status

NC NG911 Migration Status
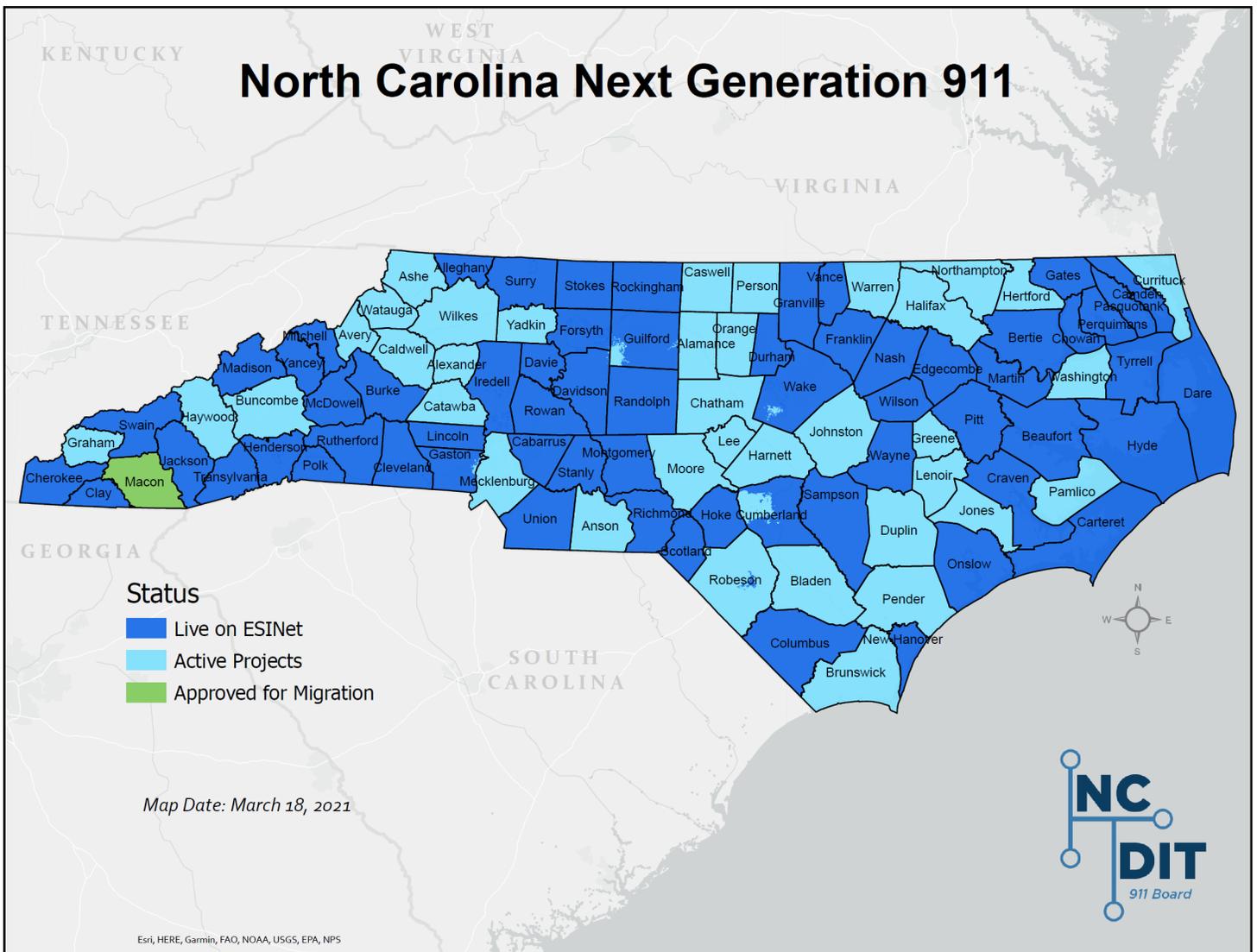
ESInet Migrations
February 23, 2021 – March 24, 2021

Due to ESInet migrations now being conducted under Covid-19 restrictions and limited accessibility requirements, we have suspended the requests for photos and quotes at this time.

Kudos and Congratulations to All!!!

Cabarrus County 911
Concord PD 911
Kannapolis PD 911
ESInet Migration
(South Central Region)
February 23, 2021

- **Migration as i3**
- **First Live Call at 1503 Hours EST (Cabarrus)**
  - **1041 Hours (Concord)/1356 Hours (Kannapolis)**
- **PSAP #69/Physical Location #108 (Including Backups)**

Davidson County 911 (North Central Region) ESInet Migration February 24, 2021

- Migration as i3
- Vesta Hosted Call Handling Equipment
- First Live Call at 1226 Hours EST
- PSAP #70/Physical Location #110 (Including Backups)

Stanly County 911 (South Central Region) ESInet Migration March 1, 2021

- Migration as i3
- First Live Call at 1133 Hours EST
- PSAP #71/Physical Location #112 (Including Backups)

Columbus County 911
(Eastern Region)
ESInet Migration
March 3, 2021

- **Migration as i3**
- **Vesta Hosted Call Handling Equipment**
- **First Live Call at 1110 Hours EST**
- **PSAP #72/Physical Location #114 (Including Backups)**

Dare County 911
Includes Tyrrell and Hyde Counties
(Eastern Region)
ESInet Migration
March 3, 2021

- **Migration as i3**
- **Viper Hosted Call Handling Equipment**
- **First Live Call at 1256 Hours EST**
- **PSAP #73/Physical Location #116 (Including Backups)**

Clay County 911
ESInet Migration
(Western Region)
March 10, 2021

- **Migration as i3**
- **Vesta Hosted Call Handling Equipment**
- **First Live Call at 1210 Hours EST**
- **PSAP #74/Physical Location #118 (Including Backups)**

Cherokee County 911
(Western Region)
ESInet Migration *** PSAP #75 ***
March 17, 2021

- **Migration as i3**
- **Vesta Hosted Call Handling Equipment**
- **First Live Call at 1040 Hours EST**
- **PSAP #75/Physical Location #119 (Including Backups)**

**Alleghany County 911
(Western Region)
ESInet Migration
March 17, 2021**

- **Migration as i3**
- **First Live Call at 1041 Hours EST**
- **PSAP #76/Physical Location #121 (Including Backups)**

*UPCOMING ESINET MIGRATIONS
SCHEDULED PRIOR TO MARCH
911 BOARD MEETING*

**Moore County 911
Moore County SO
(South Central Region)
ESInet Migration
March 24, 2021**

Tab 5 g)

NextGen 911 GIS Status Map

NC NG911 GIS Status

North Carolina Next Generation 911

NC Counties GIS Status
- Data i3 Ready - EGDMS
- Data i3 Ready - GDH
- Data Processed
- Data Processed
- Data Processed (Pre-ALI)
- Data Uploaded
- User Invite Sent
- none

Map Date: March 18, 2021

NC DIT
911 Board

Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

Tab 5 h)
National Suicide Prevention Lifeline (988)

ATTENTION 911 State/County Coordinators and PSAPs!

Effective October 24, 2021, MANDATORY 10-digit local dialing is required for all customers in the North Carolina 910 Area Code

Why is the local dialing plan changing?
On July 16, 2020, the FCC adopted an Order (FCC 20-100) approving 988 as the 3-digit abbreviated dialing code to reach the National Suicide Prevention Lifeline, starting July 16, 2022. Customers must continue to dial 1-800-273-TALK (8255) to reach the Lifeline until July 16, 2022.

The Order requires all telecommunications carriers, interconnected Voice over Internet Protocol (VoIP) providers, and one-way VoIP providers (covered providers) to make any network changes necessary to ensure that users can dial 988 to reach the existing National Suicide Prevention Lifeline by July 16, 2022. For 988 to work in the North Carolina 910 area code, 10-digit local dialing must first be implemented.

Does this apply to North Carolina?
Yes. Implementation of this Order requires all covered providers to make 10-digit dialing mandatory for all local calls in the entire North Carolina 910 area code.

Why is 10-digit dialing going to be required in this area code?
The FCC ordered that any area code that has the 988 prefix and has 7-digit local dialing be transitioned to 10-digit local dialing to ensure everyone is able to reach the National Suicide Prevention Lifeline using the 3-digit 988 code.

Will everyone in the 910 area code have to dial 10 digits for local calls?
Yes. Every customer with a number from the 910 area code will change to **mandatory** 10-digit dialing for local calls. Dialing 7 digits for local calls will be prohibited for all customers in the entire area code.

What will be the new dialing procedure?
To complete local calls, the new dialing procedure requires callers to dial the area code + telephone number. This means that all local calls in the entire 910 area code that are currently dialed with 7 digits will need to be dialed using the area code + telephone number.

When will the dialing change begin?
Beginning April 24, 2021, you should start dialing 10 digits (area code + telephone number) for all local calls. If you forget and dial just 7 digits, your call will still be completed.

When will the dialing change become mandatory?

Beginning **October 24, 2021**, you must dial 10 digits (area code + telephone number) for all local calls. On and after this date, local calls dialed with only 7 digits may not be completed, and a recording will inform you that your call cannot be completed as dialed. If you get this recording, you must hang up and dial again using the area code with the 7-digit telephone number.

How does this affect providers of PSAP services and equipment?

All local calls in the 910 area code that are currently dialed with 7 digits will need to be dialed using area code + telephone number. **All PSAP equipment**, such as speed dialers and call forwarding equipment with a number from the 910 area code and programmed to dial only 7 digits must be updated or reprogrammed to dial 10 digits (area code + telephone number) for all local calls in the 910 area code. Such updates or reprogramming must occur between April 24, 2021 and October 24, 2021 (the permissive dialing period). Starting these efforts before April 24, 2021 may result in 10-digit calls not being completed (if permissive 10-digit dialing has not yet been implemented). And on and after October 24, 2021, 7-digit calls may not be completed.

> **Any necessary changes for PSAPs in this area code must be completed by October 24, 2021.**

What other changes need to be made?

In addition to changing your dialing patterns, all services, automatic dialing equipment, or other types of equipment that are programmed to complete local calls using only 7-digit numbers will need to be reprogrammed to complete calls to 10-digit numbers. Some examples are:

- life safety systems or medical monitoring devices
- PBXs
- fax machines
- Internet dial-up numbers
- fire or burglar alarm and security systems or gates
- speed dialers
- mobile or other wireless phone contact lists
- call forwarding settings
- voicemail services, and other similar functions

Be sure to check your website, personal and business stationery, advertising materials, personal and business checks, contact information, your personal or pet ID tags, and other such items to ensure the area code is included.

What will remain the same?
- Your telephone number, including current area code, will not change
- The price of a call, coverage area, or other rates and services will not change due to the dialing change
- What is a local call now will remain a local call regardless of the number of digits dialed
- You will continue to dial 1+ the area code + telephone number for all long-distance calls
- You will continue to dial a prefix when dialing from a multi-line telephone system (i.e., in a hotel, office building, etc.) as required
- You can still dial just 3 digits to reach 711 (relay services) and 911 (emergency services)
- If 211, 311, 411, 511, 611, or 811 are currently available in your community, continue to dial these codes with just 3 digits

- The National Suicide Prevention Lifeline can still be reached by dialing 1-800-273-8255 (TALK) even after the 988 code is in effect

When can I begin dialing 988 to reach the National Suicide Prevention Lifeline?

Beginning **July 16, 2022**, dialing "988" will route your call to the National Suicide Prevention Lifeline. Customers must continue to dial 1-800-273-8255 (TALK) to reach the Lifeline until July 16, 2022.

Still have questions?

Customers with questions about the dialing change should contact their local service provider, or they can visit the FCC website https://www.fcc.gov/suicide-prevention-hotline.

Tab 5 i)
National Public Safety Telecommunicator Week (NPSTW)
April 11 – 17, 2021

Tab 5 j)
Kings Mountain PD 911
Passing of Andy Underwood Communications Manager

Tab 5 k)
Legislative Update
Richard Bradford

Tab 6
**CGIA 2020-2023 Cycle/
Northern Piedmont and
Mountains 2022 Proposal**
Pokey Harris

Tab 6 a)
Presentation
Tim Johnson, CGIA Director
Ben Shelton, Program Manager

NCDIT | NORTH CAROLINA
DEPARTMENT OF
INFORMATION
TECHNOLOGY

Roy Cooper
Governor

Thomas I. Parrish, IV
Acting Secretary and State Chief Information Officer

March 2, 2021

L.V. Pokey Harris, MPA, ENP
Executive Director
NC 911 Board
NC Department of Information Technology
PO Box 17209
Raleigh, NC 27619-7209

Dear Ms. Harris:

The NC Center for Geographic Information and Analysis (CGIA) is pleased to submit the attached proposal for the Northern Piedmont and Mountains Orthoimagery Project. This project will continue the progress of refreshing orthoimagery across North Carolina based on your approval of the 2020-2023 cycle last year.

The Northern Piedmont and Mountains project consists of 26 counties including the Greensboro and Winston-Salem urban areas and the northwestern mountain from Alleghany County in the north to Madison County in the south. The project directly benefits the primary PSAPs in the project area by providing fresh orthoimagery prepared to state standards and quality checked by state and local government partners. The project team continues to find ways to compress the schedule and deliver the orthoimagery to the PSAP community. Flights will occur early in 2022 followed by end-user quality control throughout the summer with final delivery in November of next year either in person or by other means depending on the status of COVID-19 in that region of our state.

The Northern Piedmont and Mountains 2022 project will be completed at a total cost of $3,430,142 which is significantly lowered than the projected cost of $3,794,185 expressed in the 2020-2023 proposal submitted to you in 2019, a reduction of $364,043. The lower cost is based on a continued downward trend in negotiated costs for orthoimagery production services that the team has seen since the four-year proposal was prepared.

I look forward to briefing you and the Board on this proposal at the March 26 Board meeting.

Sincerely,

Tim Johnson, GISP
Director, NC Center for Geographic Information and Analysis

STATEWIDE ORTHOIMAGERY PROGRAM

Phase 3

Northern Piedmont and Mountains

Orthoimagery Acquisition, Processing and Distribution

Prepared for

North Carolina 911 Board

Prepared by

North Carolina Center for Geographic Information and Analysis

Submitted on

March 2, 2021

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Contents

Overview

The availability of current, high-accuracy orthoimagery is essential for effective response to emergencies, especially with the wide-spread use of mobile phones. According to the North Carolina 911 Board website, over 77% of calls to NC Primary Safety Answering Points (PSAPs) in 2019 were from wireless devices. Having consistent orthoimagery products with a high degree of spatial accuracy provides positioning and situational awareness necessary to effectively respond to these calls. Since the first statewide orthoimagery project in 2010, the quality and reliability of the orthoimagery available to every PSAP in the state has consistently improved due to the investment of the NC 911 Board.

Beginning in 2012 with the first four-year cycle of the NC Statewide Orthoimagery Program, the NC Center for Geographic Information and Analysis (CGIA) has served as the overall project manager through two statewide cycles. CGIA's approach to each project is to emphasize quality control that ensures that the board's investment produces the best possible imagery products for use in the Computer Aided Dispatch (CAD) systems employed by PSAPs. In addition to stringent quality control measures, a focus on continually refining the imagery products and processes has improved the final deliverables, shortened the delivery timeline, and reduced costs for the board. Since 2010, the Statewide Orthoimagery Program has
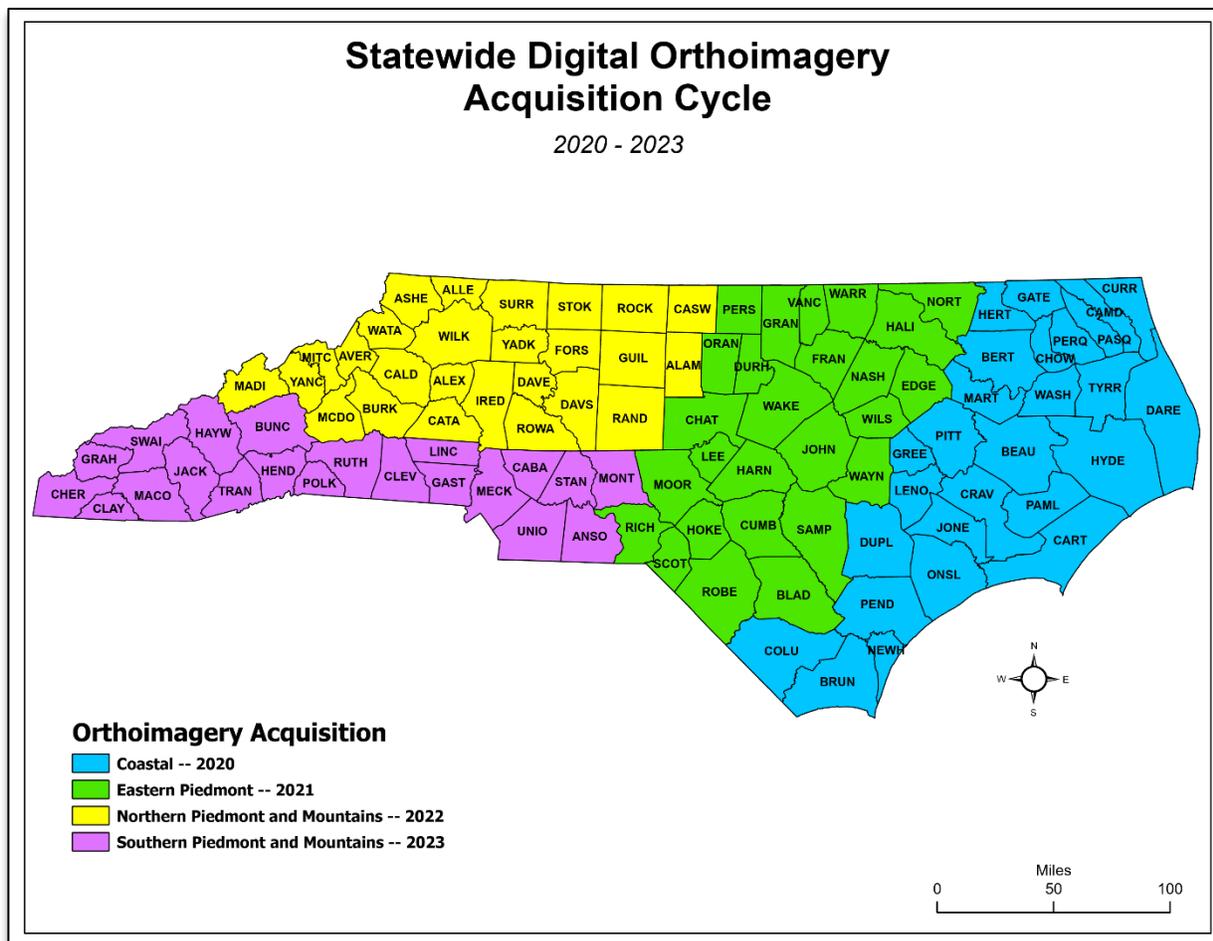
Figure 1: Current Four-Year Statewide Orthoimagery Cycle

delivered over 175,000 square miles of high-resolution orthoimagery products to every Primary PSAPs in all 100 counties. This equates to over 60 terabytes of data.

To continue to sustain this mission-critical dataset, CGIA proposed the third statewide cycle of orthoimagery projects beginning in January 2020 and continuing through 2023 (See Figure 1). The NC 911 Board approved this proposed cycle in March of 2019, with funding approved for the first phase of the four-year cycle, which was completed and delivered new imagery for 27 counties in the coastal region of the state in early December 2020. The second phase of the cycle is currently underway and flying to collect imagery for 26 counties in the eastern piedmont region of the state that includes the Raleigh-Durham urban areas, Rocky Mount, Fort Bragg, Camp Mackall, and Seymour Johnson Air Force Base. The subject of this proposal is Phase 3, which covers 12,349 square miles and 26 counties in the Northern Piedmont and Mountains region. The unique challenges included in this project area are the Greensboro and Winston-Salem urban districts, as well as the mountain region in the western part of the project area (See Figure 2). The mountain region accounts for almost 25% of the project area and requires increased specifications for sun angle and flight planning, which directly impact the costs of acquiring imagery over this region. Close coordination with stakeholders and a strict implementation of quality control measures is necessary to successfully complete the project in the narrow schedule proposed for such a large area.
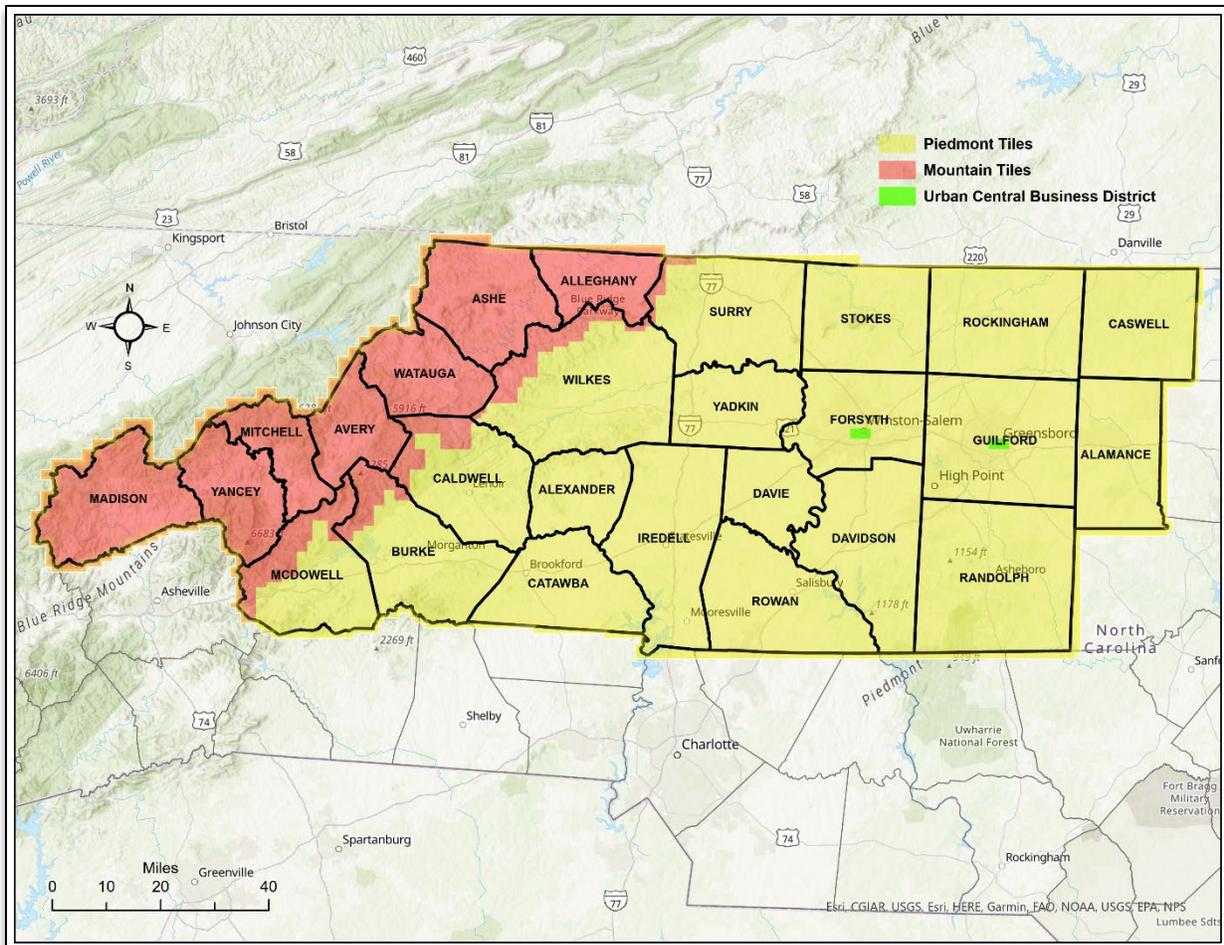
Figure 2: 2022 Orthoimagery Project Area
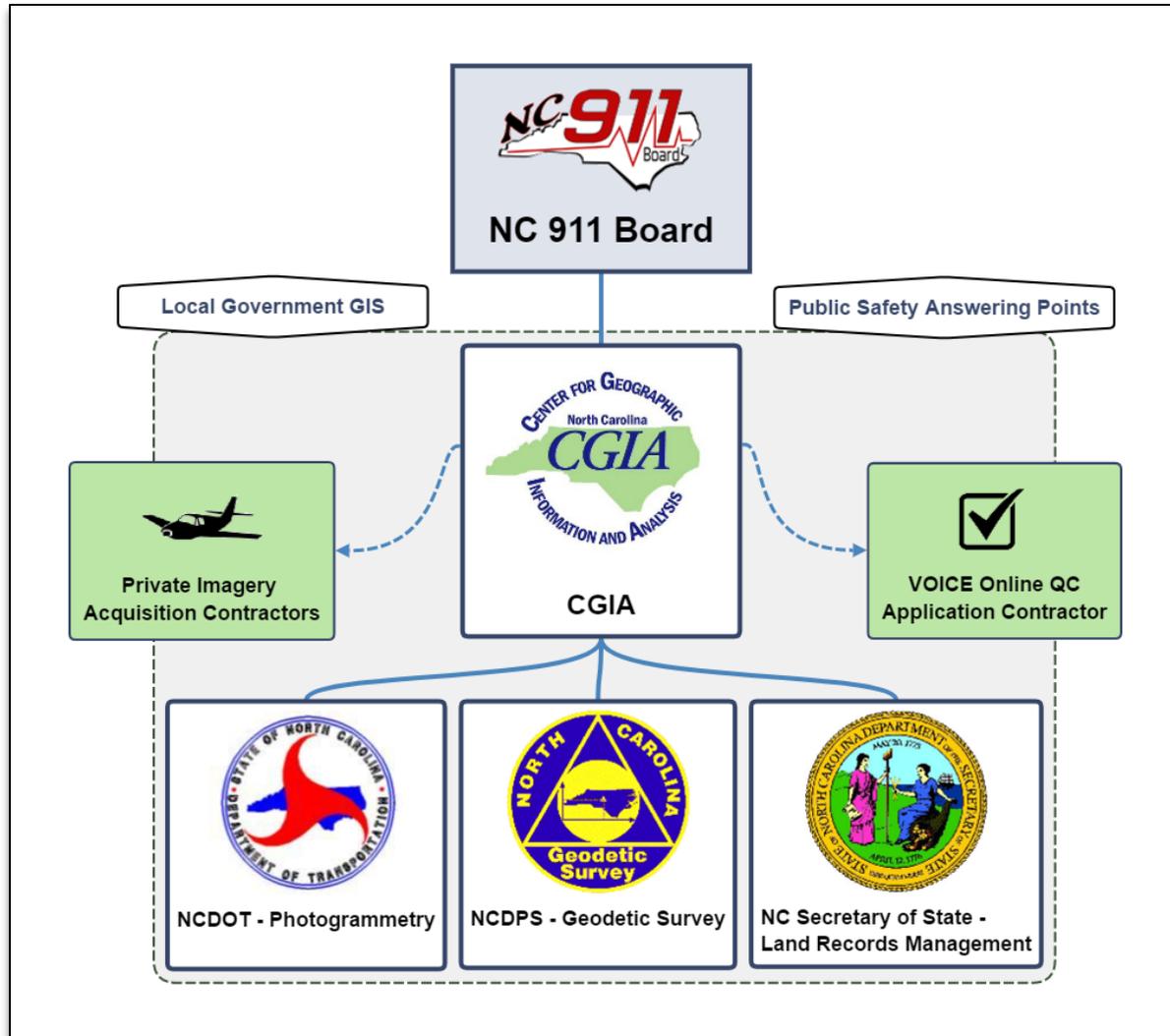
Figure 3: Project Team

As the overall project manager, CGIA must take all the distinctive challenges for each project into consideration when developing requirements and oversight. Each project is a collaborative effort among many different state agencies and external stakeholders. Each organization plays a role in creating the best final product possible. Figure 3 demonstrates the level of stakeholder involvement in each project that contributes to the success of each project.

Project Team Roles and Responsibilities

1. CGIA

CGIA will serve as the project manager of all third-party contractors and state partners, to include performing qualifications-based selection (QBS) procurement for private sector contractors, developing contracts, managing invoices, and documenting scope of work on the projects. CGIA will specify the detailed requirements for products and services based on *North Carolina Technical Specifications for Digital Orthophoto Base Mapping*. CGIA will also

oversee all quality review activities and resolutions, manage the creation of all final orthoimagery products, coordinate outreach with Primary PSAPs and local government representatives, and ensure client satisfaction.

2. NCDOT Photogrammetry Unit

NCDOT Photogrammetry will provide advisory and technical services throughout the project phases. NCDOT has extensive expertise and experience in photogrammetry (i.e., the art, science, and technology behind obtaining reliable accurate measurements and three-dimensional data from overlapping photographs). NCDOT Photogrammetry is responsible for the technical details associated with photogrammetric processes and production which include flight and control planning, imagery acquisition, image post processing, GNSS-IMU post processing, aerotriangulation, and orthoimagery generation. GNSS-IMU comprises technology on the acquisition aircraft that uses orbiting GNSS satellites to compute the aircraft's relative position, time, and velocity at the time of each exposure collected by the sensor. GNSS-IMU is used in aerotriangulation, which is the use of ground control to spatially rectify each image to the correct location on the earth's surface. This facilitates detailed analysis of acquisition coverage requirements and compliance to the specifications outlined in the North Carolina standards for orthophotography. The NCDOT Photogrammetry Unit will evaluate and advise on all report documentation, technical data submittals, and contractor submittals. NCDOT will also perform quality review for 30% of each project and will ensure specifications are met for transportation infrastructure.

3. NC Department of Public Safety-NC Geodetic Survey

The NC Geodetic Survey has extensive expertise and experience in managing positional quality control for orthoimagery. NC Geodetic Survey will advise on the QBS procurement process for private contractors, maintain validation range for testing and approving digital cameras, and perform horizontal quality control. They will also evaluate report documentation and technical data submittals directly related to survey control.

4. NC Department of the Secretary of State, Land Records Management Section

The Department of the Secretary of State is the author of the *North Carolina Technical Specifications for Digital Orthophoto Base Mapping*, the state standard for orthoimagery acquisition. The Land Records Management Section will advise on the QBS procurement process of private contractors, interpret the state standard for the project team as needed, and serve as a member of the state project team throughout the projects.

5. Private Contractors

Private contractors, managed by CGIA with support from collaborating members of the state project team, will perform acquisition, processing, production and delivery of orthoimagery to CGIA covering all project counties. An additional private contractor will develop and deliver an online application for quality review of the imagery product by PSAP and GIS end users in the project areas.

6. Local Governments

The Public Safety Answering Points and the local government GIS representatives are critical to the successful completion of each orthoimagery project. They will perform

preliminary quality review of the product, receive final delivery of the orthoimagery from CGIA, and coordinate with project team for any product exceptions or outstanding issues. Over the past statewide orthoimagery projects, PSAP and local government review of a minimum of 25% of project imagery during quality review has been critical to eliminate error from final products. Feedback from the PSAP and GIS community validate current deliverables and support the development of future product requirements.

Project Approach

In 2011, the NC 911 Board selected CGIA as the Project Manager over all aspects of the Program. Throughout all phases of the statewide orthoimagery program, the project team has focused on taking a proactive approach to quality control and project administration. The foundation for this high standard of quality and oversight is based on the *North Carolina Technical Specifications for Digital Orthophoto Base Mapping*, which were originally adopted by the GICC on August 18, 2004. This State Standard for orthoimagery was updated and re-adopted on December 11, 2014 by the NC Secretary of State (see https://www.sosnc.gov/documents/forms/land_records/Technical_Specifications.pdf). Using these specifications as a basis for the orthoimagery program has allowed CGIA and the project team to perform oversight and accountability of all contractor processes and deliverables to ensure that the investment of the NC 911 Board leads to the best orthoimagery products possible.

The imagery acquisition season is the most critical period for each project. This typically runs from the first of February into mid-April depending on which part of the state is being flown. Due to the stringent requirements of the projects for leaf-off collection, lack of cloud cover, rivers within their banks, absence of snow cover, minimum sun angle, and other conditions, the contractors may only have eight to ten days with optimum conditions to fly the project area. NCDOT has developed various acquisition monitors allowing the team to review the results of every flight mission not to exceed five days after the mission occurs. If the flight mission does not meet certain requirements, re-flights are required. CGIA includes contractual terms and conditions mandating re-flights the next flying season if there is demonstrated non-compliance. This ensures that the contractors are placing North Carolina as a high priority and not missing opportunities to acquire imagery when conditions are favorable.

Throughout each phase of the program, oversight and accountability of private contractors has been achieved primarily through the review of several required compliance documents that each contractor must submit at milestones throughout the project. Much of the compliance documentation must be signed and sealed by a Professional Land Surveyor (PLS) licensed in North Carolina to attest to the accuracy of the processes outlined. They outline the processes, technologies, and results of each phase of orthoimagery development, such as flight planning, horizontal control surveys, imagery acquisition, GNSS-IMU post-processing, aerotriangulation, and final product delivery. Each piece of documentation is analyzed by the state project team for adherence to the state standards for orthoimagery and the project requirements. This generates a consistent, high-quality product from every contractor on each project.

Beginning with the 2020 project, the project team implemented more stringent standards for horizontal accuracy, following updated positional accuracy standards set forth by the American Society for Photogrammetry and Remote Sensing (ASPRS). Previous projects achieved a high-

level of accuracy in the final products. However, with advancements in imaging and GNSS-IMU technology even higher levels of spatial accuracy can be achieved without additional cost to the program. The horizontal accuracy achieved in the final products allows for a level of confidence in 911 response, as well as validates the spatial accuracy of many of the GIS datasets being used for CAD mapping and call routing. Many local and county GIS organizations rely on the imagery from this program to create and maintain addresses, street centerlines, and other spatial data that now directly impact the Next Generation 911 (NG911) system.

Another tool that can be leveraged by county and local GIS organizations to create and maintain NG911 spatial data is color infrared (CIR) imagery. CIR has many uses for a variety of industries, but in terms of 911, it greatly enhances the ability to distinguish built features and impervious surfaces, such as roads, buildings, and parking lots, from trees and other vegetation, which can be seen in Figure 4. It can also be loaded as an additional layer in conjunction with the standard orthoimagery products in certain CAD software that can aid response teams in navigating difficult terrain and highlighting man-made objects in dense vegetation. If a road or path is in dense forest, swamp, or other problematic conditions, it can become difficult to see on the basemap even with leaf-off conditions. However, by turning on a CIR data layer, roads and paths will stand out more clearly against the red tree and vegetation features.

Figure 4: Color Infrared Imagery Example

Figure 5: Color Infrared Imagery Assessment of Flood-Impacted Ground Conditions

In the 2020 and 2021 orthoimagery projects, CIR has also proved beneficial to post-flight imagery assessments. An important task after each flight is for the vendors to examine the collected images to determine if all ground conditions meet the state specifications. If the collected images contain snow cover, flooding, or other adverse ground conditions as outlined by the State Standard, the area must be collected again once conditions are more suitable. Evaluating the collected imagery quickly and efficiently is key to ensuring these areas are identified and there is opportunity enough to re-collect problem areas. Figure 5 demonstrates how CIR highlights the extent of flooding in an area by clearly outlining the dark region and blue water extending outward from the river in the example. The vendor can then quickly identify the flight lines and exposures that will require additional acquisition once waters recede. Local and county government organizations have also realized benefits from the inclusion of CIR in project deliverables. One county is leveraging CIR to update a county tree canopy dataset as part of a buy-up project on top of the 2021 Eastern Piedmont Orthoimagery Project. This will facilitate better management of natural resources and contribute to tax revaluations.

In recent years, the costs associated with this additional product have been drastically reduced due to lower prices for computer processing hardware and storage. The cost of CIR in the 2020 project was 1.8% of the acquisition contractors' proposed budgets, which is less than the amount of reduced costs achieved through negotiations during contractor selection. This trend continued with the 2021 project where the cost of CIR was just over 2% of contractor costs.

911 BOARD COVERAGE REQUIREMENTS	
7 Mile Extent	Coverage that extends a minimum of 7 miles outside that county. Provides coverage for cellular call routing.
Neighbor Counties – Current project year	Provides regional coverage within the current project year.
Neighbor Counties – Previous project years	Completes regional coverage with imagery from previous projects where applicable.
Adjacent State Imagery	GA, SC, TN, and VA imagery from partners in those states incorporated into the single file mosaic for counties that border these states.

Table 1: Imagery Extent Requirements

CGIA and the project team continually strive to improve upon the administration of the program and the products produced. CGIA has incorporated lessons learned and feedback from the 911 Board to improve the final products delivered at the end of each project. Table 1 outlines the current requirements related to the coverage of the imagery delivered to each county. Throughout the first four-year cycle, advancements were made to the county-wide, single file imagery deliverable that many of PSAP CAD systems employ. Figure 6 demonstrates an example of how the new coverage requirements combine to produce the single file product that is now delivered at the end of each project to the PSAPs. Feedback received from the 911 community showed concern of having basemapping that extended outside the county boundary far enough for the routing of mobile phone calls that may originate outside a county's
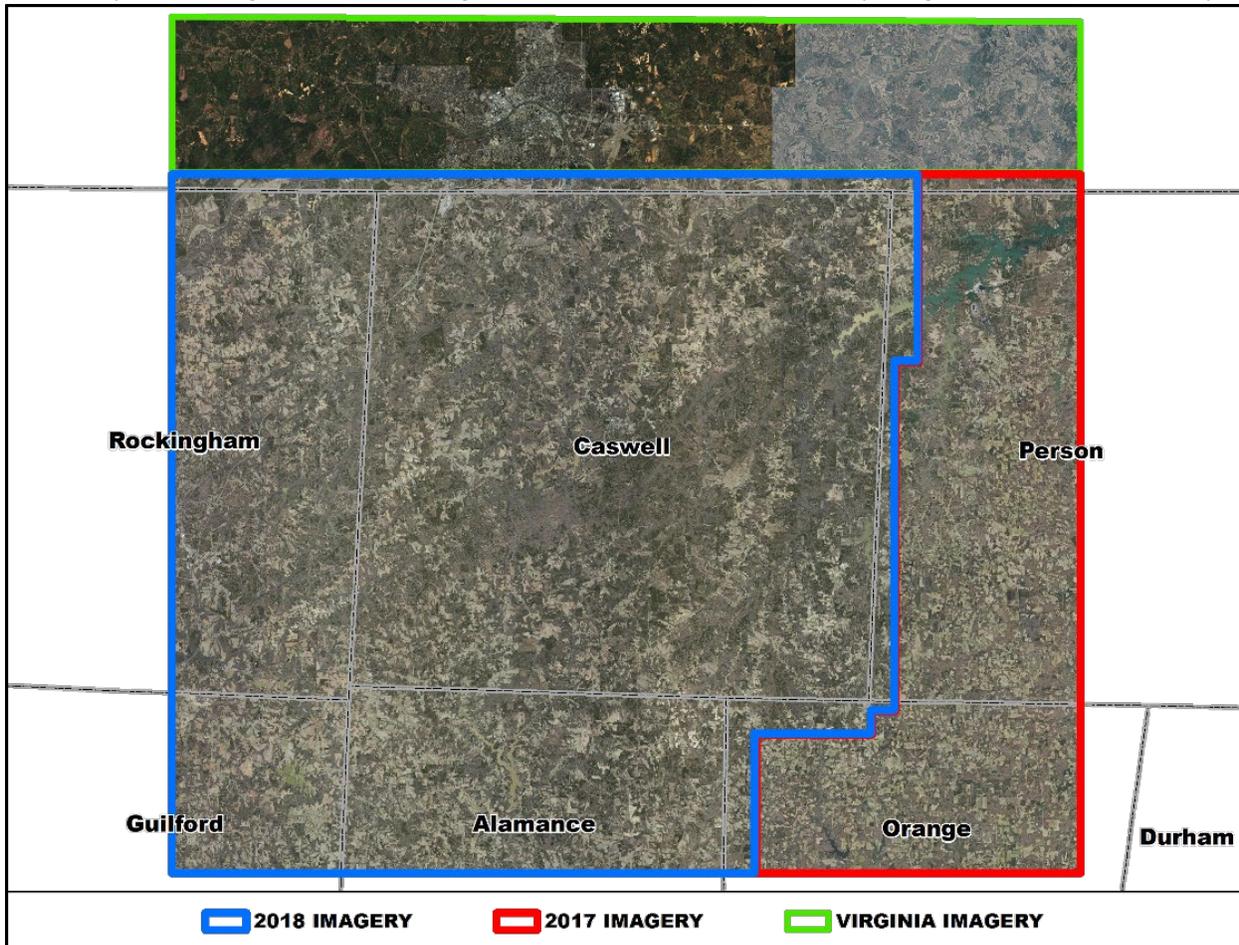
Figure 6: Single File Deliverable Extent for Caswell County for the 2018 project

borders depending on where the cellular tower is located that is used to route that call. Having these requirements in place ensures each PSAP receives the coverage necessary to respond to any emergencies even if they fall outside their respective county boundary.

CGIA makes every effort to stay up to date with the latest trends in imagery collection and processing techniques to assess the potential for improvements to the products delivered to North Carolina PSAPs. A new approach that was started with the 2017 project and has continued since then, is to increase processing requirements for downtown areas of major cities with tall structures. In the 2014 project, the central business districts of Greensboro and Winston-Salem had increased specifications for flight planning to minimize the lean of tall buildings in the imagery. However, this did not eliminate all building lean as can be seen in the left side of Figure 7. By implementing a new processing approach that requires additional workflows and three-dimensional modeling, the orthoimagery produced as part of the 2018 project in the same area shown in the right of Figure 7 eliminates all building lean so that sidewalks, roads, and ingress/egress routes surrounding the structure are clearly visible. This approach to downtown areas will be implemented again for the Greensboro and Winston-Salem central business districts in the 2022 project.

Figure 7: Typical Nadir Orthoimagery (Left) compared with new processing requirements for tall structures (Right)
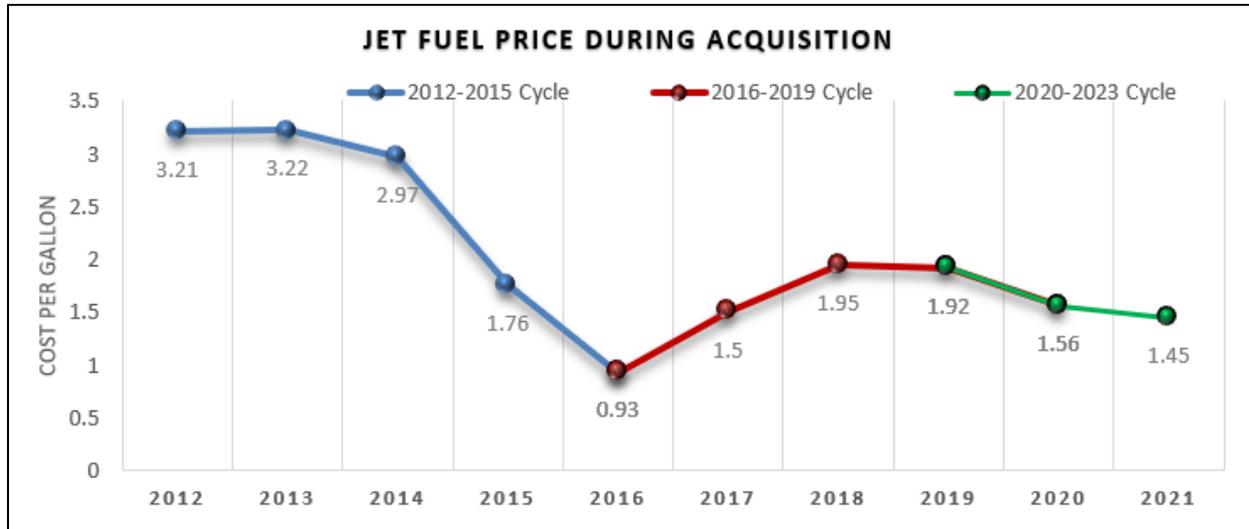
Figure 8: Jet Fuel Price Analysis

Costing Approach

Over seventy-five percent of the proposed project budget is dedicated for contracting with private firms to fly the aircraft and produce the imagery. CGIA places a major emphasis on analyzing multiple factors that go into the contractor costs for each project. The makeup of the project area directly impacts the expected costs due to several factors. The degree of elevation change, especially in the western mountains, and amount of built-up urban areas all directly impact the cost to acquire and process imagery. The project team factors in all these variables as part of a detailed cost analysis, along with economic factors, such as overall inflation and the cost of jet fuel when budgeting for each phase. Figure 8 shows the variability in jet fuel prices for the acquisition season in each project year over the life of the program. This cost is a major impact on the cost of contracting for the project and has been stable or trending lower.

Each subsequent project budget builds on the savings realized by the previous projects because the project team analyzes the trends and adjusts the budget forecasting. Figure 9 demonstrates how the overall 2020 through 2023 trend line continues to adjust as each project's actual costs are realized. If current budget trends continue through the full 4-year cycle, the program will save over $1.5 million from the 4-year budget that the board approved in early 2019. The proposed 2022 budget alone is over $350,000 under that approved 4-year cycle.

Overall, CGIA takes great care to ensure the NC 911 Board funds are spent efficiently to produce the highest-quality product possible. Each project since 2012 has been delivered on time and under budget. The 2012 through 2015 statewide orthoimagery cycle was completed with a savings to the Board of $1,353,723 below the combined budget totals from each project. The 2016 through 2019 statewide orthoimagery cycle was completed with a savings of
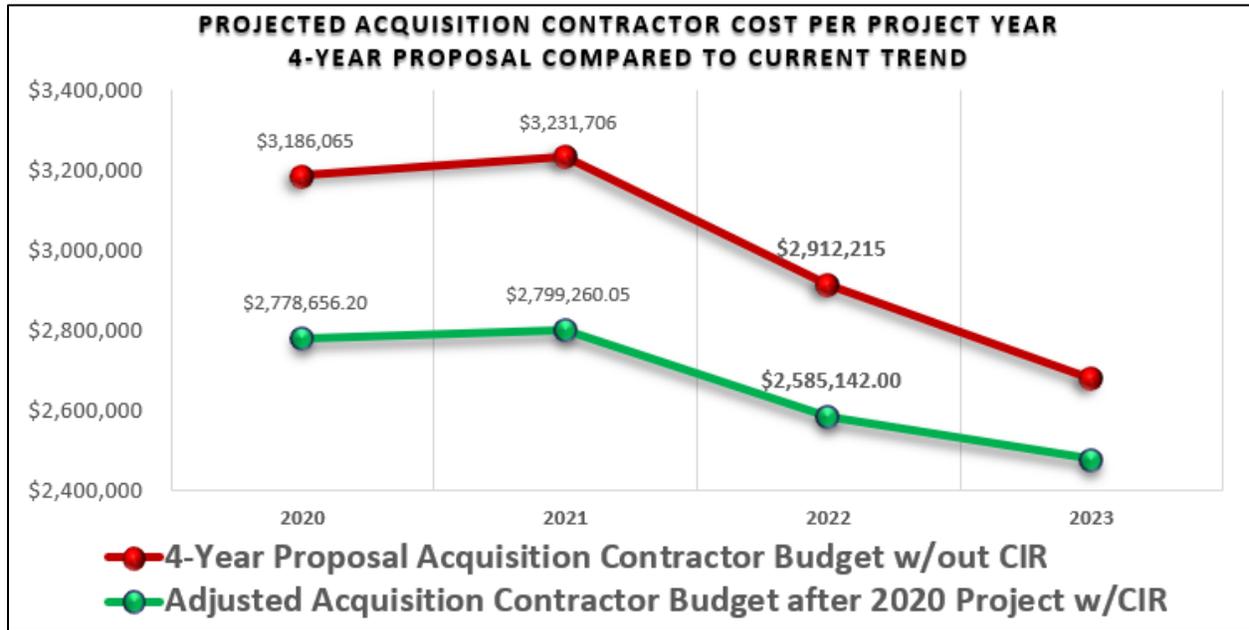
Figure 9: Adjusted Acquisition Contractor Budgets from Approved 4-Year Proposal

$2,171,342.22 under the combined project budgets over the four years. CGIA and the project team continue to improve upon processes and timelines to maintain this trend for future efforts.

Level of Effort and Cost

The table below provides the level of effort required to complete the 2022 project based on the set of tasks outlined in the scope of work. This proposed total project cost is $364,043.00 lower than this phase's cost in the approved four-year proposal from early 2019.

Item	Phase 3
CGIA Labor	$350,000
Private Contractors	$2,585,142
Information Technology	$15,000
NCDOT-Photogrammetry	$155,000
NCDPS-NC Geodetic Survey	$205,000
VOICE (QC Service Provider)	$75,000
Travel and Miscellaneous	$5,000
NC DNCR Archives	$40,000
Total	**$3,430,142**

Table 3: Budget.

An additional line item was added for NC Department of Natural and Cultural Resources-State Archives Division to allow for retention of past project data. This cost was not anticipated for this phase at the time of the four-year proposal. However, backing up past project data into the State Archives is critical to ensure the data is available even if a hardware failure occurs on the physical storage devices used by the project team.

Assumptions

- CGIA Labor line item is calculated at $84 per hour starting July 1, 2021. If the CGIA labor rate changes, these changes would begin July 1, 2021. It is unknown at the time of this proposal if the labor rate will change or what that change could be.
- Information Technology line item cost includes hardware for processing and delivering final products to all Primary PSAPs in the project area.
- The Virtual Online Inspection, Checking and Editing (VOICE) application used for the past two cycles will be continued.
- Storage costs associated with State Archives data retention remain consistent with past cycles.

Schedule

Table 4 outlines the schedule for the third phase of the orthoimagery cycle. It assumes that approval to proceed is granted by the NC 911 Board in May 2021.

Task	Begin	End
1: Qualifications-Based Selection and Procurement	July 2021	December 2021
2: Imagery Acquisition and Production	February 2022	July 2022
3: Quality Control	July 2022	November 2022
4: Delivery	November 2022	November 2022
5: Project Closeout	February 2023	April 2023

Table 4: Project Schedule for Phase 3
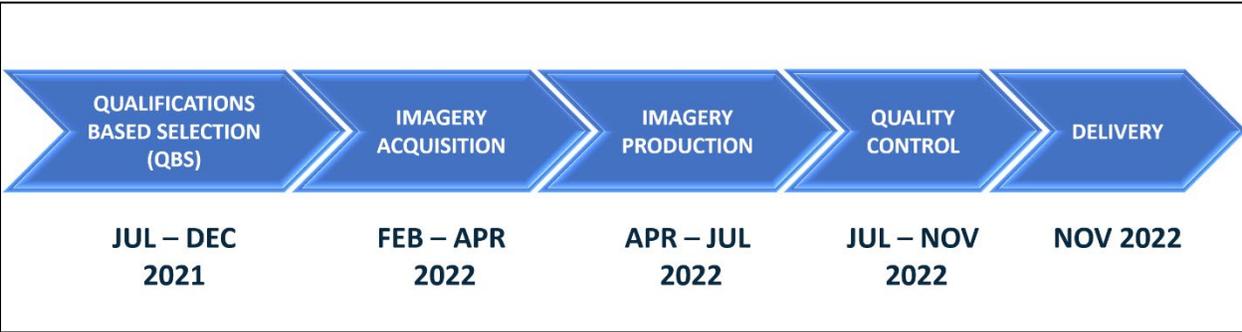
Figure 10: Expedited Orthoimagery Project Lifecycle

Scope of Work

The scope of work consists of five distinct tasks performed by a combination of the state project team and private sector contractors.

Task 1: Qualifications-Based Selection and Procurement (July – December)

The purpose of this task is to develop contracts with public and private sector project partners and to begin other administrative tasks in preparation for orthoimagery acquisition.   Specific activities under this task include:

1. Develop a statement of work, develop and execute a contract between CGIA and the NC 911 Board, and develop contracts between CGIA and the NCDOT Photogrammetry Unit and the NCDPS-NC Geodetic Survey, respectively.

2. Develop and release an RFQ and manage a QBS process for qualifying private sector contractors.

3. Select private sector contractors as a result of the QBS process and negotiate actual cost.

4. Initiate project planning, meet with project partners, and begin outreach activities with stakeholders.

5. Conduct kickoff and planning workshops with all applicable parties including project partners, contractors, and the Geographic Information Coordinating Council, Working Group for Orthoimagery and Elevation.

6. Develop core data required to support the project, develop project websites, initiate open lines of communication, and implement the project SharePoint site.

7. Finalize extents and requirements for 'true orthoimagery' development process in built-up urban areas in the project area to facilitate contract requirements for private sector contractors.

Deliverables:
- Contract between CGIA and the NC 911 Board
- Contracts between CGIA and NCDOT Photogrammetry and NCDPS-NC Geodetic Survey
- Contracts between CGIA and private sector contractors
- Project website and project SharePoint site

Task 2: Imagery Acquisition and Production (January – July)

The purpose of this task is to acquire leaf-off imagery and to perform and document all post-processing activities prior to product delivery. Prior to the flying season, the team must plan the technical details of the project, finalize technical requirements, and develop, engage, review, and approve quality compliance documentation. The flying season is driven by sun angle and vegetation per the *North Carolina Technical Specifications for Digital Orthophoto Base Mapping*, the state standard. The goals are to minimize shadows, snow, and vegetative cover that would obscure infrastructure. CGIA and the state project team, including NCDOT, NC Secretary of State, and NCDPS-NC Geodetic Survey, mandates adherence by subcontractors to the *North Carolina Technical Specifications for Digital Orthophoto Base Mapping* and invests a detailed focus on photogrammetric compliance. Specific activities under this task include:

1. Acquisition Planning. Validate digital sensors using NC's validation range and procedures. Produce and review and finalize detailed flight plans. Design and implement ground control and survey planning.

2. Review planning compliance documentation.

3. Finalize imagery specifications to facilitate consistent radiometric deliverables across varying land classifications and contractor study areas.

4. Conduct flights, acquire orthoimagery, and verify images captured meet state specifications.

5. Perform all post processing activities required to develop a tile-based orthorectified product.

6. Deliver acceptance documentation for acquisition and all post processing submittals.

7. Develop and procure agreement with the VOICE quality control application contractor.

8. Quality Control Application: Update the VOICE application based on the previous projects' user experience. The VOICE application receives the delivery of orthoimagery tiles and facilitates three levels of visual quality control (Levels 2-4 where Level 2 is a 30% quality review by NCDOT, Level 3 is a 5% review by CGIA, and Level 4 is an independent review by PSAP and local government end-users).

9. Confirm software readiness to support quality review process. Acquire hardware to facilitate receipt of processed data. Plan hosting services and software updates to accommodate online access to imagery.

10. Outreach: Perform outreach and conduct training programs for PSAPs and local government points of contact to perform quality review during the Production stage. CGIA will work with the NC 911 Board to identify the appropriate contacts.

Deliverables:
- Detailed requirements for imagery products
- Quality Review Training programs
- Reports verifying images captured meet state specifications

Assumptions

- To account for weather and leaf-off conditions, flight terms vary depending on geographic areas.

Task 3: Quality Control (July – November)

The purpose of this task is to perform the following four primary tasks:

- Complete a full circle quality review on the image deliverable product (including review, issues submittal, resolution, resolution submittal review, and signoff).
- Develop secondary image format of 3-band (RGB) images after satisfactory signoff and delivery of the TIFF product.
- Develop additional imagery products of false-color color infrared images from delivered TIFF product.
- Implement Cloud hosting services and initiate data loading onto NC OneMap.
- Open communications for final delivery.

Specific activities under this task include:

1. Finalize and secure Cloud hosting services and perform initial image data loading onto servers.

2. Conduct Level 1 quality review by imagery processing contractors to assure the imagery meets state specifications and is free of systematic error or systematic visual quality issues and to verify the quality and completeness of the product.

3. Conduct Level 2-4 quality review through the VOICE application, identify valid issues, and submit and receive revised imagery from imagery processing contractors.

4. Develop a MrSID format 20:1 compression file for each 3-band (RGB) tile in the county and a 50:1 compression format that represents an entire county mosaic. CGIA will request feedback from PSAP and local government end-users to determine exceptions to the delivered compression format.

5. Develop a MrSID format 20:1 compression file for each 4-band (CIR) tile in the county and a 50:1 compression format that represents an entire county mosaic of the CIR product.

6. Complete horizontal quality control and review process.

7. Work with Primary PSAP contacts to set and schedule November delivery meetings.

8. Package imagery products on portable disk drives to include delivery of final imagery in GeoTIFF format, MrSID compressed format, metadata, and other applicable documentation. This also includes the logistics to maintain master copies of the GeoTIFF tiles, MrSID tiles and mosaics, finalize metadata files, assemble neighbor imagery, and collect other applicable data relevant to the primary county.

Deliverables:

- Quality control reports per county

Assumptions

- GeoTIFF product release by the processing contractor(s) will occur no later than seven months after completion of flights.

- The Public Safety Answering Points and the local government GIS representatives perform early quality review of the product as part of the Level 4 quality review through the VOICE application.

Task 4: Implementation (November – February)

The purpose of this task is to deliver the final orthoimagery product to each PSAP including prior phase data as well as imagery seven miles into Tennessee and Virginia, implement release of data on NC OneMap, and evaluate each county's quality review (60-day evaluation period). Delivery of the final orthoimagery products will be coordinated with PSAPs and the NC 911 Board to determine the best method for distribution.

1. Product Delivery: This task includes the distribution of data to each PSAP, either by in-person regional deliveries, by mail, or by digital dissemination.

2. NC OneMap Implementation: CGIA will load the imagery into the NC OneMap database for public access as imagery services and as downloadable compressed imagery. The storage and maintenance will be continuous through the four cycles of quarter-state imagery acquisition.

3. 60-Day Evaluation: Each PSAP and county GIS office will evaluate the delivered product(s) during a period of 60 days to validate completeness or defectiveness or the existence of quality issues.   CGIA will work with PSAPs to deliver exceptions and/or resolve outstanding data with contractors.

Deliverables:

- Final orthoimagery in GeoTIFF and MrSID formats
- NC OneMap release

Assumptions

- States of Tennessee and Virginia will supply data either directly or through their respective county governments

Task 5: Project Closeout (February – April)

The purpose of this task is to perform project management and other activities relevant to project closeout and procurement. This includes evaluating final contractor invoices and issuing final payment after state acceptance of all deliverables. This task also involves resolving and accepting final delivery of outstanding documentation, including final and lessons learned reports by acquisition contractors, to finalize contractor performance evaluations, conclude contractor agreements, to develop and deliver the final project report, and to perform project management closeout.

Deliverables:

- Final Report

Summary of Deliverables

<u>Technical</u>

1. Orthoimagery, true color RGB with 0.5-foot resolution in 5,000 by 5,000-foot tiles (equivalent to a mapping scale of 1 inch – 200 feet) in GeoTIFF and MrSID (20:1 compression ratio) formats, as well as a derived single file per county MrSID mosaic (50:1 compression ratio) format.
2. Orthoimagery, false color CIR with 0.5-foot resolution in 5,000 by 5,000-foot tiles (equivalent to a mapping scale of 1 inch – 200 feet) in GeoTIFF and MrSID (20:1 compression ratio) formats, as well as a derived single file per county MrSID mosaic (50:1 compression ratio) format.
3. Imagery will be consistent with the *North Carolina Technical Specifications for Digital Orthophoto Base Mapping*, Land Records Management Section, North Carolina Department of the Secretary of State.
4. Metadata in txt, HTML, and XML for (one record per format per county)
5. Statewide and county tile index
6. Elevation data if modified
7. NC OneMap image services

<u>Reports and Requirements</u>

1. Weekly status meeting minutes and contractors' status reports
2. Monthly invoicing, status, accomplishments, and plans
3. Distribution schedules
4. Reports include Flight Planning, Survey Control, Imagery Acquisition Compliance, Exploitation Image Post Processing, Airborne GPS Post Processing, Aerotriangulation, Orthoimagery Delivery, Quality Review Resolutions and Final Report.

Tab 6 b)

Proposal Consideration and Recommendation
(Roll Call Vote Required)

Tab 7

Executive Committee Report
Donna Wright

Tab 8

Education Committee Report
Chuck Greene

Tab 9
Funding Committee Report
David Bone

Tab 9 a)
Graham County
High Fund Balance
Re-Evaluation
(Roll Call Vote Required)
Stephanie Conner

Graham County 911 Communications

Memorandum

To: Stephanie Connor
From: Misty Hembree
Graham County 911 Communications Director

Since the finance committee meeting, I wanted to provide an update on some expenditures that have been made and an addition to the plan for next year.

I have attached the PO for the radio console equipment which has already been purchased and came in a little over the 50,000.00 that was estimated. ACTUAL PRICE $52,498.00.
The MDT project was not reflected on the plan came in at MDIS $28,488.00
GIS Data cleanup Highlands Mapping 7,200.00

In addition for next year I would like to add into the plan an estimated $45,000.00 for EPD implementation.

With these changes I ask that the funding committee not withhold distribution to Graham County as previously discussed and accept this technology plan. I will continue to work with Stephanie on any revisions needed.

Thank you for your patience and consideration,

Misty Hembree
911 Communications Director
Graham County

Strategic Technology Plan Template

Overview

This section is intended to provide an overview of your organization and its strategic goals. It is also intended to make a link between your strategic goals and your technology goals.
- *Inline w/NC911 Board established policy*
- *Align with future plans of the PSAP*
- *Established refresh cycle*

About Our Organization

Graham County 911 communications is a standalone department. We are the only Public Safety Answering Point in the county and we take all 911 calls for service and dispatch for Fire, Law Enforcement and EMS.

Mission Statement—

The mission of Graham County 911 Communications is to provide efficient and effective emergency communications to our residents, visitors and the first responders. We continually strive to answer each 911, administrative, and radio call with curtesy and professionalism always keeping the safety of the responders and the community we serve as our top priority.

Organizational Goals

- Onboard to the Statewide 911 network as I3 capable
- GIS at 99% accuracy
- Complete diverse internet pathway into building
- Upgrade phone system
- Implement EPD and EFD Protocols
- Update QA processes to better serve our agency
- Complete agency Peer Review

Technology Goals

Goals from strategic plan	Technology related goals
Onboard onto statewide 911 network I3	Finish GIS work to 99% accuracy. Complete diverse internet pathway into building. Upgrade Phone System
Replace Radio equipment	Replace Radio Equipment
Ensure Continuity of Operations.	Continue to Create and conduct drills annually to test agency back up plan. Teach and train staff on these processes
Compliance within all legislative rules	Complete agency Peer Review
Quality Assurance Aqua training	Get at least 2 telecommunicators trained on EMD-Q and Aqua to assist with Quality Assurance

Technology Assets

We moved into a new 911 facility in October of 2019 with new technology throughout including CAD, CPE, Radio, and Recorder. With the new facility we tried to plan to accommodate for future technology needs that may come up.

Technology Infrastructure

This section should describe the infrastructure that an organization has – computers, internet connections, printers, etc.

Item	Description	Purchase Date	Replacement Plan	Estimated Cost
Telephone Sets	Zetron Maxx Calltaker	8/11/2017	2021	N/A

CPE Equipment	Zetron Maxx Call Taker	8/11/2017	2023	N/A
Headsets	Plantronics HW540	9/30/2019	2022	$1070.37 5% increase
Monitors	Dell	2018	2021	$3,225.00 5% increase
Keyboards	Dell	2018	2021	$400. Price from internet
Point to Point Connection				
CAD	Southern Software/MDIS	2018/2021	2023/2022	$265,923.00 10% increase $28,000
GIS Software	Southern Software/GIS Software Upgrade	2018/2021	2021/2022	$7,695.60 10% increase $7,000
Voice Logging	Eventide	2018	2023	$53,435.42 10% increase
Time Synchronization Device	Spectracom	2018	2023	$11,330.00 10% increase
Protocol Software and Flip Cards	Priority Dispatch	2018	2023	$3,344.00 10% increase New cardsets and lic fees for 1yr
Quality Assurance	Aqua	2018	2023	
ALI Database Software	Geoconex	2018	2023	27,332.80 10% increase

Software Licenses	EPD	2022	2024	$51,750
Radio Console Software	Zetron Maxx Dispatch	2014	2021	50,000.00 Estimate replacing outdated equip.
Console Audio Box Software	Zetron Maxx Dispatch	2014	2022	
Paging Software	Zetron maxx	2014	2023	
CAD to CAD	Do not have			
Automated Digital Voice Dispatch Software	N/A			
Message Switch Software	N/A			
Servers				
Computer Workstations	Dell optiplex 5060	2018	2022	$3,376.09 10% increase
UPS	Eaton	2018	2032	$110,000.00 Estimate from grant
Generator	Generac	2018	2038	$52,000.00
Radio Network Switching Equipment	Zetron Maxx (Cisco Switches for IP console)	2014	2021	
Fax Modem	Konica Minolta bizhub	2018	2022	$550.00

Printers	Konica Minolta bizhub	2018	2022	$550.00	
Radio Console Ethernet Switch	Cisco	2018	2022		
Radio Console Access Router	N/A				
Backup Storage for 911 Database	Hp Z440	2018	2022		
Alpha Numeric Pager/Tone Generator	N/A				
Radio Consolette	Zetron Maxx	2014	2021		
Handheld GPS	N/A				
Monitors	Dell ultrasharp 24 monitors	2018	2021		

Additional Information

Provide additional information about technology infrastructure needs. Questions to consider include:

- We have 4 stations that need full time computer access in dispatch, and 1 computer in the QA office that need 24/7 computer access. Plus the 911 Addressing office, Admin office and QA office that require computer access during business hrs. *How many additional computers are needed for part time staff and volunteer computer access?*We also have a training room that has hook ups for laptops for training.
- *How many locations does the organization have?* Just 1 location.*Do all locations have a LAN, a printer and high speed Internet access?*Yes
- *Are there areas where software upgrades and replacements are needed?* Yes some will need upgrades this year.
- *What is the plan for providing technical support for staff and volunteers?*The County has IT department on staff during business hrs if it is after hrs or weekends eta will be longer timeframes. We also rely on vendors to remote in to fix any issues with their equipment. One of my telecommunicators is my go-to in house IT person that troubleshoots and helps with software upgrades ect.

- *Do you have diverse routing?*   Not at this time.

Technical Skills

List all the technical skills of your staff, what training is absent and necessary to be productive - e.g. writing HTML, social media, good at using Excel
We do have a telecommunicator on staff who has Microsoft training and is good with Excel.
We need Excel training, most of my staff are comfortable with social media.
QA training needed

Supervisors' ability to troubleshoot in order to determine outside support call out. Determine actions necessary during faults and failures to minimize service impact.
Supervisor can troubleshoot and contact outside support. Some additional training and practice in this area would be helpful.

Vendor Relationships

List all your relationships - past and present - with vendors or IT companies who have done technology work for you.

Vendor	Service Provided	Level of Support
CAD/SouthernSoftware/ Geoconex	Cad/ Map and Geoconex provides ALI and was my CAD/Map vendor	24/7 service My vendors are my first line of support they can remote in and assist with onsite problems or come onsite if necessary.
Phone / Geoconex	Provide support for the 911 phones	24/7 service My vendors are my first line of support they can remote in and assist with onsite problems or come onsite if necessary.
Radio/ Western Carolina Communications	24/7 service for radio service in dispatch	24/7 service My vendors are my first line of support they can remote in and assist with onsite problems or come onsite if necessary.
MCP	Worked with Graham County Communications designing the technology plan for the new facility	Worked as consultants on our new facility grant project. Consulted and helped design the center as well as the technology plan.

Technology Assessment

Strengths & Challenges

Based on your assessment of technology assets, assess your organization's technology strengths and challenges.

	Strengths	Challenges
Infrastructure	Most of our equipment is 2018 or newer with the exception of some of our radio equipment	We still have servers to maintain onsite. Need to update our radio equipment.
Software	Neil is onsite telecommunicator and works with vendors to do updates.	It is hard to keep up with what updates are due or necessary.
Skills	Neil is comfortable with technology enough to help with onsite work, upgrades, and small technology problems we may have onsite.	Most staff are not strong at using technology
Vendor Relationships	Good relationship with vendors.	We are 2 hrs away from most of our vendors.
Attitudes towards technology (management, staff, clients, board)	Board is comfortable with technology however funds are always an issue in a small county.	Most staff are comfortable with their current processes and are reluctant to change.

Identified Areas of Concentration

Based on your strengths and challenges, list projects or areas you could work on. For each area, consider:
1. *How will this project help you meet your organization goals?*
2. *How does this help you maintain compliance with legislative rules?*
3. *How much it might cost (high level estimate)*
4. *What are the other work and costs you will have to make this happen - e.g. training, data migration, new infrastructure, market research on donors*
5. *How you can use your strengths to assist you*
6. *next steps to move forward on this project*
7. *Research, select and implement - Train staff on how to use content management system for new website*
8. *Upgrade computers*

Set Priorities

Place the areas of work you have identified on the chart. You may want to do some research to see if your assessment of your projects is accurate (e.g. is your assessment of the cost realistic). In determining the impact, consider your mapping of organizational and technology goals. Based on this prioritizing, determine which projects you will actively pursue and which will have to be addressed later or in a more limited way.

Most urgent (high impact) to least priority (low impact)
1.- CAD replacement
2- CPE replacement needed- no longer under support

	High Impact	Low Impact	Cost
Examples:			
Radio Equipment replacement	**X**		**50,000.00**
QA /Aqua Training	X		5000.00
Onboarding to statewide network /phone replacement	X		0
EPD, EFD implementation	X		130,000.00

NC 911 Board Approved Best Practices on Replacing Equipment

Using the information, you've already gathered, you can figure out when you should purchase equipment. Keep in mind how long it takes to get RFP responses etc. when determining when to replace.

Equipment from Eligible 911 Expenditure List	Replacement Recommendation	Year Purchased	Year To Replace
Phone Systems:	**Years**	**Year**	**Year**
Telephones sets used to answer 911 calls	2		
CPE equipment	5		
Headsets	1.5		
Touchscreen Monitor	4		
Monitors	3		
Keyboards	1		
Mouse	1		
Servers used exclusively for Telephone Sets.	5		
Furniture:	**Years**		
Cabinets	10		
Tables	10		
Desks that hold eligible 911 equipment	7		
Telecommunicator Chairs	3		
Hardware:	**Years**		
Servers used exclusively for Telephone	5		
CAD Server	5		
Voice Logging Recorder	5		
GIS Server	5		
Paging	5		
Console/Alias Database Management	4		
Radio Console Network Switching	3		
Radio Console Touchscreen Monitor	4		

Radio Console Monitor	3		
Radio Console Keyboard	1		
Radio Console Mouse.	1		
Computer work stations used exclusively for Telephone, CAD, voice logging recorder, GIS and Radio console software systems	3		
Touchscreen Monitor	4		
Monitor	3		
Keyboard	1		
Mouse	1		
Microphones	3		
Speakers	3		
Headset jacks	1		
Footswitches	1		
Console audio box (CAB).	4		
Time synchronization devices (e.g. Spectracom Net Clock)	5		
Facility Uninterrupted Power Supply (UPS) for 911 only related equipment (excluding batteries)	15		
Emergency Power Generator that serves the 911 center	20		
Eligible dispatch equipment	5		
Radio Network Switching Equipment used exclusively for PSAP's Radio Dispatch Consoles	5		
Fax Modem (for rip & run)	3		
Printers (CAD, CDR, Reports, etc)	3		
Radio Console Ethernet Switch	5		
Radio Console Access Router	4		
Back Up Storage Equipment for 911 Data Base Systems	5		
Mobile Message Switch	5		
Paging Interface with Computer Aided Dispatch (CAD) system	3		

Alpha / Numeric Pager Tone Generator	3		
Radio Consolette (portable or mobile radio configured for exclusive use at the dispatcher work station for dispatcher operation to perform dispatch function when there is no traditional console installed at the workstation	5		
Handheld GPS devices that are used strictly for 911 addressing that meet or exceed the requirements of "Mapping Grade GPS Receiver" as defined in the Global Positioning System	5		
Activity Monitor used to graphically display the location of incoming 911 calls for viewing by all telecommunicators within the communications center	4		

Three Year Technology Budget

This section provides a high level technology budget. An example is provided here (costs are not necessarily representative):

Item	*2011*	*2012*	*2013*	*Notes*
Infrastructure and support	$12,000	$12,000	$12,000	Four people / workstations x TCO cost of $250/month per workstation.
Web site – baseline	$5,000	$5,000	$5,000	Hosting and freelance webmaster
Web site - upgrades	$2,000	$0	$0	New e-newsletter system
Strategic project – new CRM	$0	$12,000	$2,000	Implementation in 2012 and training in 2013
Cyber Security	18,000	0	22,000	Implantation with 2 year contract
Total	*$19,000*	*$29,000*	*$19,000*	

Action Plan

This section provides a high level list of all of the tasks required to implement your technology plan.

% Eligible Expense	Task	Due by
	Research CRM options	*Q2 - 2011*
	Replace all computers and upgrade to Windows 7	*Q4 - 2012*

PSAP	FY2020 Fund Balance	FY2021 Annual Distribution	FY2021 Estimated Expenditure	FY2021 Planned Capital Expense	Total Ending FY2021 Fund Balance =B+C+D+E	Estimated FY2022 Distribution	Estimated FY2022 Operational Cost	FY2022 Planned Capital Expense	Ending FY2022 Fund Balance with PSAP Distribution =F+G+H+I	FY2022 (Prior 2-year Distribution Average) X 20% Carry Forward	FY2022 Possible Financial Impact with less Estimated PSAP Distribution =J+H+I		Adjusted FY2022 Fund Balance =L	FY2023 PSAP Distribution	FY2023 Estimated Expenditures	FY2023 Planned Capital Expense	FY2023 Ending Fund Balance = N+O+P+Q	FY2023 (Prior 2-year Distribution Average) X 20% Carry Forward
Graham County 911 Communications	$529,283.50	$76,593.66	-$76,593.66	-$100,707.00	$428,576.50	$32,337.54	-$63,622.64	-$58,396.00	$338,895.40	$22,357.79	$216,876.76		$216,876.76	$68,844.29	-$68,844.29	-$280,597.00	-$63,720.24	$20,146.70

Date Submitted	7/29/2020	
Region	Western	
Regional Coordinator	Stephanie Conner	
Financial Review Specialist	TBD	
PSAP Manager	Misty Hembree	
FY19 Fund Balance	$475,641	
Percentage of Fund Balance Above Distribution	400%	
FY19 Annual Distribution	$98,705	**Graham County 911**
FY 20 Unreconciled Fund Balance	$529,284	
FY 20 Annual Distribution	$124,873	
FY 21 Annual Distribution	$76,594	
FY22 Estimated Distribution	$48,524	
Seat Count	4 Primary; 2 Backup	

FY20-21 Planned Expenditures & Cost	FY21-22 Planned Expenditures & Cost	FY22-23 Planned Expenditures & Cost	FY23-24 Planned Expenditures & Cost	FY24-25 Planned Expenditures & Cost
Dell Monitors - $3,225	Headsets - $1,071	CAD Replacement Project -		
Keyboards - $1,600	Workstations - $3,376	$265,923		
GIS Software - $7,696	Printers - $2,200	Recorder - $53,435		
Radio Console Software - $52,498	EPD - $51,750	Time Clock - $11,330		
MDIS - $28,488		EMD Flip cards - $3,344		
GIS Software - $7,200				
Total: $100,707	Total: $58,396	Total: $280,597	Total:	Total:

Tab 9 b)
Estimated Three-Year Forecast/Service Charge Recommendation
(Roll Call Vote Required)
Marsha Tapler

Estimated Projections for Service Charge Rate - Revenues/Expenditures

Service Charge Variations

	FY2021 $0.65 CURRENT	FY2022 $0.65	FY2023 $0.65	FY2024 $0.65
Service Charge Collection	$94,714,348	$95,187,922	$95,663,863	$96,142,185

Allocation of Service Charge Collection from Total Collected

	FY2021	FY2022	FY2023	FY2024
Next Generation 911 Reserve Fund	28% $26,520,017	22% $20,941,343	22% $21,046,050	22% $21,151,281
PSAP Grant and Statewide Project Account 10%	$9,471,435	$9,518,792	$9,566,386	$9,614,218
Administrative Account 1.5%		$1,427,819	$1,434,958	$1,442,133
Total Service Charge remaining to allocated:	$58,722,896	$63,299,968	$63,616,469	$65,376,686
Administrative Account 1.5%	$880,843			
CMRS Account (4%)	$0	$2,531,999	$2,544,659	$3,922,601
PSAP Account (prepaid, Voip, Wireline)	$57,842,052	$60,767,969	$61,071,810	$61,454,084

Account and Fund Revenues/Expenditures

Next Generation 911 Reserve Fund

	FY2021	FY2022	FY2023	FY2024
Next Generation 911 Reserve Fund Balance (prior June 30)	$65,426,680	$82,746,930	$66,104,507	$53,117,806
Transfer In	$14,000,000	$0	$0	$0
Estimated Service Charge Revenue	$26,520,017	$20,941,343	$21,046,050	$21,151,281
Estimated Expenditures	-$23,199,767	-$37,583,766	-$34,032,751	-$34,032,751
Estimated Ending Fund Balance (June 30)	$82,746,930	$66,104,507	$53,117,806	$40,236,335

PSAP Grant and Statewide Projects Account

	FY2021	FY2022	FY2023	FY2024
PSAP Grant and Statewide Projects Account Balance (prior June 30)	$29,744,440	$15,305,046	$9,518,792	$9,566,386
Transfer in (previous FY)	$6,093,503	$8,238,202	$13,116,073	$15,115,860
Transfer out	$0	$0	$0	$0
Estimated Service Charge Revenue	$9,471,435	$9,518,792	$9,566,386	$9,614,218
Estimated Expenditures	-$30,004,332	-$23,543,247	-$22,634,865	-$24,682,247
Estimated Ending Account Balance (June 30)	$15,305,046	$9,518,792	$9,566,386	$9,614,218

Administrative Account

	FY2021	FY2022	FY2023	FY2024
Admin Estimated Account Balance (prior June 30)	$1,473,254	$1,455,588	$1,347,213	$1,245,977
Estimated Service Charge Revenue	$880,843	$1,427,819	$1,434,958	$1,442,133
Estimated Expenditures	-$898,509	-$1,536,194	-$1,536,194	-$1,536,194
Estimated Ending Account Balance (June 30)	$1,455,588	$1,347,213	$1,245,977	$1,151,916

CMRS Account

	FY2021	FY2022	FY2023	FY2024
CMRS Estimated Account Balance (prior June 30)	$5,964,801	$2,964,801	$2,496,800	$2,041,458
Estimated Service Charge Revenue	$0	$2,531,999	$2,544,659	$3,922,601
(Estimated) CMRS Cost Recovery Expenditures	-$3,000,000	-$3,000,000	-$3,000,000	-$3,000,000
Estimated Ending Account Balance (June 30)	$2,964,801	$2,496,800	$2,041,458	$2,964,060

PSAP Account

	FY2021	FY2022	FY2023	FY2024
PSAP Estimated Account Balance (prior June 30)	$0	$0	$0	$0
Estimated Service Charge Revenue	$57,842,052	$60,767,969	$61,071,810	$61,454,084
Estimated PSAP Distribution	-$47,875,466	-$43,955,950	-$43,955,950	-$43,955,950
Estimated Funding Reconsiderations	-$1,728,385	-$3,695,946	-$2,000,000	-$2,000,000
Estimated Ending Account Balance (June 30)	$8,238,202	$13,116,073	$15,115,860	$15,498,134

Estimated on Cash basis reporting**
No Interest**

Tab 9 c)
General Committee Report

Tab 10
Finance Team Report
**Marsha Tapler/Kristen Falco/
Sarah Templeton**

Tab 11
Grant Committee Report
Jeff Shipp/Pokey Harris

Tab 11 a)
2022 PSAP Grant Program
- **Workshop (Held March 25, 2021)**
- **Grant Application Post to Website (April 1**
- **Pre-Application Abstract (April 15)**
- **Grant Application Submission Deadline (June 1**

Tab 12
Standards Committee Report
Donna Wright

Tab 13
Technology Committee Report
Jeff Shipp/Gerry Means/Stanley Meeks

Tab 14
911 Regional Coordinator Reports
Conner/Gardner/Newberry/ Turbeville

Tab 15
Other

Adjourn

Next Meeting - Friday, April 23, 2021.