NORTH CAROLINA 911 BOARD MEETING
Friday, December 3, 2021
9:00 AM – 12:30 PM
Heritage Hall, Sampson County Exposition Center
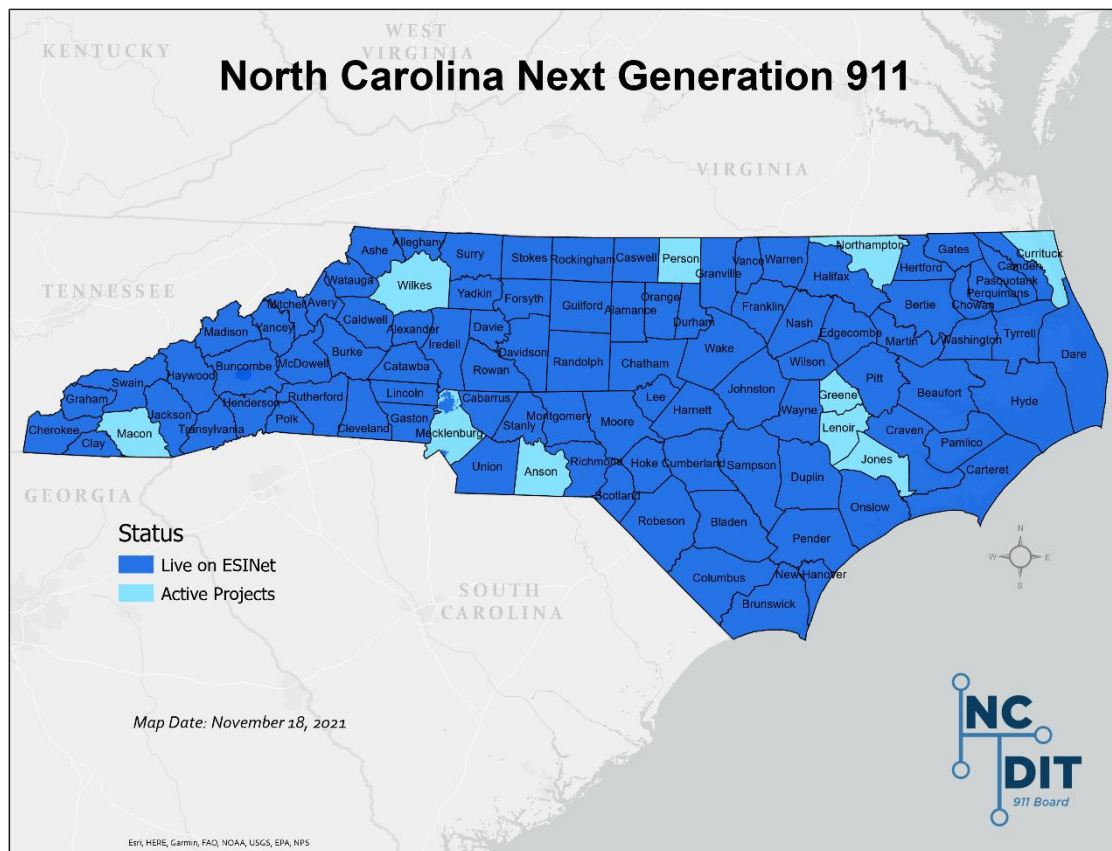## 414 Warsaw Road, Clinton, NC 28328
and
Via Simultaneous Communication
[Join Microsoft Teams Meeting]
984-204-1487 Conference ID: 128 976 279#

North Carolina Next Generation 911

Status
- Live on ESINet
- Active Projects

Map Date: November 18, 2021

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

Call to Order
Jeff Shipp

Roll Call
Stephanie Conner/Amy Berenson

Ceremonial Swearing-In of Board Member Edward "Lee" Kerlin
Pokey Harris

Tab 1
**Opening Remarks
NC 911 Board Vice Chair
Jeff Shipp**

**Sampson County Manager
Ed Causey**

Tab 2
Ethics Awareness/Conflict of Interest Statement
Jeff Shipp

> *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
Jeff Shipp

> *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
October 22, 2021

North Carolina 911 Board Meeting
MINUTES
Friday, October 22, 2021
NC DIT - 3700 Wake Forest Road – Emerald Conference Room
and
Via Simultaneous Communication
Microsoft Teams Meeting
10:00 AM – 12:00 PM

NORTH CAROLINA 911 BOARD MEETING
ROLL CALL
Friday, October 22, 2021
10:00 AM – 12:00 PM

NC 911 BOARD MEMBERS	IN PERSON	VIA TEAMS OR PHONE	NOT PRESENT
David Bone, County Manager, Davie County (NCACC)	X		
Tommy Cole, Fire Chief, City of Graham (NCSFA)		X	
Greg Coltrain, VP Business Development, Wilkes Communication/River Street	X		
Brian Drew, Manager of Customer Design and Implementation, CenturyLink/Lumen (LEC)		X	
Bo Ferguson, Deputy City Manager, City of Durham (NCLM)		X	
Greg Foster, Director of Communications, Alexander Co. (NC Assn. of Rescue EMS)			EXCUSED
Chuck Greene, Director of Government Affairs, AT&T (LEC)	X		
J.D. Hartman, Sheriff, Davie County (NC Sheriff's Association)		X	
Jeff Ledford, Chief, City of Shelby Police Department (NCACP)			EXCUSED
Lee Kerlin, RF Engineer, TMobile Sprint (CMRS)		X	
John Moore, Regional Mgr. Government and Education Sales, Spectrum Comm. (VoIP)		X	
Melanie Neal, Director, Guilford-Metro 911 (APCO)	X		
Jude O'Sullivan, Chief Customer Officer, Carolina West (CMRS)		X	
Jeff Shipp, Vice President of Operations, Star Telephone (LEC)	X		
Earl Struble, Sr. Manager Verizon Response, Verizon Wireless (CMRS)			EXCUSED
Secretary Jim Weaver, NC 911 Board Chair (NC DIT)	X		
Donna Wright, Director (Ret.), Richmond CO Emergency Services (NENA)	X		
NC 911 BOARD STAFF			
Amy Berenson, Administrative and Logistics Coordinator	X		
Rick Blumer, NMAC Technician		X	NMAC
Richard Bradford, Legal Counsel	X		
Chris Carlin, NMAC Technician			NMAC
Stephanie Conner, Western Regional Coordinator	X		
Iesha Duffy, NMAC Technician			NMAC
Kristen Falco, Financial Review Specialist	X		
Bernard Gardner, NMAC Technician			NMAC
Tina Gardner, North Central Regional Coordinator		X	EXCUSED
Pokey Harris, Executive Director	X		
Jesus Lopez, (NC DIT) NC 911 Board PM	X		
Gerry Means, Network Engineer/NG 911 Project Manager	X		
Stanley Meeks, NMAC Manager	X		
David Newberry, South Central Regional Coordinator	X		
Tom Rogers, Network Engineer/NG 911 Project Manager	X		
Marsha Tapler, Financial Analyst			EXCUSED
Sarah Templeton, Financial Review Specialist	X		
Angie Turbeville, Eastern Regional Coordinator			EXCUSED
Troy Whitfield, NMAC Technician			NMAC

NORTH CAROLINA 911 BOARD MEETING
ROLL CALL
Friday, October 22, 2021
10:00 AM – 12:00 PM
Via Simultaneous Communication with Microsoft Teams Meeting

NC DIT
911 Board

GUESTS	IN PERSON	VIA MS TEAMS OR PHONE	ORGANIZATION
Ron Adams	X		Southern Software
Drew Allvine		X	AT&T
Randy Beeman		X	City of Durham
Josh Briggs		X	AT&T
Bill Gibbs		X	Lincoln County
Red Grasso		X	NCDIT
Del Hall		X	NC NENA/Stokes Ret.
Stephanie Isbell		X	Charlotte Mecklenburg PD
Tim Johnson	X		NC CGIA
Glenn Knox		X	NCDIT
Matt McLamb	X		NC CGIA
Candy Miller		X	Iredell County
Dominick Nutter		X	Raleigh-Wake
Ronald Rombs Jr.		X	Charlotte Mecklenburg PD
Lynn Slycord		X	Kings Mountain PD
Suzanne Walker		X	Raleigh-Wake
Stephanie Wiseman		X	Mitchell County
PHONE NUMBERS			
404-441-1358 – Did Not Identify		X	Did Not Identify

Call to Order - Chairman Weaver called the meeting to order at 10:03 AM and asked Ms. Harris to proceed with an introduction. Ms. Harris welcomed Lee Kerlin from T-Mobile/Sprint who has been named to fill the vacant CMRS seat on the Board. Ms. Harris indicated Mr. Kerlin will be sworn in during the December meeting.

Roll Call - Ms. Berenson called the roll of Board and staff members. Ms. Conner proceeded to call the roll of guest attendees. Ms. Harris noted Tina Gardner and Marsha Tapler were absent from today's meeting.

1. Chair's Opening Remarks - Chairman Weaver made brief remarks, observing this was Richard Bradford's last Board meeting and there would be time prior to the close of the meeting for some reflection and comments recognizing Mr. Bradford and Mr. Means. Chairman Weaver thanked Mr. Bradford for all of his contributions to the NC 911 Board noting he will be greatly missed.

2. Ethics Awareness/Conflict of Interest Statement - Chairman Weaver read the Ethics Awareness/ Conflict of Interest statement. Ms. Wright recused herself from item 10a.

3. Public Comment - Chairman Weaver read the invitation for public comment. No public comment was made.

4. Consent Agenda *(Roll Call Vote Required)* - Chairman Weaver asked Ms. Harris to proceed with the consent agenda. Ms. Harris noted Ms. Templeton would be the technical facilitator for today's meeting.
    a) Minutes of Previous Board Meeting - September 24, 2021
    b) NG 911 Reserve Fund
        September 2021 Account Balance $ 83,632,102
        September 2021 Disbursement $ 4,002,280
    c) CMRS Account
        September 2021 Account Balance $ 3,109,145
        September 2021 Disbursement $ 61,555

d) PSAP Account

September 2021 Account Balance	$	2,656,948
September 2021 Disbursement	$	3,545,823

e) PSAP Grant/Statewide Projects Account

September 2021 Account Balance	$	48,861,483
Grant Funds Committed	$	26,793,292

f) Grant Project Updates per Reports

Ms. Wright made a motion to approve the consent agenda as presented. Ms. Neal seconded the motion. Ms. Berenson conducted the roll call vote. All attending Board members voted. The motion carried unanimously. *The roster of roll call votes for all action items for this meeting included below as part of these minutes.*

5. Executive Director Report
   a) 911 Board Appointment Status - As previously noted, Mr. Lee Kerlin is in attendance and this appointment concludes this item for the Board which will be removed from future agendas.
   b) NextGen 911 Migration Status - Live Status Map - Ms. Harris congratulated the following on their recent migrations:
   - Robeson County 911 (09/21/2021) - Migrated as i3. Viper hosted call handling equipment. First live call at 1101 Hours EDT. PSAP #104/physical location #160 (including backups).
   - Brunswick County 911 (09/28/2021) - Migrated as i3. First live call at 0944 Hours EDT. PSAP #105/physical location #161 (including backups).
   - Watauga County 911 (09/29/2021) - Migrated as i3. Vesta hosted call handling equipment. First live call at 1107 Hours EDT. PSAP #106/physical location #162 (including backups).
   - Pamlico County 911 (09/29/2021) - Migrated as i3. Vesta hosted call handling equipment. First live call at 1128 Hours EDT. PSAP #107/physical location #163 (including backups).
   - Beech Mountain 911 (09/30/2021) - Migrated as i3. Vesta hosted call handling equipment. PSAP #108/physical location #164 (including backups).
   - Boone PD 911 (09/30/2021) - Migrated as i3. Vesta hosted call handling equipment. PSAP #109/physical location #165 (including backups).
   - Pender County 911(10/06/2021) - Migrated as i3. Vesta hosted call handling equipment. First live call at 1242 Hours EDT. PSAP #110/physical location #167 (including backups).

   Ms. Harris was happy to report there are 111 completed migrations which represent 168 physical locations including the backup facilities. There are 45 on the Viper hosted platform and 49 hosted on the Vesta platform, with 16 ESInet only. Ms. Harris reported if schedules remain unchanged, all but one migration will be complete by the end of the first quarter of 2022. Unfortunately, due to supply chain issues the last migration needs to be postponed. Mr. Means noted the tentative date for the final migration will be in March 2022.
   c) NextGen 911 GIS Status - All jurisdictions are engaged in the submission of their statewide GIS data. Work continues with approximately 10 jurisdictions to revise and finalize data
   d) 988 Planning Coalition - Ms. Harris, Mr. Bradford, and Ms. Turbeville continue participating in the Coalition for the National Suicide Prevention Lifeline. The Coalition has been awarded a $100,000 grant and are exploring efforts to establish the National Suicide Prevention Lifeline for those who are in need and seeking assistance. The initiative includes text to 988 capabilities. Ms. Harris reported these meetings will conclude at the end of the year.
   e) Staffing Update - Ms. Harris introduced Mr. Tom Rogers, who has officially joined the team and is shadowing Mr. Means until his departure in December. Mr. Rogers thanked Ms. Harris for the opportunity to work with the Board and be a part of the organization. He was pleased to have been a part of Brunswick County's ESInet migration before his tenure with the Brunswick Sheriff's Office ended. His work with Mr. Means continues and will be instrumental as he assumes the .duties of the NC911 Network Manager and Project Manager in December. Ms. Harris added Mr. Rogers had a busy few weeks with many meetings and training sessions as he navigates his new responsibilities. As previously reported, Ms. Harris noted Mr. Bradford will be retiring November 1. Interviews for his position were held the week of October 11. Ms. Harris and Mr. Bone

participated on the interview panel. Ms. Harris is hopeful the process will conclude shortly, and new legal counsel will be introduced during the December Board meeting. Ms. Harris announced Stanley Meeks has accepted a position with the State of Texas working in IT procurement and contracts, and he has tendered his resignation to the Board. He will be departing October 25. Ms. Harris, Mr. Means and Mr. Rogers have commenced the recruitment process and are working with Human Resources to fill this vacancy.

f) State 911 Plan Update - Ms. Harris announced the State 911 Plan will be presented for Board approval during the December Work Session/Board Meeting. There have been three successful Study Group meetings to date facilitated by Barry Ritter and Laura Barton of Ritter Strategic Services. Staff, Board, and Committee members had an opportunity to provide input into this quickly moving process.

g) Legislative Update - Mr. Bradford reported there has been no legislative action since the last Board meeting which directly impacts the Board. HB 404 is pending and is presently with the Conference Committee.

Mr. Bradford proceeded to give an update on his work with the FCC Strikeforce. He said his work there was enjoyable and informative and the issues which were discussed by the Committee reflected discussions held by the NC 911 Board and Committees as it relates to NextGen 911. Though the conversations were similar, implementation across the country was widely diverse. The purpose of the Strikeforce was to study how the Federal Government can most expeditiously end diversion of 911 fees. Mr. Bradford's recommendation is to utilize the Strikeforce report for future legislative planning and discussion. This document will also serve to direct the work of the NC 911 Board and its Committees.

There were three workgroups associated with the Strikeforce. The first workgroup was charged with determining whether current laws were effective, they said, "No". Workgroup two was assigned the question of whether criminal penalties would further prevent 911 fee diversion. The group said, "Yes". Workgroup three was assigned with identifying the impact of 911 fee diversion and underfunding. There were a few recommendations from all the workgroups and one of those was to require audits and reporting at the state level. The second recommendation was to authorize the FCC to take direct action in 911 fee diversion. The third recommendation was to further develop data collection and annual reporting. Mr. Bradford chaired Workgroup two, that contributed several recommendations on data collection. Their focus was on whether criminal penalties would further prevent 911 fee diversion. The model they favored was a discipline model where there would be a fine, and an escalation of fines leading up to a percentage of the fees diverted. If these escalating penalties were unsuccessful, the committee suggested having a means to issue only temporary licenses or suspend licenses if taken together with a remediation plan. This, however, would be highly problematic for the offending jurisdictions as it would involve changes within their legislature. The hope is that changes will be made, and some states will continue to modify their laws and behavior like West Virginia who made legislative alterations after an auditor's report in 2018 and ceased to be a fee diverting state in 2020.

Mr. Bradford recommends studying what the FCC has identified as acceptable and unacceptable, which is well suited for the committee structure of this Board, and he expects this will carry forward in various ways over the next two years. In addition, Mr. Bradford noted the FCC's rules provide a method for "safe harbor". The "safe harbor" is a means by which a state (not local governments) can petition the FCC for a determination for expenses within the intent of the legislation and the FCC's rules. Mr. Bradford observed it will be important for his successor to track and monitor developments in this area to help in guiding the work of the 911 Board. Ms. Harris thanked Mr. Bradford for his service and time while participating on the FCC Strikeforce. For clarity, Mr. Bradford's summary document containing links to the full report and the presentation which was shared during the last public meeting of the Strikeforce is included in these minutes as Attachment A.

h) NSGIC Geospatial Excellence Award - Ms. Harris announced North Carolina is receiving another award and introduced Tim Johnson, CGIA Director and Matt McLamb, CGIA Assistant Director, to present the NSGIC Geospatial Excellence Award. Mr. Johnson began his comments stating it was great to see everyone in person. The NSGIS Geospatial Excellence Awards celebrate 30 years of facilitating smart policy, partnership-building, innovation, and professional growth.

NSGIC was formed to provide a unified voice on geographic information and technology issues, advocate for states' interests and support its membership in statewide initiatives. The Geospatial Excellence Awards recognize geospatial initiatives which embody the NSGIC spirit. North Carolina was a charter member of this organization, which represents the entire nation. The 2021 NSGIC Annual Conference was held in Dallas, Texas in September. During the conference, Mr. Johnson received this award on behalf of the state of North Carolina and the NextGen 911 Team. Mr. Johnson submitted a nomination for this award as the NextGen 911 program was exemplary. The roll the 911 Board played with their support of this project was key in its success. Mr. Johnson said the word catalyst was prominently displayed on the award inspiring him to look this up in the dictionary and the word catalyst means precipitates action. This is what the NextGen 911 program accomplished, and the achievement of the completion of this program serves as an example for the entire nation. Mr. Johnson is pleased to present this award to Ms. Harris, Mr. Means, the team, and the NC 911 Board.

Ms. Harris expressed her appreciation, recognizing the collaboration of the 911 Board team and CGIA, and the role this alliance has played in the success of this program. She continued to say the awards received speak volumes about the collaborative efforts of the work and serve as a tangible reminder of what we have accomplished in North Carolina. Mr. Means added his thoughts about how pleased he is the team has gelled in the manner it has and created such a structure and process. He thanked Mr. Johnson for his foresight and encouragement which was a fundamental element in the culmination of this project.

Chairman Weaver stated Covid was a "chief innovation officer" as it allowed people to think, work, and collaborate differently and is impressed with the high-level of work of this team. Transitioning from one award to another, Chairman Weaver noted a successful National Association of State Chief Information Officers of the States conference was held in Seattle last week. A highlight of the conference for Secretary Weaver was the awards ceremony on Tuesday night where North Carolina was recognized as a national leader in NextGen 911 and presented with the Enterprise IT Management Initiatives State IT Recognition Award along with three other projects from North Carolina. These awards honor outstanding contributions to advance state technology, policy through the promotion of best practices, adoption of new technologies and advancement in service delivery.

6. Executive Committee Report - Chairman Weaver introduced Ms. Wright to give the Executive Committee Report. Ms. Wright asked Ms. Harris if the PSAPs will have input into the State Plan before the final draft is prepared. Ms. Harris agreed the plan will be sent out to the PSAPs for their review before it is presented to the Board for approval. Ms. Wright reported the Executive Committee met on October 15 to discuss some Bylaw changes which will be presented to the Board once the new language is crafted. Ms. Wright noted Mr. Bone attended the interviews held for Mr. Bradford's position to serve as the representative for the Executive Committee.

Mr. Cole departed the meeting at 10:54 AM.

7. Education Committee Report - Mr. Greene reported the Education Committee did not meet this month, however the committee is keeping busy with tracking the progress of the PSA. Mr. Greene introduced Ms. Conner to present in Ms. Tuberville's absence the updated statistics for this campaign. Ms. Conner reported Ms. Turbeville sent this information before she departed for vacation. Ms. Conner also updated the report, so this report will cover both sets of data. Ms. Turbeville ran a report from September 6 through October 14. During this time period, there were 3,942 airings on the Spectrum Reach dashboard with 47 networks and the top five networks were Lifetime network, Spectrum News, BET, Oprah Winfrey Network and MTV. Ms. Conner ran a report five days later from the Spectrum dashboard, showing 4,245 airings with 49 networks with the same top five networks. For the Board's website the Google Analytics Dashboard, from September 6 through October 14, there were 541 page views, 278 users and 222 sessions. One week later, there were 622 page views, 321 users and 278 sessions. Ms. Conner is optimistic the PSA is driving traffic to the website and garnering attention. Secretary Weaver asked if there was an increase in applicants due to the campaign. Ms. Conner responded this would be the next step with hopes the PSAPs will be able to report on specific numbers. However, the initial feedback indicates some increase in interest at some of the PSAPs and the hope is by the end of the campaign there will be

an increase in interest and applications. Ms. Wright reported the PSAPs are pushing this out as well, using the PSA on their personal and business social media pages. Mr. Greene indicated the goal, once the campaign is over, is to review the data with Spectrum and look at the website traffic to cross reference this with the numbers and airings as well as the networks it has been shown on during the times which there have been spikes. As this begins to roll out statewide, this data will be helpful in determining the networks to focus on during the statewide campaign. Ms. Harris commented on Ms. Wright's observation with the PSA was being used by others on social media, which was an unanticipated, but exciting outcome.

8. Funding Committee Report - Mr. Bone reported the Funding Committee has two action items for the Board's consideration.

    a) Currituck Communications FY 2022 Funding Reconsideration (Roll Call Vote Required) - Mr. Bone advised Currituck Communications has requested a funding reconsideration in the amount of $476,255.10 for the purpose of radio console dispatch workstations, which has been an item regularly funded through the reconsideration process. The 911 Board staff has recommended the request and the Funding Committee voted unanimously to approve this reconsideration request and this comes before the Board as a motion from the Funding Committee. Ms. Berenson conducted the roll call vote. All Board members present voted. The motion carried unanimously. *The roster of roll call votes for all action items for this meeting included below as part of these minutes.*

    b) General Report - Mr. Bone stated staff reviewed a number of other PSAP funding reconsiderations, however these were all withdrawn. Some withdrew due to the availability of fund balance in the PSAP while others planned to resubmit next year. Mr. Bone stated the Funding Committee had a productive conversation regarding 2022 goals and he appreciates everyone's efforts with this. The committee looks forward to presenting those to the Board during the December meeting. Mr. Bone stated he had nothing further to report.

9. Finance Team Report - Ms. Falco reported the finance team spent a good deal of time reviewing reconsiderations, most of which were withdrawn. The team has also been working on finishing up PSAP reports, reviewing many eligibility requests and attending multiple PAT meetings.

Ms. Templeton gave an update on the PSAP revenue expenditure report status. For FY2019,127 reports were received,110 have been finalized, six are in the clarification process, and 11 are awaiting the signed revised report. For FY2020,127 reports were received, 76 are finalized, 35 are in the clarification process, and 16 are awaiting the signed revised report. For FY2021,128 reports were received, -three are finalized, 13 are in the clarification process, and one is awaiting the signed revised report and 111 are waiting to be reviewed. For FY2019, a few reports were outstanding due to discrepancies found upon comparing the Board report and the CAFR. The PSAPs are researching these inconsistencies and the Finance Team has given a deadline of November 1, 2021, to finalize FY2019 reports. If any expenditures in question remain on reports after November 1 they will be removed as ineligible expenditures.

Chairman Weaver inquired where the Finance Team was in terms of closing out 911 Board's last fiscal year. Ms. Harris responded Ms. Tapler is working on this and it is moving forward. Mr. Bone questioned whether there may be a slow-down of reconsideration requests from the PSAPs as they take up so much of the team's time. Ms. Falco responded from a staff perspective, the more education PSAPs have with budgeting and planning for large future expenditures, we may see a decrease in reconsiderations coming forward. Also, it will be important for the PSAPs to understand there is only one fiscal year to spend reconsideration monies. Ms. Falco believes the PAT concept is working to educate the PSAPs in these types of matters. Ms. Harris added these issues can be addressed with education and PAT meetings, though there are still some PSAP managers who need face to face meetings for these to be successful. Once the PATs are able to get back into the field, it will help PSAP managers in understanding the reconsideration process. Ms. Harris noted there were seven reconsideration requests although there have been upwards of 17 reconsideration requests in the past and submission numbers are decreasing because of focused education and an understanding of the process. Ms. Wright asked about the deadline of November 1, 2021, for FY2019, and Ms. Harris clarified the team has been working within the government structure and have been asking for this information for more than a year. The hard deadline of November 1 was provided to encourage prompt responses.

Ms. Harris notified the Board Chief Ledford had been in touch and with apologies for his absence, however he had been called away on an urgent police department matter.

10. Grant Committee Report - Mr. Shipp stated the Grant Committee was presenting one item for the Board today.

    a) Chowan County Central Communications - Grant Award Amendment *(Roll Call Vote Required)* - Chowan County Central Communications was previously approved for a grant award for the requested amount of $154,037.85 for the Chowan Backup Radio Project. As noted at the previous Board meeting, all awards are contingent upon final review of the identified components for which grant funding eligibility shall be validated. Upon final review of non-eligible radio cost, the total recommended grant award for Chowan County Central Communications is $136,781.62. This is brought forward as a motion to recommend the grant award be amended for Chowan County Central Communications for their Chowan Backup Radio Project to $136,781.62 of overall grant request for non-eligible radio costs. A motion was made by Mr. Shipp to accept the recommended amendment. Mr. Bone seconded the motion. Ms. Berenson conducted the roll call vote. All Board members present voted, with Ms. Wright being recused from this item as noted. The motion carried unanimously. *The roster of roll call votes for all action items for this meeting included below as part of these minutes.*

    b) Priority One Collaboration Grant - Mr. Shipp is very enthusiastic for this newly created opportunity. Mr. Shipp asked Ms. Harris to close out the committee report. Ms. Harris reported staff has worked feverishly in the last few weeks to produce the grant application which was sent to the Grant Committee. Committee members responded with their feedback. November 1 was set as the release date for this grant in addition to a December 9 date for the Grant Workshop. Work is being done in collaboration with DIT Comms on the announcement, which will go out on the PSAP Listserv, and the Regional Coordinators are on deck to send this out to their respective PSAPs. Mr. Bradford noted one of the issues which is addressed in this grant is similar to past grants as it does include clawback provisions and things of that nature. Those in local government may be more familiar with this concept when applying for grants through the State Department of Commerce or some of the Federal grants This is one of the substantive changes between the two forms which will become clear as this process evolves.

    c) General Report - Ms. Harris noted Perquimans County has recently responded to the grant award notification they will be declining their grant award. We will be scheduling a meeting to discuss priorities for the upcoming (regular) grant cycle.

11. Standards Committee Report - Ms. Wright indicated the Standards Committee met on October 7 and discussed the status of the Ad Hoc Committee work concerning classifying PSAPs. The Committee is looking for more members to serve on the Ad Hoc, so this ambitious project can be completed.

The Standards Committee also discussed goals and are planning to present these to the Board during the December meeting. Peer reviews were also a topic of discussion and how adjustments to this process can be implemented to incorporate 911 Board staff, so a funding consideration may be a subject for the Board to discuss in the future. Mr. Shipp asked if virtual reviews could be a substitute for on-site meetings. Ms. Wright responded they had attempted the virtual approach, and these were unsuccessful. Ms. Wright added discrepancies from prior reviews will also need to be researched to ensure they are corrected. Addressing this work will be a top priority for the upcoming year. Ms. Harris added discussions regarding staff augmentations to the peer review process have been held. In the interim, possibly a third-party vendor could be brought in to bring this program up to date. All energies are focused on this issue as peer reviews are a requirement for the Board. Ms. Harris will be meeting with Ms. Wright and Ms. Tapler to discuss budget and explore remedies for this situation. Mr. Bradford stated there is a peer review training piece in place to instruct potential reviewers to look at this from a Board point of view. Ms. Harris indicated Ms. Gardner and Ms. Conner will play a key role in this training. Mr. Greene asked if we do proceed with an alternate model, will the PSAPs have a problem as they will no longer be peer reviews. Ms. Wright responded and said she has been extremely vocal in encouraging engagement in the peer process to little avail. This lack of engagement is what is driving these discussions. Covid did contribute to this problem, in addition, the PSAP managers are now in seats and dealing with a mass exodus of 911 professionals. Mr. Bradford added the rules do not actually require a peer to conduct the review, and it is within the Board's authority to combine peers and non-peers to meet this requirement. Ms. Wright reported she has always promoted the idea of a peer review, so this could be a learning experience for newer PSAP managers as well as alleviating staff participation. However, due to the engagement problem, this does not currently seem to be an option.

Secretary Weaver asked, "What does NextGen 911 look like five to ten years from now as maintenance and operations mode will now be the focus?" Ms. Harris responded the goals which will be presented to the Board in December and the NC 911 State Plan will address the issues of data sharing, maintaining the GIS data and emerging technologies. All of these issues have been discussed from a committee and staff level, and among the State Plan Study Group members.

12. Technology Committee Report - Mr. Shipp represented the Board on Monday for a special NextGen 911 project team update for Tom Rogers at the office in Raleigh. This meeting was held with the goal of bringing Mr. Rogers up to date, beginning with some history and continuing with a review of where the project has been and where it is going. This was a productive day and Mr. Shipp was pleased to participate.

Mr. Meeks gave a brief report for the NMAC. As of September 20, the NMAC is now at a staffing of five with the addition of Troy Whitfield. Mr. Whitfield has joined the evening staff and his training is progressing. Mr. Meeks reported on September 17, about 1:00 AM the NMAC received reports of a service disruption in Cherokee, Swain, and Mitchell Counties. The networks were continually bouncing and degrading and the PSAPs were put into abandonment mode and Frontier Communications was contacted. Service was fully restored to all of the PSAPs around 4:30 AM. The problem was caused by a scheduled maintenance upgrade, which lacked any advanced notification. Conversations were held with the 911 service manager, and he has worked internally to fix this communications error. Frontier communications have improved since this incident on September 17. The only other outstanding issue is with ECaTS data. Various PSAPs continue to experience discrepancies. This situation is being closely monitored by Mr. Meeks, who is receiving daily updates. Mr. Meeks concluded his remarks by thanking the Board and the staff for the opportunity stating it has been an honor and a privilege to work with the NC 911 Board. Mr. Meeks is pleased the NMAC is up and running, and will continue to thrive with a strong and dedicated staff. Ms. Neal said Mr. Meeks' responsiveness to her push back particularly regarding network downtime is greatly appreciated. Ms. Neal thanked Mr. Meeks for everything and wished the best for him in future endeavors.

Ms. Wright brought up the troubling issue of Frontier network outages and asked Ms. Harris if anything could be done to remedy these debilitating problems. Ms. Harris said she has given advice to PSAPs, as the customers, to contact representatives at the Utilities Commission to see if they can get assistance there. Ms. Harris reported there has been a concerted effort to facilitate these conversations and a great deal of time has been put in by staff to try to assist, however, at the end of the day, the jurisdictions are the ones who need to drive these discussions. The Board can assist with support, not in terms of appearing, but providing documentation and information regarding general 911 operations. Mr. Means noted for the carrier in question, the problem is a financial issue, and investments in infrastructure will have to be made to achieve significant progress in this area. There are some intrinsic issues with the way this business is being managed and they are in a precarious situation in terms of their reliability and fortitude of their infrastructure. Ms. Harris thanked Ms. Wright for her apt comments and indicated these discussions are ongoing with the carrier promising improvements and not following through. Ms. Wright questioned whether these issues have been brought before the FCC and Ms. Conner confirmed there was a complaint filed from a North Carolina PSAP manager.

Mr. Means advised there are 111 PSAPs operational on the network. There are an additional 12 unfunded/independent PSAPs also live, this includes the State Highway Patrol. Next up is Chatham County on November 2, followed by Alexander County on November 3, Yadkin County on November 10, Bladen County on November 17, and Haywood County on November 17. Charlotte Fire, Medic, PD will delay into February 2022 due to supply chain issues with Cisco Routers. Macon, Greene, Person, and Jones-Lenoir migrations are scheduled for the remainder of 2021. The projected total for 2021 is 120 PSAPs live on the ESInet. Current migration demographics include 49 Vesta hosted , 45 Viper hosted and 17 ESInet only. The end of year migration demographics projections include 53 Vesta hosted, 49 Viper hosted and 18 ESInet only. GIS is closing in on 100% completion. 105 jurisdictions have i3 ready uploaded data sets. Only ten remain to reach 100%. These are working on RCL and alignment issues and are actively engaged. This achievement means all i3 and existing RFAI PSAPs have met the i3 standard. The CGIA team is also working to support the completion. As of October 31, Brandon Moore's support contract closes and GeoComm is now moving to the support phase of the contract. RFAI PSAPs number 25 with three active RFAI to i3 projects for Gaston, Rutherford, and Durham. There are currently

86 i3 PSAPs. The GIS Governance Model version 4 is completed. The re-write using the Kansas model has been completed and review comments were received from several members of the review team. The Technology Committee will need to weigh in on the rules making authority of the Board for proper enforcement.

The total population served by NG911 is 9,053,279 (85%) and the total land mass covered by NG911 is 41,788 square miles (85%). The Data Analytics IFB evaluations are finished, and the award was made to AT&T proposing the Rapid Deploy Eclipse Analytics. The solution built on MS Power BI and will provide call data reporting and new data discovery abilities including workforce management, staffing projections, call volumes, location accuracy and call transfers. This meets the specification for using natural language queries. Ms. Harris added ECaTS has extended a six-month transitional contract and Ms. Tapler is presently in the process of executing this contract. Ms. Harris said we do anticipate having the new data analytics project implemented and engagement with the PSAP community to roll this out in similar fashion to previous projects with regional meetings held with the PSAP managers. Mr. Means indicated applications will be implemented in a SAAS (software as a service) mode to include all infrastructure, future enhancements, technical support, and feature enhancements over the life of the contract. Initial meetings will be scheduled within the week with the assignment of an AT&T project manager. The official award date is October 6, 2021. Mr. Means has conducted five meetings of the Ad-Hoc sub team from the Technology Committee. A game plan has been put in place beginning with the team's review of the NIST IR 8255 document entitled, "*Interoperability of real-time public safety data: Challenges and future states*". This document will help us develop a game plan and evaluate future potential difficulties. The Ad-Hoc has been broken into two sub-teams: Data Format and Schemas with Gerry Means, Tom Rogers and Jimmy Steward and Data Access Control with Randy Cress and David Newberry. Mr. Means is working to develop a playbook of system management and service planning advice to assist with the transition effort. Discussions with Josh Briggs are being held on key strategic objectives in the transition to, 'run and manage'. OSP migrations will be the focus as we move to an all IP 911 infrastructure.

Mr. Means introduced Josh Briggs to give an overview of originating service providers (OSP) Direct IP Ingress to AT&T ESInet. Mr. Briggs is pleased to report we are about six months ahead of schedule with the OSPs. There have been conversations with all of the OSPs regarding their various levels of progress. Both Verizon Business and Wireless have forecasts and transport orders in progress. AT&T mobility also has some TDM transport orders in progress. T-Mobile/Sprint uses a third-party and there is a direct IP connection in place which is currently being tested in Kansas. Wilkes Telephone, ATMC and Windstream all have active transport orders in various levels of development. In terms of AT&T Mobility, there is a connection in place, and they are targeting the week of November 1 for the City of Lumberton, for a direct IP connection. After a period of 30 days, they will begin moving other PSAPs off the legacy selected router directly to the ESInet. Ms. Harris was very excited to see the City of Lumberton will be the first direct IP connection as Mr. Bill French has worked diligently and progressively to assist in this process.

Ms. Conner reported Sheriff Hartman did have to drop from the call, but sends his congratulations to Mr. Means and Mr. Bradford. Mr. Moore also had to go to another meeting, but wanted to thank Mr. Means and Mr. Bradford for their stellar service to the NC 911 Board and the citizens of North Carolina. You both will be sorely missed. Godspeed. Mr. Hall sends his congratulations and best wishes to Mr. Bradford.

13. 911 Regional Coordinator Reports - The regional coordinators present gave brief reports. As noted, the Eastern and North Central reports were not available.

Mr. Newberry has been working with the Finance team determining eligibility for some new quotes. He had several PAT meetings with more scheduled for next week. He was able to attend the NC Department of Information Technology series on cybersecurity. He encourages everyone to participate in future opportunities similar to this as there was a lot of useful information presented and he found it particularly beneficial.

Ms. Conner congratulated Watauga, Beech Mountain, and Boone for their recent migrations. She is pleased to report the Regional Coordinators have begun to return to their fieldwork and expects to be onsite for Alexander County's migration. Ms. Conner has spent a great deal of time on the Priority 1 Collaboration Grant Application and participated in several project calls and PAT meetings. Ms. Conner has been working with some of her PSAPs on grant meetings as they move forward. In addition, a PSAP

reached out to ask for a Peer Review and this has been scheduled for next week.

Chairman Weaver thanked Mr. Shipp for covering for him during the upcoming December Board meeting as he will be unable to participate due to previously scheduled state CIO business.

Other – Ms. Harris asked, and the Board indicated they were interested, in attending a dinner the evening prior to the December meeting.

Ms. Harris wanted to share some comments and acknowledged Mr. Means, stating Mr. Gerry Means has 17 years of service working for the State of North Carolina, most notably as the Network Engineer for the North Carolina 911 Board. He is a seasoned manager with broad technical and business operations experience and has held roles which included senior positions in multiple areas including strategic business planning, customer relationship management, IT service management, and process development in both public and private sectors. Mr. Means' advanced level of technical depth in the areas of network infrastructure, server applications, and network design has played a key role in his success leading North Carolina to be the recognized frontrunner for Next Gen 911 migration. This means the success and reliability of 911 will be greatly improved as it will enhance emergency number services to create a faster and more resilient system. This will ensure North Carolina residents can reach 911 services regardless of their location or the communication technology they use. Next Gen 911 also improves the PSAPs (public safety answering points) ability to help manage call overload, natural disasters, and the transferring of emergency calls based on location tracking. In addition, Mr. Means has developed and implemented industry standard based internet protocol service management policies and procedures necessary to provide 24/7 support to all North Carolina public safety answering points. He manages and supervises the 911 Board Network Monitoring and Assistance Center (NMAC) which provides advanced technical support in the areas of incident management, problem resolution, service monitoring and user support for all NC PSAPs. This service is the first of its kind in the Nation. To further the migration to internet protocol based NG911 services, Mr. Means represents North Carolina with his active participation in National 911 organizations such as the National Emergency Number Association (NENA), the Association of Public-Safety Communications Officials (APCO) and the National Association of State 911 Administrators (NASNA).

With thirty plus years of experience managing highly skilled, knowledgeable workers, high standards of integrity and an outstanding work ethic, Mr. Means retires with a storied legacy that will improve lives for all North Carolinians for years to come. Mr. Means resides in Cary with his wife Rodell. He and Mrs. Means enjoy spending time with their grown children who reside in North Carolina and Texas, and they especially enjoy time with their grandchildren. Gerry has noted this is one reason he is looking so forward to retirement. Gerry assists with the care of his elderly mother who resides in South Carolina. Mr. Means dedicates a tremendous amount of time to serving his church and its ministries. He is also engaged in mentoring programs devoted to improving the quality of life for young African American men. Ms. Harris concluded her comments thanking Mr. Means for his time and service to the NC 911 Board.

Ms. Harris then addressed Mr. Bradford noting he had graduated from Franklin Pierce Law Center in 1988. His studies there, focused on Intellectual Property and technology law. In addition, Mr. Bradford is a graduate of North Carolina State University. Richard Bradford, affectionately nick-named RB by Ms. Harris, joined the Department of Justice as Special Deputy Attorney General in 2000, and has represented the NC 911 Board since 2002. Mr. Bradford's legal representation includes the Board, and its committees, in all aspects of operations including the development of legislation and policies. This work includes maintaining knowledge of FCC actions relevant to 911 as well as legislative developments in other states. The NC 911 Board has been recognized nationally for implementing a unified statewide 9-1-1 ESInet, and Richard has been integral to this work. In addition, he represents the North Carolina Department of Information Technology. In that capacity, he has been regularly involved with communications technologies, information/data security, IT infrastructure and similar project areas. Richard is very involved in music, wood working, cooking, and his activities at his mountain get-away. Mr. Bradford leaves having provided historical and institutional knowledge for this staff through the

years which he has been engaged. More than this, he has guided, educated, and served as a trusted advisor to Ms. Harris during her tenure as executive director. Mr. Bradford will be deeply missed by the NC 911 Board, staff, and Ms. Harris.

Roster of Roll Call Votes:

NORTH CAROLINA 911 BOARD MEETING
ROLL CALL VOTE
Friday, October 22, 2021
10:00 AM – 12:00 PM
Via Simultaneous Communication with Microsoft Teams
NC DIT

NC 911 Board Members	4. Consent Agenda	8. a) Currituck Communications	10. a) Chowan County
David Bone	Y	Y	Y
Tommy Cole	Y	Not Present During Vote	Not Present During Vote
Greg Coltrain	Y	Y	Y
Brian Drew	Y	Y	Y
Bo Ferguson	Y	Y	Y
Greg Foster	Excused	Excused	Excused
Chuck Greene	Y	Y	Y
J. D. Hartman	Y	Y	Y
Jeff Ledford	Excused	Excused	Excused
John Moore	Y	Y	Y
Melanie Neal	Y	Y	Y
Jude O'Sullivan	Y	Y	Y
Jeff Shipp	Y	Y	Y
Earl Struble	Excused	Excused	Excused
Secretary Jim Weaver	Y	Y	Y
Donna Wright	Y	Y	Recused

Adjourn - Chairman Weaver adjourned the meeting at 12:17 PM and invited attendees to stay to watch a specially produced video followed by a reception honoring Mr. Bradford and Mr. Means.

NC DIT

Next NC 911 Board Meeting - Friday, December 3, 2021 – This will be a hybrid meeting with a location to be announced and Via Simultaneous Communication with Microsoft Teams

ATTACHMENT A

FCC final rule on 911 fee diversion

Summary for the 911 Board, 22 October 2021

The FCC publishes collected 911 related materials at: <u>911 and E911 Services | Federal</u> <u>Communications Commission (fcc.gov)</u>. The Report and Order in the Matter of 911 Fee Diversion was published on June 25 and is included in those materials. The final rules are copied below; see pp. 2-4.

Legislative changes effected December 2020 removed deference to states' (state, herein means all states and taxing jurisdictions) purposes and limited imposition of 911 fees to those "*consistent with the purposes and functions designated in the [FCC's] final rules issued under paragraph (3) as purposes and functions for which the obligation or expenditure of such a fee or charge is acceptable.*" 47 USC §615a-1(f)(1).

Federal law does not require states to impose a 911 fee. Rather, the law allows states to impose a fee applicable to CMRS or IP enabled voice services for the support or implementation of 911 / E911 services. Some states have "multi-purpose" fees which, in practice, direct or support diverting 911 related fees to non-911 purposes. The FCC noted such legislation is superseded by federal law and that Congress's intent on this issue was made clear in 2007: "the NET 911 Act is not intended to allow 911 or E-911 fees to be used for other public safety activities that, although potentially worthwhile, are not directly tied to the operation and provision of emergency services by PSAPs." The scope of 911 calling has expanded to include text to 911 and NG911. For this reason, the FCC relied on the NET 911 Act and RAY BAUM'S Act in adopting and applying the new rules to all communications services regulated by the Commission that provide emergency communications, including wireline services.

The legislation also added a method (the "safe harbor") for states to petition the FCC for a determination that expenses are within the intent of the legislation and the FCC's rules: meaning that the expenses are "acceptable".

The final rules clarify that fee diversion includes distribution of 911 fees to a political subdivision that obligates or expends such fees for a purpose or function other than those designated by the Commission.

The final rules were adopted to specifically fulfill the FCC's responsibility to identify "acceptable" expenditures. The final rules provide illustrative examples of acceptable expenditures, and the Commission explicitly stated that the examples are non-exclusive. States have discretion to make reasonable, good faith determinations whether expenditures are acceptable. The proposed rule and associated illustrative examples were adopted with one addition for PSAP operating costs: *PSAP operating costs, including lease, purchase, maintenance, replacement, and upgrade of customer premises equipment (CPE) (hardware and software), computer aided dispatch (CAD) equipment (hardware and software), and the PSAP building/facility and including NG911, cybersecurity, pre-arrival instructions, and emergency notification systems (ENS). PSAP operating costs include technological innovation that supports 911.*

The final rules retain the Commission's determination that <u>all</u> public safety radio expenses do not directly support 911 services. However, the Commission recognized that acceptable radio expenses are not limited to those "inside the PSAP", with the added understanding that such

expenses might include integrated communications systems that support caller location or enhance 911 reliability and resiliency. The demarcation between acceptable and unacceptable radio expenses was referred to the Strike Force for consideration in its report to Congress.

The Commission declined to further address its approach to underfunding analysis as a prerequisite to finding fee diversion, and to provide more detail regarding underfunding as the Board requested. However, the Commission did refer the topic of underfunding to the Strike Force for study.

Subpart I – 911 Fees

9.21 Applicability.
9.22 Definitions.
9.23 Designation of acceptable obligations or expenditures for purposes of section 902 of Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, section 902(c)(1)(C).
9.24 Petition regarding additional purposes and functions.
9.25 Participation in annual fee report data collection.
9.26 Advisory committee participation.

§ 9.21 Applicability.

The rules in this subpart apply to States or taxing jurisdictions that collect 911 fees or charges (as defined in this subpart) from commercial mobile services, IP-enabled voice services, and other emergency communications services.

§ 9.22 Definitions.

For purposes of this subpart, the terms in this section have the following meanings set forth below. Furthermore, where the Commission uses the term "acceptable" in this subpart, it is for purposes of Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, section 902(c)(1)(C).

911 fee or charge. A fee or charge applicable to commercial mobile services, IP-enabled voice services, or other emergency communications services specifically designated by a State or taxing jurisdiction for the support or implementation of 911 services. A 911 fee or charge shall also include a fee or charge designated for the support of public safety, emergency services, or similar purposes if the purposes or allowable uses of such fee or charge include the support or implementation of 911 services.

Diversion. The obligation or expenditure of a 911 fee or charge for a purpose or function other than the purposes and functions designated by the Commission as acceptable pursuant to § 9.23. Diversion also includes distribution of 911 fees to a political subdivision that obligates or expends such fees for a purpose or function other than those designated as acceptable by the Commission pursuant to § 9.23.

Other emergency communications services. The provision of emergency information to a public safety answering point via wire or radio communications, and may include 911 and E911 service.

State. Any of the several States, the District of Columbia, or any territory or possession of the United States.

State or taxing jurisdiction. A State, political subdivision thereof, Indian Tribe, or village or regional corporation serving a region established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 *et seq.*).

§ 9.23 Designation of acceptable obligations or expenditures for purposes of section 902 of Consolidated Appropriations Act, 2021, Pub. L. No. 116-260, Division FF, Title IX, section 902(c)(1)(C).

(a) Acceptable purposes and functions for the obligation or expenditure of 911 fees or charges for purposes of section 902 are limited to:

    (1) Support and implementation of 911 services provided by or in the State or taxing jurisdiction imposing the fee or charge; and

    (2) Operational expenses of public safety answering points within such State or taxing jurisdiction.

(b) Examples of **acceptable purposes and functions include, but are not limited to, the following**, **provided that the State** or taxing jurisdiction **can adequately document** that it has obligated or spent the fees or charges in question for these purposes and functions:

    (1) PSAP operating costs, including lease, purchase, maintenance, replacement, and upgrade of customer premises equipment (CPE) (hardware and software), computer aided dispatch (CAD) equipment (hardware and software), and the PSAP building/facility and including NG911, cybersecurity, pre-arrival instructions, and emergency notification systems (ENS). PSAP operating costs include technological innovation that supports 911;

    (2) PSAP personnel costs, including telecommunicators' salaries and training;

    (3) PSAP administration, including costs for administration of 911 services and travel expenses associated with the provision of 911 services;

    (4) Integrating public safety/first responder dispatch and 911 systems, including lease, purchase, maintenance, and upgrade of CAD hardware and software to support integrated 911 and public safety dispatch operations; and

    (5) Providing for the interoperability of 911 systems with one another and with public safety/first responder radio systems.

(c) Examples of **purposes and functions that are not acceptable** for the obligation or expenditure of 911 fees or charges for purposes of section 902 include, but are not limited to, the following:

    (1) Transfer of 911 fees into a State or other jurisdiction's general fund or other fund for non-911 purposes;

    (2) Equipment or infrastructure for constructing or expanding non-public safety communications networks (e.g., commercial cellular networks); and

    (3) Equipment or infrastructure for law enforcement, firefighters, and other public safety/first responder entities that **does not directly support** providing 911 services.

(d) If a State or taxing jurisdiction collects fees or charges designated for "public safety," "emergency services," or similar purposes that include the support or implementation of 911 services, the obligation or expenditure of such fees or charges shall not constitute diversion provided that the State or taxing jurisdiction:

    (1) Specifies the amount or percentage of such fees or charges that is dedicated to 911 services;

    (2) Ensures that the 911 portion of such fees or charges is segregated and not commingled with any other funds; and

    (3) Obligates or expends the 911 portion of such fees or charges for acceptable purposes and functions as defined under this section.

§ 9.24 Petition regarding additional purposes and functions.

    (a) A State or taxing jurisdiction may petition the Commission for a determination that an obligation or expenditure of 911 fees or charges for a purpose or function other than the purposes or functions designated as acceptable in § 9.23 should be treated as an acceptable purpose or function. Such a petition must meet the requirements applicable to a petition for declaratory ruling under § 1.2 of this chapter.

    (b) The Commission shall grant the petition if the State or taxing jurisdiction provides sufficient documentation to demonstrate that the purpose or function:
      (1) Supports public safety answering point functions or operations; or

      (2) Has a direct impact on the ability of a public safety answering point to:
        (i)   Receive or respond to 911 calls; or
        (ii)   Dispatch emergency responders.

§ 9.25 Participation in annual fee report data collection.

    (a) If a State or taxing jurisdiction receives a grant under section 158 of the National Telecommunications and Information Administration Organization Act (47 U.S.C. 942) after December 27, 2020, such State or taxing jurisdiction shall provide the information requested by the Commission to prepare the report required under section 6(f)(2) of the Wireless Communications and Public Safety Act of 1999, as amended (47 U.S.C. 615a-1(f)(2)).

    (b) Each state or taxing jurisdiction subject to paragraph (a) of this section must file the information requested by the Commission and in the form specified by the Public Safety and Homeland Security Bureau.

    (c) Paragraph (b) of this section contains information collection and recordkeeping requirements. Compliance will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the *Federal Register* announcing that compliance date and revising this paragraph accordingly.

§ 9.26 Advisory committee participation.

Notwithstanding any other provision of law, any State or taxing jurisdiction identified by the Commission in the report required under section 6(f)(2) of the Wireless Communications and Public Safety Act of 1999, as amended (47 U.S.C. 615a-1(f)(2)), as engaging in diversion of 911 fees or charges shall be ineligible to participate or send a representative to serve on any advisory committee established by the Commission

Tab 4 b – e)

*b)*NG 911 Reserve Fund

     October 2021 Account Balance $ 82,660,554

     October 2021 Disbursement $ 2,639,619

*c)*CMRS Account

     October 2021 Account Balance $ 3,006,317

     October 2021 Disbursement $ 194,434

*d)*PSAP Account

     October 2021 Account Balance $ 4,033,599

     October 2021 Disbursement $ 3,545,823

*e)*PSAP Grant/Statewide Projects Account

     October 2021 Account Balance $ 48,096,548

     Grant Funds Committed $ 25,797,277

NC 911 Board Financials

Next Generation 911 Reserve Fund

FY2022 beginning Fund Balance: $85,360,511.79

	July 2021	August 2021	September 2021	October 2021
Service Charge Receipts	$2,335,821.52	$1,896,826.06	$1,800,548.33	$1,658,576.88
Interest allocation	$15,841.12	$0.00	$11,255.06	$9,493.67
PSAP Grant/Statewide Project Allocation (In)				
NG 911 Reserve Fund Disbursement	-$1,184,566.79	-$2,601,855.15	-$4,002,279.62	-$2,639,619.17
NG 911 Reserve Fund Balance	$86,527,607.64	$85,822,578.55	$83,632,102.32	$82,660,553.70

CMRS Account

FY2022 beginning Account Balance: $3,315,649.38

	July 2021	August 2021	September 2021	October 2021
CMRS Service Charge Receipts	$0.00	$103,442.00	$101,584.21	$91,253.04
Interest allocation	$615.32	$0.00	$402.44	$352.94
CMRS Allocation (out)				
CMRS Disbursement	-$187,291.72	-$163,701.20	-$61,555.25	-$194,434.08
CMRS Account Balance	$3,128,972.98	$3,068,713.78	$3,109,145.18	$3,006,317.08

PSAP Account

FY2022 beginning Account Balance: $8,376,978.19

	July 2021	August 2021	September 2021	October 2021
Service Charge Receipts	$3,052,966.06	$3,272,633.05	$3,213,827.39	$2,886,979.06
Wireline Service Charge Receipts	$415,257.57	$427,849.50	$448,078.90	$418,606.45
VOIP Service Charge Receipts	$826,903.01	$815,763.88	$820,970.68	$742,855.97
Prepaid Wireless Service Charge Receipts	$799,466.88	$797,471.16	$858,105.40	$873,731.03
Interest allocation	$1,554.59	$0.00	$1,453.27	$301.61
Subtotal	$5,096,148.11	$5,313,717.59	$5,342,435.64	$4,922,474.12
PSAP Allocation (out)			-$10,221,234.00	
PSAP Distributions	-$4,159,451.48	-$3,545,823.03	-$3,545,823.03	-$3,545,823.03
PSAP Account Balance	$9,313,674.82	$11,081,569.38	$2,656,947.99	$4,033,599.08

UnCertified October 2021 Report
Cash Basis

PSAP Grant-Statewide 911 Projects Account						
	Total Disbursed YTD	Jul-21	Aug-21	Sep-21	Oct-21	Remaining available balance
		$37,798,380.35	$37,659,648.79	$38,274,358.29	$48,861,483.46	
FY2019	**Award Amount**					
Greene G2019-03 (069)	841,964.00	-118,547.55	-161,722.04			561,694.41
FY2020	**Award Amount**					
NC State Highway Patrol G2020-02 (075)	1,102,933.00	0.00			-1,102,933.00	0.00
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	-293,298.21			1,958,088.79
Chatham G2020-07 (080)	2,339,608.00	0.00				2,339,608.00
FY2021						
Bladen County (084)	$334,937.99	0.00	-113,021.92			221,916.07
Clay County G2021-02 (087)	2,500,000.00	-56,575.26	-33,549.67		-18,115.90	2,391,759.17
Sampson County (088)	$5,479,453.00	-55,216.72		-158,112.44	-298,157.74	-294,576.32	4,673,389.78
Surry County (085)	$238,127.00	0.00				238,127.00
Union Count (086)	$484,021.00	0.00				484,021.00
Wilson County (083)	$35,900.00	0.00		-35,900.00		0.00
FY2022						
Alleghany County G2022-01	$135,000.00					135,000.00
Watauga County G2022-02	$154,130.86					154,130.86
Burke County G2022-03	$135,303.57					135,303.57
Pasquotank-Camden County G2022-04	$331,021.40					331,021.40
STATEWIDE PROJECTS:	**Award Amount**					
E-CATS II (012)	2,688,500.00	-1,779,525.12	-69,746.84		-68,395.84	-80,231.84	690,600.36
Interpretive Services (042)	540,626.75	-254,943.00	-25,683.75		-54,960.75	-28,089.00	176,950.25
Ortho Project III Image 20 (073)	4,108,739.00	-3,185,491.08					923,247.92
CRM Statewide One-time Development	700,000.00	-135,213.40	-1,024.10	-36,167.23	-145.00	-435.00	527,015.27
Ortho Project III Image 21 (081)	3,723,908.00	-1,542,668.59	-281,921.59	-16,585.10			1,882,732.72
Ortho Project III Image 22 (089) MGJ	3,430,142.00	0.00					3,430,142.00
Approved Allocation from PSAP & Transfer out to NG 911 Fund				10,221,234.00		
Interest		7,014.59	0.00	5,019.43	5,546.61	
Revenue 5%		834,221.97	825,574.27	818,431.07	753,898.58	
Total Ending Fund Balance	$ 37,798,380.35	$37,659,648.79	$38,274,358.29	$48,861,483.46	$48,096,547.59	

Committed: 25,797,276.57
Grant Account Balance $22,299,271.02

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

November 8, 2021

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

Greetings to all. I hope you are staying safe and healthy. October saw good movement on this project, with headway being made in the acquisition of RMS data from our current vendor. We appear to be on track for the new timeline that was released last month.

Some October highlights include:

- <u>Southern </u>Software –
  - CAD, JMS and RMS data conversion is in progress.
  - A game plan to install client software at all agencies is being formulated.
- <u>Caliber Public Safety</u> – RMS data has been received. A concern has arisen on whether this data is just County law data or if it is all other law agencies as well. We are waiting on a response from our vendor in reference to this.

With the cutover to ESInet coming in November along with this project, we are looking forward to some great new abilities over the coming months. We strive to make each month better than the last! Thank you for all that you do.

Sincerely,

Jeff Kulp
911 PSAP Manager
County of Bladen

**Chatham County
Emergency Communications**

297 West Street • Pittsboro, NC 27312

Office 919.545.8163
24-hour Warning Point 919.542.2911
www.chathamnc.org

November 3, 2021

Attn: L. V. Pokey Harris, Executive Director

N.C. 911 Board

P.O. Box 17209

Raleigh, NC 27609

Reference: Chatham County FY2020 Grant Report

Ms. Harris:

We continue to make progress on the radio upgrade project. All agencies have been trained on the new radio system. Portable and mobile radios continue to be distributed and/or installed. We are working with vendors to install repeaters, lines and antennas and bring network connectivity to the towers.

Regarding our 6th tower that was initially planned for Governors Club, we will now build the radio tower at the Chatham County Northeast District Park (tower site name will be Northeast Park). Site plans are being drafted and the zoning process has begun. We are working to have building permits in early spring.

We appreciate the 911 Board granting an extension to our project and look forward to completing this project Summer 2022.

Please do not hesitate should you have any specific questions.

Regards:

Mike Reitz

Director

Clay County, NC
Grant Report – October 2021

Activities – October 2021

- Evaluate site selection and next steps
- Communicate regularly with Project Team (ongoing)

Anticipated Activities – November 2021

- Finalize site selection
- Continue with initial facility programming
- Review programming and schematic design
- Continue to define technology needs
- Communicate regularly with Project Team (ongoing)

The tasks listed below will be tracked throughout the project duration and will be updated monthly. Any changes will be noted in the monthly report.

Work Plan

Task	Projected Timeframe[1]	Actual	Completed
Contract for project oversight	Months 1-2	December 2020	X
Issue RFQ for architectural services	Months 2-3 (December 2020 – January 2021)	December 2020	X
Select architect and contract for services	Months 4-5 (February – March 2021)	February 2021	X
Negotiate fee with architect	Months 5-6 (March – April 2021)	March 2021	X
Define technology needs in conjunction with building design	Months 3-12 (January – October 2021)	June 2021	
Facility design and construction document process	Months 4-11 (February – September 2021)	April 2021	
Establish lead times for major technology systems, including NG911	Months 20-22 (June – August 2022)		

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[1] As the grant agreement was signed in late October 2020, month 1 is considered November 2020.

Task	Projected Timeframe[1]	Actual	Completed
Bid and award construction project	Months 16-18 (February – April 2022)		
Proceed with construction, including coordination with migration to the State ESInet NG911 network	Months 20-32 (June 2022 – June 2023)		
Procure new technology and furnishings	Months 20-26 (June – December 2022)		
Substantial completion of construction, address any facility punch list issues	Month 30 (April 2023)		
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 – August 2023)		
Go-live / Physically transition the Clay County primary PSAP to the new facility and the State ESInet NG911 system	Months 34-36 (August – October 2023)		
Monitor systems post cutover	Months 32-36 (June – October 2023)		

Woodson "Gene" Booth
Director

CUMBERLAND
COUNTY
NORTH CAROLINA

Emergency Services Department

Gene Booth
131 Dick St.
Fayetteville, NC 28301
October 30, 2021

L.V. Pokey Harris, Executive Director
P.O. BOX 17209
Raleigh, NC 27609

RE: CUMBERLAND COUNTY FY2020 GRANT REPORT

Dear Ms. Harris,

This letter is to provide an update on the FY2020 911 Board Grant. During the month of October 2021, Engineered Construction Company (ECC) along with sub-contractors continued focus on interior renovations pertaining to obtaining rough in inspections, hanging drywall and the erection of the communications tower.   Continued submittal approval for various construction areas. In addition, there was continued work on the new section of the building. Construction progress meetings were held October 7th and 21st. I have attached photos of the progress thus far. If you have any questions do not hesitate to reach out.

Gene Booth, Director
Cumberland County Emergency Services

Law Enforcement Center, 131 Dick Street, Room 114 I P.O. Box 1829 I Fayetteville, North Carolina 28301
Phone: 910-678-7688 I Fax: 910-677-5552

co.cumberland.nc.us
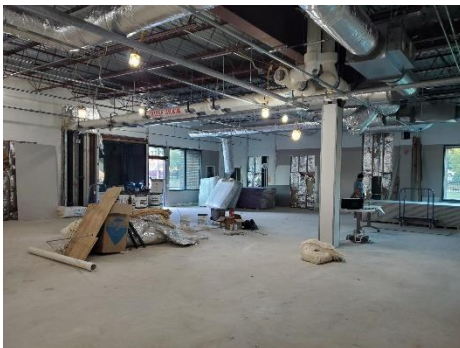
Woodson "Gene" Booth
Director

CUMBERLAND
COUNTY
NORTH CAROLINA

Emergency Services Department

New 120' Communications Tower

911 Center

Server Room

Law Enforcement Center, 131 Dick Street, Room 114 | P.O. Box 1829 | Fayetteville, North Carolina 28301
Phone: 910-678-7688 | Fax: 910-677-5552

co.cumberland.nc.us

PHONE (252)232-2216
FAX (252) 232-2750

Mary Beth Newns
Director

Liz Hodgis
Supervisor

Currituck County
COMMUNICATIONS
147 Courthouse Rd,
Currituck, North Carolina 27929

Date: October 29, 2021

To: NC 911 Board

From: Mary Beth Newns

RE: 2020 Grant Progress Report

Please see the following highlights.

Timeline:

- Public Safety Building housing new PSAP is complete and ready to install furniture and equipment.
- Waiting on final furniture quote and contract to submit to get furniture ordered.
- Radio Communications equipment and installation quote (for at least the consoles portion) and contract negotiations by November 2021. This includes the UPS as well.
- **Radio tower build: due to delays in material availability the likelihood of having a tower built before the end of the Grant deadline is highly *unlikely*.
    - We can attempt to have equipment purchased, cement pads poured, and equipment shelter placed but the actual tower build will likely be close to a year from contract date.
    - Our innovative team has determined a way to temporarily establish radio communications from the new PSAP so that we can move forward with moving in by March 2022. It will have a cost but may offer a good tertiary backup in the long term.

Reimbursement:

Reimbursement submitted, however, a different form of documentation has been requested. Unsure of status.

Building Progress:

- Work in progress
    - Display monitors mounted
    - Ordering PSAP equipment and furniture
    - Ordering Console radio equipment
    - Ordering UPS

Franklin County, NC
Grant Report – October 2021

Activities – October 2021

- Finalize design and bidding next steps
- Rebid construction project (10/25/2021)
- Prebid meeting (10/25/2021)
- Access Control / Security coordination meetings
- Continue to define technology timeframe
- Dispatch Furniture sample layouts obtained
- Communicate regularly with project team (ongoing)

Anticipated Activities – November 2021

- Receive bids on construction project (11/23/2021)
- Review and prepare for award of construction project
- 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	April 2021	X
Facility design and construction document process	Months 9-19 (July 2020 – April 2021)	April 26, 2021	X
Establish lead times for major technology systems, including NG911			

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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
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)		
Monitor systems post cutover	Months 32-36 (May – September 2022)		

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

Greene County, NC

911 Facility Relocation   MCP Project Number 18-128

Monthly Progress Report – October 2021

Activity	This Period	Next Period
• Design	• No activities	• None expected
• Permits	• No activities	• None expected
• Construction	• Install doors and hardware • Finish data center upfit • Finalize power for dispatch positions • Complete tile • Finalize cabling, overhead power and grounding • Fire alarm / UPS / Generator annunciator	• Punch list and prep for certificate of occupancy
• Communications Systems	• Continue meetings with AT&T • On-site review with AT&T / Intrado • Continue technology migration planning and vendor out-reach • Order / receive telecom circuits • Continue with procurements of technology needs • Dispatch furniture installation • Installation of AV displays • Coordination meetings with CAD vendor • Coordination of data circuits and copper circuits	• Continue meetings with AT&T • Continue with procurements of technology needs • Prepare for building completion and technology migration • Begin technology implementation • Prep for radio console
• Other Activity	• Routine project meetings to coordinate design and technology needs	• Continue to hold project meetings to discuss next steps and coordinate project needs

Sampson County, NC
Grant Report – October 2021

Activities – October 2021

- **Construction:**
  - Completed underground conduit to tower
  - Natural gas line into the building
  - Completed air barrier
  - Completed interior metal framing
  - Continued roof drains
  - Culvert improvements
  - Supply duct installation
  - HMI Frames
  - Drywall top-out

- **Technology**
  - Publish RFP for new tower and issue addendum #1 & #2
  - Continue with technology plan
  - Continue coordination access control/security
  - Coordinate structured cabling
  - Coordinate audio-visual
  - Review dispatch furniture quotes
  - Issue order for radio consoles
  - Begin technology / network specifications
  - Telecom vendor outreach

Anticipated Activities – November 2021

- **Construction:**
  - Complete culvert improvement
  - Complete HMI frames
  - Roof drains
  - 911 PME rough-ins
  - Plumbing on-going
  - Building duct installation
  - Utility yard work

- **Technology**
  - Pre-bid conference on radio tower
  - Continue to refine the technology plan
  - Finalize access control/security
  - Continue to coordinate structured cabling
  - Continue to coordinate audio-visual
  - Finalize dispatch furniture plan
  - Continue technology / network specifications
  - Continue vendor outreach and scoping discussions

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[1]	December 2020	X
Contract with construction firm	Month 5 (April 2021)	April 2021	X
Construct new 911 facility	Months 5-19 (April 2021 – June 2022)	April 19, 2021 – Ongoing	
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)		

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[1] Month 1 is December 2020

Activities – October 2021

- Review and alignment of technology migration & procurement plan tasks.
- Begin procurement process of technology items.
- Awarded bid for structured cabling/low voltage and selected vendor.
- Developed estimated tower schedule and tasking with county staff & engineer. Tasking processes underway.
- Received generators and scheduled installation.
- Provided technical guidance for upcoming technology integration.

Anticipated Activities – November 2021

- Continue review and alignment of technology migration plan with project team.
- Continue procurement of project technology items
- Issue contract to vendor for structured cabling/low voltage work. Schedule review of contact scope and issue authorization for work start.
- Continue tasking review of tower with county staff & 3rd party engineer.
- Install generators.
- Continue technical and vendor reviews for alignment with grant funded technology.

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 (January – February 2021)	Execution completed	X
Determine procurement schedule based on facility project schedule	Month 2 (February 2021)	Procurement schedule completed	X
Outline and finalize a procurement strategy based on expected installation schedules	Months 7-8 (July – August 2021)	Purchasing plan developed / completed	X
Install generator (dependent on construction contract)	Month 10 (October 2021)	Equipment received, installation pending	
Procure equipment and schedule installations	Month 11+ (November 2021 onwards depending on procurement lead times)	Procurement processes of technology underway	
Install structured cabling systems and datacenter needs	Month 13 – 14 (January – February 2022; construction dependent)	Bid awarded, vendor selected, contract issuance in process	
Install backroom supporting technical systems	Month 14 – 15 (February 2022 – March 2022; construction dependent)	Design reviews and alignment with construction ongoing	

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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
Test and validate – (pre-go-live decision)	Months 16 – 17 (April – May 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	Status / Comments
						Union County NC - NC 911 Grant Award 2021-07
						Budget Report - October 29, 2021
Generator	$160,000.00	$0.00	$0.00	$0.00	$160,000.00	Equipment received October 28, scheduling installation
Radio Tower	$150,000.00	$0.00	$0.00	$0.00	$150,000.00	A1 environmental letter completed, submitted for review; FCC & FAA application documents completed and filed for review
Microwave Link	$125,000.00	$0.00	$0.00	$0.00	$125,000.00	Equipment/installation quote under review and edit by county
Structured Cabling	$39,000.00	$0.00	$0.00	$0.00	$39,000.00	Awarded bid for structured cabling/low voltage and selected vendor. Contract issuance in process
Radio Distribution Surge Protection	$5,016.00	$0.00	$0.00	$0.00	$5,016.00	Work contract issuance to selected vendor in process
Racks for Equipment	$5,005.00	$0.00	$0.00	$0.00	$5,005.00	Work contract issuance to selected vendor in process
Totals:	$484,021.00	$0.00	$0.00	$0.00	$484,021.00	

Facility Construction Activity Status[2]

Construction

- Status
  - Roof decking completed, material installation underway.
  - Installation of some exterior storefront windows underway.
  - Interior HVAC ductwork has started.
  - Installation of gas and water utility lines to facility underway.
  - Provisioning of temporary power to facility in process.
  - Electrical work continues both interior and exterior of the facility.

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

- Schedule
  - Once the building is "in the dry," interior work can proceed unencumbered by weather, but GWB can't be finished until the envelope is completed and the building can be somewhat climatized.

Owner (Union County) Contracted/Owner Furnished Items

- Structured Cabling
  - Bid document opening rescheduled for October 4 due to lack of bidders.
- Audio Visual System(s)
  - AV vendor selected; Project alignment completed 10/10; Lead times on equipment appear to not be an issue.
- Facility Security (Access Control/CCTV) Packages
  - Vendor selected; Coordination meeting completed by county staff and facility general contractor
- Communications Tower
  - 3rd party engineering processes for federal environmental survey, FCC, & FAA approvals in process.
  - Awaiting bid process start from County
  - Completion of tower will likely exceed facility building completion

Other Activity:

- Ongoing alignment of technology procurement
- Discussion and review of potential impacts in delay of tower installation & completion

Figure 1: Installation of roofing and upper exterior windows underway

Figure 2: Overhead conduits and interior framing in progress; HVAC ductwork installation to begin soon

Figure 3: Exterior utility provisioning in process

Tab 5
Executive Director's Report
Pokey Harris

Tab 5 a)
NextGen 911 Migration Status

NC NG911 Migration Status

North Carolina Next Generation 911

Status
- Live on ESINet
- Active Projects

Map Date: November 18, 2021

NC DIT 911 Board

Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS
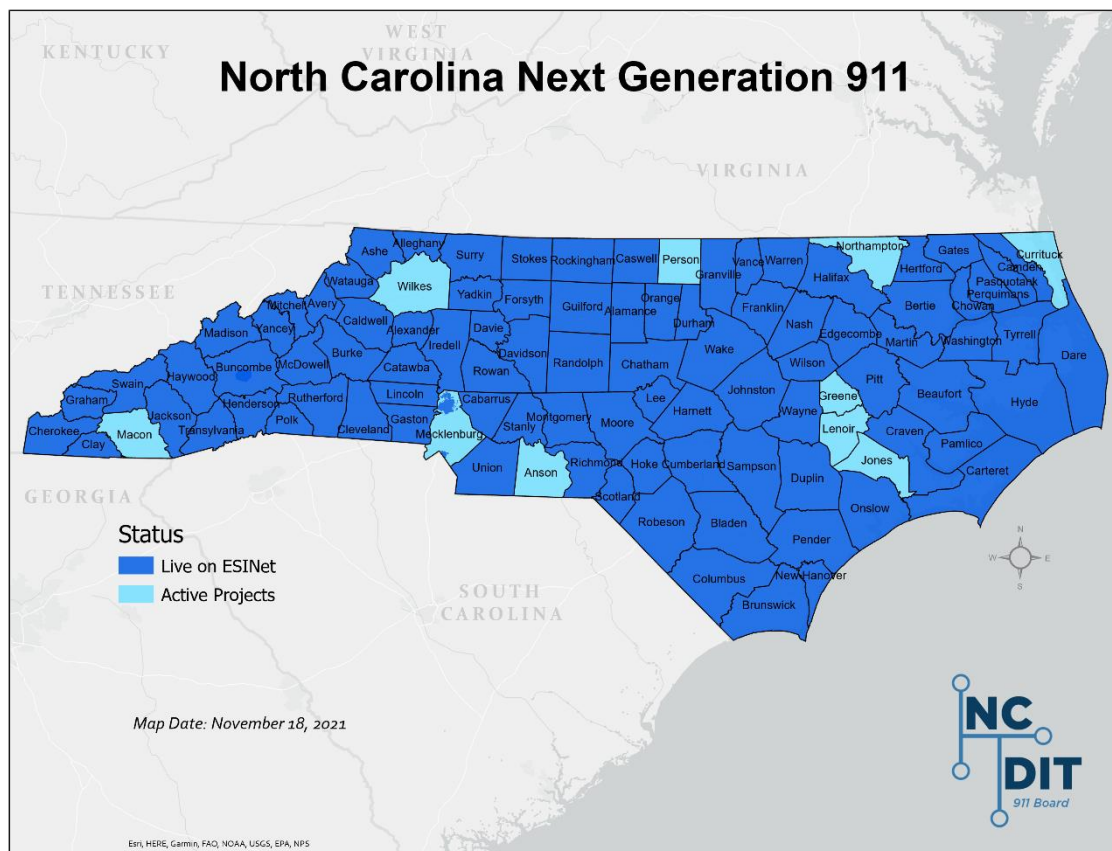
ESInet Migrations
October 19, 2021 – November 17, 2021

Due to ESInet migrations now being conducted under Covid-19 restrictions and limited accessibility requirements, photos and quotes may or may not be included.

Kudos and Congratulations to All!!!

High Point 911
(North Central Region)
ESInet Migration
October 19, 2021

- **Migration as i3**
- **First Live Call at 1130 Hours EST**
- **PSAP #111/Physical Location #169(Including Backups)**

Chatham County 911
(South Central Region)
ESInet Migration
November 2, 2021

- **Migration as i3**
- **First Live Call at 1113 Hours EST**
- **PSAP #112/Physical Location #171 (Including Backups)**

Alexander County 911 (Western Region) ESInet Migration November 3, 2021

- Migration as i3
- Vesta Hosted Call Handling Equipment
- First Live Call at 1024 Hours EST
- PSAP #113/Physical Location #172 (Including Backups)

Yadkin County 911 (North Central Region) ESInet Migration November 10, 2021

- Migration as i3
- Vesta Hosted Call Handling Equipment
- First Live Call at 1044 Hours EST
- PSAP #114/Physical Location #174 (Including Backups)

Bladen County 911
(Eastern Region)
ESInet Migration
November 17, 2021

- **Migration as i3**
- **Vesta Hosted Call Handling Equipment**
- **First Live Call at 1139 Hours EST**
- **PSAP #116/Physical Location #178 (Including Backups)**

Haywood County 911
(Western Region)
ESInet Migration
November 17, 2021

- **Migration as i3**
- **Viper Hosted Call Handling Equipment**
- **First Live Call at 1104 Hours EST**
- **PSAP #115/Physical Location #176 (Including Backups)**

Tab 5 b)
NextGen 911 GIS Status Map
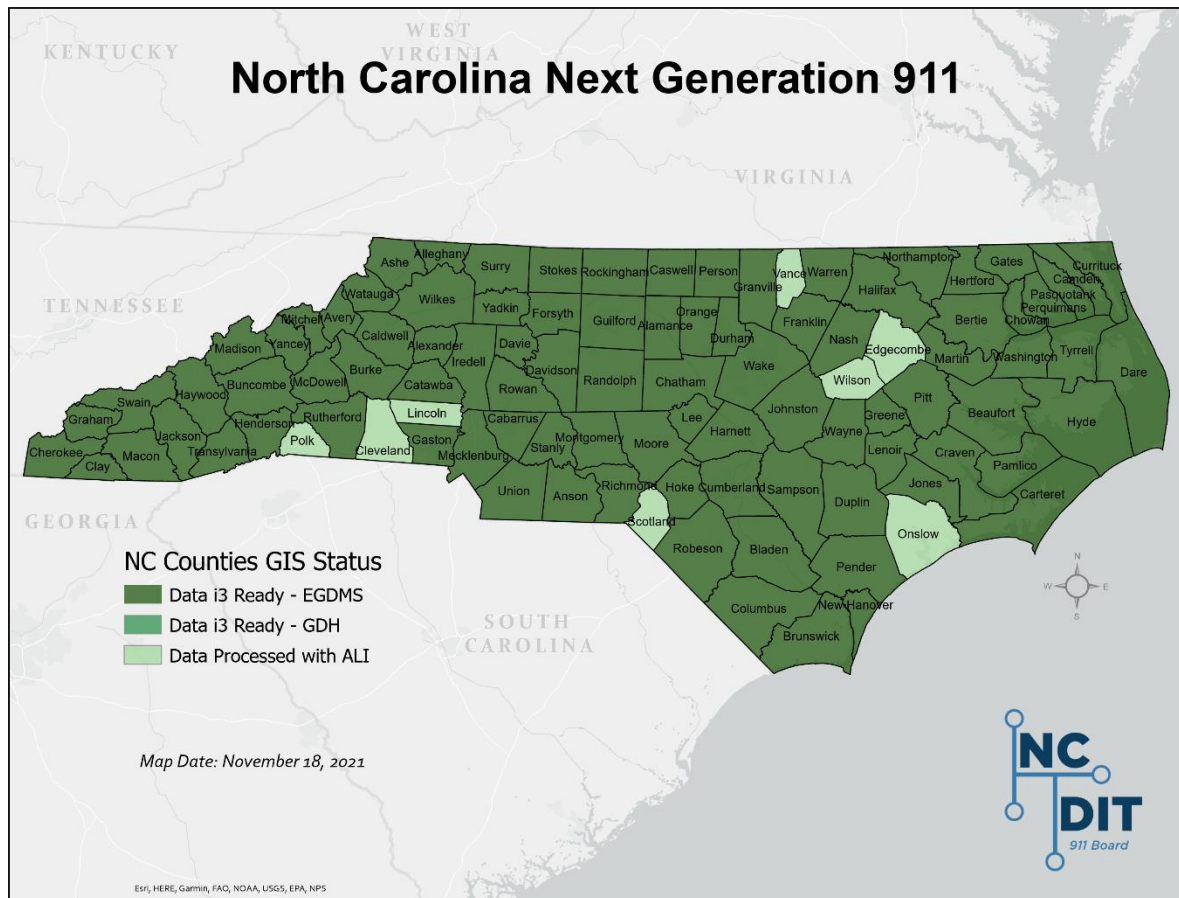
Tab 5 c)
988 Planning Coalition - National Suicide Prevention Lifeline

Tab 5 d)
Staffing Update

Tab 5 e)
Consideration for Nomination for Board Vice Chair (January Meeting)

Tab 6
Executive Committee Report
Donna Wright

Tab 6 a)
NC 911 Board Bylaws Modifications
(Roll Call Vote Required)

Bylaw revisions – updated 10/15/21

ARTICLE IV –COMMITTEES

Section 1: Standing Committees. There shall be five (5) permanent committees. They shall include: the Funding Committee, Grants Committee, Technology Committee, Education Committee and Standards Committee. Committees shall have a minimum of three (3) members of the 911 Board.

Section 2: Non-Standing Committees.

a)   **Executive Committee**. The Chair may appoint an Executive Committee to address matters not assigned to a Standing Committee including but not limited to governance, legislative or regulatory issues. The Board Vice Chair shall serve as Chair of the Executive Committee. An Executive Committee shall reflect the Board's composition to the extent practicable. The Executive Committee may be convened quickly to act on matters that may not allow time for assembly of the full Board. As such, this Committee will act in good faith to review the matter at hand and make a recommend action that it believes is representative of the majority of the Board. The Executive Director and legal counsel will participate in Committee meetings. Any Committee recommendations and actions will be provided to the 911 Board for action as soon as possible. The Chair may rotate Executive Committee membership as may be needed. The Committee shall have other duties as assigned by the 911 Board.

b)   **Section 5: Meetings**. Committee chairs shall call meetings in a timely manner to complete the business of their Committees. 911 Board staff shall be responsible for securing a location and providing all Committee members with notices of meetings and meeting materials. Board members shall comprise a majority of voting members on any Committee. A committee quorum shall include two (2) or more Board members. Committee actions shall be decided by simple majority of a quorum of voting members.

c)   **Section 6: Membership.** Any Committee may include persons who are not 911 Board members at the discretion of the Committee Chair upon approval of the 911 Board Chair. Such Committee members may be appointed for terms of three (3) years and appointments may be renewed at the Board Chair's discretion. Committee members shall not miss two (2) consecutive meetings of the Committee without the approval of the Committee Chair and must attend seventy-five (75%) percent of the Committee meetings scheduled.

Section 7: Non-Board Members of Committees. Non-Board members of committees may be selected from the public having particular subject matter knowledge and expertise. The 911 Board may give public notice of its desire to select non-Board members and may seek recommendations for such members from the Executive Director. The Executive Director or Committee Chairs shall forward names of individuals from the public who are interested in serving as non-Board members to the 911 Board Chair for approval. Non-Board members may not participate in official votes of any Committee, unless such privilege is granted by the 911 Board Chair.

Tab 6
General Committee Report

Tab 7
Education Committee Report
Chuck Greene

Tab 8
Funding Committee Report
David Bone

Tab 8 a)
PSAP Estimated FY2023 Distribution
(Roll Call Vote Required)

PSAP	PSAP Distribution FY2020 (Column B)	PSAP Distribution FY2021 (Column C)	Maximum Allowable 20% Carry Forward (Column B+C/2*20%)	Fund Balance FY2021 (Column F)	Fund Balance FY2020 (Column G)	Fund Balance +/- Column F & G	Carry forward (Ok) or Over 20% (Reduce)	Excess Funds over Maximum Allowable 20% Carry forward (Column J)	Proposed 5-YR rolling Average before carry forward reduction (Column K)	Estimated PSAP Proposed Yearly Distribution FY2023 (Column K-J)	Estimated PSAP Proposed Monthly Distribution FY2023
Alamance County Central Communications	$604,648.02	$620,965.04	$122,561.31	671,643.82	779,123.98	-$107,480.16	-	0.00	702,546.19	$702,546.19	$58,545.52
Burlington PD (Secondary)	118,918.08	166,060.00	$28,497.81	39,350.14	21,937.15	$17,412.99	-	0.00	189,010.80	$189,010.80	15,750.90
Alexander County Communications	205,594.59	217,612.80	$42,320.74	287,559.08	381,276.23	-$93,717.15	-	0.00	254,364.18	$254,364.18	21,197.02
Alleghany County E911	182,945.07	195,405.36	$37,835.04	121,689.65	138,189.43	-$16,499.78	-	0.00	226,864.69	$226,864.69	18,905.39
Anson County Emergency Communications	200,282.36	172,121.88	$37,240.42	479,404.97	462,491.74	$16,913.23	-	0.00	152,931.72	$152,931.72	12,744.31
Ashe County Communications	366,255.27	371,145.48	$73,740.08	378,727.73	252,620.74	$126,106.99	Reduce	-52,366.92	327,237.00	$274,870.09	22,905.84
Avery County Communications Center	180,508.18	132,089.52	$31,259.77	523,241.45	513,783.05	$9,458.40	-	0.00	154,573.73	$154,573.73	12,881.14
Beaufort County Communications Center	292,304.22	304,189.08	$59,649.33	481,407.02	335,526.45	$145,880.57	Reduce	-86,231.24	203,048.63	$116,817.39	9,734.78
Bertie County Sheriff's Communications	203,145.88	216,304.32	$41,945.02	217,001.49	160,440.82	$56,560.67	Reduce	-14,615.65	106,505.02	$91,889.37	7,657.45
Bladen County Sheriff's Communications	277,911.07	277,856.76	$55,576.78	417,258.49	357,642.17	$59,616.32	Reduce	-4,039.54	217,547.34	$213,507.80	17,792.32
Brunswick County 9-1-1	757,912.55	799,291.44	$155,720.40	1,776,270.97	1,533,293.77	$242,977.20	Reduce	-87,256.80	527,277.69	$440,020.89	36,668.41
Buncombe County Emerg. Communications	24,984.00	553,845.95	$57,883.00	1,909,384.94	2,219,836.10	-$310,451.16	-	0.00	663,932.51	$663,932.51	55,327.71
Asheville PD (Secondary)	0.00	111,907.50	$11,190.75	0.00	0.00	$0.00	-	0.00	198,939.84	$198,939.84	16,578.32
Burke County Emerg. Communications	581,125.58	668,564.88	$124,969.05	1,377,389.64	1,226,222.05	$151,167.59	Reduce	-26,198.54	473,139.95	$446,941.41	37,245.12
Cabarrus County Sheriff Communications	694,860.25	703,111.92	$139,797.22	765,591.90	629,959.27	$135,632.63	-	0.00	614,089.28	$614,089.28	51,174.11
Caldwell County Communications	418,622.70	320,650.32	$73,927.30	726,871.36	652,457.51	$74,413.85	Reduce	-486.55	319,874.95	$319,388.40	26,615.70
Carteret County Communications	372,448.53	279,393.24	$65,184.18	1,454,845.45	1,409,466.41	$45,379.04	-	0.00	205,172.06	$205,172.06	17,097.67
Caswell County 911 Communications	303,687.05	244,936.32	$54,862.34	383,454.87	466,035.53	-$82,580.66	-	0.00	241,013.79	$241,013.79	20,084.48
Catawba Co Communications Center	853,712.01	786,709.48	$164,042.15	1,127,269.30	1,016,311.85	$110,957.45	-	0.00	864,090.91	$864,090.91	72,007.58
Hickory PD (Secondary)	213,786.90	90,724.92	$30,451.18	131,368.54	124,934.47	$6,434.07	-	0.00	115,608.35	$115,608.35	9,634.03
Newton PD (Secondary)	40,370.40	19,139.12	$5,950.95	25,846.04	25,035.31	$810.73	-	0.00	23,559.25	$23,559.25	1,963.27
Chatham County Emergency Operations Center	506,302.00	535,273.80	$104,157.58	310,080.33	445,830.88	-$135,750.55	-	0.00	573,741.87	$573,741.87	47,811.82
Cherokee County 911	272,270.23	295,875.84	$56,814.61	73,694.57	49,463.73	$24,230.84	-	0.00	322,505.48	$322,505.48	26,875.46
Chowan Central Communications	275,826.41	261,497.76	$53,732.42	291,528.56	203,736.76	$87,791.80	Reduce	-34,059.38	194,334.04	$160,274.66	13,356.22
Clay County E911 Communications	222,660.19	47,761.44	$27,042.16	168,362.52	480,699.19	-$312,336.67	-	0.00	223,267.74	$223,267.74	18,605.65
Cleveland County Communications Center	203,352.64	94,031.04	$29,738.37	1,449,084.36	1,474,810.95	-$25,726.59	-	0.00	142,798.89	$142,798.89	11,899.91
Kings Mountain (City of)	100,403.79	56,220.36	$15,662.41	162,069.75	175,317.53	-$13,247.78	-	0.00	80,031.44	$80,031.44	6,669.29
Shelby Police Communications	119,189.16	35,192.48	$15,438.16	225,660.44	243,823.55	-$18,163.11	-	0.00	66,971.61	$66,971.61	5,580.97
Columbus Central Communications	322,399.54	325,810.68	$64,821.02	915,650.31	845,135.37	$70,514.94	Reduce	-5,693.92	340,782.22	$335,088.30	27,924.03
Craven County Sheriff Communications	288,035.30	153,448.56	$44,148.39	735,318.80	685,742.53	$49,576.27	Reduce	-5,427.88	131,384.75	$125,956.87	10,496.41
Havelock Public Safety Comm.	149,339.28	129,505.95	$27,884.52	104,143.24	139,466.46	-$35,323.22	-	0.00	164,709.01	$164,709.01	13,725.75
New Bern Communications Center	295,570.70	217,088.95	$51,265.97	191,505.27	297,292.06	-$105,786.79	-	0.00	233,477.56	$233,477.56	19,456.46
Cumberland County Communications	861,166.07	755,204.16	$161,637.02	3,192,580.68	2,889,605.10	$302,975.58	Reduce	-141,338.56	572,581.91	$431,243.35	35,936.95
Fayetteville City Communications	919,978.18	963,132.63	$188,311.08	873,073.17	780,519.65	$92,553.52	-	0.00	959,724.55	$959,724.55	79,977.05
Currituck Central Communications	212,237.71	199,032.24	$41,127.00	361,153.15	322,686.66	$38,466.49	-	0.00	204,688.58	$204,688.58	17,057.38
Dare Central Communications	0.00	340,767.48	$34,076.75	406,353.53	496,066.51	-$89,712.98	-	0.00	418,946.35	$418,946.35	34,912.20
Davidson County 911	486,024.05	565,045.44	$105,106.95	182,859.93	768,907.50	-$586,047.57	-	0.00	656,442.61	$656,442.61	54,703.55
Davie County Communications	214,101.99	218,748.12	$43,285.01	486,150.49	482,051.42	$4,099.07	-	0.00	138,948.70	$138,948.70	11,579.06
Duplin County/Kenansville PSAP	261,285.36	350,200.80	$61,148.62	528,787.31	508,928.91	$19,858.40	Reduce	0.00	306,393.25	$306,393.25	25,532.77
Durham Emergency Communications	1,666,795.05	814,087.18	$248,088.22	2,256,349.63	1,976,683.09	$279,666.54	Reduce	-31,578.32	693,334.89	$661,756.57	55,146.38
Edgecombe County E911	197,868.62	115,881.00	$31,374.96	470,178.62	637,644.89	-$167,466.27	-	0.00	171,048.22	$171,048.22	14,254.02
Tarboro Police Communications	143,421.70	108,007.59	$25,142.93	74,535.87	83,282.82	-$8,746.95	-	0.00	104,508.74	$104,508.74	8,709.06
Forsyth County 911 Communications	328,370.73	327,003.47	$65,537.42	1,866,298.03	1,616,725.86	$249,572.17	Reduce	-184,034.75	255,781.94	$71,747.19	5,978.93

PSAP	PSAP Distribution FY2020 (Column B)	PSAP Distribution FY2021 (Column C)	Maximum Allowable 20% Carry Forward (Column B+C/2*20%)	Fund Balance FY2021 (Column F)	Fund Balance FY2020 (Column G)	Fund Balance +/- Column F & G	Carry forward (Ok) or Over 20% (Reduce)	Excess Funds over Maximum Allowable 20% Carry forward (Column J)	Proposed 5-YR rolling Average before carry forward reduction (Column K)	Estimated PSAP Proposed Yearly Distribution FY2023 (Column K-J)	Estimated PSAP Proposed Monthly Distribution FY2023
Kernersville PD (Secondary)	14,688.00	20,563.20	$3,525.12	0.20	1,479.00	-$1,478.80	-	0.00	3,649.41	$3,649.41	304.12
Winston Salem Police/Fire Communications	528,587.65	446,454.41	$97,504.21	2,176,857.58	1,997,541.09	$179,316.49	Reduce	-81,812.28	336,479.44	$254,667.16	21,222.26
Franklin County Sheriff Communications	604,890.74	585,134.76	$119,002.55	971,652.28	650,087.10	$321,565.18	Reduce	-202,562.63	452,318.53	$249,755.90	20,812.99
Gaston County Communications	698,275.97	579,741.37	$127,801.73	1,017,565.09	942,607.79	$74,957.30	-	0.00	761,179.36	$761,179.36	63,431.61
Mount Holly Police Department	67,075.86	70,922.39	$13,799.83	360,374.04	364,060.14	-$3,686.10	-	0.00	73,946.02	$73,946.02	6,162.17
Gates County Communications	150,580.26	142,470.48	$29,305.07	140,265.24	60,686.77	$79,578.47	Reduce	-50,273.40	137,659.46	$87,386.06	7,282.17
Graham County Communications	124,873.36	76,593.72	$20,146.71	471,826.14	529,283.50	-$57,457.36	-	0.00	80,790.90	$80,790.90	6,732.58
Granville County Emergency Communications	377,887.27	374,803.20	$75,269.05	395,381.25	542,161.77	-$146,780.52	-	0.00	363,723.88	$363,723.88	30,310.32
Greene County Communications	161,789.00	191,946.12	$35,373.51	309,744.28	249,354.31	$60,389.97	Reduce	-25,016.46	203,054.82	$178,038.36	14,836.53
Guilford Metro 911	2,594,180.12	2,174,618.88	$476,879.90	1,264,401.52	1,189,515.12	$74,886.40	-	0.00	2,166,661.90	$2,166,661.90	180,555.16
High Point 911	534,947.22	1,665,465.52	$220,041.27	122,663.05	89,717.20	$32,945.85	-	0.00	814,984.46	$814,984.46	67,915.37
Halifax County Central Communications	283,655.25	359,980.08	$64,363.53	558,032.72	448,496.01	$109,536.71	Reduce	-45,173.18	363,597.96	$318,424.78	26,535.40
Harnett County Communications	863,118.64	893,534.28	$175,665.29	596,892.06	500,099.33	$96,792.73	-	0.00	873,609.85	$873,609.85	72,800.82
Haywood County 911	433,942.65	376,810.68	$81,075.33	590,342.20	641,442.49	-$51,100.29	-	0.00	454,939.90	$454,939.90	37,911.66
Henderson County Communications	612,658.03	626,922.23	$123,958.03	507,871.36	196,266.92	$311,604.44	Reduce	-187,646.41	547,718.69	$360,072.28	30,006.02
Hendersonville PD (Secondary)	54,905.61	59,130.97	$11,403.66	24,380.65	52,576.12	-$28,195.47	-	0.00	30,205.66	$30,205.66	2,517.14
Hertford County Communications	94,700.31	110,382.24	$20,508.26	545,679.62	589,761.84	-$44,082.22	-	0.00	140,646.16	$140,646.16	11,720.51
Hoke County Emergency Communications	278,456.30	301,261.44	$57,971.77	92,798.55	72,304.98	$20,493.57	-	0.00	250,868.38	$250,868.38	20,905.70
Iredell County Emergency Communications	607,556.02	658,684.82	$126,624.08	596,290.00	371,762.31	$224,527.69	Reduce	-97,903.61	474,981.39	$377,077.78	31,423.15
Mooresville PD (Secondary)	11,821.60	18,733.10	$3,055.47	0.26	13,613.06	-$13,612.80	-	0.00	42,642.24	$42,642.24	3,553.52
Statesville PD (Secondary)	42,408.00	37,773.69	$8,018.17	55,661.25	92,469.71	-$36,808.46	-	0.00	48,509.16	$48,509.16	4,042.43
Jackson County Emergency Communications	420,248.96	410,868.72	$83,111.77	1,206,443.97	988,962.85	$217,481.12	Reduce	-134,369.35	251,778.05	$117,408.70	9,784.06
Johnston County Communications	1,377,276.75	1,184,578.32	$256,185.51	1,571,449.76	1,548,081.68	$23,368.08	-	0.00	1,105,486.01	$1,105,486.01	92,123.83
Lee County Emergency 911 Center	404,574.56	421,709.40	$82,628.40	799,921.69	631,811.70	$168,109.99	Reduce	-85,481.59	356,651.63	$271,170.04	22,597.50
Lenoir County Communications	550,472.58	386,056.20	$93,652.88	917,514.27	924,329.47	-$6,815.20	-	0.00	397,468.61	$397,468.61	33,122.38
Lincoln County Communications Center	253,029.37	196,247.40	$44,927.68	582,980.84	692,193.74	-$109,212.90	-	0.00	217,153.66	$217,153.66	18,096.14
Macon County Communications	354,430.76	379,139.04	$73,356.98	777,778.05	614,013.31	$163,764.74	Reduce	-90,407.76	264,337.78	$173,930.02	14,494.17
Madison County EOC	193,235.04	146,215.56	$33,945.06	377,621.24	341,480.82	$36,140.42	Reduce	-2,195.36	125,699.72	$123,504.36	10,292.03
Martin County Communications Center	213,699.88	105,163.80	$31,886.37	531,844.31	528,910.34	$2,933.97	-	0.00	118,780.02	$118,780.02	9,898.34
McDowell County Sheriff's Communications	332,296.06	344,270.16	$67,656.62	228,630.90	16,128.44	$212,502.46	Reduce	-144,845.84	288,856.98	$144,011.14	12,000.93
Charlotte-Mecklenburg Police Department	2,363,858.92	2,539,963.30	$490,382.22	6,239,746.28	6,120,481.31	$119,264.97	-	0.00	2,435,372.34	$2,435,372.34	202,947.70
Charlotte Fire (Secondary)	26,724.41	42,882.67	$6,960.71	1,105.77	1,286.73	-$180.96	-	0.00	61,262.12	$61,262.12	5,105.18
Charlotte MEDIC (Secondary)	344,767.80	248,958.42	$59,372.62	30,543.63	34,769.41	-$4,225.78	-	0.00	369,137.84	$369,137.84	30,761.49
Cornelius Police Communications	115,182.04	135,042.12	$25,022.42	362,202.53	338,784.42	$23,418.11	-	0.00	134,876.26	$134,876.26	11,239.69
Pineville Police Comm. Center	72,319.25	154,358.28	$22,667.75	461,848.83	423,866.88	$37,981.95	Reduce	-15,314.20	143,700.10	$128,385.90	10,698.83
Mitchell County Central Communications	133,345.73	108,528.60	$24,187.43	298,150.03	270,609.95	$27,540.08	Reduce	-3,352.65	240,464.77	$237,112.12	19,759.34
Montgomery County Communications	200,337.82	218,900.64	$41,923.85	219,731.13	128,016.62	$91,714.51	Reduce	-49,790.66	199,789.54	$149,998.88	12,499.91
Moore County Emergency Communications	336,853.60	338,676.00	$67,552.96	876,648.77	851,087.05	$25,561.72	-	0.00	389,188.26	$389,188.26	32,432.36
Nash County Central Communications	454,008.57	451,146.12	$90,515.47	671,609.77	367,913.74	$303,696.03	Reduce	-213,180.56	328,178.40	$114,997.84	9,583.15
Rocky Mount Police Communications	382,460.48	387,401.18	$76,986.17	556,737.90	363,600.92	$193,136.98	Reduce	-116,150.81	298,384.28	$182,233.47	15,186.12
New Hanover County Sheriff Communications	652,909.68	715,242.00	$136,815.17	639,945.19	452,017.84	$187,927.35	Reduce	-51,112.18	780,575.48	$729,463.30	60,788.61
Northampton County E-911	200,082.44	204,667.44	$40,474.99	429,378.46	372,265.14	$57,113.32	Reduce	-16,638.33	148,355.29	$131,716.96	10,976.41
Onslow County Communications	235,286.80	289,348.32	$52,463.51	971,522.94	1,142,484.86	-$170,961.92	-	0.00	269,464.94	$269,464.94	22,455.41

PSAP	PSAP Distribution FY2020 (Column B)	PSAP Distribution FY2021 (Column C)	Maximum Allowable 20% Carry Forward (Column B+C/2*20%)	Fund Balance FY2021 (Column F)	Fund Balance FY2020 (Column G)	Fund Balance +/- Column F & G	Carry forward (Ok) or Over 20% (Reduce)	Excess Funds over Maximum Allowable 20% Carry forward (Column J)	Proposed 5-YR rolling Average before carry forward reduction (Column K)	Estimated PSAP Proposed Yearly Distribution FY2023 (Column K-J)	Estimated PSAP Proposed Monthly Distribution FY2023
Jacksonville E-911	480,254.40	534,221.90	$101,447.63	341,171.08	74,973.56	$266,197.52	Reduce	-164,749.89	220,953.25	$56,203.36	4,683.61
Orange County Emergency Communications	573,225.09	755,470.80	$132,869.59	48,199.86	23,296.44	$24,903.42	-	0.00	775,458.62	$775,458.62	64,621.55
Pamlico County Communications	153,692.80	149,122.80	$30,281.56	333,064.61	314,433.58	$18,631.03	-	0.00	130,814.55	$130,814.55	10,901.21
Pasquotank/Camden Central Communications	404,296.39	325,742.88	$73,003.93	541,796.41	685,260.84	-$143,464.43	-	0.00	208,703.69	$208,703.69	17,391.97
Pender County Sheriff Communications	430,887.32	426,736.68	$85,762.40	27,492.46	81,736.56	-$54,244.10	-	0.00	425,677.55	$425,677.55	35,473.13
Perquimans County Communications	265,708.49	328,449.60	$59,415.81	330,621.92	212,144.58	$118,477.34	Reduce	-59,061.53	194,966.23	$135,904.70	11,325.39
Person County Communications	588,848.55	626,805.24	$121,565.38	329,245.85	232,752.69	$96,493.16	-	0.00	615,994.89	$615,994.89	51,332.91
Pitt County 911 Communications	707,677.96	729,290.52	$143,696.85	721,629.71	319,999.52	$401,630.19	Reduce	-257,933.34	557,887.55	$299,954.21	24,996.18
Polk County Communications	557,941.15	219,256.56	$77,719.77	136,958.42	184,322.30	-$47,363.88	-	0.00	264,680.25	$264,680.25	22,056.69
Randolph County Emergency Communications	697,309.38	469,377.36	$116,668.67	1,662,895.68	1,640,459.06	$22,436.62	-	0.00	636,204.11	$636,204.11	53,017.01
Richmond County Emergency Comm.	297,456.29	158,977.80	$45,643.41	368,806.51	402,556.61	-$33,750.10	-	0.00	221,448.33	$221,448.33	18,454.03
Robeson County Communications	329,196.57	360,695.04	$68,989.16	1,101,901.32	1,034,545.40	$67,355.92	-	0.00	390,493.94	$390,493.94	32,541.16
Lumberton Emergency Services	188,068.74	135,134.80	$32,320.35	195,335.23	325,474.69	-$130,139.46	-	0.00	146,053.46	$146,053.46	12,171.12
Rockingham County 911 Communications	310,977.41	352,961.04	$66,393.85	550,802.57	571,509.26	-$20,706.69	-	0.00	407,312.82	$407,312.82	33,942.74
Rowan County Telecommunications	653,197.99	443,628.24	$109,682.62	1,491,068.15	1,432,666.46	$58,401.69	-	0.00	530,051.21	$530,051.21	44,170.93
Rutherford County Communications	456,477.91	693,313.91	$114,979.18	84,083.86	112,068.39	-$27,984.53	-	0.00	581,693.28	$581,693.28	48,474.44
Sampson County Sheriff Communications	260,346.19	174,428.16	$43,477.44	379,674.00	912,654.14	-$532,980.14	-	0.00	256,238.05	$256,238.05	21,353.17
Scotland County Emergency Communications	436,067.32	162,941.16	$59,900.85	110,418.85	183,169.53	-$72,750.68	-	0.00	230,168.14	$230,168.14	19,180.68
Stanly County Emergency Communications	412,653.62	430,982.28	$84,363.59	172,263.27	201,006.07	-$28,742.80	-	0.00	382,356.17	$382,356.17	31,863.01
Stokes County Emergency Communications	276,106.57	288,491.88	$56,459.85	370,355.07	656,203.01	-$285,847.94	-	0.00	331,597.47	$331,597.47	27,633.12
Surry County Communications Center	491,950.09	408,695.35	$90,064.54	217,126.24	170,974.15	$46,152.09	-	0.00	539,603.53	$539,603.53	44,966.96
Elkin PD (Secondary)	18,412.20	12,928.50	$3,134.07	0.00	8,548.00	-$8,548.00	-	0.00	8,026.72	$8,026.72	668.89
Mt. Airy PD (Secondary)	56,278.80	36,266.10	$9,254.49	113,189.28	96,810.81	$16,378.47	Reduce	-7,123.98	22,818.04	$15,694.06	1,307.84
Eastern Band Cherokees	172,659.68	182,971.45	$35,563.11	538,108.53	413,582.51	$124,526.02	Reduce	-88,962.91	108,260.97	$19,298.06	1,608.17
Swain County 911 Dispatch	234,772.45	238,744.20	$47,351.67	353,765.25	193,332.84	$160,432.41	Reduce	-113,080.75	194,640.36	$81,559.62	6,796.63
Transylvania County Communications	347,923.37	344,053.55	$69,197.69	378,658.18	284,944.35	$93,713.83	Reduce	-24,516.14	361,045.93	$336,529.79	28,044.15
Union County	746,597.80	816,658.44	$156,325.62	2,462,650.23	2,082,364.77	$380,285.46	Reduce	-223,959.84	697,701.49	$473,741.65	39,478.47
Vance-Henderson 911 Center	593,071.64	532,572.60	$112,564.42	376,687.99	551,477.66	-$174,789.67	-	0.00	438,218.84	$438,218.84	36,518.24
Cary Police Communications	575,466.69	247,333.20	$82,279.99	854,846.76	965,472.69	-$110,625.93	-	0.00	275,398.51	$275,398.51	22,949.88
Holly Springs Public Safety Center	168,940.09	236,786.40	$40,572.65	676,227.67	583,998.06	$92,229.61	Reduce	-51,656.96	149,522.23	$97,865.27	8,155.44
Raleigh Wake 911 Center	2,587,879.74	2,633,984.76	$522,186.45	2,136,910.34	1,520,090.41	$616,819.93	Reduce	-94,633.48	2,043,466.88	$1,948,833.40	162,402.78
Warren County Sheriff Comm.	180,632.63	146,540.76	$32,717.34	387,529.50	387,426.72	$102.78	-	0.00	185,034.03	$185,034.03	15,419.50
Washington County Communications	162,822.22	126,420.72	$28,924.29	557,893.40	594,801.21	-$36,907.81	-	0.00	81,197.84	$81,197.84	6,766.49
Watauga County Sheriff Communications	314,310.86	343,448.16	$65,775.90	391,510.58	296,848.41	$94,662.17	Reduce	-28,886.27	300,682.03	$271,795.76	22,649.65
Beech Mountain Police Dept	65,235.82	103,065.36	$16,830.12	179,079.74	145,476.30	$33,603.44	Reduce	-16,773.32	87,919.58	$71,146.26	5,928.85
Boone Police Department 911	165,601.39	197,394.36	$36,299.58	8,204.27	66,044.98	-$57,840.71	-	0.00	199,809.81	$199,809.81	16,650.82
Wayne County Central 911	601,535.01	338,606.52	$94,014.15	1,257,440.54	2,081,595.20	-$824,154.66	-	0.00	438,929.12	$438,929.12	36,577.43
Wilkes County Sheriff Communications	431,561.47	499,451.04	$93,101.25	223,196.50	233,355.94	-$10,159.44	-	0.00	566,426.50	$566,426.50	47,202.21
Wilson County Emergency Communications	496,433.82	305,462.64	$80,189.65	716,312.36	756,381.76	-$40,069.40	-	0.00	322,156.31	$322,156.31	26,846.36
Yadkin County Emergency Communications	268,040.03	246,870.24	$51,491.03	334,556.99	361,878.40	-$27,321.41	-	0.00	258,161.58	$258,161.58	21,513.47
Yancey County Sheriff Comm.	176,082.84	152,875.92	$32,895.88	317,122.95	296,432.36	$20,690.59	-	0.00	126,252.99	$126,252.99	10,521.08
Totals	$51,035,619.55	$49,259,292.49	$10,029,491.20	$79,951,833.14	$76,752,459.45			-$3,417,893.71	$46,198,888.73	$42,780,995.02	$3,565,082.92

Received Funding Reconsideration

Tab 8 b)
General Committee Report

Tab 9
Finance Team Report
Marsha Tapler/Kristen Falco/ Sarah Templeton

Tab 10
Grant Committee Report
Jeff Shipp/Pokey Harris

Tab 10 a)
FY 2022 PSAP Priority One Collaboration Grant Update

***TENTATIVE 2022 PSAP Priority One Collaboration Grant								
Grant Announcement, Application and Timeline	11/1/2021	Monday						
2022 PSAP Priority One Collaboration Grant Virtual Workshop	12/9/2021	Thursday	Meeting Date for Grant Committee, Staff, and Potential Applicants					
Submission Deadline for Assistance with Eligibility of Expenditures	1/14/2022	Friday						
Expenditure report FY 2021 Deadline—All revenue reports must be submitted, finalized and approved by this deadline. No extensions will be given.	2/1/2022	Tuesday						
2022 PSAP Priority One Grant applications due	2/15/2022	Tuesday						
2022 PSAP Priority One Program Initial Application Review	3/30/2022	Wednesday	Meeting Date for Grant Committee and Staff					
2022 PSAP Priority One Grant Applicant Presentations	4/19/2022	Tuesday						
2022 PSAP Priority One Grant Program Committee Recommendations Prepared for Board Approval	6/2/2022	Friday	Meeting Date for Grant Committee and Staff					
2022 PSAP Priority One Program Committee Recommendations to Board	6/17/2022	Friday	Information Only					
2022 PSAP Priority One Grant Grant Awards Presented to Board for Approval	6/24/2022	Friday	Meeting Date for Board					

Tab 10 b)
General Committee Report

Tab 11
Standards Committee Report
Donna Wright

Tab 12
Technology Committee Report
Jeff Shipp/Gerry Means/Tom Rogers

Tab 13
911 Regional Coordinator Reports
Turbeville/Newberry/Conner/Gardner

Tab 14
Other
Pokey Harris

Tab 15
NC 911 Board 2021 Work Session for Calendar Year 2022

Tab 15 a)
2021 Board Goals Review
Pokey Harris

NC 911 Board 2021 Goals
As Proposed by Committee per Initiative

Education

Develop an information sharing program to effectively communicate the Board and Staff's vision, initiatives, and responsibilities for NG911 and other state projects.

Explore the feasibility of expanding Board sponsored training in conjunction with the Community College system.

Explore the feasibility of creating a voluntary Telecommunicator training, certificate and/or certification program in collaboration with the Community College system.

Explore methods for public outreach utilizing nontraditional media outlets.

Funding

Explore strategies and develop procedures to assist with management of low/high PSAP fund balances.

Review the Approved Use of Funds List and vet expenditures to establish maximum allowable limits, where appropriate, while aligning with legislation.

Continue to explore backup capabilities and alignment with the ESInet.

Continue reviewing the funding model, taking into consideration the ongoing implementation of NextGen 911 Technologies.

Standards

Review and update potential verbiage of the Rules in order to prepare for the long process of updating them, focusing on the outcomes of legislative sessions

Consider how a checks and balance would occur if there are new requirements regarding matters such as i3 standards and the need for collaboration between all committees regarding NG911 deployment.

Explore feasibility of establishing PSAP levels based on operational and technical capabilities.

Technology

Enhance PSAP service continuity by developing specific PSAP plans based on the technology enhancement offered by the NG911 service platform. Define basic elements of continuity planning. PSAPs should have defined rules for abandonment and alternate routing. Continued workshops and outreach for continuity planning with PSAPs.

Develop framework for minimum requirements for connection to ESInet based on cybersecurity assessment findings and review.

Commit to 60 PSAP migrations to the ESInet. Goal is to map a potential conversion plan to meet or exceed the migration goal.

Exploration of ongoing ALI database maintenance via automated applications.

Assemble workgroup or ad hoc to begin analysis/exploration of a hosted CAD offering to PSAPs, establishing realistic goals and timeline for the first year of this effort. Perform SWOT analysis.

Tab 15 b)
2022 NC 911 Board Goals
Committee Chairs

Tab 15 b i)
2022 Education Committee Proposed Goals Presentation
Chuck Greene

Education Committee
Continue the information sharing program to effectively communicate the Board and Staff's vision, initiatives, and responsibilities for NG911 and other state projects.
Explore the feasibility of creating a voluntary Telecommunicator training certificat and/or certification in collaboration with the Community College system.
Expand the Recruitment Public Service Announcement Initiative based on data collected during the pilot program.
Explore additional methods for public outreach utilizing nontraditional media outlets.

Tab 15 b ii)
2022 Funding Committee Proposed Goals Presentation
David Bone

Funding Committee
Review the Approved Use of Funds List and vet expenditures to establish maximum allowable limits, where appropriate, while aligning with legislation.
In an effort to create efficiencies with regional or tertiary collaboration, conduct a study to review costs and utilization of backup PSAPs, thereby leveraging the ESInet, radios, CAD and other key technological elements.
Continue reviewing the funding model, taking into consideration the ongoing implementation of new and emerging 911 Technologies.
In partnership with the other Board Committees, create an ad hoc group to explore new technologies/initiatives and how they may be funded. **Not intended as elegibility approval process.**
Staff Goal: Explore strategies and develop procedures, implement, and provide PSAP outreach to assist with management of low/high PSAP fund balances using the financial planning tool.

Tab 15 b iii)
2022 Standards Committee Proposed Goals Presentation
Donna Wright

Standards Committee
Review and update language of the policies relating to Peer Review to ensure consistent scheduling and review of the PSAPs while considering options to accomplish them during the pandemic.
Hold joint meetings, twice annually at minimum, to review technological or operational changes that may need to be addrssed in Standards or Peer Review.
Continue to explore feasibility of establishing PSAP levels based on operational and technical capabilities.

Tab 15 b iv)
2022 Technology Committee Proposed Goals Presentation
Jeff Shipp

Technology Committee
Develop CAD data sharing technical standards and schemas to enable CAD data portability and interconnection across the NC NG911 service platform.
Develop CAD data sharing access control, auditing, and reporting framework to ensure data security across the PSAP and public safety communities.
Develop plan for integration methodologies and standards for extension of calls to non-traditional PSAP environments to ensure the integrity of the ESInet, to ensure integrity, security, and regulatory standards and align with the State 911 Plan and the Statewide Communications Interoperability Plan (SCIP).
Address technical and governance structure concerning admin lines to enable the eventual migration to SIP based admin lines for re-establishing contact with a 911 caller.
Consider framework for cybersecurity policy based on recommendaitons from the cyber-security assessment completed in June 2021 and collaboration with other cyber security focused partners.

Tab 15 v)
2022 Proposed Goals
Discussion and Approval
(Roll Call Vote Required)

NC 911 Board 2022 Goals

As Proposed by Committee per Initiative

Education Committee

Continue the information sharing program to effectively communicate the Board and Staff's vision, initiatives, and responsibilities for NG911 and other state projects.

Explore the feasibility of creating a voluntary Telecommunicator training certificat and/or certification in collaboration with the Community College system.

Expand the Recruitment Public Service Announcement Initiative based on data collected during the pilot program.

Explore additional methods for public outreach utilizing nontraditional media outlets.

Funding Committee

Review the Approved Use of Funds List and vet expenditures to establish maximum allowable limits, where appropriate, while aligning with legislation.

In an effort to create efficiencies with regional or tertiary collaboration, conduct a study to review costs and utilization of backup PSAPs, thereby leveraging the ESInet, radios, CAD and other key technological elements.

Continue reviewing the funding model, taking into consideration the ongoing implementation of new and emerging 911 Technologies.

In partnership with the other Board Committees, create an ad hoc group to explore new technologies/initiatives and how they may be funded. **Not intended as elegibility approval

Staff Goal: Explore strategies and develop procedures, implement, and provide PSAP outreach to assist with management of low/high PSAP fund balances using the financial planning tool.

Standards Committee

Review and update language of the policies relating to Peer Review to ensure consistent scheduling and review of the PSAPs while considering options to accomplish them during the pandemic.

Hold joint meetings, twice annually at minimum, to review technological or operational changes that may need to be addrssed in Standards or Peer Review.

Continue to explore feasibility of establishing PSAP levels based on operational and technical capabilities.

Technology Committee

Develop CAD data sharing technical standards and schemas to enable CAD data portability and interconnection across the NC NG 911 service platform.

Develop CAD data sharing access control, auditing, and reporting framework to ensure data security across the PSAP and public safety communities.

Develop plan for integration methodologies and standards for extension of calls to non-traditional PSAP environments to ensure the integrity of the ESInet, to ensure integrity, security, and regulatory standards and align with the State 911 Plan and the Statewide Communications Interoperability Plan (SCIP).

Address technical and governance structure concerning admin lines to enable the eventual migration to SIP based admin lines for re-establishing contact with a 911 caller.

Consider framework for cybersecurity policy based on recommendaitons from the cyber-security assessment completed in June 2021 and collaboration with other cyber security focused partners.

Tab 15 c)
2023 NC 911 PSAP Grant Program
Jeff Shipp

Tab 15 c i)
2023 NC 911 Grant Program Priorities
(Roll Call Vote Required)

2023 PSAP Grant Program Priorities
1 -Regional Initiative with focus on Primary PSAP Consolidations (Two or more PSAPs consolidated into one entity).
2 - CAD Data Interoperablity - CAD Data Sharing, CAD to CAD, or multiple PSAP Shared/Hosted CAD.
3 - Replacing End of Life Equipment - Radio, CAD and/or Recorder only.
4 - Cybersecurity
5 - Other

Tab 15 c ii)
2023 NC Grant Program Cycle Draft/Tentative Timeline
Pokey Harris
(Roll Call Vote Required)

***TENTATIVE 2023 Grant Cycle Calendar Draft									
Milestone	**Date**	**Day of Week**	**Days to Next Date**						
Grant Workshop for PSAPs	3/24/2022	Thursday	7	Meeting Date for Grant Committee, Staff, and Potential Applicants					
Beginning of Grant Cycle - Application Posted to Website	3/31/2022	Thursday	61						
Grant Applications Due	5/31/2022	Tuesday	29						
Grant Committee Discussion	6/29/2022	Wednesday	16	Meeting Date for Grant Committee and Staff					
Grant Applications Presentation Day 1	7/15/2022	Friday	5	Meeting Date for Grant Committee, Staff, and Applicants					
Grant Applications Presentation Day 2 (Potential Hold - Need TBD)	7/20/2022	Wednesday	12	Meeting Date for Grant Committee, Staff, and Applicants					
Grant Committee Meeting - Review and Vote	8/1/2022	Monday	11	Meeting Date for Grant Committee and Staff					
Grant Committee Results to Board for Review prior to Board Meeting	8/12/2022	Friday	14						
Board Meeting - Vote on Grant Committee Recommendation	8/26/2022	Friday	38	Meeting Date for Board					
Results Notification and Grant Agreement to Applicants	10/3/2022	Monday	30						
Grant Acceptance Acknowledgement Due from PSAP	11/2/2022	Wednesday	62						
Final Date for all PSAP Agreements to be Executed (Per Individual Agreement Date Based on Return of Acknowledgement)	1/3/2023	Tuesday							
Key Timeframes	**Calendar Days**								
Days from Workshop to Applications Due	68								
Days from Beginning of Grant Cycle to Applications Due	61								
Days from Applications Due to Presentation Day 1 (Grant Comm/Staff Prep Time)	45								
Days from Presentation Day 2 to Grant Committee Review and Vote	12								
Days from Grant Committee Meeting to Recommendation to Board	11								
Days for Board to Pre-Review Recommendaiton Prior to Vote	14								
Days to Award Notifications and Grant Agreements to PSAPs	38								
Days to Receive Acceptance Acknowledgement from PSAPs	30								
Days for PSAPs to Execute Grant Agreement	92								
Allocate ~25 minutes per applicant. Includes presentation and questions - 10 Min. Transition Time Between Presentations - 1 Hour Committee Review after each Presentation Day									

Tab 15 d)
2022 NC 911 Board Meeting Dates
Pokey Harris
(Roll Call Vote Required)

Day	Month	Date	2022 NC 911 Board and Committee Meetings	Time	Location	Assigned Staff
Thursday	January	6	Standards Committee Meeting	10:00-12:00	TBD	Tina Gardner/Stephanie Conner
Thursday	January	13	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	January	20	Education Committee Meeting	10:00-12:00	TBD	Angie Turbeville
Thursday	January	20	Funding Committee Meeting	13:00-15:00	TBD	Kristen Falco/Sarah Templeton
Friday	January	28	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
Thursday	February	10	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	February	17	Education Committee Meeting	10:00-12:00	TBD	Angie Turbeville
Thursday	February	17	Funding Committee Meeting	13:00-15:00	TBD	Kristen Falco/Sarah Templeton
Friday	February	25	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
	February		No Standards Committee Meeting This Month			
Thursday	March	3	Standards Committee Meeting	10:00-12:00	TBD	Tina Garder/Stephanie Conner
Thursday	March	10	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	March	17	Education Committee Meeting	10:00-12:00	TBD	Kristen Falco/Sarah Templeton
Thursday	March	17	Funding Committee Meeting	13:00-15:00	TBD	Angie Turbeville
Friday	March	25	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
Thursday	April	14	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	April	21	Education Committee Meeting	10:00-12:00	TBD	Angie Turbeville
Thursday	April	21	Funding Committee Meeting	13:00-15:00	TBD	Kristen Falco/Sarah Templeton
Friday	April	29	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
	April		No Standards Committee Meeting This Month			
Thursday	May	5	Standards Committee Meeting	10:00-12:00	TBD	Tina Garder/Stephanie Conner
Thursday	May	12	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	May	19	Education Committee Meeting	10:00-12:00	TBD	Angie Turbeville
Thursday	May	19	Funding Committee Meeting	13:00-15:00	TBD	Kristen Falco/Sarah Templeton
Friday	May	27	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
Thursday	June	9	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	June	16	Education Committee Meeting	10:00-12:00	TBD	Kristen Falco/Sarah Templeton
Thursday	June	16	Funding Committee Meeting	13:00-15:00	TBD	Angie Turbeville
Friday	June	24	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
	June		No Standards Committee Meeting This Month			
Thursday	July	7	Standards Committee Meeting	10:00-12:00	TBD	Tina Garder/Stephanie Conner
Thursday	July	14	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	July	21	Education Committee Meeting	10:00-12:00	TBD	Angie Turbeville
Thursday	July	21	Funding Committee Meeting	13:00-15:00	TBD	Kristen Falco/Sarah Templeton
Friday	July	29	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
Thursday	August	11	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	August	18	Education Committee Meeting	10:00-12:00	TBD	Kristen Falco/Sarah Templeton
Thursday	August	18	Funding Committee Meeting	13:00-15:00	TBD	Angie Turbeville
Friday	August	26	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
	August		No Standards Committee Meeting This Month			
Thursday	September	1	Standards Committee Meeting	10:00-12:00	TBD	Tina Garder/Stephanie Conner
Thursday	September	8	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	September	15	Education Committee Meeting	10:00-12:00	TBD	Kristen Falco/Sarah Templeton
Thursday	September	22	Funding Committee Meeting	13:00-15:00	TBD	Angie Turbeville
Friday	September	30	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
Thursday	October	13	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	October	20	Education Committee Meeting	10:00-12:00	TBD	Angie Turbeville
Thursday	October	20	Funding Committee Meeting	13:00-15:00	TBD	Kristen Falco/Sarah Templeton
Friday	October	28	**911 Board Meeting**	10:00-12:00	TBD	Pokey Harris
	October		No Standards Committee Meeting This Month			
Thursday	November	3	Standards Committee Meeting	10:00-12:00	TBD	Tina Garder/Stephanie Conner
Thursday	November	10	Technology Committee Meeting	10:00-12:00	TBD	David Newberry
Thursday	November	17	Education Committee Meeting	10:00-12:00	TBD	Angie Turbeville
Thursday	November	17	Funding Committee Meeting	13:00-15:00	TBD	Kristen Falco/Sarah Templeton
	November		*No 911 Board Meeting This Month*			
Friday	December	2	**911 Board Meeting/Work Session**	9:00-13:30	TBD	Pokey Harris

Tab 15 e)
**2021 State 911 Plan
Presentation**
Barry Ritter
(Roll Call Vote Required)

NORTH CAROLINA
2021 STATE 911 PLAN

Final Draft Submitted:
November 19, 2021

Prepared by:

Ritter Strategic Services, LLC

TABLE OF CONTENTS

EXECUTIVE SUMMARY

North Carolina General Statues ("GS") §143B-1402(a)(1) requires the Board to publish and maintain a comprehensive plan for the provision of 911 service in the state. GS §143B-1402(a)(1) further requires the Board to monitor trends in 911 and enhanced 911 technology, incorporate GIS mapping and other resources into the plan, ensure that each Public Safety Answering Point (PSAP) in the state has a back-up; and implement strategies for the efficient and effective delivery of enhanced 911 services.

The 2018 Plan gave way to the implementation of a single statewide digital network which was the most effective and efficient way to provide enhanced 911 services, rather than on a county-by-county basis. Implementing a single statewide digital network required a new level of statewide planning and coordination. Creating a three- to five-year strategic plan was a critical tool to help the Board and staff plan for and prioritize resources, amend governance, and address all needs associated with Next Generation 911 (NG911), including but not limited to technology, funding, operations, and training. The 2021 State 911 Plan will continue down the path of the NG911 journey with a new set of goals and objectives to take them to the next level.

Goals and objectives are important in strategic planning because they turn the Board's vision for NG911 into specific measurable targets or steps. Goals build on the vision and mission by defining and prioritizing the broad direction in response to specific priorities. Goals describe the general accomplishments to be achieved if the vision is to be achieved. Objectives articulate specific steps that are needed to complete each goal and include the owner-agency and the planned timeline. The following 8 goals are not placed in order of priority. They have been implemented to continue North Carolina's current path to roll out NG911 and to ensure successful operation of the State's 911 system.

Goal 1:   Provide and pay for a statewide hosted Next Generation 911 system.

Goal 2:   Manage Board staff to provide for the reorganization and expansion of job responsibilities to better serve PSAPs.

Goal 3:   Amend state law (G.S. §143B-1400 et seq.) to reflect changes in 911 service, PSAP operations, and Board responsibilities in the Next Generation 911 environment.

Goal 4:   Develop a revenue and funding model for 911 service, NG911 service, PSAPs, and 911 Board operations.

Goal 5:   Implement outreach and public education programs to keep the public, NG911 stakeholders, and industry partners informed about the Board's NG911 efforts.

Goal 6:   Facilitate the consolidation or regional collaboration of PSAPs.

Goal 7:   Explore and investigate the interconnection of PSAP users of the ESInet with other ESInet users and with other partners and networks serving public safety.

Goal 8:   Prioritize mental health/wellness programs for Telecommunicators.

1   INTRODUCTION

1.1   Background & Project Overview

North Carolina General Statues ("GS") §143B-1402(a)(1) requires the North Carolina 911 Board ("the Board") to publish and maintain a comprehensive plan for the provision of 911 service in the state. The Board is further required to describe the allowable uses of 911 revenue in the State 911 Fund.

GS §143B-1402(a) (1) further requires the Board to monitor trends in 911 and enhanced 911 technology, incorporate GIS mapping and other resources into the plan, ensure that each PSAP in the state has a back-up; and implement strategies for the efficient and effective delivery of enhanced 911 services.

1.2   Purpose of the 2021 North Carolina State 911 Plan

This document represents an official update to the 2018 North Carolina State 911 Plan ("the 2018 Plan"). The Board decided in 2018 to update the 2010 Plan which was then implemented and approved in December 2018. With the complexity of NG911 technology and the inherent economies of scale, implementation of a single statewide NG911 system is the most effective and efficient way to provide enhanced 911 services, rather than on a county-by-county basis. It was realized in 2021 there was again a need for an update to the North Carolina State 911 Plan to reflect the progress made in the implementation of NG911 in North Carolina and to set further goals and guidelines in completing this transition.

Implementing a single statewide digital network requires a level of statewide planning and coordination not previously required. Creating a three- to five-year strategic plan is a critical tool to help the Board and staff plan for and prioritize resources, amend governance, and address all needs associated with NG911, including but not limited to technology, funding, operations, and training. The 2021 North Carolina State 911 Plan ("the 2021 Plan") will provide the Board, Board staff, PSAPs, public safety personnel, and state and local officials a continued roadmap in the efforts toward completing the implementation of NG911 and will assure equal access to enhanced 911 services to every resident of and visitor to North Carolina, regardless of the telecommunications service, device, or technology used.

The 2021 Plan also documents the status of NG911 in North Carolina and the continued vision for NG911 in North Carolina. The 2021 Plan sets forth the top priorities identified by the Board and its PSAP stakeholders, with the main goal of completing the implementation of their NG911 system. It is vitally important to continue the path of implementing the NG911 system—a disparate collection of circuit-switched analog technology and non-integrated 911 call delivery operations—to an integrated and secure Internet Protocol (IP)-based call-routing system using GIS. North Carolina has been in process of this implementation for several years and it is the State's expectation to complete this transition by early 2022.

The 2021 Plan is intended to continue the plan or vision for the statewide implementation of NG 911 services. Because the 2021 Plan serves as a strategic planning guide for the future, the 2021

Plan must remain flexible to account for unforeseen circumstances or events and should be reviewed and amended at least annually to account for and adjust to any such changes. The 2021 Plan is also intended to foster collaboration and should be used on an ongoing basis. Overall, the 2021 Plan will:

- Serve as a tool to communicate the continued strategy for the migration to NG911 services statewide while informing key decision makers where priorities exist;
- Serve as a tool to examine and explore new technologies and trends in 911 service;
- Ensure the effective and efficient use of 911 resources (e.g., revenue, personnel, and equipment) by focusing resources on the key priorities;
- Provide focus for the Board, Board staff, and the 911 community by providing an opportunity for interested parties to collaborate and provide their input in a structured format, resulting in greater efficiency and effectiveness in the continued efforts to move forward with their NG911 implementation; and
- Demonstrate the value of having the Board coordinate and facilitate statewide provision of enhanced 911 services.

1.3 Updating the State 911 Plan

The goals established in the 2021 Plan are high-level, general directions, and the objectives for achieving the goals are concise, specific, and measurable. As goals and objectives are achieved, they should be documented. Any changes to the 2021 Plan should be documented in the following manner:

- The Plan is given a new version number following an annual review or following any interim update that was necessary. The number assigned at the time should be a full number, i.e., 1.0; 2.0; or 3.0.
- Any changes made to the Plan on an interim cycle are given a fractional number, such as 1.1; 1.2; or 1.3.
- The date of the official change to the Plan should be documented.
- There should be a description of what changes were made to the Plan, including the page and section numbers.
- The footer of the revised Plan should be updated to indicate a new Plan number.

Appendix A—Document Change History provides the form to use to document any updates to the 2021 Plan.

1.4 Methodology

In February 2021, the Board awarded a contract from a proposal submitted by Ritter Strategic Services, LLC (RSS) to update the existing 2018 State 911 Plan, and in June 2021, the contract was executed. On July 20, 2021, RSS facilitated a kickoff meeting with Staff to review the 2018 goals and objectives in the Plan and identify the accomplishments achieved therein. The kickoff meeting also provided Staff an opportunity to brainstorm ideas for the 2021 Update.

RSS attended (virtually) the four regional PSAP Mangers meetings in August 2021. In collaboration with Staff, RSS highlighted the accomplishments achieved in the 2018 Plan and requested attendees' suggestions for new goals and objectives for consideration.

RSS facilitated virtual work sessions with Study Group members to draft the 2021 State 911 Plan Update. The group identified goals and objectives that would carry forward from 2018 and then prioritized new goals and objectives for the updated Plan.

Table 1—2021 Regional PSAP Meetings

Date	Location
Aug 18	Western Region PSAP Managers Meeting
Aug 25	North Central Region PSAP Managers Meeting
Aug 25	South Central Region PSAP Managers Meeting
Aug 26	Eastern Region PSAP Managers Meeting

1.4.1 2021 Study Group

The 2021 Plan was developed in close conjunction with Board staff and Legal Counsel as well as members of the 2021 Study Group. As part of the update process, Board and staff members appointed professionals across the state to represent the various stakeholder groups in public safety and 911. The RSS team worked with Board staff to incorporate stakeholder input and feedback into the 2021 Plan.

For the most part, Board meetings and workshops were held virtually due to restrictions because of the COVID mandates and protocols followed by the state of North Carolina.

Table 2 contains a list of the 2021 Study Group members, along with each member's affiliation.

Table 2—2021 Study Group

Name	Title	Association
Mr. Scott Alderman	Fire Chief	Town of Kernersville
Mr. Tony Brown	County Manager	Halifax County
Mr. John Connet	City Manager	City of Hendersonville
Mr. Allen Cress	Chief	Rowan County Emergency Services
Mr. Grayson Gusa	Training Supervisor	Davie County 911
Mr. Greg Hauser	NC Statewide Interoperability Coordinator (SWIC)	NC Department of Public Safety (DPS)
Mr. Phil Howell	Sheriff	Ashe County
Mr. Topper Hightower	Universal Service Executive	AT&T
Mr. Tim Johnson	Director	Center for Geographic Information and Analysis (CGIA)
Mr. Joe Ramey	Chief of Police	Gaston County Police
Mr. Jimmy Stewart	Director	Hoke County Emergency Communications
Mr. Richard Sneed	Chief, Eastern Band of Cherokee Indians	Eastern Band of Cherokee Indians
Mr. Todd Young	Chief Partner -Business Development	Verizon Business Group

1.5   The Federal E911 Matching-Funds Grant Program

The E911 Implementation Coordination Office (ICO) was created in 2004 as a joint effort of the U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA) and the U.S. Department of Commerce National Telecommunications and Information Administration (NTIA). The ICO was created pursuant to the ENHANCE 911 Act of 2004, which also authorized grant funding to assist PSAPs in implementing NG911.

In August 2019, the NC 911 Board was one of 36 recipients awarded Federal funding from the U.S. Department of Commerce National Telecommunications and Information Administration (NTIA) and the U.S. Department of Transportation National Highway Traffic Safety Administration (NHTSA) through the national 911 Grant Program. The award of $3,941,384 has helped fund the NG911 initiative in North Carolina with approved use of grant funding for special installation charges for diversity, GIS data development for i3 geospatial call routing, and the cybersecurity assessment. The Board provided matching funds in the amount of $2,627,589, which was allocated from the NG911 account established by G.S. 143B-1407.

In June 2018, the ICO announced the availability of $110 million in grants, and final rules were published in the Federal Register in July 2018. The deadline to file certifications of compliance was September 10, 2018. It is anticipated that the application process will open in the first quarter of 2019. The rules for this round were largely unchanged from those adopted in 2009. The most significant change was the inclusion of tribal nations in states' NG911 plans. According to the Office of Emergency Communications (OEC) in DHS, tribal nations represent a unique and important sector of the emergency communications environment in the US.[1] Although many tribal nations have cooperative arrangements and relationships with their neighboring counties and PSAPs, tribes have historically been excluded from statewide NG911 plans. Including tribal nations and governments in NG911 planning will enhance the readiness and ability of tribal, state, and local emergency responders to communicate and coordinate effectively during any sort of emergency or incident.

The Board's inclusion of the Eastern Band of Cherokee Indians in the delivery of enhanced 911 service is discussed in a subsequent subsection of this Plan.

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[1] Department of Homeland Security, Office of Emergency Communications, *Emergency Communications Case Study: Tribal Communications Partnerships—The Missing Piece in the Emergency Communications Landscape*, August 2013, p. 1.

2   THE 911 ENVIRONMENT IN NORTH CAROLINA

North Carolina is the tenth largest state in the U.S. with a population of 10,439,388 in 2020. The state's population grew 9.5 percent between 2010 and 2020 increasing their residents by 903,905. Since 2000, the state's population has grown over 25 percent.

With respect to land size, North Carolina is the 28th largest in the nation. Having a relatively large population and relatively low land area means that the population per square mile in the state is 196 people, compared to 87 per square mile for the nation.[2] According to the 2010 US Census, 66 percent of the state's population lived in an urban area and 34 percent lived in a rural area.

There are 100 counties in the state and over 500 municipalities. As of 2020, the two largest counties were Mecklenburg and Wake, with populations, respectively, of 1,143,570 and 1,152,740. The next largest county is Guilford, with a population of 546,308. The least populated county in the state is Tyrell, with 3,818 people. Table 2 below provides a breakdown of the various population ranges for 2020.[3] Appendix B—North Carolina Population by County: 20 contains the state's population by county (listed by population) for 2020 with the percentage of growth since 2010.

Table 2—Breakdown of North Carolina Population, 2020

Population Range	No. of Counties	% of Total
Less than 10,000	4	4%
10,001 - 24,000	21	21%
24,001 - 50,000	22	22%
50,001 - 100,000	25	25%
100,001 - 500,000	25	25%
500,001 - 1 million	1	1%
Over 1 million	2	2%
Totals	*100*	*100%*

The ten largest cities in North Carolina, in order of population, are Charlotte; Raleigh; Greensboro; Durham; Winston-Salem; Fayetteville; Cary; Wilmington; High Point; and Greenville. North Carolina has the largest state-maintained highway system in the United States, exceeding 77,400 miles of roads. The state has over 1,500 lakes and over 37,000 miles of freshwater

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[2]US Census Bureau, American Fact Finder: Annual Estimates of the Resident Population: April 2021: North Carolina,. https://data.census.gov/cedsci/table?q=north%20carolina%20&tid=DECENNIALPL2020.P1, as of November 5, 2021

[3] Ibid.

streams. Tourism is an important source of revenue for the state, and in 2020 visitors spent more than $1 billion in the state.

Some of the major attractions in North Carolina are year-round golfing; snow skiing at ski resorts; fresh- and salt-water fishing; hunting; the Great Smoky Mountain National Forest; the Blue Ridge Parkway; Wrightsville Beach; the Cape Hatteras and Cape Lookout National Seashores; and the Wright Brothers National Memorial in Kitty Hawk. The vast differences in geography, population, and attractions place a unique demand on the 911 systems across North Carolina and underscore the importance of a single statewide digital network for E911 service.

Table 3 provides information on statewide 911 call volume.

Table 3—Statewide 911 Call Volume in 2019 and 2020

Class of Service	2019 Totals	Percentage of 2019 Call Total	2020 Totals	Percentage of 2020 Call Total
WRLS	5,729,376	78%	5,713,316	79%
WRLN	1,013,029	14%	898,161	12%
VoIP	615,337	7%	587,174	8%
Incoming Text-2-911 Sessions	3048	.0004%	9782	.001%
Total Incoming Texts	6802	.0009%	34462	.004%
Total 911 Calls	7,367,592		7,198,651	

2.1 Statutory Framework for 911 Service

North Carolina General Statutes (G.S.) Chapter 143B, Article 15, Part 10, Section §143B-1400 *et seq.*, establishes the statutory provisions and requirements for 911 service at the state and local levels. The statutory provisions for 911 service in the state include, but are not limited to, the creation of a state 911 Board, the monthly 911 service charge, and eligible uses of 911 revenue.

2.2 State-Level Governance for 911 Service—the 911 Board

North Carolina adopted 911 by legislative act in 1989, and authorized local governments to adopt ordinances to fund 911 operations. In 1998, the North Carolina General Assembly created the Wireless 911 Board, pursuant to S.L. 1989-587; as codified in Chapter 62A of the N.C. General Statutes. The Wireless Board was originally established to provide a wireless E911 system in response to FCC Order 94-102 mandating wireless E911 service.

In 2007, the North Carolina General Assembly further amended the 911 statutes to create the 911 Board and charged the 911 Board with responsibility for landline 911 as well as wireless 911 service. The General Assembly also consolidated the 911 service charge into a single statewide

uniform charge effective January 1, 2008 and disallowed any other 911 fee or tax by local governments. The initial rate was 70 cents ($0.70) per connection for any type of voice communication service provider. This was done to consolidate North Carolina's 911 system under the Board with a uniform 911 service charge to integrate the state's 911 system, enhance efficiency and accountability, and create a competitive playing field among voice communication technologies. In Fiscal Year (FY) 2010,[4] the Board lowered the rate to sixty cents ($0.60), effective July 1, 2010.[5]

2.2.1 911 Board Composition

The Board is comprised of 17 members, as established in G.S. §143B-1401. The Secretary of the Department of Information Technology (referred to as the State Chief Information Officer) serves as Board Chair. The Governor appoints four members, and the General Assembly appoints 12 members. Of the legislative Board member appointments, six are appointed based on the recommendation of the Speaker of the House of Representatives, and six are appointed based on the recommendation of the Senate President Pro Tempore.

The four appointments by the Governor are as follows:
- One municipal representative with a primary PSAP, based on a recommendation from the North Carolina League of Municipalities;
- One county representative with a primary PSAP, based on a recommendation from the North Carolina Association of County Commissioners;
- One representative of a VoIP provider; and
- One representative from the NC Chapter of the National Emergency Number Association (NENA).

The six appointments by the General Assembly upon the recommendation of the House Speaker are as follows:
- One Sheriff, based on a recommendation from the NC Sheriff's Association;
- One representative of a CMRS provider operating in the state;
- One representative from the NC Chapter of the Association of Public Safety Communications Officials (APCO);
- Two representatives from LECs operating in the state, one of whom represents a carrier with fewer than 50,000 access lines;
- One Fire Chief with PSAP supervisory experience based on a recommendation from the North Carolina Firefighter's Association.

The six appointments by the General Assembly upon the recommendation of the Senate Speaker Pro Tempore are as follows:

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[4] In North Carolina, the Fiscal Year starts on July 1 and ends June 30 the following year.
[5] NC Department of Information Technology, *the NC 911 Board: About the NC 911 Board*, https://it.nc.gov/about/boards-commissions/911-board/about-nc-911-board, as of August 31, 2018.

- One Chief of Police, based on a recommendation from the NC Association of Chiefs of Police;
- Two representatives from CMRS providers operating in the state;
- One Rescue or Emergency Medical Services (EMS) with experience operating or supervising a PSAP, based on a recommendation from the NC Association of Rescue and Emergency Medical Services; and
- Two representatives from LECs operating in the state, one of whom represents a carrier with fewer than 200,000 access lines.

One State Official:
- Secretary of the NC Department of Information Technology, who also serves as Board Chair

Eight Local and Public Safety Officials:
- Municipality with a primary PSAP (NC League of Municipalities)
- County with a primary PSAP (NC Association of County Commissioners)
- Sheriff (NC Sheriff's Association)
- Chief of Police (NC Association of Chiefs of Police)
- PSAP (NC Chapter of Association of Public Safety Communication Officials)
- PSAP (NC Chapter of National Emergency Number Association)
- Fire Chief with PSAP experience (NC Firefighter's Association)
- Rescue or EMS Chief with PSAP experience (NC Association of Rescue and Emergency Medical Services)

Eight Providers:
- Three CMRS representatives
- Four Local Exchange Carrier (LEC) representatives
- One VOIP representative

Board members serve terms of four years, are limited to two terms, and serve until their respective successor has been appointed. The Governor may remove any Board member, regardless of appointment, "…for misfeasance, malfeasance, or nonfeasance…" pursuant to G.S. §143B-13(d).[6] Board members serve without compensation, but receive per diem, subsistence, and travel allowances at the rate established in state law. Nine members constitute a quorum at a Board meeting, and the Board meets upon the call of the Chair. Board members are considered public servants and as such, are subject to the provisions of the State Government Ethics Act.

2.2.2 Powers and Duties of the 911 Board

G.S. §143B-1402 establishes the Board's powers and duties, which include the following:
1. Develop a 911 State Plan;

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[6] This subsection of the Executive Organization Act of 1973 concerns provisions for the appointment, qualifications, terms, and removal of members of boards or commissions.

2. Administer the 911 Fund;
3. Distribute revenue in the 911 Fund to CMRS providers and PSAPs pursuant to requirements established by the Board;
4. Establish cooperative purchasing agreements or other contracts for the procurement of goods and services;
5. Establish policies and procedures to fund advisory services and training for PSAPs;
6. Set operating standards for PSAPs and back-up PSAPs;
7. Investigate revenues and expenditures associated with the operation of PSAPs to ensure compliance with Board rules, regulations, requirements, and policies;
8. Make and enter into contracts and agreements as needed to fulfill its statutory obligations;
9. Use funds to pay for statewide 911 projects;
10. Accepts gifts, grants, or other money for the 911 Fund;
11. Undertake its duties in a manner that is competitively and technologically neutral to communication service providers;
12. Design, create, or acquire printed or Web-based public education materials regarding the proper use of 911;
13. Adopt rules to implement G.S. §143B-1400 *et seq.*;
14. Take other necessary and proper action to implement the provisions of G.S. §143B-1400 *et seq.*; and
15. Pay private sector vendors for provisioning a communications network for providing access to 911.

G.S. §143B-1402(b) strictly prohibits the Board (or any state agency) from constructing, operating, or owning a communications network for the provision of 911 service. The Board is permitted to pay private sector firms for such networks.

2.2.3 The 911 Service Charge

G.S. §143B-1403 provides for the monthly 911 service charge that is imposed on "…each active communications service connection that provides access to the 911 system through a voice communications service…." The rate established in statute, which excludes pre-paid wireless service but includes all other communications services, is seventy cents ($0.70) per month per access line, which was effective July 1, 2008.[7] The Board is permitted to lower the service charge and lowered the rate to sixty cents per month effective July 1, 2010.[8] Providers of these services are required to remit the service charge to the 911 Board by the end of the calendar month following the month in which the charge was collected. Providers are entitled to retain as an administrative fee either one percent of the amount collected or $50, whichever is greater.

The 911 service charge on prepaid wireless service was established by statute to be the same rate for each retail transaction and is assessed at the retail point of sale. Pursuant to G.S. §143B-1414, retail sellers are entitled to retain up to five percent of the amount collected as an

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[7] The inflation-adjusted rate (in July 2018 dollars) is 80 cents.
[8] The inflation-adjusted rate (in July 2018 dollars) is 69 cents.

administrative fee. Retail sellers must remit the amount collected to the NC Department of Revenue either monthly or semiannually. For sellers that remit monthly, the amount collected is due by the 20th day of the month following the calendar month in which the fee was collected. For sellers that remit semiannually, the amount collected in the first six months of the calendar year is due by July 20, and the amount collected in the second six months of the calendar year is due by January 20.

It is important for there to be parity between or among the various types of voice communications devices and providers with respect to remittance and assessment of the 911 service charge. There should be parity in how often the 911 service charge is remitted; that is, if one group is required to remit the service charge monthly, then all groups should remit monthly. Disparate remittance periods could make it more difficult to accurately estimate 911 revenue and to efficiently manage cash flow. It is also important to maintain parity with respect to the amount providers are entitled to withhold to cover their administrative costs; that is, if one provider or group is entitled to withhold one percent, then all providers or groups should withhold the same percentage amount. Lack of parity with respect to the administrative fee could result in a lack of a competitive playing field.

2.2.4 The 911 Fund

G.S. §143B-1404 provides for the creation and administration of the 911 Fund, which is an interest-bearing special revenue fund within the State treasury. The Board administers the Fund and funds may only be used as provided for in §143B-1400 *et seq*. The statute allows the Board to retain up to two percent of the revenue for administrative expenses. Currently, the Board is setting aside only one percent for its administrative costs.[9] Ten percent of the service charge must be allocated to the Next Generation 911 Reserve Fund. The remainder of the funds are distributed between CMRS Providers and primary PSAPs. Primary PSAPs are defined as the "…first point of reception of a 911 call by a public safety answering point…."[10]

Wireless, or rather CMRS, providers receive a percentage of 911 revenue, excluding 911 revenue from wireless pre-paid retail sales, for cost recovery. PSAPs receive a percentage of all 911 revenue, including wireless pre-paid. The Board must determine the specific percentage that each group receives to ensure full cost recovery to wireless carriers; any excess funds not used for cost recovery are available for distribution to PSAPs.

G.S. §143B-1405 establishes the statutory process for CMRS cost recovery along with requirements with which wireless carriers must comply to be eligible for reimbursement of their costs to provide wireless E911 service. If there are excess funds from cost recovery at the end of a fiscal year, the Board has the authority to reallocate those funds to the PSAP Grant and

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[9] North Carolina Department of Information Technology, the North Carolina 911 Board, *911 Fund*, https://it.nc.gov/about/boards-commissions/911-board/911-fund, as of August 31, 2018.

[10] G.S. §143B-1400(23). A public safety answering point (PSAP) is further defined in G.S. §143B-1400(25) as the "…public safety agency that receives an incoming 911 call and dispatches appropriate public safety agencies to respond to the call…."

Statewide 911 Projects Account, pursuant to limitations and other requirements in G.S. §143B-1407.

2.2.5 The 911 Board Staff & Committees

The Executive Director of the 911 Board is responsible for the day-to-day operations of the Board and its staff. Board staff also provide staff assistance to the Board's six committees, which are comprised of Board members. Following are the committees:

- Education Committee
- Funding Committee
- Grant Committee
- Standards Committee
- Technology NG 911 Committee
- Study Group (State 911 Plan)

2.2.6 Accountability

In February of each odd-numbered year, the 911 Board must report to the Joint Legislative Commissioner on Governmental Operations and the Revenue Laws Study Committee on the receipts and expenditures of all funds received by the Board during the reporting period. The report must also contain the status of the 911 system and the results of any investigation of PSAPs by the Board.

The State Auditor is required by statute to audit the 911 Board at least every two years pursuant to Part 5A of Chapter 147 of the General Statutes. The audits are conducted to ensure that the 911 Fund is properly managed.

2.2.7 Intergovernmental Coordination

The responsibilities of the Board and its staff require intergovernmental coordination and collaboration for the delivery of 911 service to residents of and visitors to North Carolina. Historically, the primary purpose of coordination has been based upon the distribution of revenue from the 911 Fund and its subsequent verification and auditing. The Board's decision to provide and pay for the NG911 system will require additional coordination and collaboration with PSAPs, and other local government and public safety officials.

In continuing with the action plan put in place in 2018, the Board continues to enhance customer service, improve educational and outreach programs, and continues to conduct 911 meetings across the state to obtain input from PSAPs and the public.

The Board continues to use the Study Groups and hosts regional meetings for local officials and PSAP directors to assist in updating the State 911 Plan.

2.2.7.1 GIS Current Status and Near Future Plans

The 911 Board has established a cooperative agreement with the North Carolina Center for Geographic Information and Analysis NC CGIA) to obtain robust GIS data from PSAPs that will support NG911 service. The NextGen 911 (NG911) GIS team consisting of 911 Board staff, CGIA, and GeoComm is bringing the last 10 PSAPs to i3 ready status with their GIS data. This effort will be completed by the end of 2021. Once complete, North Carolina will have seamless coverage for address points, street centerlines, emergency services boundaries (fire, law, and EMS), PSAP boundary, and provisioning boundary. These datasets have been prepared in cooperation with PSAPs and local government GIS offices. Communications have occurred across state boundaries as well with Georgia, South Carolina, Tennessee, and Virginia.

The challenge going forward will be sustaining each dataset as the data changes locally. Either monthly or quarterly updates of the core GIS datasets are needed. The frequency of those updates will vary across the state as growth and change in individual jurisdictions occurs. Continued outreach and communication with PSAPs and local government GIS offices is essential. Simultaneously, there should be an ongoing effort to monitor changes in the NENA standards related to GIS that could impact the future state of the datasets. For example, the NG911 team knows that a standard for unique ID's will be emerging through the NENA standards activity and that 3D requirements to capture the elevation component of the data is also on the horizon.

2.2.7.2 Coordination of 911, Enhanced 911, and NG911 Services with Native American Tribal Nations and Governments

Section 2.1 of this Plan provided a high-level summary of the Federal 911 Grant Program and new rules established for the round of grants in 2018. To reiterate, the new rules required state applicants to include Native American Tribal Nations and governments in statewide NG911 planning and efforts. Including tribal nations and governments in NG911 planning will enhance the readiness and ability of tribal, state, and local emergency responders to communicate and coordinate effectively during any sort of emergency or incident. Including tribal governments in NG911 planning and implementation ensures equal access to enhanced 911 services.

As part of the Board's distribution of funds and the offering of the NG911 system, inclusion of the Eastern Band of Cherokee Indians is statutorily required. The Eastern Band is the local governing body and is included as all other units of local government in North Carolina.

The inclusion of Native American Tribal Nations and governments has been addressed in the 911 general statutes. G.S. §143B-1406(g) defines the Eastern Band of Cherokee Indians as a PSAP, thereby including this tribal government in the funding and planning of all 911 service in the state, including NG911. A representative of the Tribal Council of the Eastern Band of Cherokee Indians serves on the Study Group for the 2021 State 911 Plan.

2.2.8 Board Programs and Initiatives

The state of North Carolina has entered two contracts to create a fully functional NG911 ecosystem compliant with National Emergency Numbers Association i3 standards and best practices. The first was with AT&T to provide the state's IP-enabled NG911 system, which includes the ESInet, Next Generation 911 Core Services (NGCS), and hosted call-handling solution for primary PSAPs in North Carolina. As of November 30, 2021, 116 PSAPs have joined the ESInet with 2 more expected to complete the transition by the end of 2021 leaving only 9 remaining to complete the process. All PSAPs are expected to have made the migration to the ESInet by early 2022.

The second was with GeoComm, for managed geographic information system services. The Board is developing a statewide geodatabase within the Next Generation 911 system to accurate identify 911 callers' location and route them to the appropriate PSAP. GeoComm is aggregating and validating the required geographic information system data from all 127 PSAPs in North Carolina for the geodatabase. The GIS data is used for emergency call routing functions and location validation functions.

Along with the ESInet and GIS projects, the State opened the Network Monitoring and Assistance Center (NMAC) in September 2019 which was the first of its kind in the nation. It enables seamless 911 coverage so that emergency responders can help North Carolina residents as quickly as possible. The NMAC supports an uninterrupted flow of communication between Next Generation 911 PSAPs and AT&T. The center is staffed 24/7 and equipped to monitor service and performance on North Carolina's digital emergency services network, ESInet. NMAC technicians immediately troubleshoot network issues and help behind the scenes. For example, technicians monitoring ESInet can identify increasing emergency calls and quickly reroute emergency calls to other 911 centers – particularly during severe weather and major events that draw many people to an area.

Another initiative by the Board is to deliver outreach and public education programs to keep the public, stakeholders and industry partners informed about the NC 911 Board's Next Generation 911 efforts. Public education and outreach include the general public, appointed/elected officials, and stakeholders. The Board makes every effort to know their target audience and identify the specific message being delivered.

The COVID 19 pandemic of 2020 presented many challenges for the Board to be able to reach out to the communities and stakeholders. The staff adjusted their outreach approach by creating and publishing one-page White Sheets detailing information related to the ESInet, GIS, and NMAC services. Additionally, webinars were created and placed on the Board's website for NG911 and GIS training.

The Staff created and hosted a (3) three-day Webinar focusing on Continuity of Operations Planning for PSAPs. The three-day agenda include one day focusing on the ESInet and alternative routing' radio resources and creating the Plan respectively.

The COVID Pandemic also impacted staffing in the PSAPs. The Board looked for an approach to get the message out to the public. The Board's Education Committee in collaboration with Spectrum Reach were able to put into production and air a Public Service Announcement developed as a recruiting tool for PSAP telecommunicators. The PSA aired from September 6, 2021, through November 7, 2021, with 6,837 airings on 49 networks. The PSA campaign was delivered in two different television zones spanning 10 counties. To connect applicants to their desired locality, a website page was created on the Board's website with a link to all the PSAPs in the state. The PSA was shared with the local chapters of NC NENA, APCO, and the PSAPs so it could be used locally and on social media. The PSA can be found on the Board's website. The PSA will continue to air in select markets in North Carolina to assist PSAPs in their recruitment efforts.

Local-Level Governance for 911 Service

In North Carolina, PSAPs are operated, managed, and staffed by local governments, either at the municipal or county level. These same local governments are responsible for funding PSAP operations. In the current analog 911 environment, 911 service has typically been delivered via a contract between a PSAP (or municipality or county) and the 911 system provider, which traditionally has been the Incumbent Local Exchange Carrier (ILEC). The 911 system provider supplies the 911 network, network monitoring, network maintenance and repair, and static ALI database as part of the contract. The PSAP purchases or leases the 911-related equipment (e.g., CPE, CAD, mapping) and is responsible for equipment maintenance and repairs. As a result, it was not typical for counties or municipalities to coordinate the provision of 911 service on a regional basis except for back-up arrangements.

NG911 will create an environment where coordination among multiple counties is possible and beneficial. In other states that have implemented NG911, regional consortia have been established for procurement advantages and redundant operating purposes. Regardless, the delivery of 911 services to the public is a local matter, although PSAPs are accountable to the Board with respect to the use of 911 funds.

2.2.9   Monthly Distribution of 911 Revenue to PSAPs

G.S. §143B-1406 provides for the process of the monthly distribution of 911 revenue to primary PSAPs. To be eligible to receive such distributions, a PSAP must provide E911 service, comply with all provisions of state 911 law, and must have received distributions in FY 2008-09. Subsection (a)(1) through (3) provides specific requirements the Board must follow concerning monthly distributions, such as setting a base amount for each PSAP. In addition, the Board "…must determine a method for establishing distributions that is equitable and sustainable and that ensures distributions for eligible operating costs and expected increases for all funded PSAPs…." The Board is further required to consider the following six factors:

1. Population served by each PSAP.
2. PSAP reports, budgets, prior disbursements, and prior costs.
3. PSAP operations, technologies used by the PSAP for 911 service, compliance with operating standards established by the Board, and level of service a PSAP delivers dispatching fire, law enforcement, and EMS and providing Emergency Medical Dispatch (EMD).
4. The tier designation of the county in which the PSAP is located.[11]
5. Any current existing interlocal agreement between a primary PSAP and a secondary PSAP, provided that the secondary PSAP was in existence as of June 1, 2010, receives funding from the primary PSAP under the agreement, and is within the primary PSAP's service area.
6. Any other information the Board deems relevant.

Standards for eligible and prohibited uses of 911 funds are provided in subsection (d). PSAPs are prohibited from using 911 funds for the following:

- The lease or purchase of real estate;
- Cosmetic remodeling of 911 Centers;
- Personnel costs for 911 Telecommunicators; and
- The purchase of mobile communications vehicles, ambulances, fire engines, or other emergency vehicles.

PSAPs may use 911 revenue only for the following:

- The non-recurring costs of establishing a 911 system;
- Expenditures for in-state training of 911 personnel regarding the maintenance and operation of the 911 system (within specific guidelines);
- Charges associated with the provision of 911 service by the 911 service supplier; and
- The lease, purchase, or maintenance of the following:
  - ➢ 911 call-taking equipment, including necessary computer hardware, software, and database provisioning.
  - ➢ Addressing.
  - ➢ Telecommunicator furniture.
  - ➢ Dispatch equipment located exclusively within the building where the PSAP or back-up PSAP is located, except for radio-dispatch equipment.

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[11] G.S. §143B-437.08 concerns development tier designations, which are based on factors such as unemployment; income; percent change in population; and per capita adjusted assessed property values.

2.2.10 Accountability

The fiscal officer of a PSAP to whom a distribution from the 911 Fund is made must deposit the funds in a special revenue fund as defined in G.S. §159-26(b)(2), designated as the Emergency Telephone System Fund. Annually, a participating PSAP must submit to the Board an approved budget detailing the revenues and expenditures eligible for reimbursement.

In accordance with G.S. §143B-1408, the Board is empowered to provide notice to any communications service provider or PSAP found by the 911 Board to be using fees from the 911 Fund for purposes not authorized by statute. The provider or PSAP must stop making any further unauthorized expenditures but may petition the Board for a hearing on the matter. If the Board determines at the hearing that the expenditure does not represent an eligible use of 911 revenue, the provider or PSAP will be required to reimburse the 911 Fund. If reimbursement is not made, the Board is authorized to suspend future distributions.

2.3 Current 911 PSAP Technology

In North Carolina, all 911 calls are answered at a primary PSAP, which is legally defined as the first agency that receives a 911 call. Primary PSAPs must be capable of receiving and processing E911 calls from all voice communications service providers. There are currently 115 primary PSAPs in the state. There are also 12 secondary PSAPs in the state, which the Board has defined as a PSAP that is able to receive voice and data of an E911 call that has been transferred from a Primary PSAP for dispatch of law enforcement, emergency medical services, firefighters, or other responders. PSAPs range in size from two-position centers up to almost 60-position PSAPs.

In addition to the Public Switched Telephone Network (PSTN), there are several pieces of equipment at a PSAP that play a crucial role in the answering and processing of E911 calls. Common equipment includes the call-taking equipment, or Customer Premise Equipment (CPE); Computer Aided Dispatch (CAD); voice logging recorders; Uninterruptable Power Systems (UPS); generators; GIS/Mapping; and radio.

Typically, PSAPs enter into agreements or contracts with their 911 System Service Provider (SSP), which provides the 911 network, database, and network monitoring and maintenance. The PSAP typically enters into a separate lease/purchase agreement with the SSP for the call-taking equipment. The PSAP also provides and is responsible for the equipment mentioned above. As in most states, the level of technology in place and used varies from PSAP to PSAP, which results in varying levels of capability with respect to the provision of 911 service.

2.4 Current 911 Infrastructure

The Board provides and pays for a managed NG911 system provided from AT&T. The NG911 capable ESInet is available for all North Carolina PSAPs. The ESInet provides connectivity from the Ingress (OSPs) to the Next Generation Core Services (NGCS), and Egress (PSAPs). AT&T has implemented the system compliant with NENA standard functional elements. The NGCS supplies the connections to hosted call handling solution(s) that PSAPs may utilize for their call handling.

All interconnections, whether to the core, the PSAPs, or to outside resources, are redundant and diverse and provide survivable features to meet the 99.999% service availability.

The NG911 system interconnects to six geographically redundant core sites for call routing and two in state data centers for hosted call handling. Through this network design, every PSAP is connected to the six core elements to allow increased diversity and redundancy of communication between the end sites and the NG911 functional elements.

The Board established the Network Monitoring and Assistance Center (NMAC) to serve the instate network and operations center. In addition to monitoring the health of the ESInet, the staff provides Tier 1 and Tier 2 PSAP support.

In collaboration with local authorities and the North Carolina Center for Geographic Information and Analysis, the Board has established a statewide authoritative dataset for call delivery services on the ESInet. Through contracting with the Board, GeoComm serves as the aggregator of data and upon validation provides the dataset to AT&T and Intrado for production.

3 THE FUTURE ENVIRONMENT: NEXT GENERATION 911

3.1 The Drive to Next Generation 911

The current 911 systems in place in the US were built in the 1970s and were based on circuit-switched technology. A circuit is a connection or line between two points, using various media such as copper, coaxial cable, fiber, or radio wave. A circuit-switched network is one that establishes a physical circuit temporarily on demand and keeps the circuit open and reserved for the user until the user disconnects. The current 911 systems were designed to handle only one type of communications device: analog landline telephone service.

The explosive growth in communications technology is forcing 911 Authorities at every level of government to change the way they operate in order to provide equivalent services to constituents. To support these trends, PSAPs must migrate to a platform that enables new and emerging communications services and devices to access E911. The evolution of communications technology provides an opportunity for the 911 Board and PSAPs to make major improvements in the current E911 infrastructure. These improvements include the capability for multimedia services that will enhance public safety, reduce response times, and save lives.

Residents and businesses no longer live or operate in small, isolated communities, and telecommunications services are no longer local-only offerings. People's lives take place in widespread areas with a multitude of communications options, and communications are no longer constrained to a fixed location. Traditional communications companies are transforming their circuit-switched networks into packet switched networks to accommodate the transport of voice, data, and video. The trend is only going to accelerate in the coming months and years.

Consumers and businesses are increasingly using and depending on new communications technologies and devices, such as VoIP devices, instant messaging, text messaging, Short Message Service (SMS), and email. These new technologies and devices enable the transfer of huge amounts of data. In addition, consumers and businesses are increasingly giving up their landline phone service for wireless phone service only. The deaf and hard-of-hearing community is increasingly using text messaging to communicate. Many have given up use of TTY/TDD machines in favor of text messaging. Consumers expect that they should be able to communicate with 911 using their smart phones and smart devices, including sending photos and videos or by texting.

As the rest of the world moves to Internet Protocol (IP)-based networks, the current E911 system will continue to lag further behind technologically, will continue to degrade, and will be unable to meet the needs and demands of consumers requesting emergency assistance. Every time a new technology is introduced (e.g., wireless, VoIP, texting) or system functions are expanded (e.g., location determination), the existing E911 network and equipment must undergo significant, convoluted, and costly engineering changes. These changes result in significant time delays and solutions that are not completely effective. The current 911 network and infrastructure cannot effectively or adequately support the network and technology needs of the future. The state's 911 systems must transition to a digital/IP-based network and must prepare for future technological changes.

The way PSAPs operate and provide 911 service is changing rapidly, but currently, PSAPs attempt to respond to today's requests for service using yesterday's technology. Delivering additional data with a 911 call requires a digital network to provide the speed and data capacity to properly route and deliver a 911 call based on the call's location (rather than the location of the wireless tower, for example) to the appropriate PSAP. The existing analog, circuit-switched 911 networks in the state must be upgraded to a single, statewide 911 IP-based network. Such a network will improve call set-up time, increase the speed at which voice and data arrive at the PSAP, and improve response time, thereby saving lives. A single statewide IP-based network will also provide for call load sharing and host equipment sharing; the latter will allow local governments to retain control over how 911 calls are processed and dispatched, while minimizing 911 costs through centralizing network, equipment, and software.

The technology associated with a digital network cannot be implemented on a county-by-county and on an "as a local government can afford it" basis. There must be a plan and funding that provide for the implementation of a single IP-based statewide network to transport 911 requests for service to the appropriate PSAP. The funding source for NG911 must be technology neutral, provide parity across all devices and carriers, and must cover the complete cost of the NG911 system. The plan must account for the fact that while telecommunications and access to E911 service are becoming increasingly borderless, emergency response is, and always will be, a local response; that is, if something goes wrong during a 911 call, local authorities are held accountable to their constituents.

It is nationally accepted that 911 call-takers and dispatchers in local 911 centers are the true first responders to any incident, whether isolated or widespread, human-caused, or natural, accidental or deliberate. Yet, 911 service, infrastructure, training, and operations are rarely included in any federal government appropriations or homeland security grant programs. It is simply not good enough to merely implement or facilitate the implementation of a NG911 system without considering the impacts to PSAPs to prepare and train their 911 employees for answering, processing, and dispatching calls in a NG911 environment. PSAPs need a road map to implement NG911 to ensure that every resident can access and obtain the same level and quality of 911 service.

3.2   What is Next Generation 911?

Much work has been done in many forums to design a 911 system to meet consumer expectations and technological changes. In the future, consumers will be able to access 911 from any networked communication device, with location automatically provided at the beginning of the call.

Internet Protocol (IP) is the technology that will be used for the future 911 network, which is being called Next Generation 911, or NG911. According to the National Emergency Number Association (NENA), NG911 is

"An Internet Protocol (IP) based replacement for E9-1-1 features and functions that supports all sources of emergency access to the appropriate PSAPs, operates on reliable, secure, managed, multi-purpose IP networks, and provides expanded multimedia capabilities for PSAPs and other emergency responders."

According to the Association of Public Safety Communications Officials (APCO) Project 43, NG911 is:

"A secure, nationwide, interoperable, standards-based, all-IP emergency communications infrastructure enabling end-to-end transmission of all types of data, including voice and multimedia communications from the public to an Emergency Communications Center."

In other words, NG911 is

- A secure and open architecture that uses a reliable and managed IP network to allow new communications devices such as text messaging, data, pictures, and video to access 911 service.
- A system that enables call access, transfer, and backup among and between PSAPs without geographic or technical restrictions.
- An architecture that will facilitate an interoperable system of systems for all emergency response organizations.
- A system that will contain the same functions of the legacy 911 system, such as redundancy and reliability (e.g., 99.999% up time), while providing for greater accessibility, interoperability, functionality, and a more efficient use of 911 resources.

When fully implemented, NG911 will enable:

- Transfers of 911 calls between geographically dispersed PSAPs, and from PSAPs to remote public safety dispatch centers, if necessary;
- Increased sharing of data, resources, procedures, and standards to improve emergency response;
- Reductions in capital and operating costs for the state and PSAPs; and
- Improved coordination and partnerships within the emergency response community.

3.3   The NENA i3 Standard

The National Emergency Number Association ("NENA") is an ANSI-accredited Standards Developer and is at the forefront of developing standards for emergency calling services. NENA follows the Internet Engineering Task Force (IETF) standards[12] and adds specific service-related features that apply to 911 service. In addition, NENA publishes 911 information documents that often contain recommended best practices.

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[12] The Internet Engineering Task Force (IETF) is the entity that creates and defines IP standards. The IETF also defines related protocols used on the public Internet and that may be adopted for use on private IP networks, including public safety IP networks.

The NENA i3 standard details the network, components, and interfaces required for NG911 service. Specifically, the term "i3 standard" generally refers to NENA Standard 08-003, *Detailed Functional and Interface Standard for NG9-1-1 (i3)*, or NENA STA 010.2-2016, *Detailed Functional and Interface Standards for the NENA i3 Solution*. According to NENA the i3 Standard

> *"…describes the 'end state' that has been reached after a migration from legacy Time Division Multiplex (TDM) circuit-switched telephony, and the legacy E9-1-1 system built to support it, to an all IP-based communication system with a corresponding IP-based Emergency Services IP network…."*[13]

The NENA i3 Standard has the following 11 critical underlying assumptions:
1. All calls entering the Emergency Services IP Network (ESInet) are Session Initiation Protocol (SIP)-based.
2. Access network providers operate a location function for their networks.
3. All calls entering the ESInet will normally have location data in the signaling with the call.
4. The 911 authorities have converted their tabular Master Street Address Guide (MSAG) and Emergency Service Numbers (ESNs) to a GIS-based Location Validation Function (LVF) and Emergency Call Routing Function (ECRF).
5. The 911 authorities have accurate and complete GIS data, which are used to provision the LVF and ECRF. In addition, a change to the GIS system automatically updates the ECRF and LVF, which may affect routing.
6. All civic locations are validated by the access network against the LVF prior to an emergency call being placed (analogous to MSAG-validation).
7. All civic locations are periodically revalidated against the LVF to ensure that the location remains valid as the GIS system changes.
8. Legacy PSAP Gateways (LPGs) are included in the i3 architecture as the interface between i3 ESInets and legacy PSAPs, and between i3 PSAPs and legacy PSAPs.
9. Legacy Network Gateways (LNGs) are included in the i3 architecture as the interface between legacy originating networks and i3 ESInets.
10. Federal, state, and local laws, regulations, and rules are modified to support NG911 system deployment.
11. The specific protocol mechanisms, especially interworking of legacy telecom and ESInet/NGCS protocols are North-America specific and may not be applicable in other areas.

Figure 1 provides a basic diagram of the NENA i3 architecture.

The green shaded areas denote areas that are considered within the i3 domain and covered by NENA STA 010.2-2016. The main purpose of the NENA STA 010.2-2016 is to define the end operating state of a new 911 delivery system that replaces the existing legacy 911 system with

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[13] National Emergency Number Association, *NENA STA 010.2-2016 Detailed Functional and Interface Standards for the NENA i3 Solution, p. 15.*

the same features and capabilities of the legacy system but with modern, IP- and SIP-based components and technologies, which provide greater capabilities beyond the current legacy 911 system. While the i3 architecture encompasses many areas, much of it is devoted to the treatment of a 911 call in the SIP format, through the i3 architecture, using the functional elements defined in NENA STA 010.2-2016.
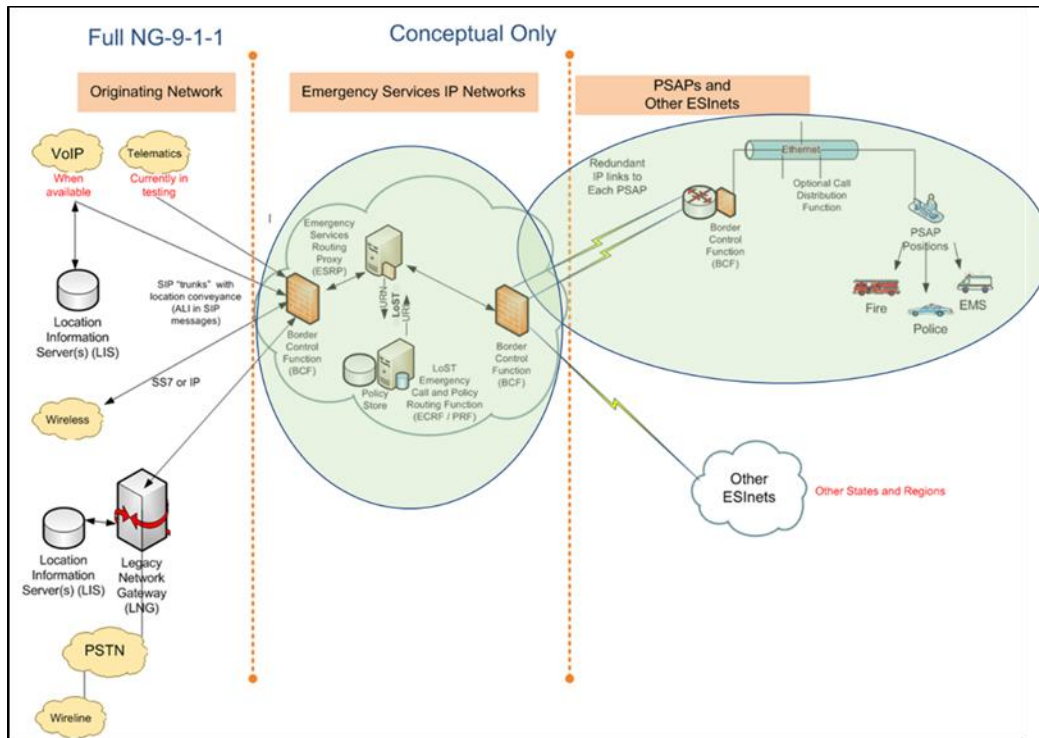

Figure 1 - Simplified NENA i3 NG911 Conceptual System Diagram

NENA STA 010.2-2016 encompasses requirements for many physical and logical elements of NG911 service, including the ESInet, the Border Control Function (BCF), the Session Border Control (SBC), the Emergency Service Routing Proxy (ESRP), the Emergency Call Routing Function (ECRF), Location Validation Function (LVF), Session Initiated Protocol (SIP), and Security.

3.3.1 i3v3 Accelerates the Drive Toward 21st-Century 9-1-1 Services

In July 2021, NENA released a new version of the i3 Standard for Next Generation 911. As North America's leading 9-1-1 standards-development body, NENA approved a landmark new version of its Next Generation 9-1-1 standard in order to accelerate the transition to smarter, faster, and more resilient emergency response. Version 3 of NENA's *i3 Standard for Next Generation 9-1-1* includes key updates to NG9-1-1 infrastructure, paving the way for interoperability on a national and international scale.

The new version will serve as the foundation of a 21st Century, broadband-based 9-1-1 ecosystem. Version 3 changes include:

- New REST/JSON architecture, following modern best practices for interface design;
- Cybersecurity improvements;
- Major updates to call bridging;
- Discrepancy Reports;
- Outgoing Call Interface Function;
- Blind transfer support;
- Updates to handle novel call types (including non-interactive calls and Advanced Automatic Crash Notifications); and
- Harmonization with European specifications.

Beyond these changes, the new version of i3 includes many more feature improvements and updates. Also, NENA has made Version 3 APIs (based on the Open API specification) a

3.3.2   i3 ESInet Standards and Best Practices

According to NENA, an ESInet is a managed IP network that is used for emergency services communications and that can be shared by all public safety agencies.[14] NENA addresses the ESInet through a combination of specific standard language in STA-010.2-2016 and a best practices document titled *NENA Emergency Services IP Network Design for NG9-1-1 (NID), NENA 08-506* (released in December 2011).

The ESInet is the core of NG 911 and is needed to provide NG911 services to the PSAP. The ESInet is the IP transport infrastructure upon which independent application platforms and core functional processes will be deployed. An ESInet will provide for broadband speed transmissions and allow prioritized, efficient, and prompt delivery of texts, videos, pictures, and other data that will be used by 911 Telecommunicators at the PSAP and by responding units for safer and more effective emergency responses in the field.

Following are highlights from the i3 standard related to ESInets:
- Each PSAP must be connected to an ESInet.
- Origination networks are not included as part of the ESInet.
- ESInets must be accessible from the global Internet, with calls going through the Border Control Function (BCF).
- Connection to the Internet is acceptable, preferably through a Virtual Private Network (VPN).
- Access to ESInets must be controlled. Only public safety agencies and their service providers may be connected directly to the ESInet.
- Elements connected to the ESInet should not be referred to by their IP address, but through a hostname using DNS.
- There must be no single point of failure for any critical service or function hosted on the ESInet. Certain services designated as non-critical may be exempt from this requirement. However, the BCF, internal ECRF, ESRP, logging service, and security

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[14] *National Emergency Number Association, NENA Master Glossary of 9-1-1 Terminology NENA-ADM-000.24-2021, June 22, 2021, p. 73.*

services should never be exempt from this requirement. Services must be deployed to survive disaster, deliberate attack, and massive failure.

3.3.3   NG911 Security Standard

Out of necessity, PSAPs will be connected (indirectly through the ESInet) to the global Internet to accept calls. As a result, PSAPs will likely experience deliberate attacks on their systems. The types of vulnerabilities that NG911 systems must manage and protect against will fundamentally change and will require constant vigilance to create a secure and reliable operating environment. NG911 systems must have robust detection and mitigation mechanisms to deal with such attacks.

Cyber risks are inherent in systems such as the ESInet that are open to the internet. Safeguarding the NG911 system, including the PSAPs, from cyber-attacks is yet one more reason why it makes sense to have a singular statewide system that is managed and monitored by the Board; cyber security is costlier and more difficult to provide if done PSAP-by-PSAP.

The NENA i3 standard provides overall security requirements for NG911. There is also a separate standard, *NENA Security for Next-Generation 9-1-1 Standard (NG-SEC)*, NENA 75-001, which addresses security requirements.

The i3 security standard deals with authentication and authorization functions. Pursuant to this standard, all transactions must be protected with authentication, authorization, integrity protection, and privacy mechanisms specified in the i3 document. In addition, common authentication (single sign-on) and common rights management and authorization functions must be used for all elements in the network.

The NENA NG-SEC standard establishes minimum guidelines and requirements for the protection of NG911 assets and elements, and to provide a basis for auditing and assessing levels of security and risk. Certain applications may require access from external, public transport networks such as the Internet. These applications are placed on special, external network segments referred to as Demilitarized Zones (DMZs). The DMZ provides an intermediate environment for interaction with external domains without permitting access to internal domains or networks. This layering technique can improve the security posture of a system that requires an application to face the Internet without exposing the internal network. When applications require access from external, public transport networks (i.e., Internet), they shall be placed on a DMZ, or shall employ network-based encryption and authentication mechanisms such as a VPN.

The equipment supporting virtual or logical networks can pose a unique risk. All guidelines for the use of firewalls, intrusion detection, remote access, and all other relevant security principles shall be followed when designing interaction between virtual networks. The routers and switches supporting these networks can be used as "islands" to hop between networks of different security classification. The NENA NG-Sec standard lists the various ways that these risks can be managed.

Appendix C—NENA NG911 Standards and Best Practices Reference Chart contains a spreadsheet with the various NENA Standards as they relate to NG911.

3.4 NG911 Considerations

Internet Protocol and broadband technologies will have tremendous beneficial impacts to current 911 service and PSAP operations. At the same time, these new technologies have the potential to pose significant challenges to PSAPs. It is important for policy makers and elected and appointed officials at all levels of government to understand that the Board and PSAPs must have the resources needed to maximize benefits, minimize costs and challenges, and effectively incorporate and use NG911 technologies.

In 2017, APCO published the report, *PROJECT 43™ Broadband Implications for the PSAP: Analyzing the Future of Emergency Communications,*[15] and identified the following six areas of impact:

- Operations
- Governance
- Cybersecurity
- Technology
- Training
- Workforce

3.4.1 NG911 & Operations

According to APCO, NG911 will have its biggest impact on 911 operations because of the PSAP's role as the first layer in emergency response. NG911 will allow PSAPs to leverage information sharing resources such as electronic health records; building records and floor plans; camera systems and detectors; officer-worn body cameras; and video from surveillance systems. As a result, PSAPs will need to amend their Standard Operating Procedures (SOPs) to account for new sources of information, increased call processing times, and more mutual aid incidents, to name a few. The revised SOPs must ensure that the handling, disseminating, and storage of all the information received with a call meets statutory requirements.

Increased call processing times, in turn, have the potential to increase call answering times, which in turn, could require the hiring of more 911 call-takers. In addition, PSAPs may need to create new positions to process and analyze all the various pieces of data that will arrive with a 911 call. Obviously, training PSAP personnel for the changes resulting from NG911 service is critical. 911 Telecommunicators will need to be trained on how to process all the new additional information in a fast-paced, stressful, and high-emotion environment.

When wireless E911 was implemented, PSAPs experienced an increase in multiple 911 calls about a given incident. This trend is expected to continue, and PSAPs will need to be prepared to handle multiple pictures, videos, texts, and calls to 911 about any given incident. Finally, the potential exists for non-emergency calls to increase, due to the increased use of social media applications. PSAP staff will have to balance the need to focus on emergencies with the public's expectation for an immediate response to those non-emergencies. In other words, in today's environment,

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[15] Association of Public Safety Communications Officials, *PROJECT 43™ Broadband Implications for the PSAP: Analyzing the Future of Emergency Communications*, 2017.

PSAPs may get complaints about it taking longer than expected for a 911 call to be answered. In the future, PSAPs should expect to receive complaints about long waits for responses to non-emergency texts, for example.

3.4.2 NG911 & Governance

APCO emphasized that states that have established a state 911 authority have made the most progress in implementing NG911, provided there is input from PSAPs and other stakeholders. Such state authorities must remove statutory or regulatory barriers that can impede the modernization of 911 service. Examples include regulations that treat 911 service as a single-provider system accompanied by legacy requirements; 911 system service provider (SSP) certification restrictions; references to tariffs and Local Access Transport Areas (LATAs); lack of parity among carriers regarding liability; and rules that implicitly prohibit the use of IP-routing and NG911 architecture.

State authorities must also enact or amend laws and rules that will ensure that NG911 can be implemented statewide with seamless and secure interoperability. Examples include liability parity across all communications and NG911 providers; mutual aid agreements; and records retention laws, public records, and public information requests, because a 911 call will involve more than just voice.

One of the key lessons learned from past 911 implementation is the importance of statewide coordination to maintain focus and priorities for funding and support of 911 emergency services. Other benefits of statewide coordination include improved service uniformity and quality across the entire state, along with a potential reduction in costs associated with implementation of a NG 911 system. Statewide coordination and management of the NG911 system will help ensure the security and reliability of the ESInet. Statewide coordination will focus efforts; maintain priorities; ensure the timely achievement of NG911 goals; and ensure that every resident in the state will have equal access to NG 911 services. Finally, the presence of state-level standards and requirements will help ensure that desired future interoperability will be achieved and will provide economic incentives for host-sharing and regional collaboration, while simultaneously ensuring local autonomy and control of emergency response.

3.4.3 NG911 & Technology

As stated previously, the ESInet is the building block of NG911 and will replace the traditional network transport mechanisms. The ESInet provides interoperability between and among PSAPs on the same ESInet. The ESInet also facilitates hosted CPE solutions, which have the potential to bring about a higher level of reliability by placing core systems at redundant hosted locations. Doing so, in turn, provides operational continuity in local- or large-scale disasters. Hosted CPE solutions also reduce costs for the affected PSAPs because they are sharing equipment and could tend to minimize the need for hot back-up PSAPs. It is important for the 911 Board to work with the NG911 system vendor and PSAPs to establish interconnection policies, procedures, and best practices, including cyber-security, based on applicable NENA standards.

NG911 also provides opportunities for interconnectivity with other entities or agencies that are not PSAPs, and with other networks that serve public safety. Interconnectivity with entities not on the 911 ESInet or with other ESInets or public safety networks is complex and is associated with significant cybersecurity risk. It is important for the Board to investigate such possibilities in the future after the NG911 system has been implemented and accepted. The Board will need to work with the NG911 vendor, PSAPs, and the entities considering interconnection. The Board and NG911 vendor will need to define the interconnection terms, responsibilities, technical requirements, conditions, and costs to address how agencies will join the network, along with interconnection policies, shared responsibilities and costs, and cyber-security, for example. In addition, the Board will need to work with the NG911 system vendor to establish Service Level Agreements (SLAs) for allowed interconnections.

NG911 requires a GIS system that includes a GIS database with a map layer that defines the geographical jurisdictional boundaries of each PSAP in the state. One of the major administrative tasks in NG911 is the maintenance of the GIS database, which will largely replace the MSAG. In addition, the GIS system must be able to reliably convert civic or street addresses to coordinate locations (e.g., lat/long) to plot or map the caller's location accurately. It is important for the 911 Board to ensure that the GIS data development and maintenance associated with NG911 meets NENA standards.

In the NG911 PSAP, 911 calls (or, rather, 911 requests for assistance) will need to be answered, processed, dispatched, and stored using equipment that is capable of receiving and interpreting the data that will be delivered with the call. The CPE must also provide standard interfaces to existing CAD and mapping applications. At the same time, until the legacy 911 system is decommissioned, the CPE must be capable of handling legacy 911 calls as well.

In NG911, CAD systems will need to be capable of exchanging data with the CPE using open standards, which means future CAD systems will need to be XML-capable. Another major component of the NG911 PSAP will be logging and storing all data and new data streams, which will require logging recorders that are capable of recording data in addition to voice, as well as recording keystrokes of the CAD and CPE systems.

3.4.4   NG911 & Training

911 Telecommunicators provide the only link for the public to access or request emergency services; these essential PSAP employees are the true first responders. It is well-established that training 911 Telecommunicators is fundamental to the success of 911 service. The ability to maintain quality services for both the public and emergency responders is dependent upon the training provided, both at initial hire and on-going.

According to APCO, NG911 will provide a more immersive environment for 911 call-takers and dispatchers, who may see much of what responders see while on scene. While this additional information will ultimately improve or enhance emergency response, PSTs will be exposed to even more stress than they currently face. Both APCO and NENA have reiterated the importance of establishing a comprehensive stress management program. In 2013, NENA issued *NENA Standard on 9-1-1 Acute/Traumatic and Chronic Stress Management, NENA-STA-002.1-2013* to

provide awareness of the serious risks posed by work-related stress on the mental and physical health of 911 Telecommunicators in their role as the nation's first first-responders.[16] The NENA standard also establishes best practices for PSAP comprehensive employee stress management programs.

It is essential for the long-term success of NG911 that state and local elected and appointed officials and PSAP authorities view training as a necessary and required investment to provide a consistent level of 911 service across the state. Without adequate training of PSAP personnel, even the best technical solution will fail. NG911 will require additional training of all 911 Telecommunicators to learn how to process different types of requests for assistance, such as texting, videos, social media, and other applications yet to be invented. Regardless of PSAP size, training across PSAPs in the state should include minimum baseline training so that 911 call-takers and dispatchers can proficiently answer, process, and dispatch calls from other jurisdictions in the NG911 environment, as well as maintain proficiency with legacy technology. Finally, because of the nature of NG911 service itself, all PSAP personnel must receive basic training in cybersecurity.

3.4.5 NG911 & the Workforce

Currently, PSAPs across the nation are faced with high-turnover and burn-out. Relatively low pay, limited career growth opportunities, and a fast-paced, life-or-death stressful environment have limited the ability of PSAPs to recruit and retain qualified 911 Telecommunicators. The critical nature of 911 service requires a special kind of employee with a unique set of knowledge, skills, and abilities; NG911 will add to the workforce challenges.

PSAPs may need to modify their hiring processes, may have to hire additional 911 Telecommunicators, may have to add new positions, such as data analyst, and may have to increase job requirements for 911 Telecommunicators, as they will now have to manage and analyze all the additional data that will arrive with the request for service.

At the same time, NG911 may provide more options for career growth and enhancement for PSAP personnel, due to the role they will play in aiding, enhancing, and improving emergency response in the field. According to APCO, in addition to current knowledge, skills, and abilities, the 911 Telecommunicator in a NG911 PSAP will need to have the following:

- Basic knowledge of IT systems, technology administration, cybersecurity, and GIS and related mapping tools;
- Proficiency with social media tools;
- Ability to examine various types of data for quality, authenticity, and reliability;
- Ability to interpret the meaning of arriving data and determining the best agency to respond and the type of response; and
- Ability to collaborate with counterparts in other PSAPs, EOCs, or jurisdictions.

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[16] National Emergency Number Association, *NENA Standard on 9-1-1 Acute/Traumatic and Chronic Stress Management, NENA-STA-002.1-2013*, August 5, 2013, p. 8.

3.5 NG911 Funding Considerations in North Carolina

Local governments receive monthly distributions (per G.S. §143B-1406) for eligible 9-1-1 expenses. Local governments must allocate funds for other expenses associated with PSAP operations, such as personnel costs, physical facilities and other expenses excluded from eligible expenses by G.S. §143B-1406. Some costs to migrate to the ESInet may pose a significant challenge to smaller local governments that lack available and adequate funding. These constraints support planning for regional primary PSAPs and consolidation of PSAPs. A funding method is needed to share costs across the state to guarantee the same level of access for every resident of North Carolina regardless of their location or the device or technology used.

Upgrading PSAP CPE and CAD systems is as important as building out the NG911 network; it will not serve the state's residents to have a robust, secure ESInet that can deliver a plethora of data when PSAPs and emergency responders are limited by outdated analog equipment. It is not clear if the current 911 service charge revenue can support the necessary upgrades to NG911-capable CPE and CAD systems. Adding to this challenge for PSAPs is how to pay for the training that will be required of all PSAP employees in a NG911 PSAP. Currently, PSAPs pay for on-the-job training, but this training does not include the standardized training that will be needed for NG911. 911 Telecommunicators will need extensive one-time and on-going training to process this new and unfamiliar content, such as photos and videos. The implementation of NG911 service will require PSAPs to revise their current standard operating procedures and provide training on those changes. Effective public policy must recognize these realities and the statutory framework must assure adequate and sustainable funding to support equal access to a consistent level of 911 throughout the entire state.

It is important to repeat that the Board and PSAPs will be paying for the both the current legacy 911 system and the new NG911 system until transition is 100 percent complete statewide. Because the existing legacy 911 network will have to co-exist with the NG911 network, operating costs during the transition will be higher. Due to the parallel cost associated with the implementation of the NG911 network, the current funding model is being and will continue to be evaluated to ensure available funding for 911 services, NG911 services, PSAP Operations, and Board operations. A 3-year forecast is completed and presented to the Board for decision making related to possible changes in the service charge rate necessary for the upcoming fiscal years. The information is provided through various reports to the Board and General Assembly. It is anticipated that Board staff responsibilities and job requirements will increase with the responsibilities of implementing NG911. Funding a statewide NG911 implementation can be a challenge for a variety of reasons, such as limited Board resources; competing budgetary requirements; increased PSAP costs; the unwillingness of elected officials to approve service charge increases; and a concern that 911 revenue will be used for non-911 purposes.

The tables below and on the following pages provides historical information on 911 revenues and expenditures between FY 19-20 (FY ending June 30, 2020) and FY 20-21 (FY ending June 30, 2021). The data has not been adjusted for inflation and does not include expenditures for PSAP grants.

Cash basis of reporting:						
REVENUE	**July-20**	**August-20**	**September-20**	**October-20**	**November-20**	**December-20**
CMRS Wireless	0.00	0.00	0.00	0.00	0.00	0.00
CMRS (PSAP) Wireless	3,703,957.11	3,037,143.02	2,887,243.71	3,161,764.33	2,991,754.65	244,161.92
Wireline	614,662.16	499,831.63	465,005.38	392,418.16	458,439.36	257,467.79
VoIP	1,000,935.69	787,998.26	733,878.84	688,776.70	737,779.53	283,473.29
Prepaid Wireless	1,499,829.23	1,020,790.25	779,694.47	816,971.03	792,212.33	769,253.18
NG 911 Fund	1,395,092.02	2,085,230.33	2,230,932.17	2,319,928.70	2,283,366.72	712,657.19
Admin Account	68,882.67	74,021.73	74,098.80	77,054.77	75,840.41	23,670.41
Grant Account	435,966.27	731,569.56	796,761.49	828,545.97	815,488.11	254,520.43
Revenue Total (no	8,719,325.15	8,236,584.78	7,967,614.86	8,285,459.66	8,154,881.11	2,545,204.21
NG911 Fund Interest	64,893.33	57,000.91	48,171.13	41,868.24	36,337.94	29,666.57
CMRS Account Interest	5,916.18	4,942.46	4,058.58	2,876.10	2,470.26	1,931.48
PSAP Account Interest	15,933.15	16,542.96	14,575.60	425.36	868.41	1,026.14
Admin Account Interest	1,461.25	1,301.50	1,066.08	754.93	661.79	525.94
Grant Account Interest	29,501.97	26,026.83	21,904.13	18,801.78	16,568.52	13,357.96
Total Interest	117,705.88	105,814.66	89,775.52	64,726.41	56,906.92	46,508.09
Combined Total:	8,837,031.03	8,342,399.44	8,057,390.38	8,350,186.07	8,211,788.03	2,591,712.30
BD701 Report Total						
w/Interest	8,837,031.03	8,342,399.44	8,057,390.38	8,350,186.07	8,211,788.03	2,591,712.30
Difference:	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES	**July-20**	**August-20**	**September-20**	**October-20**	**November-20**	**December-20**
NG911 Fund Interest	-2,615,169.69	-210,751.08	-1,224,925.34	-2,797,496.25	-115,207.19	-1,232,491.74
CMRS Account Interest	-397,838.09	0.00	0.00	-90,502.16	-91,226.45	0.00
PSAP Account Interest	-4,246,371.10	-3,983,693.48	-3,993,019.11	-3,954,415.97	-4,040,728.69	-3,997,572.33
Admin Account Interest	-76,077.32	-77,691.71	-75,168.03	-71,012.90	-76,314.07	-77,473.17
Grant Account Interest	-863,302.27	-725.00	-525,473.50	-486,455.81	-299,036.50	-443,264.03
Total Expenditures	-8,198,758.47	-4,272,861.27	-5,818,585.98	-7,399,883.09	-4,622,512.90	-5,750,801.27
BD701 Report Total Expend	-8,198,758.47	-4,272,861.27	-5,818,585.98	-7,399,883.09	-4,622,512.90	-5,750,801.27
Difference:	0.00	0.00	0.00	0.00	0.00	0.00

Cash basis of reporting:

REVENUE	January-21	February-21	March-21	April-21	May-21	June-21	Totals
CMRS Wireless	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CMRS (PSAP) Wireless	5,193,795.98	3,165,184.02	3,195,068.11	2,856,300.49	3,223,001.30	3,054,839.72	36,714,214.36
Wireline	606,566.46	427,329.44	458,240.31	413,456.35	415,330.67	465,485.07	5,474,232.78
VoIP	1,228,238.54	710,994.99	782,177.83	745,060.29	804,025.02	741,657.59	9,244,996.57
Prepaid Wireless	646,668.61	445,726.50	1,272,817.50	778,185.35	743,522.60	829,617.89	10,395,288.94
NG 911 Fund	3,519,036.33	2,177,477.96	2,617,201.67	2,197,544.95	2,377,675.25	2,334,449.11	26,250,592.40
Admin Account	116,882.28	72,323.37	86,928.49	72,989.88	78,972.78	77,537.06	899,202.65
Grant Account	1,256,798.69	777,670.69	934,714.88	784,837.49	849,169.74	833,731.83	9,299,775.15
Revenue Total (no	12,567,986.89	7,776,706.97	9,347,148.79	7,848,374.80	8,491,697.36	8,337,318.27	98,278,302.85
NG911 Fund Interest	26,004.53	21,844.43	17,447.95	17,220.13	13,744.57	14,048.05	388,247.78
CMRS Account Interest	1,703.72	1,397.86	1,002.38	867.83	625.08	577.29	28,369.22
PSAP Account Interest	135.36	1,117.14	1,032.67	1,340.76	1,166.44	1,357.83	55,521.82
Admin Account Interest	447.03	398.35	311.24	298.54	237.39	233.68	7,697.72
Grant Account Interest	11,723.34	10,432.80	8,280.82	7,825.42	6,328.49	6,137.69	176,889.75
Total Interest	40,013.98	35,190.58	28,075.06	27,552.68	22,101.97	22,354.54	656,726.29
Combined Total:	12,608,000.87	7,811,897.55	9,375,223.85	7,875,927.48	8,513,799.33	8,359,672.81	98,935,029.14
BD701 Report Total w/Interest	12,608,000.87	7,811,897.55	9,375,223.85	7,875,927.48	8,513,799.33	8,359,672.81	98,935,029.14
Difference:	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES	January-21	February-21	March-21	April-21	May-21	June-21	Totals
NG911 Fund Interest	-5,755,069.03	-416,408.60	-356,037.62	-1,957,427.52	-421,540.60	-3,602,483.30	-20,705,007.96
CMRS Account Interest	-268,942.79	-424,458.48	-465,328.68	-404,195.21	-290,746.14	-244,283.05	-2,677,521.05
PSAP Account Interest	-3,997,090.43	-3,998,607.54	-3,998,607.54	-4,181,355.04	-3,998,607.54	-5,087,805.85	-49,477,874.62
Admin Account Interest	-71,408.32	-72,860.80	-88,868.94	-74,292.04	-100,407.76	-79,233.95	-940,809.01
Grant Account Interest	-114,023.59	-182,426.09	-1,563,377.00	-167,737.23	-1,986,466.62	-883,939.88	-7,516,227.52
Total Expenditures	-10,206,534.16	-5,094,761.51	-6,472,219.78	-6,785,007.04	-6,797,768.66	-9,897,746.03	-81,317,440.16
BD701 Report Total Expen	-10,206,534.16	-5,094,761.51	-6,472,219.78	-6,785,007.04	-6,797,768.66	-9,897,746.03	-81,317,440.16
Difference:	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Cash basis of reporting:						
Revenue	**July-19**	**August-19**	**September-19**	**October-19**	**November-19**	**December-19**
CMRS Wireless	640,474.96	624,531.55	610,275.75	544,846.45	524,639.06	583,723.66
CMRS (PSAP) Wireless	3,629,358.02	3,539,012.09	3,458,229.18	3,087,463.16	2,972,954.72	3,307,767.44
Wireline	651,001.04	763,761.15	879,875.62	635,037.11	591,475.12	595,066.30
VoIP	456,928.78	1,779,813.51	1,089,001.59	958,352.07	1,001,973.89	975,367.60
Prepaid Wireless	1,166,402.91	1,078,474.33	1,137,254.99	933,418.58	974,915.16	863,957.58
NG 911 Fund	734,474.29	873,803.90	805,234.27	1,155,665.13	1,138,185.19	1,186,956.11
Admin Account	66,102.70	78,642.33	72,471.08	62,213.30	61,272.32	63,897.81
Grant Account				327,438.46	322,485.81	336,304.24
Total (no interest)	7,344,742.70	8,738,038.86	8,052,342.48	7,704,434.26	7,587,901.27	7,913,040.74
NG911 Fund Interest	75,178.79	78,596.00	108,991.56	101,651.90	108,419.48	105,053.85
CMRS Account Interest	12,045.76	13,263.93	8,481.51	8,683.72	9,869.57	9,971.61
PSAP Account Interest	34,146.02	37,814.50	2,148.12	5,495.85	8,137.84	9,965.62
Admin Account Interest	2,784.74	2,862.46	2,906.93	2,687.02	2,771.85	2,633.61
Grant Account Interest	39,336.51	39,763.18	57,737.63	49,226.64	50,843.31	49,202.68
Total Interest	163,491.82	172,300.07	180,265.75	167,745.13	180,042.05	176,827.37
Combined Total	7,508,234.52	8,910,338.93	8,232,608.23	7,872,179.39	7,767,943.32	8,089,868.11
BD701 Report Total w/Interest	7,508,234.52	8,910,338.93	8,232,608.23	7,872,179.39	7,767,943.32	8,089,868.11
Difference:	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES	**July-19**	**August-19**	**September-19**	**October-19**	**November-19**	**December-19**
NG911 Fund Interest	-21,085.01	-687,515.79	-108,831.74	-27,680.92	-483,975.31	-86,813.29
CMRS Account Interest	-137,613.04	-500,809.07	-78,524.26	-89,750.24	-213,308.42	0.00
PSAP Account Interest	-4,353,456.68	-4,209,706.59	-4,394,082.08	-4,209,706.59	-4,209,706.59	-4,209,706.59
Admin Account Interest	-67,969.80	-87,325.84	**-68,813.18**	-87,915.27	-76,722.37	-77,680.59
Grant Account Interest	-415,482.99	-767,766.82	-2,485,701.43	-761,468.07	-54,115.37	-490,124.52
Total Expenditures	-4,995,607.52	-6,253,124.11	-7,135,952.69	-5,176,521.09	-5,037,828.06	-4,864,324.99
BD701 Report Total Expend	-4,995,607.52	-6,253,124.11	-7,135,952.69	-5,176,521.09	-5,037,828.06	-4,864,324.99
Difference:	0.00	0.00	0.00	0.00	0.00	0.00

Cash basis of reporting:							
Revenue	January-20	February-20	March-20	April-20	May-20	June-20	Totals
CMRS Wireless	572,880.09	559,622.37	0.00	0.00	0.00	-132,623.65	4,528,370.24
CMRS (PSAP) Wireless	3,246,320.54	3,171,193.47	3,536,245.83	3,446,250.84	3,712,022.35	2,950,362.29	40,057,179.93
Wireline	651,442.82	485,936.78	594,382.37	485,272.50	642,545.28	446,757.26	7,422,553.35
VoIP	962,702.90	905,725.47	969,988.58	922,936.00	982,492.54	703,258.20	11,708,541.13
Prepaid Wireless	1,060,931.45	862,004.01	1,128,199.90	1,008,626.51	899,015.73	297,227.91	11,410,429.06
NG 911 Fund	1,218,552.94	1,133,424.68	1,274,275.27	1,199,454.95	1,275,760.32	1,939,739.32	13,935,526.37
Admin Account	65,598.76	60,449.32	62,917.35	59,223.10	62,990.67	43,080.66	758,859.40
Grant Account	345,256.65	377,808.45	398,211.02	374,829.67	398,675.11	1,128,361.39	4,009,370.80
Total (no interest)	8,123,686.15	7,556,164.55	7,964,220.32	7,496,593.57	7,973,502.00	7,376,163.38	93,830,830.28
NG911 Fund Interest	106,071.96	104,965.54	97,662.42	109,307.11	90,485.71	84,294.03	1,170,678.35
CMRS Account Interest	10,838.93	11,200.80	11,161.75	12,914.61	10,509.57	9,760.86	128,702.62
PSAP Account Interest	12,358.49	14,689.75	15,331.97	21,101.33	19,408.08	21,124.91	201,722.48
Admin Account Interest	2,592.62	2,506.35	2,279.88	2,568.64	2,046.15	1,924.46	30,564.71
Grant Account Interest	48,603.68	47,129.78	43,962.49	51,116.14	41,462.42	38,961.17	557,345.63
Total Interest	180,465.68	180,492.22	170,398.51	197,007.83	163,911.93	156,065.43	2,089,013.79
Combined Total	8,304,151.83	7,736,656.77	8,134,618.83	7,693,601.40	8,137,413.93	7,532,228.81	95,919,844.07
BD701 Report Total w/Interest	8,304,151.83	7,736,656.77	8,134,618.83	7,693,601.40	8,137,413.93	7,532,228.81	95,919,844.07
Difference:	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXPENDITURES	January-20	February-20	March-20	April-20	May-20	June-20	Totals
NG911 Fund Interest	-53,423.60	-703,194.37	-3,492,056.58	-65,035.69	-2,979,044.93	-1,882,261.74	-10,590,918.97
CMRS Account Interest	-149,594.37	0.00	0.00	0.00	-220,734.59	-1,472,025.07	-2,862,359.06
PSAP Account Interest	-4,209,706.59	-4,209,706.59	-4,209,706.59	-4,209,706.59	-4,243,180.00	-4,715,671.19	-51,384,042.67
Admin Account Interest	-75,066.86	-86,311.56	-104,539.81	-91,858.94	-87,312.20	-62,228.00	-973,744.42
Grant Account Interest	-430,766.65	-107,034.77	-248,224.17	-474,317.63	-919,002.84	-1,597,929.63	-8,751,934.89
Total Expenditures	-4,918,558.07	-5,106,247.29	-8,054,527.15	-4,840,918.85	-8,449,274.56	-9,730,115.63	-74,563,000.01
BD701 Report Total Expend	-4,918,558.07	-5,106,247.29	-8,054,527.15	-4,840,918.85	-8,449,274.56	-9,730,115.63	-74,563,000.01
Difference:	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4   GOALS AND OBJECTIVES FOR 911 SERVICE

At the end of 2021 the ESInet will serve 118 of 127 PSAPs in the state. The remaining PSAPs are scheduled to join during the first part of 2022, culminating a three-year build and implement phase of the ESInet. The Board and staff are transitioning to the "run and manage" phase of the ESInet, an operational phase that exist indefinitely. During the "run and manage" phase the Board and staff will also be required to consider emerging technologies, services, and operational methodologies as additional services on the ESInet.

Goals and objectives are important in strategic planning because they turn the Board's vision for NG911 into specific measurable targets or steps. Goals build on the vision and mission by defining and prioritizing the broad direction in response to specific priorities. Goals describe the general accomplishments to be achieved if the vision is to be achieved. Objectives articulate specific steps that are needed to complete each goal and include the owner-agency and the planned timeline. Objectives should be SMART: Specific; Measurable; Actionable; Realistic; and Time-Bound.

	GOAL 1		
Provide and pay for a statewide hosted Next Generation 911 system			
Objective Number	**Description**	**Ownership**	**Timeline**
1	Transition the NG911 system from the build and implementation phase to the operation and management (run and manage) phase for governance, maintenance, and interoperability	911 Board 911 Board Staff *Technology Committee Goal 1A & 1B*	Ongoing
2	Implement a comprehensive Cybersecurity program for the fundamental security of the ESInet, interconnected networks, software, applications, and PSAP users of the ESInet.	911 Board 911 Board Staff *Technology Committee Goal 4*	Ongoing
3	Explore and investigate future possible interconnection of PSAP users of the ESInet with other ESInet users, with entities and agencies not on the ESInet, and with other networks after complete acceptance of the NG911 System from the NG9 1 1 System Vendor	911 Board Staff *Technical Committee Goal 2*	Ongoing
4	Sustain the statewide GIS database that is used as a core service of the NG911 System, to be based on the NENA i3 Standard and other NENA NG911 Standards as they relate to GIS	911 Board 911 Board Staff GIS Vendor	Ongoing
5	Facilitate the development, framework, and timeline for statewide data sharing between PSAPs	911 Board 911 Board Staff PSAPs	Ongoing

GOAL 2			
Manage Board staff to provide for the reorganization and expansion of job responsibilities to better serve PSAPs			
Objective Number	**Description**	**Ownership**	**Timeline**
1	PSAP Review – The lack of volunteer peer reviewers has adversely impacted the PSAP review process. Consideration will be given to the best methods of resuming PSAP reviews following the COVID-19 pandemic and to sustaining continuity and effectiveness of PSAP reviews. Methods may include transitioning the PSAP review process to Board staff, or other agents	911 Board 911 Board Staff *Standards Committee Goal 1 & 2*	2022
2	Continue evaluating the responsibilities required of the administrative, technical, and NMAC staff in providing services to PSAPS and other network partners and the role of the Board in future development	911 Board 911 Board Staff	Ongoing

GOAL 3			
Amend state law (G.S. §143B-1400 et seq.) to reflect changes in 911 service, PSAP operations, and Board responsibilities in the Next Generation 911 environment			
Objective Number	**Description**	**Ownership**	**Timeline**
1	In consideration of the 911 Fee Diversion Rules (47 CFR 9.1 et seq.) set forth by the Federal Communications Commission, the Board will evaluate acceptable expenses, as identified in §9.23, and the current state law to identify potential legislative initiatives	911 Board 911 Board Staff *Funding Committee* *Goal 1*	2022
2	Identify changes in technologies that improve or enhance 911 call taking and whether legislative initiatives or regulations may be needed to implement such new technologies	911 Board 911 Board Staff *Technical Committee* *Goal 3*	Ongoing

GOAL 4			
Develop a revenue and funding model for 911 service, NG911 service, PSAPs, and 911 Board operations			
Objective Number	**Description**	**Ownership**	**Timeline**
1	Continue reviewing the funding model, taking into consideration the ongoing implementation of new and emerging 911 technologies.	911 Board 911 Board Staff *Funding Committee* *Goal 3*	Ongoing

GOAL 5			
Implement outreach and public education programs to keep the public, NG9 1 1 stakeholders, and industry partners informed about the Board's NG911 efforts			
Objective Number	**Description**	**Ownership**	**Timeline**
1	Improve communications between the Board, PSAPs, public safety officials, and industry partners to ensure that all stakeholders are kept informed and that the information is provided in a timely manner	911 Board 911 Board Staff *Education Committee Goal 1*	Ongoing
2	Use the CRM to create a database of PSAP profile elements that can be shared with PSAP Managers to assist with continuity of operation planning and other PSAP operations	911 Board 911 Board Staff PSAPs	2022
3	Explore strategies and develop procedures, implement, and provide PSAP outreach to assist with management of low/high PSAP fund balances using the financial planning tool.	911 Board 911 Board Staff *Funding Committee Staff Goal*	Ongoing
4	Expand the Recruitment Public Service Announcement initiative based on data collected during the pilot program.	911 Board Staff *Education Committee Goal 3*	Ongoing
5	Explore additional methods for public outreach utilizing nontraditional media outlets.	911 Board Staff *Education Committee Goal 4*	Ongoing
6	Explore the feasibility of creating a voluntary telecommunicator training certificate and/or certification in collaboration with the Community College system	911 Board Staff *Education Committee Goal 2*	2022

GOAL 6			
Facilitate the consolidation or regional collaboration of PSAPs			
Objective Number	**Description**	**Ownership**	**Timeline**
1	Explore ways to further expand the NG911 system in support of PSAPs and other public safety partners	911 Board 911 Board Staff PSAPs *Funding Committee* *Goal 4*	Ongoing
2	Identify consolidation alternatives available in NG911 operations, e.g., co-locations, virtualization, shared systems, etc	911 Board 911 Board Staff PSAPs *Funding Committee* *Goal 2*	Ongoing

GOAL 7			
Explore and investigate the interconnection of PSAP users of the ESInet with other ESInet users and with other partners and networks serving public safety			
Objective Number	**Description**	**Ownership**	**Timeline**
1	Transition the NG911 system from the build and implementation phase to the operation and management (run and manage) phase for governance, maintenance, and interoperability	911 Board Staff	Ongoing
2	Explore ways to further expand the NG911 system in support of PSAPs and other public safety partners	911 Board 911 Board Staff	Ongoing
3	Work with NG911 system vendors to determine and define technical requirements, responsibilities, conditions, costs, and Service Level Agreements (SLAs) for future interconnectivity with the ESInet	911 Board 911 Board Staff	Ongoing
4	Facilitate a plan for integration methodologies and standards for extension of calls to non-traditional PSAP environments to ensure the integrity of the ESInet, to ensure integrity, security, and regulatory standards and align with the Statewide Communications Interoperability Plan (SCIP).	911 Board 911 Board Staff *Technology Committee Goal 2*	2022
5	Collaborate with other State agencies to coordinate public safety projects, e.g., systems, services, and grants to minimize duplicate efforts and ensure all jurisdictions can provide the same of level of service to 911 callers	911 Board 911 Board Staff	Ongoing

GOAL 8			
Prioritize mental health/wellness programs for Telecommunicators			
Objective Number	**Description**	**Ownership**	**Timeline**
1	Collaborate with public safety associations (i.e., APCO, NENA) to increase the awareness and place importance on the mental health and wellness of telecommunicators	911 Board 911 Board Staff PSAPs	2022
2	Facilitate a stakeholder working group to develop a strategic plan for the Board and staff's role in facilitating awareness and educational opportunities in telecommunicator mental health and wellness	911 Board 911 Board Staff PSAPs	2022

Goal 9			
Explore the feasibility of establishing PSAP levels based on operation and technical capabilities			
Objective Number	**Description**	**Ownership**	**Timeline**
1	Facilitate stakeholder discussions to assist in establishing PSAP levels of service	911 Board Staff *Standards Committee Goal 3*	Ongoing

5   MECHANISM FOR MANAGING AND COORDINATING NORTH CAROLINA'S 911 SYSTEM

The purpose of this section is to provide a brief description of the mechanisms that are in place to ensure that local, regional, and state-level system functions are coordinated, mutually supportive, comprehensive in scope, and efficient in operation.

Board staff are responsible for executing the Plan and taking the lead in updating the Plan as progress is made on achieving the Board's goals. Goals and objectives that are achieved should be documented, and any new objectives should be added.

The Board has allocated its resources to successfully implement its goals, with the focus on NG911. The Board is also held accountable for its activities and operations. The Board is required to report to the Legislature every two years and is subject to audit by the State Auditor. As an agency of state government, the Board is subject to state open meetings laws and the Public Records Act. Rulemaking takes place under the Administrative Procedures Act, which involves a public process that allows stakeholder and public input.

APPENDIX

Appendix A—Document Change History

Version	Publication Date	Description of Change

Appendix B—North Carolina Population by County: 2020

County Name	2020 Population	Growth Rate Percentage Since 2010
Wake County	1,152,740	27.11
Mecklenburg County	1,143,570	23.86
Guilford County	546,308	11.58
Forsyth County	388,453	10.55
Cumberland County	339,667	3.81
Durham County	330,506	21.80
Buncombe County	265,055	11.02
Union County	247,917	22.67
New Hanover County	238,907	17.52
Gaston County	228,327	10.78
Cabarrus County	226,165	26.66
Johnston County	222,633	31.21
Onslow County	199,984	7.01
Iredell County	188,754	18.14
Pitt County	183,076	8.42
Alamance County	175,499	15.89
Davidson County	170,111	4.47
Catawba County	161,279	4.23
Brunswick County	154,700	43.15
Orange County	149,468	11.56
Randolph County	144,503	1.77
Rowan County	144,008	4.10
Harnett County	139,256	20.30
Robeson County	128,107	-4.75
Wayne County	122,919	0.03
Henderson County	119,251	11.56
Moore County	105,030	18.55
Craven County	101,741	-2.33
Cleveland County	98,803	0.90
Nash County	94,706	-1.13
Rockingham County	91,796	-1.99
Burke County	90,645	0.07
Lincoln County	90,149	15.38
Wilson County	82,619	1.63
Caldwell County	82,482	-0.65
Chatham County	77,156	20.85
Franklin County	73,805	21.32
Surry County	71,431	-3.18
Carteret County	69,543	4.26
Wilkes County	68,110	-1.67
Rutherford County	67,537	-0.30
Pender County	65,146	24.29
Stanly County	64,058	5.74
Sampson County	63,903	0.58
Haywood County	63,171	7.19
Lee County	62,921	8.72
Granville County	61,371	6.41
Duplin County	58,241	-0.72
Watauga County	56,463	10.77
Hoke County	56,312	18.56

County Name	2020 Population	Growth Rate Percentage Since 2010
Lenoir County	55,867	-6.09
Columbus County	54,886	-5.36
Edgecombe County	50,448	-10.90
Halifax County	48,762	-10.48
Beaufort County	46,870	-1.99
McDowell County	46,338	2.74
Stokes County	45,751	-3.36
Richmond County	44,711	-4.13
Jackson County	44,614	10.52
Vance County	44,335	-2.11
Davie County	43,412	5.23
Pasquotank County	40,306	-0.79
Person County	39,598	0.47
Yadkin County	38,039	-1.03
Alexander County	37,829	1.60
Dare County	37,813	11.27
Macon County	37,026	9.03
Scotland County	34,967	-3.04
Transylvania County	34,809	5.21
Bladen County	31,864	-9.43
Currituck County	29,257	23.58
Cherokee County	29,098	6.06
Ashe County	27,411	0.67
Montgomery County	27,365	-1.31
Anson County	24,398	-9.14
Hertford County	23,275	-6.01
Caswell County	22,544	-5.08
Martin County	22,000	-10.23
Madison County	21,935	5.57
Greene County	20,995	-1.24
Polk County	20,836	1.76
Warren County	19,555	-6.82
Northampton County	19,053	-13.55
Bertie County	18,629	-12.31
Yancey County	18,461	3.68
Avery County	17,615	-1.03
Mitchell County	14,900	-3.95
Swain County	14,315	2.21
Chowan County	13,699	-7.05
Perquimans County	13,627	1.09
Pamlico County	12,912	-1.50
Gates County	11,560	-4.97
Clay County	11,445	7.89
Camden County	11,249	12.39
Washington County	11,202	-14.61
Alleghany County	11,135	-0.02
Jones County	9,031	-10.96
Graham County	8,401	-5.26
Hyde County	4,759	-18.10
Tyrrell County	3,818	-13.5221

Appendix C—NENA NG911 Standards and Best Practices Reference Chart

	DATA STRUCTURES DOCUMENTS (including NG911)	
02-010	Standard Legacy Data Formats For 9-1-1 Data Exchange GIS Mapping	2011/03/28
02-501	Wireless (Pre-XML) Static and Dynamic ALI Data Content Information Document	2006/10/16
02-503	XML Namespaces Information Document	2007/02/23
04-005	ALI Query Service Standard	2006/11/21
71-001	NG9-1-1 Additional Data Standard	2009/09/17
NENA-STA-004.1-2014	NENA Next Generation United States Civic Location Data Exchange Format (CLDXF)	2014/03/23
NENA-STA-008.2-2014 (orig. 70-001)	NENA Registry System (NRS) Standard	2014/10/06
NENA/APCO-INF-005	NENA/APCO Emergency Incident Data Document (EIDD) Information Document	2014/02/21
	DATA MANAGEMENT DOCUMENT (including NG911)	
02-011	Data Standards for Local Exchange Carriers, ALI Service Providers & 9-1-1 Jurisdictions	2012/05/12
02-013	Data Standards for the Provisioning and Maintenance of MSAG Files to VDBs and ERDBs	2008/06/07 Reviewed 9/12/2014
02-014	GIS Data Collection and Maintenance Standards	2007/06/17
02-015	Standard for Reporting and Resolving ANI/ALI Discrepancies and No Records Found for Wireline, Wireless and VoIP Technologies	2009/06/06
02-502	NENA Company ID Registration Service Information Document	2008/11/12
06-001	Standards for Local Service Provider Interconnection Information Sharing	2004/08/01
71-501	Synchronizing Geographic Information System Databases with MSAG & ALI Information Document	2009/09/08
71-502	An Overview of Policy Rules for Call Routing and Handling in NG9-1-1 Information Document	2010/08/24
NENA-INF-011.1-2014	NENA NG9-1-1 Policy Routing Rules Operations Guide	2014/10/06
NENA-INF-014.1-2015	NENA Information Document for Development of Site/Structure Address Point GIS Data for 9-1-1	2015/09/18
NENA-STA-003.1.1-2014	NENA Standard for NG9-1-1 Policy Routing Rules	2014/12/01
NENA-REQ-002.1-2016	NENA Next Generation 9-1-1 Data Management Requirements	2016/03/10
	NG911 TRANSITION PLANNING DOCUMENTS	
NENA-INF-008.2-2014 (originally 77-501)	NG9-1-1 Transition Plan Considerations Information Document	2013/11/20

SECURITY DOCUMENTS		
04-503	Network/System Access Security Information Document	2005/12/01
75-001	Security for Next-Generation 9-1-1 Standard	2010/02/06
75-502	Next Generation 9-1-1 Security Audit Checklist Information Document	2011/12/14
VOICE OVER INTERNET PROTOCOL (VoIP) DOCUMENTS		
08-001	Interim VoIP Architecture for Enhanced 9-1-1 Services (i2) Standard	2010/08/11
08-503	VoIP Characteristics Information Document	2004/06/10
08-504	VoIP Standards Development Organization Information Document	2004/06/08
57-503	Procedures for Notification of ERDB & VPC Operators of ESN Changes by 9-1-1 Administrator Information Document	2008/01/08
58-502	VoIP Funding and Regulatory Issues Information Document	2006/06/06
NEXT GENERATION 9-1-1 (NG911) DOCUMENTS		
08-002	Functional and Interface Standards for Next Generation 9-1-1	2007/12/18
08-003	Detailed Functional and Interface Standards for the NENA i3 Solution	2011/06/14
08-501	Interface between the E9-1-1 Service Provider Network and the Internet Protocol (IP) PSAP Information Document	2004/06/15
08-505	Methods for Location Determination to Support IP-Based Emergency Services Information Document	2006/12/21
08-506	Emergency Services IP Network Design for NG9-1-1 Information Document	2011/12/14
08-751	NENA i3 Requirements Document	2006/09/28
08-752	Location Information to Support IP-Based Emergency Services Requirements Document	2006/12/21
57-750	NG9-1-1 System and PSAP Operational Features and Capabilities Requirements Document	2011/06/14
NENA-INF-003.1-2013	Potential Points of Demarcation in NG9-1-1 Networks Information Document	2013/03/21
NENA-INF-006.1-2014	NG9-1-1 Planning Guidelines Information Document	2014/01/08
NENA-INF-009.1-2014	Requirements for a National Forest Guide Information Document	2014/08/14
NENA/APCO-REQ-001.1.1-2016	NENA/APCO NG9-1-1 PSAP Requirements Document	2016/01/15
WIRELESS 9-1-1 INTEGRATION DOCUMENTS		
57-001	Wireless E9-1-1 Overflow, Default, and Diverse Routing Standard & A PSAP Manager's Guide to GIS & Wireless 9-1-1	2004/11/18
57-002	E9-1-1 Wireless Maintenance Call Routing & Testing Validation Standard including Call Routing & Testing Validation Worksheet & Sample Non-Disclosure Agreement	2007/06/09

Tab 15 f)
Other Board Work Session Matters for Discussion
(Roll Call Vote if Applicable)

Adjourn