North Carolina 911 Board

Biennial Report to the
Governor
Joint Legislative Commission on Governmental Operations
Revenue Laws Study Committee

February 2013

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Executive Summary

Background of the North Carolina 911 Board

On August 19, 2007, SL 2007-383 was enacted creating the 911 Fund and the North Carolina 911 Board ("Board") to administer that fund. Members of the Wireless 911 Board created under Article 2 of Chapter 62A serve as the initial twelve members to the seventeen member 911 Board. The remaining five members were appointed by the Governor, President Pro Tempore of the Senate, and the Speaker of the House of Representatives. Seven Board members represent the public sector of local government, nine members represent the private sector of the telecommunications industry and the chair of the Board is the State Chief Information Officer or the State Information Officer's designee.

On July 23, 2010, SL 2010-158 was enacted which included a realignment of the North Carolina 911 Board members. One member representing a CMRS (Commercial Mobile Radio Service) was eliminated and replaced by a fire chief upon recommendation of the North Carolina Firemen's Association. This appointment is made by the Speaker of the House who has a total of six appointments.

One member representing NENA (National Emergency Number Association) was eliminated and replaced by a rescue or Emergency Services Chief upon recommendation of the North Carolina Association of Rescue and Emergency Medical Services. This appointment is made by the President Pro Tempore who has a total of six appointments.

NENA continues to have one representative on the Board and the CMRS providers have three representatives.

The Board now has eight members that represent the public sector and eight members that represent the private sector. The chair of the Board is the State Chief Information Officer's designee.

The 911 fee for all devices (wireline, wireless & VoIP) was reduced to $.60 in July 2010 and remains at $.60 for this reporting period.

SL 2011-122 was enacted on June 13, 2011 which ended the moratorium on collection of the 911 fee for prepaid wireless service. The methodology for collection will be a retail point of sale that begins July 1, 2013. Fees will be collected by retailers and remitted to the Dept. of Revenue, and the Dept. will retain some funds before remitting the balance to the 911 Fund.

A PSAP Grant Fund continues to award grants to PSAPs in rural and other high-cost areas. Funds for these grants come from excess amounts in the wireless carrier cost recovery fund and in 911 Fund designated for PSAPs. (§62A-47)

Funds distributed for wireless carrier cost recovery may only be used for the reimbursement for the compliance with the requirements of enhanced 911 services.

The 911 Board created a new funding model in 2010 that took effect July 1, 2011. The new model is based on a five year rolling average of eligible 911 expenditures made by each PSAP. (§62A-46)

Funds distributed to primary PSAPs may be used only for the costs of establishing a 911 emergency telephone system. Also included are expenditures for equipment located within the 911 center that is used to dispatch emergency call information.

Purpose of the North Carolina 911 Board

- To develop the 911 State Plan. In developing and updating the plan, the 911 Board must monitor trends in voice communications service technology and in enhanced 911 service technology, investigate and incorporate GIS mapping and other resources into the plan, and formulate strategies for the efficient and effective delivery of enhanced 911 service.
- To administer the 911 Fund and the monthly 911 service charge authorized by G.S. 62A-43.
- To distribute revenue in the 911 Fund to CMRS providers and PSAPs in accordance with this Article and advise CMRS providers and PSAPs of the requirements for receiving a distribution from the 911 Fund.
- To establish policies and procedures to fund advisory services and training for PSAPs; to set operating standards for PSAPs; and to provide funds in accordance with these policies, procedures, and standards.
- To investigate the revenues and expenditures associated with the operation of a PSAP to ensure compliance with restrictions on the use of amounts distributed from the 911 Fund.
- To make and enter into contracts and agreements necessary or incidental to the

performance of its powers and duties under G.S. 62A Article 3 and to use revenue available to the 911 Board under G.S. 62A-44 for administrative expenses to pay its obligations under the contracts and agreements.

- To use funds available to the 911 Board under G.S. 62-47 to pay its obligations incurred for statewide 911 projects.
- To accept gifts, grants, or other money for the 911 Fund.
- To undertake its duties in a manner that is competitively and technologically neutral as to all voice communications service providers.
- To design, create, or acquire printed or Web-based public education materials regarding the proper use of 911.
- To adopt rules to implement G.S. 62A Article 3. This authority does not include the regulation of any enhanced 911 service, such as the establishment of technical standards for telecommunications service providers to deliver 911 voice and data.

Accomplishments

- ✓ The Board met eleven times during 2011, twelve times in 2012 and conducted one work session in 2012 with focus on PSAP Fund distribution methodology and eligible use of 911 funds by PSAPs.
- ✓ Convened a 911 Study Group with representatives selected by NCLM, NCACC, APCO, and NENA to provide input for the biennial update to the Comprehensive Statewide 911 Plan.
- ✓ Provided Financial Training Seminars to local governments at multiple locations throughout the state explaining statutory requirements for eligible use of 911 funds.
- ✓ Established draft operational standards for PSAPs and submitted them to OSBM for review prior to submission to the NCOAH Rules Review Commission for review.
- ✓ Developed and implemented minimum telecommunicator qualifications and training standards.
- ✓ Developed a list of training classes which are approved for payment using 911 funds.
- ✓ Partnered with the National Center for Missing and Exploited Children to provide critical training to every 911 telecommunicator in the state for responding to such incidents.
- ✓ Funded classes at the 2011 and 2012 annual conferences of the North Carolina chapters of NENA (the National Emergency Number Association) and APCO (the Association of Public Safety Communications Officials) to reduce the financial burdens placed upon the individual PSAPs which sent attendees.
- ✓ Completed the first statewide orthography project in partnership with the North Carolina Center for Geographic Information Analysis (CGIA), providing up to date orthographic imagery to all 100 counties in the state (and the Eastern Band of the Cherokee Indians), benefitting all primary PSAPs in the state at no additional cost to them by enabling their governing entities to update their GIS for both 911 and non-911 applications.

- ✓ Initiated the maintenance phase of that statewide orthophotography project, again in partnership with the North Carolina Center for Geographic Information Analysis (CGIA), developing a rolling update process through which one quarter of the state's counties is flown every year to acquire updated orthophotographic imagery, ensuring no county's GIS data is ever more than four years old.
- ✓ Initiated a project to purchase and provision a consistent statewide 911 emergency call tracking system that collects, collates, and stores E911 telephonecall detail data such as the total number of calls, call duration, time to dispatch and other relevant information at every primary PSAP in the state, paid for by the 911 Board and at no additional cost to the PSAPs. The project is still ongoing.
- ✓ Provided $ 31,149,792 in grant funding to 9 PSAPs for projects which included consolidation of multiple PSAPs into a single PSAP serving multiple jurisdictions, individual PSAP hardware/software enhancement or replacement, and regional initiatives providing for shared use of the components that support E-911 among PSAPs, such as equipment, resources, and/or co-location of technology. Such grants facilitated improvements that would not have been fiscally feasible.

Action Plan for 2013

- Update the Comprehensive State 911 Plan
- Solicit vendors to build an IP network and fund PSAPs to implement NG-911
- Better educational process (marketing) to proactively tell our story, who we are, what we do, how and why to the public and to the General Assembly
- Conduct monthly 911 meetings across the state and seek public input
- Continue the rulemaking process to establish PSAP operating standards
- Continue to review and update the list of eligible expenditures which 911 funds may be used to pay for
- Continue to assess and update new training classes which 911 funds may be used to pay for
- Continue to monitor and adjust as necessary the PSAP funding model
- Continue to make grant funding available to eligible primary PSAPs
- Continue the statewide project to collect, collate, and analyze E911 telephone call data at every primary PSAP

- Provide at least one training program available to all PSAPs
- Update assessment and inventory of PSAP technology

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The North Carolina 911 Board was created in January 2008 as mandated by §62A-41. The current members of the Board, their appointing authority, organization represented and term expiration are:

Board Member	*Appointing Authority*	*Representing*	*Term Expires*
George Bakolia	Statutory	Board Chair, State CIO's Designee	n/a
Jason Barbour	Governor	National Emergency Number Association (NENA)	2016
Darryl Bottoms	Senate President Pro-Tem	Chief of Police	2016
David Corn	Senate President Pro-Tem	Local Exchange Carrier with less Than 200,000 Lines	2014
Christi Derreberry	Senate President Pro-Tem	CMRS Provider (Sprint-Nextel)	2014
Margie Fry	Governor	Voice over Internet Protocol Provider (Time-Warner)	2016
Andrew Grant	Governor	League of Municipalities	2014

Len D. Hagaman	Speaker of the House	Sheriff	2014
Rick Isherwood	Speaker of the House	CMRS Provider (Verizon Wireless)	2016
Benny Nichols	Speaker of the House	Fire Chief	2014
Neal Sizemore	Speaker of the House	Association of Public Safety Communications Officials (APCO)	2014
Robert B. Smith	Speaker of the House	Local Exchange Carrier (AT&T)	2016
Jimmy Stewart	Senate President Pro-Tem	Rescue or EMS Chief	2014
Slayton Stewart	Senate President Pro-Tem	CMRS Provider (Carolina West Wireless)	2014
Laura Sykora	Senate President Pro-Tem	Local Exchange Carrier (Centurylink)	2016
Jean Thaxton	Speaker of the House	Local Exchange Carrier with Less than 50,000 Lines (Randolph Telephone)	2016
Lee Worsley	Governor	NCACC	2016

The Board is housed in the Office of Information Technology Services and is staffed by four full-time staff members and receives legal counsel from the Department of Justice. Staff members and counsel are:

Tina Bone	Network Specialist
Richard Bradford	Special Deputy Attorney General
David Dodd	Network Technician
Marsha Tapler	Financial Analyst
Richard Taylor	Executive Director

Funding for the administration of the 911 Board comes completely from a 1% fee deducted from the total revenues remitted to the Board by the Voice Communication

Providers. For the fiscal year ending June 30, 2011, total revenues for the 911 Board Administrative Fund were $ 770,242.31. For the fiscal year ending June 30, 2012, total revenues for the 911 Board Administrative Fund were $ 718,909.67.

Budgeted expenses for the fiscal year 2011 were $ 458,919.00.

Budgeted expenses for the fiscal year 2012 were $ 694,742.00.

As of June 30, 2012, the available 911 Board Administrative Fund balance was $ 2,534,287.71.

II. Purpose of the North Carolina 911 Board

- To develop a 911 State Plan. In developing and updating the plan, the 911 Board must monitor trends in voice communications service technology and in enhanced 911 service technology, investigate and incorporate GIS mapping and other resources into the plan, and formulate strategies for the efficient and effective delivery of enhanced 911 service.

In May of 2010 the 911 Board approved and submitted a comprehensive Statewide 911 Plan to the Joint Legislative Committee on Governmental Operations, the Revenue Laws Study Committee, and the Joint Legislative Utility Review Committee (Addendum 2). During 2012 the 911 Board convened a 911 Study Group to review and update that plan. Study group participants were recommended by NCLM, NCACC, APCO, and NENA, to include representatives from local governments' IT, Fire, Rescue and EMS departments as well as a Sheriff and a Police Chief. The study group met several times through the year and participated in a work session with the 911 Board on December 6, 2012. It examined new technologies applicable to E911, looking at both national and statewide trends. Although an updated plan is only now being drafted, its completion is expected within the near future.

- To administer the 911 Fund and the monthly 911 service charge authorized by §62A-43.

The 911 Board employs one fulltime financial analyst to administer the 911 fund and works in conjunction with the fiscal department of ITS regarding both remittances and expenditures from both the PSAPs and the CMRS providers.

Remittances are monitored on a weekly basis to ensure all providers are in compliance. There have been only minimal instances of delinquent remittances and each has been satisfactorily resolved.

Revenues received from Voice Communications Providers are classified into three categories, Wireless, Wireline and VoIP. For FY2011 ending June 30, 2011, total revenues received from the total number of providers in each category are:

• 48	Wireless providers remitting	$ 45,053,467
• 103	Wireline providers remitting	22,819,346
• 47	VoIP providers remitting	5,757,974

Total 911 Revenues for the FY 2011 $ 73,630,787

For FY2012 ending June 30, 2012, total revenues received from the total number of providers in each category are:

• 48	Wireless providers remitting	$ 43,798,432
• 94	Wireline providers remitting	19,975,337
• 51	VoIP providers remitting	6,395,279

- Total 911 Revenues for the FY 2012 $ 70,169,048

Also for the period ending June 30, 2012, all Voice Communication Providers are current with their remittances.

- To distribute revenue in the 911 Fund to CMRS providers and PSAPs and advise CMRS providers and PSAPs of the requirements for receiving a distribution from the 911 Fund.

Cost recovery for Commercial Mobile Radio Service (CMRS) providers (wireless carriers) per §62A-45 continued from policies and procedures instituted by the North Carolina 911 Board based on cost recovery plans filed by each carrier. Carriers are required to submit sworn invoices for eligible recurring and nonrecurring costs for complying with the requirements of enhanced 911 services in order to receive reimbursement.
Of the 48 wireless providers remitting the 911 fee, seven are seeking cost recovery from the 911 fund. For the FY 2011, $ 8,890,666 was paid to CMRS providers for cost recovery. For the FY 2012, 8,565,434 was paid to CMRS providers for cost recovery.

The following wireless carriers are receiving cost recovery funds:

ATT
Atlantic Telephone Membership
Carolina West Wireless
Cricket
North State Communications
Sprint-Nextel
US Cellular

As of June 30, 2012, the funds available in the CMRS Cost Recovery Fund, with interest, were $ 2,453,121.56

G.S. §62A-46.(a)(1) states that “The Board must determine a method for establishing distributions that is equitable and sustainable and that ensures distributions for eligible

operating costs and anticipated increases for all funded PSAPs. The Board must establish a formula to determine each PSAP's base amount."

The Board approved a revised PSAP fund distribution method on December 7, 2010 to be effective July 1, 2011. This method distributed funds to eligible PSAPs based on an average of the most recent five years of eligible 911 expenditures. Each year going forward, the oldest expenses would be removed from the average and the most current year added, creating a "rolling average.

Each PSAP was notified by December 31, 2010 of the new funding amounts and were given the opportunity to request a reconsideration of the allocated amounts if the PSAP believed the proposed amount to not be adequate to provide sustainable funding for the fiscal year.

In reviewing the annual revenue/expenditure reports from the PSAPs, the 911 Board staff noted that at the end of the fiscal year of June 30, 2011, PSAP Fund Balances (the amount that PSAPs have on hand locally) totaled over $108.6 million.

Twenty-nine PSAPs expressed interest in a funding reconsideration for FY2012, twenty made formal requests and four were given an increase from the proposed amount after careful review of past expenditures and fund balances within the individual PSAP.

As of June 30, 2012, the North Carolina 911 Board was disbursing 911 funds to 125 PSAPs in North Carolina each month, including the Eastern Band of the Cherokee Indians. The primary PSAPs located in Burke County, Morganton Police Dept. and Valdese Fire Dept, are allocated funds from the 911 fund but are actually collected and disbursed by Burke County. The same is true in Granville County where a second primary PSAP is located in Butner. Funds are received by Granville County and then disbursed to the Butner PSAP.

A list of the individual PSAPs and the new funding amounts as compared to the previous amounts received based on the 2008 PSAP funding model can be found in Addendum 1.

As of June 30, 2011, $ 63,152,400 has been disbursed to the 125 primary PSAPs for the fiscal year ended.

As of June 30, 2012, $ 47,976,904 has been disbursed to the 125 primary PSAPs for the fiscal year ended.

As of June 30, 2012, the funds available in the PSAP Fund, with interest, were $ 2,662,187.99.

- To establish policies and procedures to fund advisory services and training for PSAPs and to provide funds in accordance with these policies and procedures; to set operating standards for PSAPs; and to provide funds in accordance with these policies, procedures, and standards.

During this biennium the 911 Board has adapted its policies and procedures regarding training, expanding the list of classes eligible for payment using 911 funds and sponsoring several training classes offered to PSAPs at no cost to them (Addendum 3). The Board has also added a staff Network Analyst to provide technological advisory services to PSAPs. Draft operating standards have been completed and amended, and are now going through the rulemaking process (Addendum 4).

- To investigate the revenues and expenditures associated with the operation of a PSAP to ensure compliance with restrictions on the use of amounts distributed from the 911 Fund.

The 911 Board policies and procedures require annual reporting of PSAP revenues and expenditures. Reporting is done on a fiscal year basis to coincide with local government operations. Reporting by finance officers is done on a simple form which requests the name of each vendor, product or service purchased and the amount paid from 911 fees.

- To make and enter into contracts and agreements necessary or incidental to the performance of its powers and duties under G.S. 62A Article 3 and to use revenue available to the 911 Board under G.S. 62A-44 for administrative expenses to pay its obligations under the contracts and agreements.

During this biennium the 911 Board has entered into contracts with local governments which have received grant funding from the Board, meeting all its obligations under the contracts and agreements.

For FY2011 those local governments receiving grants and entering into contracts with the 911 Board were:

PSAP	Grant Amount	Project
Rockingham County	$ 7,826,000	PSAP Consolidation w/Eden, Reidsville & Rockingham Co
Burke County EOC	7,280,630	PSAP Consolidation w/Morganton, Valdese & Burke Co
Perquimans County	279,460	Enhancement/Replacement Program
Nash County	1,227,009	Backup Center
Hoke County	299,100	Communication Center Equipment
Johnston Co 911	2,637,593	End of Life Replacement

For FY2012 those local governments receiving grants and entering into contracts with the 911 Board were:

PSAP	Grant Amount	Project
Brunswick County	$ 2,100,000	PSAP Consolidation w/Oak Island PD
Lenoir County	7,400,000	PSAP Consolidation w/Jones Co
Scotland County	2,100,000	PSAP Consolidation w/Laurinburg PD, Scotland Sheriff, Laurinburg Fire,

- To use funds available to the 911 Board under G.S. 62-47 to pay its obligations incurred for statewide 911 projects.

During this biennium the 911 Board has entered into contracts with NC Center for Geographic Analysis (CGIA) and Direct Technologies to fund statewide projects to benefit all primary PSAPs in the state.

The CGIA project has provided updated orthographic imagery to all 100 counties in the state (and the Eastern Band of the Cherokee Indians) enabling their governing entities to update their GIS data for both 911 and non-911 applications.

Previous annual requests to the NC 911 Board were for $25M from local governments to obtain individual jurisdiction orthoimagery, but also produced incomplete coverage statewide. The project cost under four-year plan is estimated to be $17M yielding statewide coverage to statewide a standard. Avoided cost of $10.4M to county/city operations of not contracting for orthoimagery individually.

It is believed that time savings will be realized in call answering and response from better quality orthoimagery available to 911 centers (quality equals consistency, currency, detail).

It is also believed that time savings will be realized in local tax and GIS operations and related local operations (quality equals consistency, currency, detail).

This project will provide for a statewide base map product to prepare for Next Generation 911 in all 100 counties of North Carolina.

This project, while contracted with CGIA, utilizes partnership with the following agencies:

Local PSAPs
NC Department of the Secretary of State
NC Department of Transportation
NC Department of Public Safety
Geographic Information Coordinating Council (including both public and private sector stakeholders)

In FY2011, the 911 Board entered into the first year of a planned 4 year contract cycle with CGIA to update the orthography that was taken in 2010. The plan, as proposed by the Geographic Information Coordinating Council (GICC) would divide the state in fourths and update the orthography of 25 counties each year. The first year of the cycle was for Coastal North Carolina. Total contract cost for this cycle is $ 3,541,341.

In FY2012, the 911 Board entered into the second year of the planned four year contract cycle to update orthography for the Eastern Piedmont area of the state. Total contract cost for this cycle is $ 3,946,827.

The Direct Technologies project (still ongoing) will provide a consistent statewide 911 emergency call tracking system that collects, collates, and stores E911 telephone call detail data at every primary PSAP, backup PSAPs and certain secondary PSAPs that are a part of the 911 system with an associated Primary PSAP.

This project, called ECaTS (Emergency Call Tracking System) provides for an enterprise based system that is a secure Internet-based MIS application that reports on all PSAPs in an entire county, jurisdiction or state with consistent data including:

- Call and Trunk statistics information
- CDR and ALI information
- Local call taker statistics

- To accept gifts, grants, or other money for the 911 Fund.

As of June 30, 2012, the 911 Board has not accepted any gifts, grants or other money for the 911 Fund.

- To undertake its duties in a manner that is competitively and technologically neutral as to all voice communications service providers.

The 911 Board provides cost recovery (§62A-45) to CMRS providers. Procedures have been established that provides for each carrier seeking cost recovery to have their cost recovery plan approved by the 911 Board. All carriers must provide the following information as part of their plan:

1) Describe the chosen technology or technologies used for delivery of calls to the PSAP (SS7 solutions, LEC solution, third party service bureau, etc.)

2) Describe the architecture to implement the chosen technology(s) in areas or for PSAPs that have requested wireless or enhanced wireless 911 services, within the CMRS Service Provider's service areas, or statewide, as may be appropriate and relevant to the cost recovery plan. Indicate all counties and/or municipalities of the state in which the CMRS Service Provider provides wireless E911 service and where deployment is expected. Indicate areas of the state, if any, where deployment has already occurred.

3) List the known cost elements for the deployment, including non-recurring and recurring charges. Provide statewide costs, if possible.

4) Describe personnel costs (estimated number of hours and rates) and actual or proposed third party service rates, if any.

5) If cost recovery is proposed on a monthly 'per subscriber' rate, indicate the amount and describe the manner in which the rate was calculated.

6) Include an accounting of the estimated total of service charges that the CMRS Service Provider expects to remit to the Board as of the anticipated date of the first sworn invoice. Include an estimate of the anticipated monthly service charge remittances for the subsequent 12 months and the anticipated sworn invoices for the same period.

- To design, create, or acquire printed or Web-based public education materials

regarding the proper use of 911.

The 911 Board has not completed this task yet but it is on the action plan for 2013.

- To adopt rules to implement G.S. 62A Article 3. This authority does not include the regulation of any enhanced 911 service, such as the establishment of technical standards for telecommunications service providers to deliver 911 voice and data.

During this biennium the 911 Board developed and adopted draft operational standards for PSAPs and submitted them to OSBM for review prior to submission to the NCOAH Rules Review Commission for rulemaking. The draft rules can be found in Addendum 4.

III. Accomplishments

✓ The Board met eleven times during 2011 and twelve times during 2012 (plus one work session) with focus on PSAP Fund distribution, use of 911 funds by PSAPs, establishing rules for the Board and work towards the Comprehensive Statewide 911 Plan. The meeting dates for 2011 were:

January 28, 2011	February 25, 2011
March 25, 2011	April 29, 2011
May 20, 2011	June 17, 2011
July 29, 2011	August 26, 2011
September 30, 2011	October 28, 2011
December 09, 2011	

The meeting dates for 2012 were:

January 27, 2012	February 24, 2012
March 23, 2012	April 20, 2012
May 18, 2012	June 15, 2012
June 20, 2012 (teleconference)	
June 28, 2012 (teleconference)	
August 24, 2012	September 28, 2012
October 26, 2012	
December 06, 2012 (work session)	
December 07, 2012	

Meetings were held at the Governor's Crime Commission in Raleigh and the Time-Warner Corporate Office in Morrisville. All meetings were open to the public and each meeting is broadcast over the internet and by telephone bridge. The approved minutes of each meeting have been posted to the 911 Board website, www.nc911.nc.gov.

✓ Convened a 911 Study Group with representatives selected by NCLM, NCACC, APCO, and NENA to provide input for the biennial update to the Comprehensive Statewide 911 Plan. Members of the Study Group were:

Member	Position	Representing
Rachel Bello	IT Director	APCO
Jonathan Bledsoe	911 Director	NENA
Terry Bledsoe	CIO	NCACC
Alan Cain	Fire Chief	NCAFC
Almey Gray	Major, Sheriff Office	NCSA
Merl Hamilton	Assistant Town Manager	NCLM
Randy Keaton	County Manager	NCACC
Jack Lewis	Police Chief	NCACP
Brian Pierce	Rescue/EMS Chief	NCARE
Tonya Pearce	Deputy 911 Director	NENA
Jimmy Sanders	Mayor	NCLM
Christy Shearin	911 Director	NCACC
Stephanie Wiseman	911 Director	APCO

The Study Group met six times during 2012 and participated in a work session with the 911 Board in December. The Study Group presented their recommendations to the 911 Board on January 25, 2013. The Study Group recommendations can be found in Addendum 5. Based upon their deliberations the 911 Board will be updating the Comprehensive State 911 Plan during 2013.

✓ Provided Financial Training Seminars to local governments at eleven locations throughout the state explaining statutory requirements for eligible use of 911 funds. Locations were selected which ensured no attendee would have to travel more than 90 miles to attend a seminar. Invitations were sent to all PSAP directors, finance directors, and city/county managers which operate primary PSAPs and receive 911 funding. 76 counties and 20 cities had at least one person in attendance at a financial seminar, and 24 counties and 8 cities did not attend any of the sessions.

The data and presentation used for the seminar was posted on the 911 Board website (www.nc911.nc.gov) for access by those who were unable to attend a seminar, as well as any interested party.

✓ Established draft operational standards for PSAPs and submitted them to OSBM for review prior to submission to the NCOAH Rules Review Commission for rulemaking.

Several public meetings were held during late 2010 and early 2011 to gather input from stakeholders regarding operational standards for PSAPs. Using that input, as well as the Comprehensive State E911 plan, the 911 Board developed rules which aligned with those found in NFPA (National Fire Protection Association) 1221: *Standard for the installation, maintenance, and use of emergency communications systems.* After the draft rules were completed, further review and additional stakeholder input resulted in some minor modifications, and then the draft was sent to OSBM for review prior to submission to the NCOAH Rules Review Commission for rulemaking. That rulemaking process is still ongoing.

✓ Developed and implemented minimum telecommunicator qualifications and training standards.

In concert with the development of the draft operational standards for PSAPs, the 911 Board discussed what minimum qualifications 911 telecommunicators should be required to have, as well as minimum training requirements which should be met. Again using NFPA 1221 as an example and adapting it to North Carolina PSAPs, the 911 board compiled Telecommunicator Qualification Standards and Telecommunicator Training Standards. Those standards were not required to go through the rulemaking process and were adopted by the 911 Board in late 2010. PSAPs were given until January 1, 2012 to begin applying them. Both sets of standards are available on the 911 Board website (www.nc911.nc.gov) for review and/or download.

✓ Developed a list of training classes which are approved for payment using 911 funds.

In response to PSAP requests for guidance throughout this biennium the 911 Board has examined many training classes to determine whether they meet statutory requirements for training and may be paid using 911 funds. Based upon those examinations, it has compiled a list of eligible training classes and posted it to the 911 Board website (www.nc911.nc.gov). The list is also found in Addendum 3.

✓ Partnered with the National Center for Missing and Exploited Children to provide for critical training to every 911 telecommunicator in the state for responding to such incidents.

During the summer of 2011 the National Center for Missing and Exploited Children (NCEMC) contacted the 911 Board seeking a partnership with North Carolina with the goal of providing specialized training addressing the unique characteristics of incidents involving missing and/or exploited children. NCEMC indicated it would be willing to pay for the majority of the training.

At the September 30, 2011 911 Board Meeting NCEMC Executive Director Rachel Johnston addressed the Board through teleconference. She cited statistics emphasizing the importance of having resources in place from the first few minutes of a child being reported missing. After the presentation, 911 Board Chair George Bakolia stated that he felt the 911 Board should endorse and support all aspects of this program and give the staff the authority to pursue any kind of training and raise awareness to support the program. 911 Board Executive Director Richard Taylor noted that a state implementation team had been formed and would be meeting monthly to chart a way forward.

The 911 Board subsequently sponsored several training classes, including some "train the trainer" classes and some "super training classes" held in the spring and fall of 2012 in the western and eastern parts of the state. The Board also established a goal of having all telecommunicators working in all the primary PSAPs in the state receive the training by December 31, 2012.

✓ Funded classes at the 2011 and 2012 annual conferences of the North Carolina chapters of NENA (the National Emergency Number Association) and APCO (the Association of Public Safety Communications Officials) to reduce the financial burdens placed upon the individual PSAPs which sent attendees.

As in years past the 911 Board sponsored pre-conference training classes at the 2011 and 2012 NC NENA/APCO Annual State Conference. Each year, 50 telecommunicators received this free training.

✓ Completed the first statewide orthography project in partnership with the North Carolina Center for Geographic Information Analysis (CGIA), providing up to date orthographic imagery to all 100 counties in the state (and the Eastern Band of the Cherokee Indians), benefitting all primary PSAPs in the state at no additional cost to them by enabling their governing entities to update their GIS for both 911 and non-911 applications.

Initiated through grant funding from the 911 Board to the City of Durham in 2009, this project was completed in the spring of 2011. Every county in the state was provided with orthographic imagery acquired during the leaf-off season of 2009-2010, and the final imagery was delivered to the counties in late 2010-early 2011 at a six inch ground resolution scale. Maintenance on the 2010 imagery continued until 2012.

- ✓ Initiated the next phase of that statewide orthography project, again in partnership with the North Carolina Center for Geographic Information Analysis (CGIA), developing a rolling update process through which one quarter of the state's counties is flown every year to acquire updated orthographic imagery, ensuring no county's GIS data is every more than four years old.

  Based upon the positive feedback the 911 Board received regarding the grant to Durham which provided updated orthographic imagery to all the counties in the state, the Board determined that it would pursue providing updated imagery as a statewide project of the Board to maintain the foundation laid by the original grant project going forward. The Board worked with CGIA to develop a schedule for future flights to acquire imagery and entered into a contract with CGIA to implement that schedule to provide updated imagery to one quarter of the state every year, beginning with the eastern quarter in 2013.
- ✓ Initiated a project to purchase and provision a consistent statewide 911 emergency call tracking system that collects, collates, and stores E911 telephone call detail data at every primary PSAP in the state, paid for by the 911 Board and at no additional cost to the PSAPs. The project is still ongoing.

  When the 911 Board initially gathered data for the creation of the Comprehensive State 911 Plan, disparities in PSAPs' abilities to report 911 telephone call data in a comprehensive, consistent, "apples to apples" context became grossly apparent, hampering collection of data from which the Board could benefit greatly in its decision making. In the spring of 2010 the Board became aware of a call data reporting system which had been implemented in California with great success and appeared to address the consistency issue very well. The product was called "ECaTS" (Emergency Call Tracking System) and was offered by a company called Direct Technologies.

  Further investigation revealed that no other company offered a comparable call data reporting system, and the 911 Board engaged in discussion with Direct Technologies about the feasibility of implementing such a system in all of North Carolina's E911 PSAPs, discovering that it would be eminently feasible. Direct Technologies made several presentations to the Board, and the consensus which developed among Board members was that this type of project would be worthy of funding as a statewide project.

The 911 Board subsequently contracted with Direct Technologies to provide ECaTS to all the 911 PSAPs in the state at no cost to the PSAP, and the project is currently underway.

✓ Provided $ 31.5 million in grant funding to nine PSAPs for projects which included consolidation of multiple PSAPs into a single PSAP serving multiple jurisdictions, individual PSAP hardware/software enhancement or replacement, and regional initiatives providing for shared use of the components that support E-911 among PSAPs, such as equipment, resources, and/or co-location of technology.

IV. Action Plan for 2013

- Solicit vendors to create an IP network and fund PSAPs to implement it
- Better educational process (marketing) to proactively tell our story, who we are, what we do, how and why to the public and to the General Assembly
- Conduct 911 Board Meetings across the state
  - Publicize meetings & invite local legislators
  - Tour PSAPs
  - Hear from public and their expectations of 911
- Conduct an up to date assessment and inventory of PSAP technology
- Update the Comprehensive State 911 Plan.

  Considering the findings of the 2012 911 Study Group and the 911 Board's knowledge of issues which will be impacting the provisioning of E911 services, the 911 Board will compile an updated Comprehensive State 911 Plan addressing those concerns.
- Continue the rulemaking process.

911 Board staff will continue to monitor progress of the Draft Operational Standards for PSAPs through the rule making process, responding to requests for clarification from reviewing bodies as warranted.

- Continue to review and update the list of eligible expenditures which 911 funds may be used to pay for.

  As new 911 products become available and new 911 technologies emerge, the 911 Board will continue to review and update the Approved Use of Fund List to assist PSAPs in determining how they may spend their 911 revenue (Addendum 6).

- Continue to assess and update new training classes which 911 funds may be used to pay for.

  As new training opportunities become known to the 911 Board, it will, working with the PSAP community and the 911 trade associations of NENA and APCO, determine whether the training is statutorily eligible for payment using 911 funds and update its List of Approved Training Classes accordingly.

- Continue to monitor and adjust as necessary the PSAP funding model.

  As 911 Board staff receives the Annual PSAP Revenue-Expenditure Reports from PSAP governing entities, eligible expenditures will be reviewed and determination will be made as to what the 911 fund distribution amount for each PSAP should be for the coming year. If adjustments are warranted, either up or down, they will be made and the PSAPs will be notified of their upcoming fiscal year distribution amount prior to December 31st of the current fiscal year. Should they wish to contest that determination, PSAPs will have until the following February 28th to file a request for reconsideration form, available on the 911 Board website (www.nc911.nc.gov). After reconsideration, final distribution amounts will be disclosed by June 1st.

- Continue to make grant funding available to eligible primary PSAPs through annual grant cycles

- Complete the statewide project to collect, collate, and store E911 telephone call data at every primary PSAP using the ECaTS equipment and applications from Direct Technologies.

- Provide at least one training program available to all PSAPs. Much as it did with the training for NCEMC during 2012, the 911 Board will seek to provide training which is universally applicable to all PSAPs at no cost to the PSAP.

- Update assessment and inventory of PSAP technology

Addendum 1

PSAP	FY2011 Distribution	FY2012 Distribution
AlamanceCounty Central Communications	683,485	640,782
Alexander County Communications	311,585	211,455
Alleghany County E911	237,151	132,858
Anson County Emergency Communications	242,465	244,336
Ashe County Communications	425,351	259,266
Avery County Communications Center	300,622	161,772
Beaufort County Communications Center	323,143	199,325
Washington City of	74,374	79,934
Bertie County Sheriff's Communications	218,687	123,952
Bladen County Sheriff's Communications	303,838	237,455
Brunswick County 9-1-1	930,750	607,350
Oak Island (Town of)	63,171	69,203
Buncombe County Emerg. Communications	1,717,210	923,808
Burke County Emerg. Communications	794,429	1,041,811
Cabarrus County Sheriff Communications	649,220	632,086
Caldwell County Communications	489,169	307,085
Carteret County Communications	559,066	559,066
Caswell County 911 Communications	265,734	209,722
Catawba Co Communications Center	1,098,978	502,077
Chatham County Emergency Operations Center	452,028	529,415
Cherokee County 911	398,620	203,816
Chowan Central Communications	169,105	252,388
Clay County E911 Communications	179,907	313,144
Cleveland County Communications Center	585,975	381,896
Kings Mountain (City of)	105,284	74,873
Shelby Police Communications	119,017	36,025
Columbus Central Communications	648,023	241,587
Craven County Sheriff Communications	386,758	308,502
Havelock Public Safety Comm.	216,657	102,184
New Bern Communications Center	324,603	269,837
Cumberland County Communications	1,153,621	928,046
Fayetteville City Communications	1,060,306	637,221
Currituck Central Communications	294,715	178,855
Dare Central Communications	565,948	264,442
Davidson County 911	745,383	608,700
Davie County Communications	342,514	238,699
Duplin County/Kenansville PSAP	422,996	202,082
Durham Emergency Communications	1,517,247	1,796,331
Edgecombe County E911	242,881	205,721
Tarboro Police Communications	153,358	107,052
Forsyth County 911 Communications	857,446	760,410

Winston Salem Police/Fire Communications	1,085,907	575,323
Franklin County Sheriff Communications	450,013	292,224
Gaston County Communications	1,250,223	1,115,633
Mount Holly Police Department	153,968	54,768
Gates County Communications	167,263	105,222
Graham County Communications	181,780	156,669
Granville County Emergency Communications	477,349	333,406
Greene County Communications	266,169	109,677
Greensboro	1,412,146	1,619,330
High Point Police/Fire Communications	394,569	443,675
Halifax County Central Communications	460,993	371,631
Dunn Police Communications	199,860	164,483
Harnett County Communications	833,864	772,029
Haywood County 911	555,653	608,573
Henderson County Communications	559,878	518,075
Ahoskie Police Department Communications	132,828	133,217
Hertford County Communications	202,152	114,696
Murfreesboro	12,179	37,341
Hoke County Emergency Communications	336,913	225,553
Hyde County Emergency Management	140,038	120,101
Iredell County Emergency Communications	593,599	346,184
Jackson County Emergency Communications	497,982	470,187
Johnston County Communications	956,386	934,031
Jones County Sheriff Communications	198,510	129,318
Lee County Emergency 911 Center	476,511	304,254
Lenoir County Communications	668,360	382,516
Lincoln County Communications Center	572,685	300,892
Macon County Communications	435,871	361,082
Madison County EOC	228,224	190,953
Martin County Communications Center	255,979	150,847
McDowell County Sheriff's Communications	307,358	204,767
Charlotte-Mecklenburg Police Department	4,955,880	2,409,785
Cornelius-Huntersville Police Communications	288,711	105,312
Pineville Police Comm. Center	230,948	208,298
Mitchell County Central Communications	262,912	267,344
Montgomery County Communications	251,553	157,852
Moore County Emergency Communications	632,354	375,149
Nash County Central Communications	376,420	421,084
Rocky Mount Police Communications	398,982	345,452
New Hanover County Sheriff Communications	967,276	640,978
Northampton County E-911	293,026	177,524
Jacksonville E-911	420,799	350,341
Onslow County Communications	592,835	310,165

Orange County Emergency Communications	657,050	554,787
Pamlico County Communications	219,816	75,666
Pasquotank/Camden Central Communications	416,285	204,053
Pender County Sheriff Communications	395,402	248,771
Perquimans County Communications	162,693	98,462
Person County Communications	399,092	392,976
Pitt County 911 Communications	759,286	441,535
Polk County Communications	231,854	202,588
Randolph County Emergency Communications	757,675	371,129
Richmond County Emergency Comm.	348,935	228,276
Lumberton Emergency Comm.	231,743	148,972
Robeson County Communications	931,467	315,322
Eden Police Communications	171,252	170,341
Reidsville Police Communications	175,117	111,207
Rockingham County 911 Communications	421,048	249,248
Rowan County Telecommunications	749,570	539,413
Rutherford County Communications	546,043	441,030
Sampson County Sheriff Communications	482,875	199,044
Scotland County Emergency Communications	268,147	192,747
Stanly County Emergency Communications	336,979	301,082
Stokes County Emergency Communications	360,570	294,680
Surry County Communications Center	589,528	374,932
Eastern Band Cherokees	139,829	208,352
Swain County 911 Dispatch	261,861	130,675
Transylvania County Communications	255,869	345,878
Tyrrell County	150,351	93,318
Union County	1,244,465	1,004,522
Vance-Henderson 911 Center	397,969	353,243
Cary	434,032	409,306
Holly Springs Public Safety Center	166,366	208,499
Raleigh Wake 911 Center	1,493,971	2,055,715
Warren County Sheriff Comm.	243,121	200,900
Washington County Communications	310,615	175,239
Beech Mountain Police Dept	136,733	92,216
Boone Police Department 911	184,930	131,717
Watauga County Sheriff Communications	388,212	306,518
Wayne County Central 911	1,315,248	268,001
Wilkes County Sheriff Communications	560,754	361,490
Wilson County Emergency Communications	542,315	439,130
Yadkin County Emergency Communications	360,408	201,100
Yancey County Sheriff Comm.	305,916	94,952
TOTALS	63,273,118	46,437,541

Addendum 2

North Carolina State 911 Plan

Submitted to the
Joint Legislative Commission on Governmental Operations
and
Revenue Laws Study Committee
and
Joint Legislative Utility Review Committee

May 14, 2010

George Bakolia, Chairman
North Carolina 911 Board

DOCUMENT CHANGE HISTORY

Version	Publication Date	Description of Change
V 0.1	04/16/2010	Final Draft
Vo.2	05/14/2010	Approved Plan

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Introduction

I. Purpose and Scope of Plan

During the 2005 Session of the General Assembly the North Carolina Wireless 911 Board was charged with developing a comprehensive, enhanced wireless emergency telecommunications plan for communicating E-911 call information across networks or among PSAPs. House Bill 1261 (S.L. 2005-439), provides the full scope and areas of focus for this plan.

In constructing and periodically updating this plan as appropriate, the Board shall:

1) Monitor trends and advances in enhanced wireless emergency telecommunications technology

2) Plan and forecast future needs for enhanced wireless emergency telecommunications technology

3) Investigate and utilize development of other resources within the State as part of a statewide plan including but not limited to GIS mapping and Voice over Internet Protocol (VoIP)

4) Formulate strategies for the efficient and effective delivery of enhanced wireless emergency telecommunications services.

During the 2007 Session of the General Assembly the North Carolina Wireless 911 Board was given responsibility for collection of wireline and Voice over Internet Protocol (VoIP) devices as well as wireless phones. The name of the North Carolina Wireless 911 Board was changed to reflect the new responsibilities to the North Carolina 911 Board. The development of the comprehensive, enhanced wireless emergency telecommunications plan was also modified to reflect the new duties. House Bill 1755 (S.L. 2007-383), provides the new scope and areas of focus for this plan.

In developing and updating the plan, the 911 Board must:

1) Monitor trends in voice communications service technology and in enhanced 911 service technology

2) Investigate and incorporate GIS mapping and other resources into the plan

3) Formulate strategies for the efficient and effective delivery of enhanced 911 service

II. Process

In response to H1261, the Wireless 911 Board contracted with Intrado of Longmont, CO, to assist the Board collecting data, analyzing the data and producing a plan with both short and long term implementation processes and recommendations.

While the Intrado report contained valuable data recommendations, the newly formed 911 Board under H1755 felt additional information was needed including a full understanding of the cost of providing 911 in North Carolina.

In May 2009, the 911 Board created a 911 Study Group of individuals representing various disciplines of local government having responsibilities in the 911 field. Representatives were appointed based on recommendations from the North Carolina League of Municipalities (NCLM), the North Carolina Association of County Commissioners (NCACC), the Association of Public Safety Communications Officers (APCO) and the National Emergency Number Association (NENA).

The study group came from both rural and urban areas across the state to ensure that the diverse perspectives, conditions, and needs of our state were fully represented.

The members of this committee were charged with developing a draft 911 State Plan for presentation and consideration by the 911 Board.

Members of the 911 Study Group were:

Carl Dean, Town Manager, Town of Holly Springs	NC League of Municipalities
Barry Furey, Director, Raleigh-Wake 911	Association of Public Safety Communications Officers (APCO)
Brenda Hewlett Retired 911 Director, New Hanover Co	National Emergency Number Association (NENA)
Randy Keaton, County Manager, Pasquotank County	NC Association of County Commissioners
Brian McMahan, County Commissioner, Jackson County	NC Association of County Commissioners
Benny Nichols, Fire Chief, City of Fayetteville	NC League of Municipalities
Mitchell Pate, Emergency Manager, City of Lumberton	NC League of Municipalities
Tonya Pearce, Deputy Director, City of Durham 911	National Emergency Number Association (NENA)

Charles Penny, Asst City Manager, City of Rocky Mount	NC League of Municipalities
Christy Shearin, 911 Director, Franklin County	NC Association of County Commissioners
Stephanie Wiseman, 911 Director, Mitchell County	Association of Public Safety Communications Officers (APCO)
Lee Worsley, Asst County Manager, Catawba County	NC Association of County Commissioners

The 911 Study Group met eleven times since July 2009 and with the exception of one teleconference, each session was designed as a day long meeting.

Representatives of the 911 Study Group met twice with the 911 Board to discuss the Group's findings and recommendations. While not all the recommendations were accepted as presented to the 911 Board, this plan does reflect the Group's findings and the 911 Board's final determinations.

To complement the 911 Study Group work and to provide accurate data for developing the State 911 Plan, the 911 Board contracted with the East Carolina University College of Business in October of 2009 to 1) determine the actual cost of 911 in North Carolina and, 2) develop a sustainable funding model which generates revenue and allows the 911 Board to disburse funds in a manner that sufficiently funds eligible 911 expenses.

History

While 911 is unquestionably recognized as the universal emergency access telephone number, and while numerous federal regulations establish requirements and parameters regarding that number, the development, deployment, and management of 911 remains principally a state and local issue. In September of 1978, the North Carolina Attorney General, the N.C. Department of Crime Control and Public Safety Division of Crime Control, the N.C. Civil Preparedness and Fire Commission, and the N.C. Department of Human Resources Office of Emergency Medical Services jointly petitioned the North Carolina Utilities Commission to consider the *Matter of Investigating of Rulemaking Regarding Implementation of the 911 Emergency Telephone Number as a Service to Citizens of North Carolina.* This led to rulemaking by the Commission that officially created the groundwork for 911 on October 19, 1979.

On July 6, 1989 *Chapter 62A of the North Carolina General Statutes* governing wire line 911 was signed into law. This original statute allowed for the creation of a 911 system in North Carolina permitting any local government to impose a 911 fee on telephone subscribers within their jurisdiction. While local governments were able to impose a 911 fee, there were no restrictions on the amount of the fee nor were there any requirements to provide 911 telephone service.

In September of 1998, Article 2 of § 62A was enacted imposing a set 911 fee of $.80 for all wireless devices (ie: cellphones). The fee was remitted to the newly created the North Carolina Wireless 911 Board for distribution to PSAPs and to provide cost recovery for Commercial Mobile Radio Service (CMRS) providers (cellphone companies).

On July 27, 2007 VoIP was added to the statute, the Wireless 911 Board was replaced with the North Carolina 911 Board, and the responsibility of that Board was expanded to include VoIP, wireless, and wire line 911. Beginning January 1, 2008, local governments were no longer authorized to collect independent 911 service fees on conventional wired telephones, and a centrally collected universal $.70 charge per voice communications service device per month was established statewide.

In each of the three iterations of the statute, restrictions were in place for the eligible uses of the 911 fee by local governments. These restrictions limited use of these funds to paying for costs attributable to connecting the caller with the appropriate PSAP serving the caller's location.

In order to bridge the link from the past to the future, understanding where we are now is imperative. While every 911 caller using a traditional telephone device in North Carolina currently has access to enhanced 911 services, this access and the service provided is not the same statewide.

The one hundred twenty-nine primary public safety answering points (PSAPs) in this state vary from single seat centers with limited training and capability to multiple position operations that have discipline specific law enforcement, fire, and emergency

medical dispatchers. In some cases, however, the individual assigned to answer 911 calls may also be responsible for a variety of other tasks such as handling walk-in complaints from the public, serving as the town switchboard, and even monitoring, booking, and feeding prisoners. The training of these personnel accordingly ranges from formalized academies to a few hours of sitting in with an "experienced" dispatcher before being expected to respond to live emergency calls.

The equipment used to answer and process these emergency calls also varies. There are currently no minimum technical standards for that equipment, and the tools used range from state-of-the-art technology to antiquated devices that can no longer be supported. In some cases, manual rather than computerized record keeping and call entry is still being used. Evidence also suggests that different agencies may pay significantly different prices for similar or the same equipment and services. This is a result of the fact that even though 911 is a statewide concern, purchasing and management is done at a local level. The increasing complexity of systems currently required makes it increasingly difficult for many PSAPs to have in-house experts able to devote significant staff time to the comparison of highly technical proposals. To some degree, many PSAPs rely solely upon advice provided by vendors, which may or may not be the best solution technologically, operationally or economically.

The current lack of standards is one of the more significant impediments to providing both a minimum acceptable level of 911 service statewide and in creating a sustainable business plan. Although critical to quickly and effectively delivering calls, for example, database accuracy requirements do not exist. Additionally, information collected by Intrado clearly illustrates that there is no standardized method of collecting and reporting 911 related statistics, as these, too, do not conform to a universal format.

While focus is often placed on Next Generation 911, legacy issues such as getting the correct location from PBX telephone systems and the inability to transfer ANI/ALI data from PSAP to PSAP significantly impede the current iteration of 911 in our state.

Findings and Recommendations

Consideration of Intrado's Prioritization of Recommendations (Intrado report Volume IV, page 19) is a basis from which to begin:

- Implementation of a Strategic Planning Process
- Understanding the design of existing North Carolina 911 systems
- Understanding the actual costs for providing 911 service
- Improving Wireless E911 Confidence and Uncertainty Factors
- Providing 911 technical and project management assistance
- Developing a centralized 911 information repository
- Establishing a consistent and comprehensive training curriculum
- Developing 911 for Multi Line Telephone Services (MLTS)
- Aligning 911 funding
- Developing a statewide procurement process and 911 catalog
- Assessing and correcting PSAP deficiencies for transition to NG911
- Establishing inter-selective router transfer and ALI database interoperability
- Developing, implementing, and maintaining a statewide 911 GIS/Mapping system and database
- Deploying a centralized ALI database
- Coordinating deployment of applications to be integrated into NG911

Specific actions and recommendations based upon the above will be directly discussed within the body of this plan.

In working toward the goal of creating a sustainable plan, consideration was given to what should be key components. These, based upon local government experiences and legislative guidance, include:

- new definition of 911 system
- expanded use of 911 funds
- consistent level of 911 service Statewide
- development of standards for service, equipment, and training
- development of a Statewide procurement plan
- development of a Statewide network
- migration to NG 911
- communications interoperability (PSAP to PSAP and PSAP to responders)

The following pages contain specific findings and recommendations concerning the steps required to make the 911 plan a reality.

Finding Number One:

North Carolina's Emergency Telephone Service statute (NCGS 62A)

currently defines "911 system" as an emergency telephone system that enables the user of a voice communications service connection to reach a PSAP by dialing the digits 911 and which provides enhanced 911 service. The definition needs to be expanded.

While there is much discussion concerning "Next Generation 911" and the changes it will bring, we must remember that three decades have passed since 911 service was originally implemented in North Carolina. In the eyes of some, demands placed upon our current 911 system represent the "next generation" when compared to the requirements of the 1970s and 1980s.

The introductions of new technology, public expectations, and operational realities regarding 911 have significantly changed. Although 911 is North Carolina's official emergency access telephone number, the average person seldom thinks of the "911 system" as representing just the equipment and services which make that telephone number work. We have done such a good job of promoting the use of that telephone number to access emergency aid that people now perceive the provision of the aid is also included within the "911 system".

Programs such as EMD (Emergency Medical Dispatch) EFD (Emergency Fire Dispatch) and EPD (Emergency Police Dispatch) have transferred much decision making capacity from the field to the PSAP. The National Incident Management System (NIMS) as well as new concerns regarding interoperability have created a more inter-active role for telecommunicators in a service that mandates a unified system of both call receipt and call delivery.

Recommendation Number One:

The definitions in the current statute must be updated to include a broader scope of systems and services that better reflect the complete handling of the emergency call, from the initial citizen access of the system through call routing to the proper PSAP for processing to the relay of information to the appropriate responders. To that end, the appropriate sections of §62A-40(4) be reworded to state:

(4) 911 system. – An emergency ~~telephone~~ communications system that does all of the following:

a. Enables the user of a communications service connection to reach a PSAP by dialing the digits 911.

b. Provides enhanced 911 service[1]
c. Enables a primary PSAP to dispatch[2] emergency responders.

Finding Number Two:

There are no established statewide operational standards in North Carolina for Public Safety Answering Points.

Clearly defined standards are the basis from which an understandable and sustainable business plan is created. A statewide 911 plan should be no exception. No statewide standards currently govern the operation of a PSAP. It is difficult, if not impossible, to provide consistent 911 service statewide unless every PSAP meets a uniform level of service. This is far from a "paper problem", but rather impacts the overall ability of North Carolina to monitor service levels or to conduct cost/benefit analysis of the 911 system statewide. In fact, the ability of Intrado to capture accurate data was impeded in many cases by the lack of standardized reporting methods. Lack of standards also results in inferior and inadequate service being provided to emergency victims in jurisdictions across the state.

One challenge is presented by the absence of any operational standards being applied to Public Safety Answering Points. If we are truly committed to providing a verifiable minimum level of 911 service across the state, it stands to reason that every facility charged with receiving and processing 911 calls should be required to meet minimum levels of technology, security, and redundancy to insure these service levels can be met.

Currently PSAPs within North Carolina are housed within a variety of facilities, and contain a wide range of technology. Some of these facilities can be considered to be "state of the art", while others are sorely lacking. Equipment may be the latest version, or it may be past the point of vendor support.

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[1] See Appendix 3 for corresponding statutory changes to GS §62A-40(9).
[2] Newton's Telecom Dictionary (19th Ed. 2003) defines dispatch as "a radio communications technique where one communicates to many through short bursts of communication." 47 CFR 22.99 states: "Dispatch service. A radiotelephone service comprising communications between a dispatcher and one or more mobile units. These communications normally do not exceed one minute in duration and are transmitted directly through a base station, without passing through mobile telephone switching facilities." See Appendix 3 for the definition as it will appear in GS §62A-40.

Many rules and regulations are currently in place in other states or exist as part of materials developed by governmental, public safety, and legislative agencies. In creating a set of minimum PSAP standards for North Carolina, the following resources are suggested as basis for a foundation:

Source	Standard
APCO / NENA / ANSI	PSAP Service Capability Criteria Rating Scale Training Standards
CALEA	Standards for Public Safety Communications Agencies
FCC	94-102 Revision of the Commission's Rules to Ensure Compatibility With E 911 Emergency Calling Systems[3] Public Law No. 104 Telecommunications Act of 1996 104, 110 Stat. 56 47 CFR Part 15 Federal Communications Commission Rules
NENA	Operations and Technical Standards
NFPA / ISO	NFPA1221Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems NFPA1061 Standard for Professional Qualifications for Public Safety Telecommunicator Insurance Service Office Rating Schedule

The intent of the North Carolina Statewide 911 Plan is to focus on and strengthen the role of the *primary* PSAP. A primary PSAP is defined as a public safety answering point that both receives the initial 911 call and assigns it to the appropriate first responders. This assignment may occur through direct dispatch, transfer, or relay of the call.

Upon the adoption of this plan, no additional primary PSAPs shall be approved or funded, except for those created through the consolidation of existing PSAPs, at least one of which must be an existing and recognized primary PSAP.

Additionally, in order to be considered a primary PSAP for the intent of this plan, a PSAP must possess at minimum:

[3] The Federal Communication Commission's Report and Order and Further Notice of Proposed Rulemaking in CC Docket No. 94-104; FCC 96-264, adopted June 12, 1996, and released July 26, 1996: effective Oct. 1, 1996.

- Two or more operating positions, continually staffed (24 x 7 x 365) by trained telecommunicators.
- Redundant or fault tolerant telephone devices, supporting the above.
- Redundant or fault tolerant computer aided dispatch (CAD) with a geographic information system interface (GIS).
- A digital geographic information system (GIS) as applicable to 911 that is necessary for receiving and processing the 911 call, including dispatch Redundant or fault tolerant communications systems that allow for the dispatch of emergency calls to first responders.
- Sufficient 911 trunk lines for the population and call volume served.
- Instant playback devices for each position, plus a master logging system that records every telephone and dispatch channel at a minimum and is capable of storing all applicable records.
- A generator, preferably fueled by an independent source, capable of running all required PSAP technical, security, lighting and HVAC systems at 100% load for a period not less than seventy-two (72) hours.
- An uninterruptible power supply (UPS) system capable of running all technical, lighting and security devices in the PSAP at 100% capacity for a period of not less than four (4) hours. If that capacity does not already exist, any future upgrade plans must include acquiring it.
- A written emergency plan which addresses the failure of critical equipment and systems, including procedures for PSAP evacuation and for extended backup operation from an alternate facility. The alternate facility must be capable of handling the predicted call volume. If the alternate facility does not come under the direct control of the primary PSAP establishing the plan, then an intergovernmental agreement or memorandum of understanding must be secured from the agency responsible for the alternate site.

Recommendation Number Two:

A) Upon the adoption of this State 911 Plan, no additional primary PSAPs shall be approved or funded, except for those created through the consolidation of existing PSAPs, at least one of which must be an existing and recognized primary PSAP, or those which present a proposal to the 911 Board for review on a case by case basis.

B) The establishment of a representative operational users group to review the minimum standards recommended and/or develop additional PSAP standards which will be presented and adopted by the 911 Board within 24 months of the adoption of the State 911 Plan.

C) The establishment of a compliance date for all primary PSAPs after standards have been adopted by the 911 Board.

D) That §62A-42(a)(9) be reworded to state:

(9) To adopt rules to implement this Article. This authority includes establishing minimum operational standards for PSAPs which primary PSAPs must meet to be eligible to receive 911 funds, but does not include the regulation of any enhanced 911 service, such as the establishment of technical standards for communications service providers to deliver 911 voice and data.[4]

Finding Number Three:

There is currently no requirement for statewide uniform training certification of all 911 telecommunicators.

There is currently no requirement for statewide uniform training certification of all 911 telecommunicators. While internationally recognized courses such as Emergency Medical Dispatch, Emergency Fire Dispatch, and Emergency Police Dispatch are offered, as is North Carolina's Sheriff's Telecommunicator Training, the first are provided at the discretion of individual agencies, and the latter does not universally apply to all North Carolina PSAPs.

The level of training offered depends upon the agency in question. Some local governments provide intensive academies that take several months to complete and utilize complex simulations and regular exams; others rely totally upon on-the-job training, which often consists of nothing more than shadowing an "experienced" employee for a period of time before being expected to respond to live emergency calls.

Recommendation Number Three:

A) The development of a consistent and comprehensive minimum training curriculum should be adopted for certification of all North Carolina 911 telecommunicators.

B) The establishment of a representative operational users group to

[4] See Appendix 3 for corresponding statutory changes to GS §62A-42(a)(4).

develop the minimum curriculum for training which will be presented to and adopted by the 911 Board within 18 months of the adoption of the State 911 Plan.

C) *The establishment of a compliance date all primary PSAPs must meet after the minimum training curriculum has been adopted by the 911 Board.*

Finding Number Four:

The current funding model is inequitable and locked in at 2007 levels.

911 service in North Carolina is supported by a 70¢ per month per voice communications connection fee that is collected from wire line, wireless, and VoIP voice communications service subscribers within the State. Those funds are currently disbursed to primary PSAPs based upon a fiscal snapshot in time taken on June 30, 2007. That fiscal snapshot cements inequities among local government wire line 911 service fees in effect at that time. Some local governments were collecting more than they could expend in accordance with statutory restrictions on the use of 911 funds, while others were not collecting enough to meet minimum needs. A new funding model that equitably supports all primary PSAPs both now and into the future is needed.

In addition to paying for primary PSAP costs incurred in providing 911 as a universal emergency access telephone number, the service fee revenue also pays for the operation of the North Carolina 911 Board and office and reimburses Commercial Mobile Radio Service (CMRS) providers for eligible expenditures required to provide Enhanced 911 service.

Recommendation Number Four:

An equitable and sustainable PSAP funding model be developed and the model be so designed to adjust appropriately the PSAP funding and the 911 fee on an annual basis.

To develop this model, the following modifications and additions be made to §62A-46(a):

(1) In the first quarter of the Board's fiscal year, the Board shall determine whether payments to PSAPs during the preceding fiscal year exceeded or were less than the eligible costs incurred by each PSAP during the fiscal year. The Board shall estimate the ensuing fiscal year's Fund balance and compute each PSAP's estimated distributions for the ensuing fiscal year. The Board shall determine a method for establishing distributions that is equitable and sustainable, and that ensures distributions for eligible operating costs and anticipated increases. The Board may consider information including, but not limited to, PSAP reports and budgets, disbursement histories, historical costs, PSAP operations, 911 technologies used by the PSAP, or any other information deemed proper by the Board. The Board shall notify each PSAP of the estimated distributions no later than December 31 of each year. The Board shall determine actual distributions no later than June 1 of each year. Distributions to primary PSAPs shall be made monthly and deposited in the Emergency Telephone System Fund of its local governing entity, as reported to the State Treasurer's Office, Local Government Division. A PSAP is not eligible for a distribution under this subdivision unless it provides enhanced 911 service and received distributions in the prior fiscal year.

(2) The Board shall reconsider a determination of eligible costs or distributions pursuant to this subsection upon request by a submitting PSAP and shall provide a procedure for such reconsideration.

(3) A PSAP may carry forward up to twenty (20%) percent of the total funds disbursed by the Board during a fiscal year for eligible expenditures for capital outlay, capital improvements, or equipment replacement; however, the twenty (20%) percent limitation does not apply to funds awarded as a grant.

(4) If the amount of money in the Fund allocated for PSAP distributions under this section is insufficient to pay the scheduled distributions at any time, each PSAP shall receive a pro rata share of the Fund at such time.

Finding Number Five:

A redefinition of "911 system" necessitates the expansion of the current list of eligible expenditures.

As the nature of 911 evolves, so too must our ability to support the varied functions associated with this service. There is an age-old adage within emergency services that

no emergency call should be dead-ended at the PSAP. To this end the scope of the 911 system should include not only the receipt, but also the delivery of emergency information to the appropriate response agency.

Recommendation Number Five:

All current eligible uses of 911 funds should be maintained, and a standards based hierarchy should be implemented to enable expanded uses to include the cost for equipment needed to dispatch call information from the PSAP, including radio transmitters and antennae, predicated upon a PSAP's successfully meeting and maintaining the standards hierarchy.[5]

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[5] A proposed 3 tier standards base hierarchy follows:

Tier 1

In order to meet Tier 1 you have to meet minimum standards. These minimum standards would be the basics of what a 911 Center in North Carolina should look like (minimum staffing, minimum equipment standards, and minimum facility standards).

Primary PSAPS would have a time limited period to all become Tier 1 Centers or lose access to 911 Funds. 911 Funds could be used to bring the center up to standard. In order to encourage some consolidation, the 911 Funds would not be able to be used to meet the staffing standards and certain aspects of the facility standards.

Tier 2

Once you meet Tier 1, you would have more flexible use of the 911 Funds to spend on anything in the Tier 1 categories, plus radio equipment up to and including the base station. In order to be certified as a Tier 2 PSAP you would have to meet standards, possible attached to dispatch to make sure that funds are being used in the best way for radio equipment (perhaps for interoperability or other radio needs). When you meet these standards, you could move to Tier 3. PSAPS would not be required to be certified as Tier 2 PSAPS, as the minimum requirements for an acceptable PSAP would be contained in the Tier 1 category. PSAPS could voluntarily be certified as Tier 2 PSAPS and that would allow them to move to Tier 3.

Tier 3

When you are a Tier 3 PSAP, you could use 911 Funds for anything in the Tier 1 and Tier 2 categories, plus you could use funds for a percentage of antennae and towers.

Maintaining your Tier status

Each year, a PSAP would have to certify compliance with whichever tier level the PSAP has achieved to ensure that you have not let your center fall behind.

Establishing the standards

A peer group equally represented by 911, public safety professionals and local government managers would be assembled to develop the standards for the tiers and would have 1 year to establish standards.

Additionally, training eligibility should be expanded to include dispatch, PSAP supervisory and PSAP management training, and certain public education costs should be included.
To accomplish these changes, the following modifications and additions should be made to §62A-46(c):[6]

§ 62A-40. Definitions

§62A-40 (5) Call taking. -- The act of processing a 911 call for emergency assistance ~~up to the point that the call is ready for dispatch~~by a primary PSAP, including the use of 911 system equipment, call classification, location of a caller, ~~and~~ determination of the appropriate response level for emergency responders, and dispatching 911 call information to the appropriate responder.

§62A-40(9) Enhanced 911 service. -- Directing a 911 call to an appropriate PSAP by selective routing or other means based on the geographical location from which the call originated and providing information defining the approximate geographic location and the telephone number of a 911 caller, in accordance with the FCC Order.

§62A-40 (__) Dispatch, Dispatching. -- The broadcast, transfer, or other re-transmittal of emergency call information by a primary PSAP to responders and shall specifically exclude equipment or services required for responders to receive such information and/or to intercommunicate among themselves.

§ 62A-46.(c)

(c) Use of Funds. – A PSAP that receives a distribution from the 911 Fund may not use the amount received to pay for the lease or purchase of real estate, cosmetic remodeling of emergency dispatch centers, hiring or compensating telecommunicators, or the purchase of mobile communications vehicles, ambulances, fire engines, or other emergency vehicles. Distributions received by a PSAP may be used only to pay for the following:

(to be effective 7/1/10: Repealed 6/30/11)

(1) PSAPs shall first pay the costs of ~~The~~ ~~lease~~leasing, ~~purchase~~purchasing, or ~~maintenance~~maintaining ~~of~~ emergency telephone equipment and emergency telephone notification systems, including necessary computer hardware, software, and database provisioning, addressing, and nonrecurring costs of establishing a 911 system, and telecommunicator furniture from distributions under subsection (a). After a PSAP satisfies the foregoing costs, the lease, purchase, or maintenance of radio communications equipment, including necessary hardware, software, and no more than 25% of the cost of base station transmitters, towers, microwave links and antennae required

[6] This proposed language was approved by the 911 Board on February 19, 2010. As with any proposed legislative activities, it is subject to change as it proceeds through the legislative process.

to dispatch emergency call information from the PSAP shall be eligible expenditures until June 30, 2011. No radio communication devices used by emergency responders are allowed.

(to be effective 7/1/2011 following repeal of (1) above)

(1) The lease, purchase, or maintenance of emergency telephone equipment and emergency telephone notification systems, including necessary computer hardware, software, and database provisioning, addressing, and nonrecurring costs of establishing a 911 system, and telecommunicator furniture under subsection (a). After a PSAP satisfies the operating standards established by the Board, the lease, purchase, or maintenance of radio communications equipment, including necessary hardware, software; and shall exclude the cost of base station transmitters, towers, microwave links and antennae used to dispatch emergency call information from the PSAP. No radio communication devices used by emergency responders are allowed.

(2) Expenditures for in-State training of 911 personnel regarding the maintenance and operation of the 911 system. Allowable training expenses include the cost of transportation, lodging, instructor fees, traineeinstructors, certifications, improvement programs, quality assurance training, and training associated with call taking, training specific to dispatch of emergency call information, and including emergency medical, fire, or law enforcement procedures, and training specific to managing a primary PSAP or supervising primary PSAP staff. Training outside the State is not an eligible expenditure unless the training is unavailable in the State or the PSAP documents that the training costs are less if received out-of-state. Training specific to the receipt of 911 calls is allowed only for intake and related call taking quality assurance and improvement. Instructor certification costs and course required prerequisites, including physicals, psychological exams, and drug testing, are not allowable expenditures.

(3) (unchanged)

(d) (unchanged)

(e) Compliance. -- A PSAP, or the governing entity of a PSAP, must comply with all of the following in order to receive a distribution under this section:

(1) A county or municipality that has one or more PSAPs must submit in writing to the 911 Board information that identifies the PSAPs in the manner required by the FCC Order.

(2) A participating PSAP must annually submit to the 911 Board a copy of its governing agency's proposed or approved budget detailing the revenues and expenditures associated with the operation of the PSAP. The PSAP budget must identify revenues and expenditures for eligible expense reimbursements as provided in this Article and rules adopted by the 911 Board. All distributions from the 911 fund must be deposited in the Emergency

Telephone System Fund of the local governing entity, and reported to the State Treasurer's Office, Local Government Division.

(3) A PSAP must be included in its governing entity's annual audit required under the Local Government Budget and Fiscal Control Act. The Local Government Commission must provide a copy of each audit of a local government entity with a participating PSAP to the 911 Board.

(4) A PSAP must comply with all requests by the 911 Board for financial information related to the operation of the PSAP.

(5) A PSAP must comply with rules, policies, procedures and Primary PSAP operating standards established by the Board.

Finding Number Six:

Through its oversight of 911 fund use, 911 Board staff has observed marked differences in pricing reported by PSAPs for purchases of similar equipment.

The 911 Board staff believes that establishing a "state contract" purchasing agreement with vendors of 911 goods and services within the state could "level the playing field" for such purchases by offering consistent pricing throughout the state and obviating the need for local governments to go to bid for major 911 purchases.

Recommendation Number Six:

The 911 Board work with local governments to implement methods for optimal cost-effective purchasing and management practices such as providing the ability for PSAPs to purchase 911 goods and services through a state contract.

Finding Number Seven:

The lack of appropriate location information provided by some multi-line telephone systems (MLTS) creates service issues for public safety.

According to the Intrado report , "In consideration of the interest and movement at the federal level, coupled with existing state level requirements, the Board should take a proactive approach toward developing E911 MLTS legislation for North Carolina that is appropriately engineered to provide for the location identification and transmission of the telephone number for 911 calls made from businesses, educational facilities, residential tenant facilities, or other facilities using MLTS."

This report also identifies thirteen other states that currently have legislation in place, and two where legislation is in progress. With attention often focused on the wireless and VoIP location technology, it is easy to overlook the fact that MLTS calls, whether they are carried by conventional networks or VoIP, present a significant challenge. Emergency calls coming from MLTS supported facilities carry the ALI of the main facility, but may be made from branch offices or remote workplaces that are literally miles away. In fact, they may be emanating from an entirely different jurisdiction.

The technology to eliminate this problem exists, and businesses, schools, and government facilities located in states where legislation is in effect have shown the ability to comply.

For the benefit of public safety MLTS legislation should be enacted in North Carolina requiring the delivery of true location based ANI and ALI for all 911 calls.

Recommendation Number Seven:

North Carolina should require all multi-line telephone systems to deliver extension based ANI/ALI to the 911 network. NCGS 62A needs to be modified to include the model MLTS legislation as provided by NENA to include but not be limited to the following language:

Operators of Shared Residential MLTS serving residential customers are required to assure that the telecommunications system is connected to the public switched network such that calls to 911 result in one distinctive Automatic Number Identification (ANI) and Automatic Location Identification (ALI) for each living unit.

For a MLTS serving business locations, the MLTS Operator shall deliver the 911 call with an Emergency Location Identification Number (ELIN) which will result in one of the following:
(a) an ERL which provides a minimum of the building and floor location of the caller, or (b) an ability to direct response through an alternative and adequate means of signaling by the establishment of a private answering point.

The MLTS Manager must make reasonable efforts to assure that 911 callers are aware of the proper procedures for calling for emergency assistance.

Finding Number Eight:

The current analog 911 telephone network does not allow the transfer of data and voice among PSAPs statewide and is not compatible with all features and functions of modern consumer communications devices.

There are many issues which must be addressed as part of a comprehensive state plan, but perhaps none is more critical than that of technology. As we move forward toward facilitating the implementation of Next Generation 911, we must acknowledge that there are existing issues that must be addressed, and that technological changes are already changing the face of 911:

- Telematics services such as OnStar and ATX are delivering vehicle incident information to PSAPs, albeit via "work-around" methods
- The social networking site Twitter has added the ability to add location information to posted "Tweets"
- Richmond, Virginia is currently receiving alarms from central stations directly into their CAD system without telecommunicator intervention
- Black Hawk County, Iowa has implemented a pilot project to accept limited 911 text messages

These examples represent a few of the potential requirements envisioned not only by NENA's challenge of providing emergency help to "any device," but also from increasingly techno-savvy consumers who expect to be able to connect with emergency

help as easily as they connect with their friends.

Even further limitations in the current architecture can be seen in the area of the transfer of data streams associated with 911 calls; a transfer that does not occur if the PSAPs are served by different local exchange carriers (LECs.) In the world of wireless communications, where 911 calls must be routinely transferred due to the nature of wireless routing, this poses a serious liability.

In addition to the issues of daily reliability, the statewide 911 system in North Carolina must be able to survive under conditions of significant duress. Whether these stem from manmade actions or the extremes of weather possible in our state, 911 must continue to operate flawlessly. In fact, it is during these extremes that 911 will be called upon more than ever to deliver.

Recommendation Number Eight:

The 911 Board be given both the authority to and the mechanism with which it may directly pay for a statewide digital network or series of internetworks specifically for the purpose of delivering 911 service, seamlessly and redundantly connecting primary PSAPs. This would also facilitate shared regional back-up capability among all PSAPs connected to the network. To that end, §62A-42(b) should be reworded to state:

(b) Prohibition. – In no event shall the 911 Board or any other State agency lease, construct, operate, or own a communications network for the purpose of providing 911 service (2007-383, s.1(a)), but the 911 Board shall be given the authority to pay private sector vendors for provisioning such a network.

Finding Number Nine:

Next Generation 911 will place significant technological demands on the 911 system, from acquisition of equipment and services to training for both telecommunicators and managerial staff.

Much of the growth of 911 in North Carolina, and throughout the United States has come in spurts that can be best classified as reactions to changes in technology. The move from basic to enhanced 911, the inclusion of wireless 911, and the addition of VoIP are all prime examples. With the advent of the Next Generations of 911, it is imperative that a carefully crafted plan be developed in order to move our growth from the reactive to the proactive mode.

We must start now in our understanding of what demands may be placed upon the system, and establish both a timetable and a funding mechanism that support adequate growth. Since this timetable will be driven by consumer requests for services, it is especially important that we understand both the nature and the need expressed by these requests, and to secure and implement the pieces required in order to offer these services statewide at an affordable cost.

At the present time wireless telephony has been in general use for almost two decades, yet we still have not completely and universally mastered pin-point location accuracy. It is doubtful that the demands of our citizens and the next generation of communications devices will afford us the luxury of such time to develop critical solutions. Services such as text messaging are a common means of communicating, and represent a valuable tool for the deaf community. This is just one of the many examples of currently unsupported methodologies that may likely be an integral part of tomorrow's 911. An accurate assessment of our current capabilities, as well as a comprehensive and coherent plan will be required to move 911 in North Carolina into the future.

Recommendation Number Nine:

The 911 Board continue its partnership with the NENA Next Generation Partners Program and periodically update the State 911 Plan. A Next Generation 911 process be established to enable an orderly transition to future technologies.

Finding Number Ten:

The technological demands placed upon primary PSAPs require significant technical and project management skills which are not always available at

a local level.

Despite the recommendation for the expansion of eligible expenses, the Board realizes that the practicality of actually being able to afford such expansion rests in utilizing sound business practices.

One area of concern expressed was the limited access to technical resources available to local PSAPs. To some degree this corresponds to the limited resources available from the state 911 staff. As stated in the finding, this Board recognizes the scope and constant churn in technology precludes smaller PSAPs from having either "in-house" experts or the time to adequately research issues. This oftentimes places the responsibility of making technological recommendations in the hands of vendors. This is not to say that this always generates negative results, however it is clear that an independent view is prudent.

By providing technical assistance directly to the PSAP, the State 911 Board would insure this independent counsel, while further working toward the technical compliance and compatibility that is required for a truly interoperable State 911 system. This ability to assist in making sound technology choices will help secure more uniform and reasonable pricing.

There are projects which are beyond the scope of any projected 911 Board staff increase, and that this recommendation is in no way intended to reduce or eliminate the need for outside consulting services where staff time commitments or lack of skill sets justify such outside consulting. Rather, we foresee a mid-level grade of service, where basic and intermediate recommendations can be given by 911 Board staff on most technical issues.

Recommendation Number Ten:

The State 911 Board staff should be expanded to include technical experts assigned to provide technical and project management assistance to the primary PSAPs by adding the following language to §62A-44(b):

(b) Allocation of Revenues. – The percentage of the funds remitted under G.S. 62A-43 which the 911 Board may deduct and retain for its administrative expenses shall initially be set at 1% of the total service charges collected. The 911 Board shall monitor the amount of funds required to meet its financial commitment to providing technical assistance to primary PSAPs and may, if

costs warrant, adjust the percentage up to 2%. The remaining revenues remitted to the 911 Board for deposit in the 911 Fund are allocated as follows:

(1) A percentage of the funds remitted by CMRS providers to the 911 Fund are allocated for reimbursements to CMRS providers pursuant to G.S. 62A-45.

(2) A percentage of the funds remitted by CMRS providers and all funds remitted by all other voice communications service providers are allocated for monthly distributions to primary PSAPs pursuant to G.S. 62A-46 and grants to PSAPs pursuant to G.S. 62A-47.

(3) The percentage of the funds remitted by CMRS providers allocated to CMRS providers and PSAPs shall be set by the 911 Board and may be adjusted by the 911 Board as necessary to ensure full cost recovery for CMRS providers and, to the extent there are excess funds, for distribution to primary PSAPs.

Finding Number Eleven:

For comparison and planning purposes, local governments and 911 directors could benefit from easy access to PSAP performance, statistical, and operational data provided by other primary PSAPs in the state. As minimum PSAP operational standards are implemented, a standardized reporting format and reporting interval should be established for collection of this data to ensure it is valid and verifiable, and it should be easily accessible from one centralized location such as the 911 Board website. 911 fund distributions to PSAPs could be dependent upon them self-reporting the validated data to encourage compliance.

The development of standards as recommended in this plan will also require a mechanism in which these standards can be stored and from which they may be retrieved. Absent any new standards, there are significant amounts of information that currently exist that would benefit from a central repository.

Recommendation Number Eleven:

A centralized repository of information be created including, but not limited to, PSAP minimum standards and PSAP performance, statistical, and operational data. The working group which establishes minimum standards should also develop a standardized reporting format which ensures the data collected and housed in the repository is reported consistently and is verifiable. To ensure reporting compliance PSAP self-reporting of this data at an established interval should be made a prerequisite to a PSAP's eligibility to receive 911 fund distributions. The data should be easily accessible to all PSAPs through the 911 Board website.

Finding Number Twelve:

Due to the importance of geographic information to both 911 call routing and the dispatch of emergency response to those calls, a statewide 911 system requires a single statewide mapping data set. Similar benefits would accrue from a statewide automatic location identification (ALI) database for 911 call routing.

Selective routing of 911 calls from wired telephone can accurately deliver the calls to the appropriate PSAP based upon street address information contained within the selective router data base, but wireless and mobile VoIP communications devices are not tethered to a single geographic location. Routing those calls and locating those callers relies on spatial location determination utilizing latitude and longitude. Since industry data as well as PSAP experience both show that these continually developing mediums now account for the majority of emergency calls, we cannot ignore the need of jurisdictions to not only accurately assess the location of calls within their service boundaries, but to quickly identify the appropriate PSAP to which to transfer or relay calls that are received from outside this area. And, while Next Generation 911 may still be loosely defined, there is no evidence to indicate that communications devices of the future will not exacerbate or add to existing deficiencies.

In addition to the initial call processing, a standardized map and data set would allow PSAPs to "look across" jurisdictional boundaries into the street network of adjoining communities. Today, first responders are often required to cross these boundaries when involved in a pursuit, a mutual aid fire response, or a mass casualty emergency medical

incident. The availability of adjacent jurisdiction spatial data will provide more efficient routing instructions to potentially unfamiliar destinations, while improving safety and accountability for the units and personnel involved.

Recommendation Number Twelve:

A statewide 911 Geographic Information System and mapping database as well as a statewide ALI database, should be implemented and maintained by the 911 Board for PSAP access and use. The 911 Board should coordinate with the North Carolina Center for Geographic Information and Analysis (CGIA) to provide updated orthographic imagery to all local governments statewide for 911 purposes on a rotation not to exceed every four years. The 911 Board should be given authority to allocate money from the PSAP fund to pay for implementing and maintaining these databases.

Finding Number Thirteen:

Implementation of minimum PSAP operational standards will require some (principally small) PSAPs to incur additional costs which they are currently unable to support. While economies of scale and cost may be realized through consolidation of such small primary PSAPs into regional PSAPs, some may wish to remain independent and meet the minimum standards.

As technological capabilities expand, consolidation of smaller local PSAPs into larger regional ones will provide both financial and operational benefits to the jurisdictions being served. The group also recognizes, however, that some smaller local PSAPs may wish to retain their autonomy for any number of reasons. To enable such smaller local PSAPs to meet the minimum operational standards required to provide a consistent level of 911 service statewide in the absence of sufficient funds, the group

proposes that a dedicated grant fund be established targeting either bringing PSAPs into compliance with minimum operational standards or assisting them in consolidation efforts. Since such efforts may require relocation and attendant construction costs, the group also proposes that some of this grant funding be made available to be used to pay for such construction costs.

Recommendation Number Thirteen:

Award grants for one-time use outside the parameters of normal eligible statutorily defined use dedicated to helping primary PSAPs meet relocation or construction costs associated with consolidation.

Funding for grants should come from the balance of the CMRS fund and through the allocation of revenues in §62A-44(b).

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Plan Implementation

I. Prioritization of Recommendations

The following list represents the recommendations detailed above listing them in order of priority for improving the efficiency and effectiveness of the 911 system in North Carolina.

1. Create Sustainable PSAP Funding Model
2. Expand the Definition of the 911 System
3. Expand the Eligible Use of 911 Fees by PSAPs
4. Establish PSAP Operational Standards
5. Establish PSAP Training Curriculum
6. Hire 911 Technical & Project Management Staff
7. Require MLTS to Provide ANI/ALI
8. Create Next Generation 911 Process
9. Grant 911 Board Ability to Pay for 911 Network
10. Implement Cost Effective Purchasing
11. Establish Grant Fund for PSAP Consolidation
12. Create Central 911 Data Repository
13. Implement Statewide GIS/ALI Database

II. Timeline for Plan Implementation

The North Carolina State 911 Plan is a living document that is used on an ongoing basis. However, any plan for action is only as good as the schedule for the action to occur. The recommendations presented in this plan are given specific dates for completion but can be measured for progress until completion is accomplished.

This timeline will reflect specific dates for completion indentified in the years 2010, 2012 and 2015. This will provide for a measured transition for all the stakeholders involved.

Of the 14 total recommendations, 10 will require some type of statutory change to either effect the recommendation or give the ability to begin work on the recommendation. The timeline will begin with the statutory changes that are listed highest in priority.

Completion Date	Recommendation
July 1, 2010 or end of legislative session	Legislative approval of changes to: § 62A-40 Expand the Definition of the 911 System § 62A-46c Expand the Eligible Use of 911 Fees by PSAPs § 62A-42 Establish PSAP Operational Standards § 62A-42 Establish PSAP Training Curriculum § 62A-42 Grant 911 Board Ability to Pay for 911 Network § 62A-4x Implement Cost Effective Purchasing § 62A-47 Establish Grant Fund for PSAP Consolidation § 62A-4x Implement Statewide GIS/ALI Database § 62A-46b Change Percentages Add MLTS legislation
July 1, 2010 or end of legislative session	# 1 Expand the Definition of the 911 System # 5 Expand the Eligible Use of 911 Fees by PSAPs # 7 Require MLTS to Provide ANI/ALI # 8 Grant 911 Board Ability to Pay for 911 Network
December 31, 2010	# 2 Establish PSAP Operational Standards # 3 Establish PSAP Training Curriculum #13 Establish Grant Fund for PSAP Consolidation # 4 Create Sustainable PSAP Funding Model
2011 Session	§ 62A-46a Create Sustainable PSAP Funding Model
January 1, 2012	# 9 Create Next Generation 911 Process # 10 Hire 911 Technical & Project Management Staff
December 31, 2012	#6 Implement Cost Effective Purchasing Review & Update State 911 Plan
June 30, 2015	#11 Create Central 911 Data Repository

	#12 Implement Statewide GIS/ALI Database Review & Update State 911 Plan

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Resource Allocation

The implementation of all the recommendations included in this plan would stretch the current 911 Board Staff of three. The addition of technical and project management staff by January 1, 2012, as identified in the plan, will be a relief to the tasks at hand. Realizing that until the hiring process can be completed for the additional fulltime staff, it is recommended that incremental contractual staffing needs be implemented for accomplishing the plan.

The contractual staffing should be as follows:

 Research for Centralized ALI Database (1 temporary FTE)—This is an initial one-time task (12 months) to lead a taskforce, issue an RFI, and coordinate interested stakeholders in researching issues associated with the potential design and implementation of a centralized ALI database and agreement on a common data format. This task may spawn subsequent project design, implementation, and deployment phases which would require ongoing support of the resource.

 911 Information Repository—Development and maintenance of 911 information repository (.25 FTE). Ongoing task to develop, acquire, research, and maintain the documents and information that will be made available related to the design, implementation, and operations of 911 services.

 911 Network Configuration—Development and maintenance of 911 network schematics. A one time task to develop and publish the initial network schematics and then provide updates as changes in 911 systems occur. This could be performed by the same FTE required for the information repository as defined above.

 911 Training Curriculum Development (1 temporary FTE)—Create an ongoing project to research, develop, and publish 911 training curriculum. Project should include the coordination of training programs with other stakeholders and the various 911 agencies.

 Research for GIS and Mapping (1 temporary FTE)—This is a one-time task that could take 8-12 months to research, develop, and provide initial coordination of GIS systems and data in support of 911 systems and mapping. Should the state determine to continue with the mapping project and provide ongoing GIS and mapping support services, the position would require a permanent FTE.

Appendix 1

The North Carolina 911 Board

Current members of the North Carolina 911 Board are:

Name and Agency	Representing
George Bakolia Senior Deputy State Chief Information Officer State of North Carolina	Office of Information Technology Services *Chair, State CIO's designee*
Jason Barbour 911 Director Johnston County Communications	National Emergency Number Association *Appointed by the Governor*
Wayne Bowers City Manager City of Greenville	League of Municipalities *Appointed by the Governor*
Frank J. Cairon Executive Director, Network Verizon Wireless, Carolinas & Tennessee	NC Licensed CMRS Provider *Appointed by the Speaker of the House*
vacant Chief of Police	Chief of Police *Appointed by the President Pro Tem*
Alan Cloninger Gaston County Sheriff	Sheriff *Appointed by the Speaker of the House*
Dave Corn Regulatory, Billing, Revenue Assurance Mgr. Yadkin Valley Telephone Membership Corp.	NC Licensed LEC Provider <200,000 access lines *Appointed by the President Pro Tem*
Christi Derreberry Government Account Manager Sprint/Nextel	NC Licensed CMRS Provider *Appointed by the President Pro Tem*
David Dodd 911 Director Cleveland County	Association of Public Safety Communications Officials *Appointed by the Speaker of the House*
Joe Durham Wake County Deputy Manager	NC Association of County Commissioners *Appointed by the Governor*

Margie Fry Vice President, Voice and Security Operations Time Warner Cable	VoIP Provider *Appointed by the Governor*
Jerry Jones Manager for Network Sales & Support AT&T	NC Licensed CMRS Provider *Appointed by the Speaker of the House*
Wesley Reid Director Guilford Metro 911	National Emergency Number Association *Appointed by the President Pro Tem*
Robert B. Smith Director, Regulatory AT&T North Carolina	NC Licensed LEC Provider *Appointed by the Speaker of the House*
Slayton Stewart CEO Carolina West Wireless	NC Licensed CMRS Provider *Appointed by the Speaker of the House*
Laura Sykora Regulatory Affairs Manager Century Link	NC Licensed LEC Provider *Appointed by the President Pro Tem*
Jean Thaxton Regulatory Director Randolph Telephone	NC Licensed LEC Provider <50,000 access lines *Appointed by the Speaker of the House*

Appendix 2

Glossary

ALI—Automatic location identification; the automatic display at the PSAP of the caller's telephone number, the address/location of the telephone and supplementary emergency services information of the location from which a call originates

ANI—automatic number identification; the telephone number associated with the access line from which a call originates answering position—a telecommunicator workstation position within a PSAP at which 911 calls for service are received and/or responses to those calls for service are dispatched

CMRS—commercial mobile radio service; i.e. a wireless provider

Enhanced 911 service—directing a call to an appropriate PSAP by selective routing based on the geographical location from which the call originated and providing information defining the approximate geographic location and the telephone number of a 911 caller, in accordance with the FCC Order.

ENS—emergency notification system; a system for placing bulk outgoing notification calls, either emergency or non-emergency

GIS—geographic information system; i.e. a computerized mapping or spatial organization application

MLTS—multi-line telephone system; a network or premise based telephone system (e.g. Centrex, PBX, Key System) with multiple extensions which may or may not be located within a single building

PBX—Private Branch Exchange; a private telephone switch that is connected to the Public Switched Telephone Network

Primary PSAP—the first point of reception of a 911 call by a public safety answering point

Telematics—system of components that supports two-way communication with a motor vehicle for the collection or transmission of information and commands (e.g. OnStar, ATX)

VoIP—voice over internet protocol; provides distinct packetized voice information in digital format using the Internet Protocol (e.g. voice communications over digital networks such as cable or DSL)

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Appendix 3

Additional Statutory Changes

§ 62A-40. Definitions

§62A-40 (5) Call taking. -- The act of processing a 911 call for emergency assistance ~~up to the point that the call is ready for dispatch~~, including the use of equipment, call classification, location of a caller, ~~and~~ determination of the appropriate response level for emergency responders, and dispatching 911 call information to the appropriate responder.

§62A-40(9) Enhanced 911 service. -- Directing a 911 call to an appropriate PSAP by selective routing or other means based on the geographical location from which the call originated and providing information defining the approximate geographic location and the telephone number of a 911 caller, in accordance with the FCC Order.

§62A-40 (x[7]) Dispatch, Dispatching. -- The broadcast, transfer, or other re-transmittal of emergency call information by a primary PSAP to responders and shall specifically exclude equipment or services required for responders to receive such information and/or to intercommunicate among themselves.

§62A-40(x) Rural[8]. –

§62A-40(x) High Cost. –

§ 62A-42. Powers and duties of the 911 Board

(a)(3) To distribute revenue in the 911 Fund to ~~CMRS providers and~~ PSAPs in accordance with this Article and advise ~~CMRS providers and~~ PSAPs of the requirements for receiving a distribution from the 911 Fund.

(a)(4) To establish policies, ~~and~~ procedures and Primary PSAP operating standards, to fund advisory services and training for PSAPs, and to provide funds in accordance with these policies, ~~and~~ procedures and standards.

(a)(6) To make and enter into contracts and agreements necessary or incidental to the performance of its powers and duties under this Article and to use

[7] "x" is used as the numbering will be adjusted to maintain alphabetical order. Rural and High Cost are used in 62A-47(a) but not defined.

[8] Two statutes include definitions of rural that may pertain: G.S. 53A-37 (5) Rural areas. Any county in North Carolina which does not include within its boundaries a city, as defined by G.S. 160A-1(2), with a population greater than one percent (1%) of the population of North Carolina; and G.S. 143B-437.45 (6) Rural county. -- A county with a density of fewer than 250 people per square mile based on the 2000 United States decennial census.

revenue available to the 911 Board under G.S. 62A-44 for administrative expenses, and funds available under G.S. 62A-47 to pay its obligations under the contracts and agreements. The Board may use funds allocated under G.S. 62A-47 for statewide projects, provided that the Board first determines that such uses:

(1) are consistent with the 911 plan,

(2) are cost effective and efficient when compared with aggregated costs incurred by primary PSAPs,

(3) are eligible 911 expenses under G.S. 62A-46(c), and

(4) will have statewide benefit for 911 service.

§ 62A-43. Service charge for 911 service

(d) Adjustment of Charge. -- The 911 Board must monitor the revenues generated by the service charge. If the 911 Board determines that the rate produces revenue in excess of the amount needed, the 911 Board must reduce the rate. The reduced rate must ensure full cost recovery ~~for voice communications service providers and~~ for primary PSAPs over a reasonable period of time. A change in the amount of the rate becomes effective only on July 1 of an even-numbered year. The 911 Board must notify providers of a change in the rate at least 90 days before the change becomes effective.

§ 62A-44. 911 Fund

(b) Allocation of Revenues. -- The 911 Board may deduct and retain for its administrative expenses up to one per-cent (1%) of the total service charges remitted to it under G.S. 62A-43 for deposit in the 911 Fund.

(1) ~~A percentage of the funds remitted by CMRS providers to the 911 Fund are allocated for reimbursements to CMRS providers pursuant to G.S. 62A-45.~~Repealed.

(3) The percentage of the funds remitted by CMRS providers allocated to ~~CMRS providers and~~ PSAPs shall be set by the 911 Board and may be adjusted by the 911 Board as necessary to ensure full cost recovery for ~~CMRS providers and, to the extent there are excess funds, for~~ distributions to primary PSAPs.

§ 62A-45. Fund distribution to CMRS providers

(Move (c), as amended, to §62A-47)

§ 62A-46. Fund distribution to PSAPs[9]

(b) Percentage Designations. -- The 911 Board must determine how revenue that is allocated to the 911 Fund for distribution to primary PSAPs and is not needed to make the base amount distribution required by subdivision (a)(1) of

[9] Alternative to Recommendation #5.

this section is to be used. The 911 Board must designate a percentage of the remaining funds to be distributed to primary PSAPs on a per capita basis, and a percentage to be allocated to the PSAP Grant Account established in G.S. 62A-47 or to the statewide 911 projects under G.S. 62A-42. If the 911 Board does not designate an amount to be allocated to the PSAP Grant Account or to the statewide 911 projects under G.S. 62A-42, the 911 Board must distribute all of the remaining funds on a per capita basis. The 911 Board may not change the percentage designation more than once each fiscal year.

(c) Use of Funds. -- A PSAP that receives a distribution from the 911 Fund may not use the amount received to pay for the lease or purchase of real estate, cosmetic remodeling of emergency dispatch centers, hiring or compensating telecommunicators, or the purchase of mobile communications vehicles, ambulances, fire engines, or other emergency vehicles or communications devices or communication system expenses for such vehicles or responders. Distributions received by a PSAP may be used only to pay for the following:

(1) The lease, purchase, or maintenance of emergency telephone equipment, including necessary computer hardware, software, and database provisioning, addressing, call taking, and nonrecurring costs of establishing a 911 system.

(e) Compliance. -- A PSAP, or the governing entity of a PSAP, must comply with all of the following in order to receive a distribution under this section:

(1) A county or municipality that has one or more PSAPs must submit in writing to the 911 Board information that identifies the PSAPs in the manner required by the FCC Order.

(2) A participating PSAP must annually submit to the 911 Board a copy of its governing agency's proposed or approved budget detailing the revenues and expenditures associated with the operation of the PSAP. The PSAP budget must identify revenues and expenditures for eligible expense reimbursements as provided in this Article and rules adopted by the 911 Board.

(3) A PSAP must be included in its governing entity's annual audit required under the Local Government Budget and Fiscal Control Act. The Local Government Commission must provide a copy of each audit of a local government entity with a participating PSAP to the 911 Board.

(4) A PSAP must comply with all requests by the 911 Board for financial information related to the operation of the PSAP.

§ 62A-47. PSAP Grant Account

(a) Account Established. -- A PSAP Grant Account is established within the 911 Fund for the purpose of making grants to PSAPs in rural and other high-cost areas. The Account consists of revenue allocated by the 911 Board under G.S. 62A-45(c) and G.S. 62A-46.

(1) Grant Reallocation[10]. -- If the ~~amount of reimbursements to CMRS providers approved by the 911 Board~~ monthly distributions under 62A-46(a)(1) for a fiscal year ~~is~~are less than the service charges remitted under 62A-43~~amount of funds allocated for reimbursements to CMRS providers~~ for that fiscal year, the 911 Board may reallocate part ~~or all~~ of the excess amount to the PSAP Grant Account, established under G.S. 62A-47 or to the statewide 911 projects under G.S. 62A-42. The 911 Board may reallocate funds under this subsection only once each calendar year and may do so only within the three-month period that follows the end of the fiscal year. If the 911 Board reallocates more than a total of three million dollars ($ 3,000,000) to the PSAP Grant Account or to statewide 911 projects under G.S. 62A-42 in a calendar year, it must consider reducing the amount of the service charge in G.S. 62A-44 to reflect more accurately the underlying costs of providing 911 system services.

(2) The 911 Board must make the following findings before it reallocates funds to the PSAP Grant Account or to the statewide 911 projects under G.S. 62A-42:

(a) There is a critical need for additional funding for PSAPs in rural or high-cost areas to ensure that enhanced 911 service is deployed throughout the State.

(b) ~~The reallocation will not impair cost recovery by CMRS providers~~.

(c) The reallocation will not result in the insolvency of the 911 Fund.

§ 62A-48. Recovery of unauthorized use of funds

The 911 Board must give written notice of violation to any ~~voice communications service provider or~~ PSAP found by the 911 Board to be using monies from the 911 Fund for purposes not authorized by this Article. Upon receipt of notice, the ~~voice communications service provider or~~ PSAP must cease making any unauthorized expenditures. The ~~voice communications service provider or~~ PSAP may petition the 911 Board for a hearing on the question of whether the expenditures were unauthorized, and the 911 Board must grant the request within a reasonable period of time. If, after the hearing, the 911 Board concludes the expenditures were in fact unauthorized, the 911 Board may require the ~~voice communications service provider or~~ PSAP to refund the monies improperly spent within 90 days. Money received under this section must be credited to the 911 Fund. If a ~~voice communications service provider or~~ PSAP does not cease making unauthorized expenditures or refuses to refund improperly spent money, the 911 Board must suspend funding to the ~~provider or~~ PSAP until corrective action is taken.

§ 62A-49 Conditions for providing enhanced 911 service

In accordance with the FCC Order, no CMRS provider is required to provide enhanced 911 service until all of the following conditions are met:

[10] Moved from §62A-45

(1) The provider receives a request for the service from the administrator of a primary PSAP that is capable of receiving and utilizing the data elements associated with the service.

(2) ~~Funds for reimbursement of the CMRS provider's costs are available pursuant to G.S. 62A-45~~.

(3) The local exchange carrier is able to support the requirements of enhanced 911 service.

Other changes not to be codified:

Allow use of accumulated fund balances for 911 related expenses; e.g. big ticket items such as radios, com equipment that is used by or for 911 centers. Such expenditures must be made in the current or next FY, all expenditures of accumulated fund balances must be reported to the Board. Use of fund balances would be conditioned upon Board approval; and Board approval would be provided only after showing that the local government has "consumed" or used its 911 funds to the fullest potential – i.e. that it has paid all eligible expenses.

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Addendum 3

List of NC 911 Board Approved Training Classes

Approved Categories

Call Taking
Improvement Programs
Maintenance to System
Protocols
PSAP Management
Quality Assurance
Supervising Staff

	Hours/Delivery	Approved	Category
Provider: APCO Institute	www.apcoinstitute.org		
Active Shooter Incidents	1 day live/3 weeks web	Yes	Call Taking
CALEA Accreditation Manager	8 weeks web	Yes	Management
Communications Center Supervisor	3 days live/5 weeks web	Yes	Supervising Staff
Crisis Negotiations for Telecommunicators	1 day live/3 weeks web	Yes	Call Taking
Customer Service in Public Safety Communications	1 day live/3 weeks web	Yes	Improvement Programs
Communications Training Officer	3 days live/5 weeks web	No	Doesn't Fit a Category
Communicaitons Training Officer Instructor	5 days live/6 weeks web	No	Doesn't Fit a Category
Disaster Operations and the Comm Center	1 day live/3 weeks web	Yes	Management
Emergency Medical Dispatch Certification	4 days live/6 weeks web	Yes	Protocols
Emergency Medical Dispatch Manager	1 day live/3 weeks web	Yes	Management
Emergency Medical Dispatch Concepts	1 day live/3 weeks web	No	Doesn't Fit a Category
Emergency Medical	5 days live/6 weeks web	No	Doesn't Fit a Category

Dispatch Instructor			
Fire Service Communications	4 days live/6 weeks web	Yes	Call Taking
Fire Service Communications Instructor	5 days live/6 weeks web	No	Doesn't Fit a Category
PSC Staffing & Employee Retention	1 day live/3 weeks web	Yes	Management
Public Safety Telecommunicator 1	5 days live/4 weeks web	Yes	Call Taking
Public Safety Telecommunicator 1 Instructor	5 days live/6 weeks web	No	Doesn't Fit a Category
Surviving Stress	1 day live/3 weeks web	Yes	Improvement Programs
Registered Public Safety Leadership (RPL) Course	approx 1 year	Yes	Management
Provider: NENA	www.nena.org		
Category: PSAP Manager's Toolkit			
Achieving Excellence in 911 Center Management	2 days	Yes	Management
Leadership in the 911 Center	1 day	Yes	Management
Next Generation Employees for the Next Gen PSAP	1 day	Yes	Management
Filling the Seats in Your PSAP	1 day	Yes	Management
Category: Expanding Your Horizions			
Missing!	1 day	Yes	Call Taking
Overcoming Negativity in the Comm Center	1 day	Yes	Improvement Programs
Preparation for PSAP Management	1 day	Yes	Supervising
Customer Service for 911 Professionals	1 day	Yes	Improvement Programs

From Ostrich to Eagle, Improving the PSAP Work Culture	1 day	Yes	Improvement Programs
Change Management in 911	1 day	Yes	Supervising
Category: Preparing for the Worst			
Continuity of Operations Plans for PSAPs	1 day	Yes	Management
Advanced Disaster Planning for PSAPs	2 days	Yes	Management
Disaster Planning for PSAPs	1 day	Yes	Management
Category: Getting the Word Out			
Government Education	1 day	Yes	Management
"In the Trenches" Approach to Public Education	1 day	No	Doesn't Fit a Category
Training the 911 Trainer	1 day	No	Doesn't Fit a Category
Category: The Future is Here			
Advanced 911 Database	2 days	Yes	Maintenance
Advanced GIS	1 day	Yes	Maintenance
Introduction to Next Generation 911	1 day	Yes	Maintenance
GIS & NG 911 for the PSAP	1 day	Yes	Maintenance
Transition to Next Generation 911	1 day	Yes	Maintenance
Category: Keeping Your PSAP Finely Tuned			
911 Center Consolidation	1 day	Yes	Management
The ADA from A to Z	1 day	Yes	Management
Grant Management for PSAPs	1 day	Yes	Management

Liability Issues in the 911 Center	1 day	Yes	Management
PSAP Design	1 day	Yes	Management
SOP SOS	1 day	Yes	Management
Communications Center Staffing Workshop	1 day	Yes	Management
Catgory: Learning the Ropes			
The 911 Puzzle: Putting All the Pieces Together	1 day	Yes	Improvement Programs
Introduction to Converging 911 Technologies	1 day	Yes	Improvement Programs
Understanding GIS for the PSAP	1 day		Maintenance
Life Skills for Telecommunicators	1 day	Yes	Improvement Programs
Provider: Priority Dispatch Corp			
National Academy Emergency Medical Dispatch	3 days	Yes	Protocols
National Academy Emergency Police Dispatch	3 days	Yes	Protocols
National Academy Emergency Fire Dispatch	3 days	Yes	Protocols
Emergency Telecommunicator Instructor	3 days	No	Doesn't Fit a Category
EMD, EFD, EPD Quality Assurance Courses	2 days	Yes	QA
NAED Communications Center Manager Course	approx 3 months	Yes	Management
Provider: NC Sheriff's Standards Commission	www.ncdoj.gov		

Sheriff's Standards Telecommunicator Certification Course	6 or 7 days	Yes	Call Taking
Provider: Powerphone	www.powerphone.com		
911 Liability	1 day		Improvement Programs
911 Supervision	2 days	Yes	Supervising
Active Shooting Response	1 day	Yes	Call Taking
Dispatch Judo: Verbal Defense & Influence for Dispatchers	2 days	Yes	Call Taking
Domestic Violence Intervention	1 day	Yes	Call Taking
Emergency Medical Dispatch	2 days	Yes	Protocols
Fire Service Dispatch	2 days	Yes	Protocols
Homeland Security for Telecommunicators	1 day	Yes	Call Taking
Hostage Negotiations	1 day	Yes	Call Taking
Law Enforcement Dispatch	2 days	Yes	Protocols
Non-Emergency Call Handling	1 day	Yes	Call Taking
Protecting Law Enforcment Responders	1 day	No	Doesn't Fit a Category
Public Safety Dispatch	2 days	Yes	Call Taking
Stress Identification and Management	1 day	Yes	Improvement Programs
Suicide Intervention	1 day	Yes	Call Taking
Provider: Public Safety Training Consultants	www.pstc911.com		
Active Shooter	1 day	Yes	Call Taking
Being the Best	1 day	Yes	Call Taking/Supervising
Building Your Liability Shield	1 day	Yes	Improvement Programs

Complacency….How to Avoid A Toxic Workplace	1 day	Yes	Supervising
Crisis Communications	1 day	Yes	Call Taking
Critical Incident Stress Management	1 day	Yes	Management/Supervising
Customer Service the 911 Way	1 day	Yes	Call Taking
Domestic & Family Violence for 911 Professionals	1 day	Yes	Call Taking
Fire Communications	1 day	Yes	Call Taking
High Risk Events!	1 day	Yes	Call Taking
Homeland Security for 911 Professionals-NIMS	1 day	Yes	Call Taking/Supervising
In Progress!	1 day	Yes	Call Taking
Modular Fire Service Dispatch Training	depends on agency need	Yes	Call Taking
People First Management	1 day	Yes	Supervising
Progressive Supervision Workshop	1 day	Yes	Supervising
School Violence: Lessons Learned	1 day	Yes	Call Taking
Planes, Trains, and Automobiles	1 day	Yes	Call Taking
Under the Headset: Surviving Dispatcher Stress	1 day	Yes	Improvement Programs
You Just Never Know	1 day	Yes	Call Taking/QA
(Most of above courses available in workshop format)	16-24 hours		
Provider: PROTEC Critical Service Solutions-Jimmy Lamb			
Telecommunicator Workshop	1 day	Yes	Improvement Programs

Recruiting, Training & Retaining Communications Personnel	2 days	Yes	Management
Provider: National Emergency Communications Institute	www.neci911.com		
Basic 911 Certification Course	5 days	Yes	Call Taking
NECI National EMD Certification Course	3 days	Yes	Protocols
NECI Fire Communications Officer Certification	3 days	Yes	Call Taking
NECI Communications Training Officer Certification	3 days	No	Doesn't Fit a Category
Workshop-Crimes in Progress Calls	1 day	Yes	Call Taking
Workshop- Suicide Calls	1 day	Yes	Call Taking
Workshop- Domestic Violence Calls	1 day	Yes	Call Taking
Workshop- Bomb Threat Calls	1 day	Yes	Call Taking
Workshop- HazMat Calls	1 day	Yes	Call Taking
Workshop- Liability and Legal Issues in 911	1 day	Yes	Improvement Programs
Workshop- Stress Management	1 day	Yes	Improvement Programs
Workshop- TDD Calls	1 day	Yes	Call Taking
Management: Developing a Policy & Procedure Manual	3 days	Yes	Management
Management: Developing a 911 Quality Assurance Program	3 days	Yes	Management

Management: EMD Program Implementation	3 days	Yes	Management
Provider: The Public Safety Group	www.publicsafetygroup.com		
Critical Incident Dispatching	2 days	Yes	Call Taking
Communicaitons Training Officer	2 days	No	Doesn't Fit a Category
Supervisor	2 days	Yes	Supervising
Fire Communications	2 days	Yes	Call Taking
Hostage Negotiations	1 or 2 days	Yes	Call Taking
Crimes In Progress	1 day	Yes	Call Taking
Active Shooter	1 day	Yes	Call Taking
Critical Incident Stress	1 day	Yes	Improvement Programs
Suicide Intervention	1 day	Yes	Call Taking
Hostage Negotiations	1 day	Yes	Call Taking
Stress: It's All in Your Head	1 day	Yes	Improvement Programs
Domestic Abuse	1 day	Yes	Call Taking
Terrorism and the Telecommunicator	1 day	Yes	Call Taking
Telecommunicator Liability	1 day	Yes	Improvement Programs
TTY Training	1/2 day	Yes	Call Taking
Customer Service	1/2 day	Yes	Call Taking
Provider: Profile Evaluations Inc	www.pei-911.com		
Hiring Right for 911	4 week web	Yes	Management
Building for Excellence: Management & Leadership Tools	6 week web	Yes	Management
The Communications Training Professional	6 week web	No	Doesn't Fit a Category
Domestic Violence	3 week web	Yes	Call Taking

by The Public Safety Group			
Stress: It's All in Your Head by The Public Safety Group	3 week web	Yes	Improvement Programs
Suicide Intervention by The Public Safety Group	3 week web	Yes	Call Taking
Basic Telecommunicator Training by Public Safety Group	5 week web	Yes	Call Taking
Active Shooter by The Public Safety Group	3 week web	Yes	Call Taking
Communications Center Liability by The Public Safety Group	3 week web	Yes	Improvement Programs
Challenging Callers by The Public Safety Group	3 week web	Yes	Call Taking
Customer Service by The Public Safety Group	3 week web	Yes	Call Taking

Addendum 4

This form is required as part of the rule making requirements. Effective dates will be specified for each rule: some will be effective when the rules receive final approval while others such as the PSAP operating standards will become effective in the future; e.g. July 2012 or other selected date. All sections of the standards document are incorporated into this document and cross referenced below. This change in presentation separates some provisions, such as those regarding grants for construction and standards section 5 for new construction or renovation; (*see .0402 PSAP Grants for Construction*).

Text previously approved by the Board appears throughout this document. Text of the standards proposed for approval by the Board is underlined. A few tracked changes remain for resolution.

Some editorial changes have been made to ensure consistency; e.g. "emergency call" has been changed to "emergency 911 call" because both phrases appeared. Additionally, this document includes definitions of some words common to 911 operations or used in the enabling legislation but not defined there (e.g. addressing), and uses definitions from the legislation in lieu of phrasing in the draft standards (e.g. voice communications; *see .0209 Telephones*). A conflict exists between the 3 year retention requirement in .0213 Records (standard 11) and the rule text previously adopted by the Board in .0105. Five year record retention meets the current funding model; i.e. having five years of financial data and support is material to determining the proper level of funding to the PSAPs.

Cross references of Rules to the draft standards:

Rule .0102	Definitions identifies new definitions from the standards
Rule .0103	Standards sec. 1: Administration
Rule .0207	Standards sec 6: Operations
Rule .0208	Standards sec 3: PSAP Facilities & sec 4 Power
Rule .0209	Standards sec 7: Telephones
Rule .0210	Standards sec 8: Dispatching Systems
Rule .0211	Standards sec 9: CAD Systems
Rule .0212	Standards sec 10: Testing
Rule .0213	Standards sec 11: Records
Rule .0402	Standards sec 5: Grants for Construction

09 NCAC 06C.0101 is proposed for adoption as follows:

TITLE 09, CHAPTER 06, SUBCHAPTER C

911 BOARD

SECTION .0100 – FORMS, DEFINITIONS, ADMINISTRATION

09 NCAC 06C.0101 FORMS

The 911 Board shall prescribe forms by or for use by Public Safety Answering Points (PSAPs), Service Providers, and any other parties as may be needed to ensure uniformity in the operation of these Rules and policies adopted by the Board.

History Note: *Authority: G.S. 62A-42;*
Eff.

09 NCAC 06C .0102 is proposed for adoption as follows:

09 NCAC 06C.0102 DEFINITIONS

(a) "Addressing" means the assigning of a numerical address and street name (the street name may be numerical) to all locations within a local government's geographical service area for the purpose of providing Enhanced 911 service.

(b) "Appropriate Public Safety Answering Point (PSAP)" means a Primary PSAP or a Board approved Back-up PSAP.

(c) "Back-up PSAP" means a facility equipped with automatic number identification, automatic location identification displays and all other features common to primary PSAPs. A Backup PSAP receives 911 calls only when they are transferred from the primary PSAP or on an alternate routing basis when calls cannot be completed to the primary PSAP. A Backup PSAP facility is normally unattended is remote from the Public Safety Answering Point and used to house equipment necessary for the functioning of an emergency communications system.

(d) Circuit. The conductor or radio channel and associated equipment that are used to perform a specific function in connection with an emergency 911 call system.

(e) CMRS is a commercial mobile radio service.

(f) CMRS "Non-recurring cost (NRC)" means one-time costs incurred by CMRS Service Providers for initial connection to selective routers and the wireless systems service provider (3rd party vendor non-recurring) cost.

(g) Communications System. A combination of links or networks that serves a general function such as a system made up of command, tactical, logistical, and administrative networks supporting the operations of an individual PSAP.

(h) Comprehensive Emergency Management Plan (CEMP). A disaster recovery plan that conforms to guidelines established by the Public Safety Answering Point and is designed to address natural, technological, and man-made disasters.

(i) Computer-Aided Dispatch (CAD). A combination of hardware and software that provides data entry, makes resource recommendations, and notifies and tracks those resources before, during, and after emergency 911 calls, preserving records of those emergency 911 calls and status changes for later analysis.

(j) Computer Aided Dispatch (CAD) Terminal. An electronic device that combines a keyboard and a display screen to allow exchange of information between a Telecommunicator and one or more computers in the system/network.

(k) Control Console. A wall-mounted or desktop panel or cabinet containing controls to operate communications equipment.

(l) Coordinated Universal Time. A coordinated time scale, maintained by the Bureau International des Poids et Measures (BIPM), which forms the basis of a coordinated dissemination of standard frequencies and time signals.

(m) Dispatch Circuit. A circuit over which a signal is transmitted from the Public Safety Answering Point to an Emergency Response Facility (ERF) or Emergency Response Unit (ERU) to notify the emergency response unit to respond to an emergency.

(n) Emergency 911 call Processing/Dispatching. A process by which an emergency 911 call answered at the Public Safety Answering Point is transmitted to Emergency Response Facilities (ERFs) or to Emergency Response Units (ERUs) in the field.

(o) Emergency Response Facility (ERF). A structure or a portion of a structure that houses PSAP equipment and personnel for receiving and dispatching 911 calls.

(p) Emergency Response Unit (ERU). A first responder to include but not limited to a police vehicle, a fire truck, and an ambulance. Personnel who respond to fire, medical, law enforcement, and other emergency situations for the preservation of life and safety.

(q) Geographic information systems (GIS) are computer programs linking features commonly seen on maps (such as roads, town boundaries, water bodies) with related information not usually presented on maps, such as type of road surface, population, type of agriculture, type of vegetation, or water quality information.

(r) "GIS base map" means a map comprising streets and centerlines used in a Geographic Information System.

(s) "Local Exchange Carrier" or "LEC" has the same meaning as provided in Chapter 62 of the N.C. General Statutes.

(t) Logging Voice Recorder. A device that records voice conversations and automatically logs the time and date of such conversations; normally, a multichannel device that keeps a semi-permanent record of operations.

(u) Notification. The time at which an emergency 911 call is received and acknowledged at a PSAP.

(v) Operations Room. The room in the PSAP where emergency 911 calls are received and processed and communications with emergency response personnel are conducted.

(w) Phase I wireless enhanced 911 service means the CMRS Service Provider delivers to the appropriate PSAP the telephone number of the handset originating the 911 call (callback number), and the location of the cell site/sector receiving the 911 call.

(x) Phase II wireless enhanced 911 service means the CMRS Service Provider delivers the telephone number of the handset originating the 911 call (callback number) to the appropriate PSAP in addition to the latitude and longitude coordinates representing the handset location.

(y) "Place of primary use" has the same meaning as provided in the Mobile Telecommunications Sourcing Act, 4 U.S.C. § 124(8), if applicable; and otherwise sourcing shall be determined pursuant to N.C. General Statutes 105-163 or 105-164.4C.

(z) Public Safety Agency. An organization that provides law enforcement, emergency medical, fire, rescue, communications, or related support services.

(aa) Public Safety Answering Point (PSAP) is the public safety agency that receives incoming 911 calls.

(bb) PSAP "Nonrecurring costs" means non-repetitive charges incurred by a Primary PSAP to pay for equipment or services which do not occur on a fixed schedule. Examples include computer equipment that has become functionally outdated, software upgrades, or repair costs that are not covered by any maintenance agreement.

(cc) “PSAP Recurring costs” means repetitive charges incurred by a primary PSAP, including, but not limited to, database management, lease of access lines, lease of equipment, network access fees, and applicable maintenance costs.

(dd) Security Vestibule. A compartment provided with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time.

(ee) Standard Operating Procedures (SOPs). Written organizational directives that establish or prescribe specific operational or administrative methods that are to be followed routinely for the performance of designated operations or actions.

(ff) “Selective routing” or “Tandem routing” means routing a 911 call to the appropriate PSAP based upon the caller’s location.

(gg) Stored Emergency Power Supply System (SEPSS). A system consisting of a UPS, or a motor generator, powered by a stored electrical energy source, together with a transfer switch designed to monitor preferred and alternate load power source and provide desired switching of the load, and all necessary control equipment to make the system functional.

(hh) “Sworn invoice” means an invoice prepared by a CMRS Service Provider’s vendor that describes the goods or services and identifies the costs that the CMRS Service Provider submits for cost recovery pursuant to an approved cost recovery plan, and that is accompanied by an affidavit that substantially complies with a form provided by the Board.

(ii) “911 line/trunk” means a telephone line/trunk which is dedicated to providing a caller with access to the appropriate PSAP by dialing the digits 911.

(jj) “Service Provider” means an entity that provides voice communications service, including resellers of such service.

(kk) TDD/TTY. A device that is used in conjunction with a telephone to communicate with persons who are deaf, who are hard of hearing, or who have speech impairments, by typing and reading text.

(ll) “Telecommunicator” shall mean any person engaged in or employed as a full time or part time 911 communications center call-taker (emergency communications specialist, emergency dispatcher, etc).

(mm) Uninterruptible Power Supply (UPS). A system designed to provide power, without delay or transients, during any period when the primary power source is incapable of performing.

(nn) Voice Communication Channel. A single path for communication by spoken word that is distinct from other parallel paths.

History Note: *Authority G.S. 62A-42;*
Eff..

09 NCAC 06C.0103 is proposed for adoption as follows:

09 NCAC 06C.0103 ADMINISTRATION

a) Scope.

1) Standards established in Section 2 shall cover the installation, performance, operation, and maintenance of PSAPs and the associated emergency communication systems.

2) Standards established in Section 2 shall not be used as a design specification manual or an instruction manual.

b) Purpose. The purpose of the Standards established in Section 2 shall be as follows:

1) To specify operations, facilities, and communications systems that receive emergency 911 calls from the public.

2) To provide requirements for the retransmission of such emergency 911 calls to the appropriate emergency response agencies.

3) To provide requirements for dispatching of appropriate emergency response personnel.

4) To establish the required levels of performance and quality of installations of emergency services communications systems.

c) Application. The Standards established in Section 2 shall apply to emergency 911 systems that include, but are not limited to, dispatching systems, telephone systems, and public reporting systems that provide the following functions:

1) Communication between the public and emergency response agencies.

2) Communication within the emergency response agency under emergency and non-emergency conditions.

3) Communication among emergency response agencies.

d) Equivalency. Nothing in the Standards established in Section 2 is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by these standards.

1) Technical documentation shall be submitted to the local government to demonstrate equivalency.

2) The system, method, or device shall be approved for the intended purpose by the local government.

History Note: *Authority G.S .62A-40*

Eff.

09 NCAC 06C.0104 is proposed for adoption as follows:

09 NCAC 06C.0104 FAILURE TO COMPLY WITH RULES

(a) If the Board determines that a Service Provider does not appear to have complied with N.C. General Statutes Chap. 62A, these rules or the requirements of FCC Report and Order 94-102 ("Report and Order"), a certified, return receipt letter shall be mailed to the company representative known to the Board. The letter shall request justification or an explanation from the Service Provider for the apparent non-compliance. The Service Provider shall have fifteen calendar days to respond to the letter.

(b) Board staff shall initially assess the Service Provider's response and report to the Board. The Board shall review the staff's report. If it appears to the Board that the Service Provider has failed to comply with applicable law, these rules or the FCC Order, the Board shall notify the Service Provider to that effect and to the consequences arising from such failure, and shall provide an opportunity for the Service Provider to appear before the Board.

(c) If after notice to the Service Provider, and appearance before the Board or Service Provider's failure to appear, the Board determines that the Service Provider has offered no reasonable solution, the Board may, at its discretion file a complaint with the FCC, the N.C. Utilities Commission or other regulatory body exercising jurisdiction over the Service Provider. A reasonable solution shall be defined as one that will comply with applicable law, these rules or the FCC Order within thirty days or upon such other conditions as the Board may find reasonable.

(d) If the non-compliant Service Provider is a CMRS Service Provider, all reimbursement payments due shall be suspended until compliance with applicable law, these rules or the FCC Order has been completed.

(e) If after notice and hearing, the Board determines that the affected PSAP is at fault, rules and procedures regarding PSAP compliance shall be followed.

(f) If through the review process the Board determines that a PSAP or CMRS Service Provider is not adhering to an approved plan or is not using funds in the manner prescribed in these rules or G.S. 62A, the Board may, after notice and hearing, suspend distributions or reimbursements until satisfactory evidence of compliance is provided to the Board. A CMRS Service Provider is not eligible to receive or expend 911Fund monies until such time as the Board determines that the Service Provider is in compliance with an approved plan and 911 Fund usage limitations.

History Note: *Authority G.S .62A-42, 62A-48;*
Eff.

09 NCAC 06C.0105 is proposed for adoption as follows:

9 NCAC 6C.0105 Review 911 Fund Expenditures

a) PSAPs shall maintain detailed books and records related to 911 Funds received and use of such funds in accordance with the Local Government Budget and Fiscal Control Act and other applicable law and generally accepted accounting principles. PSAPs shall maintain these books and records for a minimum of five (5) years. All books and records shall be available for review by the Board, its representatives, and/or audit by other governmental entities with such authority upon reasonable notice and during normal business hours. PSAPs shall cooperate fully with any such review or audit. If any review or audit indicates overpayment to a PSAP, the Board shall adjust future or final payments otherwise due. If no payments are due and owed to a PSAP, or if the overpayment exceeds the amount otherwise due during that fiscal year, the PSAP shall immediately refund all amounts that may be due to the 911 Fund.

b) PSAPs shall provide copies of any audit reports to the Board if such audit reports include receipts or expenditures for 911 systems.

c) CMRS Service Providers shall maintain detailed books and records related to service charges remitted, and records necessary to support requested reimbursements in accordance with applicable law and generally accepted accounting principles. CMRS Service Providers shall maintain these books and records for a minimum of 5 years. All books and records shall be available for review or audit by the Board, its representatives, and other governmental entities with such authority upon reasonable notice and during normal business hours. CMRS Service Providers shall cooperate fully with any such review or audit. If any audit or review indicates overpayment to a CMRS Service Provider, or subcontractor, the Board shall adjust future or final payments otherwise due. If no payments are due and owed to a CMRS Service Provider, or if the overpayment exceeds the amount otherwise due during that fiscal year, the CMRS Service Provider shall immediately refund all amounts that may be due to the 911 Fund.

Authority: *G.S. 62A-46(d)-42, 62A-48, 62A-50*
Eff.

09 NCAC 06C.0106 is proposed for adoption as follows:

9 NCAC 6C.0106 Waiver of Rules

Upon consideration of a written request and after publishing notice of any wavier request, the Board may waive any rule in this Chapter. The factors which the Board shall use in determining whether to grant a waiver are:

a) Whether the requested waiver is consistent with Article 3 of Chapter 62A or other North Carolina Statutes;
b) Whether any applicable Rule should be modified;
c) Costs to the 911 Fund if the wavier is granted;
d) Costs to the party requesting a waiver if the waiver is not granted;
e) Whether granting the waiver is consistent with the statewide 911 plan;
f) The benefit to the public;
g) Whether granting the waiver is consistent with the requirements and intent of the FCC Order;
h) Prior, concurrent, or similar waiver requests; and
i) Whether the waiver is supported or opposed by PSAPs or Service Providers.

Authority: *G.S. 62A-22.1, 150B-19(6)*
Eff.

09 NCAC 06C.0107 is proposed for adoption as follows:

9 NCAC 6C.0107 Hearings

a) A PSAP or Service Provider aggrieved in connection with any action taken by the Board under this Part may request a hearing before the Board.

b) Requests for hearings shall be made in writing to the Executive Director and Chair of the Board and shall be filed within 30 calendar days after the aggrieved party knows or should have known of the facts giving rise to the request. A request for hearing is considered filed when physically received by the Executive Director or Chair. Requests filed after the 30 calendar day period shall not be considered. To expedite handling of requests, the envelope should be labeled "911 Funds Request for Hearing". The written request shall include as a minimum the following:

1) the name and address of the party;
2) the action of the Board;
3) a statement of reasons for the hearing; and
4) supporting exhibits, evidence, or documents necessary to substantiate the party's complaint.
5) Requests for hearing shall be sent to:

Executive Director, 911 Board
c/o NC Office of Information Technology Services
P.O. Box 17209
Raleigh, NC 27609

c) Any additional information requested by the Board shall be submitted within the time periods established in order to expedite consideration of the request. Failure of the requesting party to comply expeditiously with a request for information by the Board may result in resolution of the request without consideration of that information.

d) A decision on a request shall be made by the Board as expeditiously as possible after receiving all relevant requested information.

Authority: *G.S. 62A-22.1*
Eff.

09 NCAC 06C.0108 is proposed for adoption as follows:

9 NCAC 6C.0108 Declaratory Rulings

a) On request of a person aggrieved, the Board shall issue a declaratory ruling as to the validity of a rule or as to the applicability to a given state of facts, a statute administered by the Board or of a rule or order of the Board, except when the Board for good cause finds issuance of a ruling undesirable.

b) All requests for declaratory rulings shall be written and mailed to:

Executive Director, 911 Board
c/o NC Office of Information Technology Services
P.O. Box 17209
Raleigh, NC 27609

c) All requests for a declaratory ruling must include the following information:

1) name and address of petitioner, and petitioner's attorney;

2) statute or rule to which petition relates;

3) a statement of the interpretation given the statute or rule in question by petitioner together with a statement of the reasons, including any legal authorities, in support of the interpretation given the statute or rule by petitioner

4) a draft of the declaratory ruling sought by petitioner, if a specified outcome is sought by petitioner,

5) concise statement of the manner in which petitioner is aggrieved by the rule or statute or its potential application to the petitioner;

6) a list or description of persons likely to be affected by the declaratory ruling,

7) a statement of whether an oral hearing is desired, and if so the reasons for an oral hearing.

d) Whenever the Board believes for good cause that the issuance of a declaratory ruling is undesirable, the Board may refuse to do so. When good cause for refusing to issue a declaratory ruling is deemed to exist, the Board shall notify the petitioner of the decision in writing, stating reasons for the denial of a declaratory ruling.

e) Where a declaratory ruling is deemed appropriate, the Board shall issue the ruling within 60 days of receipt of the petition.

f) Prior to issuing a declaratory ruling, the Board may give notice of the declaratory proceedings to any person or entity it deems appropriate and may direct that fact-finding proceedings appropriate to the circumstances of the particular request be conducted. A declaratory ruling procedure may consist of written submissions, oral hearings, or such other procedures as may be appropriate in a particular case.

g) For purposes of Subpart (d) of this Rule, the Board will ordinarily refuse to issue a declaratory ruling:

1) unless the petitioner shows that the circumstances are so changed since the adoption of the rule that such a ruling would be warranted;

2) unless the petitioner shows that the Board did not give to the factors specified in the request for a declaratory ruling a full consideration at the time the rule was issued;

3) where there has been a similar controlling factual determination in a contested case, or where the factual context being raised for a declaratory ruling was specifically considered upon the adoption of the rule or directive being questioned, as evidenced by the rulemaking record; or

4) where the subject matter of the request is involved in pending litigation in any North Carolina court, federal court or the Federal Communications Commission.

Authority: *G.S. 62A-42, G.S. 150B-4, 150B-17*

Eff.

09 NCAC 06C.0201 is proposed for adoption as follows:

SECTION .0200 – PUBLIC SAFETY ANSWERING POINTS (PSAPS)

09 NCAC 06C.0201 PSAP ELIGIBILITY

Before receiving distributions from the 911 Fund, a primary PSAP must meet the following criteria and certify to the same:

(a) The PSAP is separately identified in its governing agency's budget and in any audit conducted under the Local Government Budget and Fiscal Control Act.

(b) The PSAP meets the definition of primary PSAP under G.S. 62A-40(16). Callers must be able to reach the PSAP by placing a call using only the digits 911. The PSAP must operate an enhanced 911 system.

(c) The PSAP equipment vendor or a Service Provider operating in the PSAP's jurisdiction must also certify that the PSAP is capable of receiving and dispatching Phase I wireless enhanced 911 service. If neither an equipment vendor nor a Service Provider is available, a city or county may use certification from a technology specialist satisfactory to the Board to meet this requirement.

(d) Provide copies of all documentation evidencing agreements with other PSAPs governing the manner in which 911 Funds are used in overlapping geographic service areas, as identified by zip code or other identifier such as telephone exchange, township.

History Note: *Authority G.S. 62A-46;*
Eff.

09 NCAC 06C.0202 is proposed for adoption as follows:

09 NCAC 06C.0202 PSAP ELIGIBLE EXPENSES

(a) Expenses that are solely incurred to enable a PSAP to receive and utilize the voice and data elements necessary for wireline 911 and wireless Phase I or Phase II compliance may be fully paid from a PSAP's 911 Fund distributions. Eligible lease, purchase, and maintenance expenses for emergency telephone equipment include 911 telephone equipment/system costs. Eligible costs for necessary computer hardware include CAD workstation computers, servers, and ancillary equipment; GIS workstation computers, servers, and ancillary equipment; and voice logging recorder computers. Eligible costs for necessary computer software include software used in conjunction with the computer hardware to provide callers with access to the PSAP by dialing 911. Database provisioning includes creation of the ALI database and the GIS base map database. GIS base map eligible expenses include mapped street centerlines, together with costs for creation and maintenance of the base map. Nonrecurring costs of establishing a wireless Enhanced 911 system include emergency generator or uninterruptible power supplies, and Telecommunicator furniture necessary for 911system operation. Rates associated with local telephone companies' charges related to the operation of the 911 system include monthly charges for delivery of 911 calls, ANI/ALI, and monthly charges for telephone interpreter services.

(b) The 911 Board may create and periodically revise a list of permitted expenditures consistent with G.S. 62A-46.

(c) Ineligible costs include:

(1) basic termination charges incurred due to the disconnection of telephone equipment to be replaced with 911 equipment;

(2) capital outlay expenditures, such as, buildings, remodeling, communication towers and equipment not directly related to providing the user of a voice communications service connection access to a PSAP by dialing the digits 911;

(3) mobile or base station radios, pagers, or other devices used for response to, rather than receipt of, 911 calls, including but not limited to mobile data terminals (MDT) and automatic vehicle location (AVL) systems used in response vehicles;

(4) seven-digit transfer-to-lines;

(5) private line circuit costs;

(6) directory listings;

(7) maintenance costs for radio equipment and/or other miscellaneous equipment that is not integral to providing the user of a voice communications service connection access to a PSAP by dialing the digits 911.

History Note: *Authority G.S. 62A-46;*
Eff.

09 NCAC 06C.0203 is proposed for adoption as follows:

09 NCAC 06C.0203 TERMINATION AND SUSPENSION OF 911 FUND DISTRIBUTIONS

(a) A primary PSAP operated by or for a local government that is not identified or included in its governing agency's budget or in any audit conducted pursuant to the Local Government Budget and Fiscal Control Act shall not be eligible for distributions from the 911 Fund.

(b) 911 Fund distributions that lapse due to termination of a primary PSAP shall be re-allocated by the Board.

(c) 911 Fund distributions that are suspended shall be maintained by the Board until such time as the PSAP entitled to such distributions complies with the requirements of applicable statutes, these rules, and the Board's standards, policies and procedures.

(d) Primary PSAPs that cease independent operation due to consolidation with other such PSAPs, or that are consolidated with newly formed PSAPs, shall give notice to the Board. Distributions for such PSAPs shall be allocated to the consolidated PSAP upon the Board's approval of such distributions.

History Note: *Authority G.S. 62A-46 and 62A-48*
Eff.

09 NCAC 06C.0204 is proposed for adoption as follows:

09 NCAC 06C.0204 PSAP REPORTING

(a) Any PSAP receiving or requesting 911 Fund distributions must submit a copy of its governing agency's approved budget to the Board detailing the revenues and expenditures associated with the operation of its 911 system by December 1 of each year or as requested by the Board.

(b) If a PSAP fails to report its revenues and expenditures by January 30th of each year or as requested by the Board, the Board will give notice to the PSAP's governing agency by certified mail. The notice shall also inform the governing agency that failure to provide the requested information within fifteen days will be cause for suspension of monthly PSAP fund distributions until the information is received. The notice will further inform the governing agency that continuing failure to provide the information will result in a report to the North Carolina Local Government Commission of the PSAP's failure.

(c) If after sixty (60) days from January 30th of each year or the date requested by the Board under (a) above the financial information is still not received, the Board will inform the North Carolina Local Government Commission in writing of the PSAP's failure to respond to the requested information. A copy of the notice to the North Carolina Local Government Commission will also be sent to the PSAP manager and the governing agency.

(d) Each PSAP shall submit an annual report to the Board on or before December 1 of each calendar year, or as requested by the Board, detailing all revenues and expenditures associated with 911 systems during the immediately preceding fiscal year. The report shall be on a form provided by the Board and shall include information including installation schedules, installation expenses, anticipated 911 system changes, other system related costs and other information deemed necessary by the Board or by the PSAP.

(e) Each county or municipality shall submit a list of PSAPs operating within its jurisdiction each year; or, if none are known, a statement to that effect.

History Note: Authority G.S. 62A-4 and 62A-46;
Eff.

09 NCAC 06C.0205 is proposed for adoption as follows:

09 NCAC 06C.0205 [Reserved; former text was approved by the Board and has been moved to .0203(c)]

(a)

History Note: *Authority G.S. 62A-46;*
Eff.

09 NCAC 06C.0206 is proposed for adoption as follows:

09 NCAC 06C.0206 BACK-UP PSAPs

(a) An alternate method for receiving and processing 911 calls is necessary when a Primary PSAP becomes inoperable due to a catastrophic failure.

(b) The Board will disburse 911 Funds for back-up PSAPs to the extent eligible expenses are incurred for such PSAPs, and provided:

(1) A written determination for the need of a back-up PSAP is provided to the 911 Board;

(2) A plan supporting the written determination is submitted to the 911 Board, including detailed start-up costs and projected recurring expenses, and the Board approves the plan submitted;

(3) The plan includes any local agreements which may exist, or which are anticipated, which provide for the back-up PSAP;

(4) Regular annual reports regarding the back-up PSAP are made to the 911 Board and

(5) Any back-up PSAP plan revisions have been provided to the 911 Board staff.

Note: Alternate methods for receiving and processing 911 calls may include interlocal agreements among one or more PSAPs for sharing physical resources, entail use of portable equipment which could be temporarily implemented wherever appropriate network connectivity is accessible, construction and maintenance of a back-up PSAP facility that would only be utilized when the Primary PSAP is inoperable, or other alternative solution.

History Note: *Authority G.S. 62A-42*

Eff.

09 NCAC 06C.0207 is proposed for adoption as follows:

09 NCAC 06C.0207 PSAP OPERATIONS AND MANAGEMENT

(a) Personnel

(1) All systems shall be under the control of a responsible employee or employees of the PSAP served by the systems.

(2) The PSAP Emergency services dispatching entities shall have trained and qualified technical assistance available for trouble analysis and repair by in-house personnel or by authorized outside contract maintenance services.

(3) Where maintenance is provided by an organization or person other than an employee of the PSAP complete written records of all installation, maintenance, test, and extension of the system shall be forwarded to the responsible employee of the PSAP.

(4) Maintenance performed by an organization or person other than an employee of the PSAP shall be by written contract that contains a guarantee of performance.

(5) The PSAP shall have a written local management approved access control plan.

(6) Maintenance personnel other than an employee of the PSAP shall be approved by the PSAP pursuant to the approved access control plan as offering no threat to the security of the facility or the employees and equipment within it.

(7) All equipment shall be accessible to the PSAP for the purpose of maintenance.

(8) At least one supervisor or lead with Telecommunicator certification shall be available to respond immediately at all times 24 hours per day, 7 days per week, 52 weeks per year.

(b) Telecommunicator Qualifications and Training.

(1) Telecommunicators and Supervisors shall be certified in the knowledge, skills, and abilities related to their job function.

(2) Telecommunicators and Supervisors shall have knowledge of the function of all communications equipment and systems in the PSAP.

(3) Telecommunicators and Supervisors shall know the rules and regulations that relate to equipment use, including those of the Federal Communications Commission that pertain to emergency service radio use.

(4) Telecommunicators and Supervisors shall be capable of operating and testing the communications equipment they are assigned to operate.

(5) Telecommunicators and Supervisors shall receive training to maintain the skill level appropriate to their positions.

(6) Telecommunicators and Supervisors shall be trained in TDD/TTY procedures, with training provided at a minimum of once per year as part of the Annual Training.

(c) Staffing.

(1) There shall be sufficient Telecommunicators available to effect the prompt receipt and processing of emergency 911 calls needed to meet the requirements as specified herein.

(2) After January 1, 2013 a minimum of two (2) Telecommunicators must be available at all times 24 hours per day, 7 days per week, 52 weeks per year to immediately receive and process emergency 911 calls.

(3) Where communications systems, computer systems, staff, or facilities are used for both emergency and non-emergency functions, the non-emergency use shall not degrade or delay emergency use of those resources.

(A) A PSAP shall handle emergency 911 calls for service and dispatching in preference to nonemergency activities.

(B) The PSAP and emergency response agencies shall develop written standard operating procedures that identify when a dedicated Telecommunicator is required to be assigned to an emergency incident.

(4) Telecommunicators shall not be assigned any duties prohibiting them from immediately receiving and processing emergency 911 calls for service in accordance with the time frame specified in the Operating Procedures.

(d) Operating Procedures.

(1) Ninety (90) percent of emergency 911 calls received on emergency lines shall be answered within ten (10) seconds, and ninety-five (95) percent of emergency 911 calls received on emergency lines shall be answered within twenty (20) seconds. Compliance with (d).1 shall be evaluated monthly using data from the previous month.

(2) The PSAP is required to provide pre-arrival medical protocols as set forth by the North Carolina Office of Emergency Services, Health and Human Services in the initial call reception or by the responsible EMS provider on behalf of the primary answering point.

(3) For law enforcement purposes, the PSAP shall determine time frames allowed for completion of dispatch.

(4) When emergency 911 calls need to be transferred to another PSAP, the Telecommunicator will transfer the call without delay. The Telecommunicator will advise the caller: “Please do not hang up; I am connecting you with (name of the agency).” The Telecommunicator should stay on the line until the connection is complete and verified.

(5) The PSAP shall transfer calls for services as follows:

(A) The call for service shall be transferred directly to the Telecommunicator.

(B) The transferring agency shall remain on the line until it is certain that the transfer is effected.

(C) The transfer procedure shall be used on emergency 911 calls.

(6) All calls for service, including requests for additional resources, shall be transmitted to the identified Emergency Response Units over the required dispatch systems.

(7) An indication of the status of all Emergency Response Units shall be available to Telecommunicators at all times.

(8) Records of the dispatch of Emergency Response Units to call for services shall be maintained and shall identify the following:

(A) Unit designation for each Emergency Response Unit (ERU) dispatched

(B) Time of dispatch acknowledgment by each ERU responding

(C) Enroute time of each ERU

(D) Time of arrival of each ERU at the scene

(E) Time of patient contact, if applicable

(F) Time each ERU is returned to service

(9) All emergency response agencies shall use common terminology and integrated incident communications.

(10) When the device monitoring the system for integrity indicates that trouble has occurred, the Telecommunicator shall act as follows:

(A) Take appropriate steps to repair the fault.

(B) Isolate the fault and notify the official responsible for maintenance if repair is not possible.

(11) Standard operating procedures shall include but not be limited to the following:

(A) All standardized procedures that the Telecommunicator is expected to perform without direct supervision.

(B) Implementation plan that meets the requirements of a formal plan to maintain and operate the backup PSAP.

(C) Procedures related to the CEMP.

(D) Emergency response personnel emergencies.

(E) Activation of an emergency distress function.

(F) Assignment of incident radio communications plan.

(G) Time limit for acknowledgment by units that have been dispatched.

(12) Every PSAP shall have a comprehensive regional emergency communications plan as part of the CEMP.

(A) The emergency communications plan shall provide for real-time communications between organizations responding to the same emergency incident.

(B) This emergency communications plan shall be exercised at least once a year.

(C) In the event that an ERU has not acknowledged its dispatch/response within the time limits established by the PSAP, the Telecommunicator shall perform one or more of the following:

(i) Attempt to contact the ERU(s) by radio

(ii) Re-dispatch the ERU (s) using the primary dispatch system

(iii) Dispatch the ERU(s) using the secondary dispatch system

(iv) Initiate two-way communication with the ERU's supervisor

(13) The PSAP shall develop and implement standard operating procedures for responding to and processing TDD /TTY calls.

(14) Calls received as an open-line or "silent call" shall be queried as a TDD/TTY call if no acknowledgment is received by voice.

(e) Time.

(1) The clock for the main recordkeeping device in the PSAP shall be synchronized to Coordinated Universal Time.

(2) All timekeeping devices in the PSAP shall be maintained within ±5 seconds of the main recordkeeping device clock.

(f) Recording.

(1) PSAPs shall have a logging voice recorder with one channel for each of the following:

(A) Each transmitted or received emergency radio channel or talk group.

(B) Each voice dispatch call for service circuit.

(C) Each Telecommunicator telephone that receives emergency 911 calls for service.

(2) Each Telecommunicator position shall have the ability to instantly recall telephone and radio recordings from that position.

(3) Emergency 911 calls that are transmitted over the required dispatch circuit(s) shall be automatically recorded, including the dates and times of transmission.

(g) Quality Assurance/Improvement.

(1) PSAPs shall establish a quality assurance/improvement program to ensure the consistency and effectiveness of emergency 911 call processing.

(2) Statistical analysis of emergency 911 call and dispatch performance measurements shall be completed monthly and compiled over a one (1) year period.

History Note: *Authority G.S. 62A-42(a)(4)*

Eff. July 1, 2012

09 NCAC 06C.0208 is proposed for adoption as follows:

09 NCAC 06C.0208 PUBLIC SAFETY ANSWERING POINT (PSAP) FACILITIES

(a) General.

(1) Any Primary PSAP, Backup PSAP, and Secondary PSAP that receives funding from the NC 911 Board is required to comply with all NC 911 Board Standards.

(2) All equipment, software, and services used in the daily operation of the PSAP shall be kept in working order at all times.

(3) The PSAP shall be provided with an alternate means of communication that is compatible with the alternate means of communication provided at the Emergency Response Facilities (ERFs).

(A) The alternate means shall be readily available to the Telecommunicator in the event of failure of the primary communications system.

(B) Telecommunicators shall be trained and capable of using the alternate means in the event of failure of the primary communications system.

(4) Each PSAP shall maintain a Backup PSAP or have an arrangement for backup provided by another PSAP. Agencies may also pool resources and create regional backup centers.

(A) The Backup PSAP shall be capable, when staffed, of performing the emergency functions performed at the primary PSAP.

(B) The Backup PSAP shall be separated geographically from the primary PSAP at a distance that ensures the survivability of the alternate center.

(C) Each PSAP shall develop a formal written plan to maintain and operate the Backup PSAP or if backup is provided by another PSAP a formal written plan that defines the duties and responsibilities of the alternate PSAP.

(i) The plan shall include the ability to reroute incoming emergency 911 call traffic to the backup center and to process and dispatch emergency 911 calls at that center.

(ii) The plan shall be included in the Comprehensive Emergency Management Plan (CEMP).

(5) The PSAP shall be capable of continuous operation long enough to enable the transfer of operations to the Backup PSAP in the event of an emergency in the PSAP or in the building that houses the PSAP.

(6) Systems that are essential to the operation of the PSAP shall be designed to accommodate peak workloads.

(7) PSAPs shall be designed to accommodate the staffing level necessary to operate the center as required by the Standards set herein.

(8) The design of the PSAP shall be based on the number of personnel needed to handle peak workloads as required by the Standards set herein.

(9) Each PSAP shall have a written Comprehensive Emergency Management Plan (CEMP).

(10) Emergency Fire Plan. There shall be a local management approved, written, dated, and annually tested emergency fire plan that is part of the CEMP.

(11) Damage Control Plan. There shall be a local management approved, written, dated, and annually tested damage control plan that is part of the CEMP.

(12) Backup Plan. There shall be a local management approved, written, dated, and annually tested backup PSAP plan that is part of the CEMP and approved by the NC 911 Board.

(13) Penetrations into the PSAP shall be limited to those necessary for the operation of the center.

(b) Power.

(1) At least two independent and reliable power sources shall be provided, one primary and one secondary; each of which shall be of adequate capacity for operation of the PSAP.

(2) Power sources shall be monitored for integrity, with annunciation provided in the operations room.

(3) Primary Power Source. One of the following shall supply primary power:

(A) A feed from a commercial utility distribution system

(B) An engine-driven generator installation or equivalent designed for continuous operation, where a person specifically trained in its operation is on duty at all times

(C) An engine-driven generator installation or equivalent arranged for cogeneration with commercial light and power, where a person specifically trained in its operation is on duty or available at all times

(4) Secondary Power Source.

(A) The secondary power source shall consist of one or more standby engine-driven generators.

(B) Upon failure of primary power, transfer to the standby source shall be automatic.

(5) A Stored Emergency Power Supply System (SEPSS) shall be provided for telecommunications equipment, two-way radio systems, computer systems, and other electronic equipment determined to be essential to the operation of the PSAP.

(A) The SEPSS shall be of a class that is able to maintain essential operations long enough to implement the formal Comprehensive Emergency Management Plan.

(B) The instrumentation required to monitor power shall be remotely annunciated in the operations room.

(6) Power circuits shall include their associated motors, generators, rectifiers, transformers, fuses, and controlling devices.

(7) The power circuit disconnecting means shall be installed so that it is accessible only to authorized personnel.

(8) Surge Arresters otherwise known as Transient Voltage Surge Suppression (TVSS) shall be provided for protection of telecommunications equipment, two-way radio systems, computers, and other electronic equipment determined to be essential to the operation of the PSAP.

(9) Isolated Grounding System. Telecommunications equipment, two-way radio systems, computers, and other electronic equipment determined to be essential to the operation of the PSAP shall be connected to an isolated grounding system.

(10) Engine-driven generators shall be sized to supply power for the operation of all functions of the PSAP.

(A) When installed indoors, engine-driven generators shall be located in a ventilated and secured area that is separated from the PSAP by fire barriers having a fire resistance rating of 2 hours or better.

(B) When installed outdoors, engine-driven generators shall be located in a secure enclosure.

(C) The area that houses an engine-driven generator shall not be used for storage other than spare parts or equipment related to the generator system.

(D) Fuel to operate the engine-driven generator for a minimum of 24 hours at full load shall be available on site.

(E) Equipment essential to the operation of the generator shall be supplied with standby power from the generator.

(F) Generators shall not use the public water supply for engine cooling.

(11) Uninterruptible Power Supply (UPS) and Battery Systems. A UPS and battery system shall be installed in accordance with local, State, and the Federal safety regulations and be sufficient to prevent power surges from damaging equipment in the PSAP as well as provide power for all essential 911 Emergency Center operations until the backup power source can be fully activated.

(A) Each UPS shall be provided with a bypass switch that maintains the power connection during switch over and that is capable of isolating all UPS components while allowing power to flow from the source to the load.

(B) The following UPS conditions shall be annunciated in the operations room:

(i) Source power failure, overvoltage, and under-voltage

(ii) High and low battery voltage

(iii) UPS in bypass mode

(C) The UPS and Battery Systems shall be capable of providing power for the PSAP when the Primary Power Source is experiencing not functioning but the duration of the outage is not sufficient to activate the Secondary Power Source.

History Note: *Authority G.S. 62A-46;*
Eff. July 1, 2012

09 NCAC 06C.0209 is proposed for adoption as follows:

09 NCAC 06C.0209 TELEPHONES

(a) Telephone Receiving Equipment. The provisions of this Section shall apply to facilities and equipment that receive emergency 911 calls transmitted by means of any voice communications service.

(b) Equipment and Operations.

(1) Telephone lines and telephone devices shall be provided as follows:

(A) A minimum of two 911 emergency telephone lines and 911 emergency telephone devices shall be assigned exclusively for receipt of emergency 911 calls. These lines shall appear on at least two telephone devices within the PSAP.

(B) Additional 911 emergency telephone lines and 911 emergency telephone devices shall be provided as required for the volume of calls handled.

(C) Additional telephone lines shall be provided for the normal business (nonemergency) use as needed.

(D) At least one outgoing-only line and telephone device shall be provided.

(2) 911 emergency lines and 911 emergency telephone devices will be answered prior to non-emergency telephone lines and non-emergency telephone devices.

(3) When all 911 emergency telephone lines and 911 emergency telephone devices are in use, emergency 911 calls shall hunt to other predetermined telephone lines and telephone devices that are approved by the PSAP.

(4) Calls to the business number shall not hunt to the designated emergency lines.

(5) When a PSAP receives an emergency 911 call for a location or an agency that is not in its jurisdiction, the PSAP shall transfer the call directly to the responsible PSAP. When possible the call data will be transferred with the emergency 911 call. If the call transfer method is not possible, call information shall be relayed by the Telecommunicator.

(A) The Telecommunicator shall remain on the line until it is certain that the transfer has been made and the originating Telecommunicator verifies the transfer has been successfully completed by hearing both parties speaking to each other.

(6) All 911 emergency 911 calls shall be recorded.

(c) Circuits/Trunks.

(1) At least two 911 call delivery paths with diverse routes arranged so that no single incident interrupts both routes shall be provided to each PSAP.

(2) Where multiple PSAPs that serve a jurisdiction are not located in a common facility, at least two circuits with diverse routes, arranged so that no singular incident interrupts both routes, shall be provided between PSAPs.

(3) The PSAP shall have sufficient 911 emergency trunk capacity to receive 99.9% of all calls during the busiest hour of the average week of the busiest month of the year.

(d) 911 Emergency Number Alternative Routing.

(1) PSAPs shall maintain a written plan as part of the Comprehensive Emergency Management Plan (CEMP) for rerouting incoming calls on 911 emergency lines when the center is unable to accept such calls.

(2) The PSAP shall practice this plan at least once annually.

(3) Where overflow calls to 911 emergency telephone lines and emergency telephone devices are routed to alternative telephone lines and alternative telephone devices within the PSAP, the alternative telephone lines and alternative telephone devices shall be monitored for integrity and recorded as required by these Rules, and by the Board's standards, policies and procedures.

History Note: *Authority G.S. 62A-42*

Eff. July 1, 2012

09 NCAC 06C.0210 is proposed for adoption as follows:

09 NCAC 06C.0210 DISPATCHING SYSTEMS

(a) Fundamental Requirements of Emergency 911 call Dispatching Systems.

(1) An emergency 911 call dispatching system shall be designed, installed, operated, and maintained to provide for the receipt and retransmission of calls.

(2) Telecommunicators that receive emergency 911 calls shall have redundant means within the PSAP premises to dispatch calls.

(3) The failure of any component of one dispatching means shall not affect the operation of the alternative dispatching means and vice versa.

(b) Primary dispatch paths and devices upon which transmission and receipt of emergency 911 calls depend shall be monitored constantly for integrity to provide prompt warning of trouble that impacts operation.

(1) Trouble signals shall actuate an audible device and a visual signal located at a constantly attended location.

(2) The audible alert trouble signals from the fault and failure monitoring mechanism shall be distinct from the audible alert emergency alarm signals.

(3) The audible trouble signal shall be permitted to be common to several monitored circuits and devices.

(4) A switch for silencing the audible trouble signal shall be permitted if the visual signal continues to operate until the silencing switch is restored to the designated normal position.

(5) Where dispatch systems use computer diagnostic software, monitoring of the primary dispatch circuit components shall be routed to a dedicated terminal(s) that meets the following requirements:

(A) It shall be located within the communications center.

(B) It shall not be used for routine dispatch activities.

(c) The radio communications system shall be monitored in the following ways:

(1) Monitoring for integrity shall detect faults and failures in the radio communications system.

(2) Detected faults and failures in the radio communications system shall cause audible or visual indications to be provided within the PSAP.

History Note: *Authority G.S. 62A-42*

Eff. July 1, 2012

09 NCAC 06C.0211 is proposed for adoption as follows:

09 NCAC 06C.0211 COMPUTER AIDED DISPATCHING (CAD) SYSTEMS

(a) General.

(1) PSAPs shall use Computer-aided dispatching (CAD) systems. These systems shall conform to the Standards in this Section.

(2) The CAD system shall contain all hardware and software components necessary for interface with the 911 system.

(b) Secondary Method.

(1) A secondary method shall be provided and shall be available for use in the event of a failure of the CAD system.

(c) Security.

(1) CAD systems shall utilize different levels of security to restrict unauthorized access to sensitive and critical information, programs, and operating system functions.

(2) The PSAP shall have the ability to control user and supervisor access to the various security levels.

(3) Physical access to the CAD system hardware shall be limited to authorized personnel as determined by the PSAP.

(4) Operation of the CAD system software shall be limited to authorized personnel by log-on/password control, workstation limitations, and/or other means as required by the PSAP.

(5) The PSAP shall provide network isolation necessary to preserve bandwidth for the efficient operation of the CAD system and processing of emergency 911 calls.

(A) The CAD system shall provide measures to prevent denial-of-service attacks and any other undesired access to the CAD portion of the network.

(B) The CAD system shall employ antivirus software where necessary to protect the system from infection.

(d) Emergency 911 call Data Exchange.

(1) The CAD system should have the capability to allow emergency 911 call data exchange between the CAD system and other CAD systems.

(2) The CAD system should have the capability to allow data exchange between the CAD system and other systems.

(e) CAD Capabilities.

(1) The installation of a CAD system in emergency service dispatching shall not negate the requirements for a secondary dispatch circuit.

(2) The PSAP shall provide software that is for or part of the CAD system that will provide data entry; resource recommendations, notification, and tracking; store records relating to all emergency 911 calls and all other calls for service and status changes; and track those resources before, during, and after emergency calls, preserving records of those emergency 911 calls and status changes for later analysis.

(A) The PSAP shall put in place safeguards to preserve the operation, sustainability, and maintainability of all elements of the CAD system in the event of the demise or default of the CAD supplier.

(B) The system applications shall function under the overall control of a standard operating system that includes support functions and features as required by the PSAP.

(f) Computer Aided Dispatch (CAD) Performance.

(1) The CAD system shall recommend units for assignment to calls.

(A) The CAD system shall ensure that the optimum response units are selected.

(B) The CAD system shall allow the Telecommunicator to override the CAD recommendation for unit assignment.

(C) The CAD system shall have the ability to prioritize all system processes so that emergency operations take precedence.

(2) The CAD system shall detect errors and/or faults and failures.

(A) The CAD system shall automatically perform all required reconfiguration as a result of errors, faults or failures.

(B) The CAD system shall queue a notification message to the supervisor and any designated Telecommunicator positions.

(3) Under all conditions, the CAD system response time shall not exceed 2 seconds, measured from the time a Telecommunicator completes a keyboard entry to the time of full display of the system response at any position where a response is required.

(4) The CAD system shall be available and fully functional 99.95 percent of the time, excluding planned maintenance.

(5) The CAD system shall include automatic power-fail recovery capability.

(g) Backup.

(1) The CAD system shall include a data backup system, utilizing either removable media or independent disk storage arrays dedicated to the backup task.

(h) Redundancy.

(1) The failure of any single component shall not disable the entire system.

(A) The CAD system shall provide automatic switchover in case of failure of the required system component(s).

(B) Manual intervention by Telecommunicators or others shall not be required.

(C) Notwithstanding automatic switchover, the CAD system shall provide the capability to manually initiate switchover.

(D) CAD Systems that utilize server and workstation configuration shall accomplish automatic switchover by having a duplicate server available with access to all the data necessary and required to restart at the point where the primary server stopped.

(E) CAD Systems that utilize distributed processing, with workstations in the operations room also providing the call processing functions, shall be considered to meet the requirements of automatic switchover, as long as all such workstations are continually sharing data and all data necessary to pick up at the point where the failed workstation stopped are available to all other designated dispatch workstations.

(2) Monitoring for Integrity.

(A) The system shall continuously monitor the CAD interfaces for equipment failures, device exceptions, and time-outs.

(B) The system shall, upon detection of faults or failures, send an appropriate message consisting of visual and audible indications.

(3) The system shall provide a log of system messages and transactions.

(4) A spare display screen, pointing device, and keyboard shall be available in the PSAP for immediate change-out.

History Note: *Authority G.S. 62A-42*

Eff. July 1,2012

09 NCAC 06C.0212 is proposed for adoption as follows:

09 NCAC 06C.0212 TESTING

(a) General.

(1) Tests and inspections of all systems shall be made at the regular intervals.

(2) All equipment shall be restored to operating condition after each test or emergency 911 call for which the equipment functioned.

(3) Where tests indicate that trouble has occurred anywhere on the system, one of the following shall be required:

(A) The Telecommunicator shall take appropriate steps within their scope of training to repair the fault.

(B) If repair is not possible, action shall be taken to isolate the fault and to notify the person(s) responsible for repair/maintenance.

(4) Procedures that are required by other parties and that exceed the requirements of these standards shall be permitted.

(5) The requirements of this Section shall apply to both new and existing systems.

(b) Acceptance Testing.

(1) New equipment shall be provided with operation manuals that cover all operations and testing procedures.

(2) All functions of new equipment shall be tested in accordance with the manufacturers' specifications and accepted PSAP practices before being placed in service.

(c) Power.

(1) Emergency and standby power systems shall be tested in accordance with the manufacturer's specifications and accepted business practices.

History Note: *Authority G.S. 62A-42*

Eff. July 1, 2012

09 NCAC 06C.0213 is proposed for adoption as follows:

09 NCAC 06C.0213 RECORDS

a) General.

1) Complete records to ensure operational capability of all system functions shall be maintained for a minimum of five (5) years.

2) Compliance with this Standard shall begin with the purchase or lease of equipment and services after June 30 2011.

b) Acceptance Test Records and As-Built Drawings. After completion of acceptance tests, the following shall be provided:

1) A set of reproducible, as-built installation drawings

2) Operation and maintenance manuals

3) Written sequence of operation

4) Results of all operational tests and values at the time of installation

c) Electronic Records

1) For software-based systems, access to site-specific software shall be provided to the PSAP.

2) The PSAP shall be responsible for maintaining the records for the life of the system.

3) Paper or electronic media shall be permitted.

d) Training Records.

1) Training records shall be maintained for each employee as required by the PSAP.

e) Operational Records.

1) Call and dispatch performance statistics shall be compiled and maintained.

2) Statistical analysis for call and dispatch performance measurement shall be done monthly and compiled over a one (1) year period.

i) A management information system (MIS) program shall track incoming emergency 911 calls and dispatched emergency 911 calls and provide real-time information and strategic management reports.

3) Records of the following, including the corresponding dates and times, shall be kept:

i) Test, emergency 911 call, and dispatch signals.

ii) Circuit interruptions and observations or reports of equipment failures.

iii) Abnormal or defective circuit conditions indicated by test or inspection.

f) Maintenance Records.

1) Records of maintenance, both routine and emergency, shall be kept for all emergency 911 call receiving equipment and emergency 911 call dispatching equipment.

2) All maintenance records shall include the date, time, nature of maintenance, and repairer's name and affiliation.

History Note: Authority G.S. 62A-42 Eff. July 1,2012

09 NCAC 06C.0301 is proposed for adoption as follows:

SECTION .0300 – COMMERCIAL MOBILE RADIO SERVICE (CMRS) PROVIDERS

9 NCAC 6C.0301 Registration of CMRS Service Providers.

a) CMRS Service Providers, or any reseller of any commercial mobile radio service, which receive authority to serve any area within the State of North Carolina, shall register within thirty (30) calendar days of receiving authority to operate, or beginning operations, in North Carolina.

b) Such registration shall be filed with the Commission's Executive Secretary and shall include the following information:

1) Legal name of CMRS Service Provider;

2) All business names used by the CMRS Service Provider in North Carolina;

3) Name, title, mailing address, telephone number, fax number, and E-Mail address (if available) of the person to be contacted regarding 911 matters;

4) A listing of all areas in which the CMRS Service Provider is authorized to serve any portion of North Carolina; and

5) The FCC filer ID and FCC Registration Number of the CMRS Service Provider.

c) Changes to any of the above-listed information shall be filed with the Board's Executive Director within thirty (30) calendar days of the effective date of such change(s). This filing requirement includes providing notice to the Board's Executive Director of any and all mergers, divestitures, acquisitions, or other similar actions affecting North Carolina service areas.

History note: *Authority: G.S. 62A-42, 62A-45*
Eff.

09 NCAC 06C.0302 is proposed for adoption as follows:

9 NCAC 6C.0302 CMRS Service Provider Reimbursement Plans

b) Any CMRS Service Provider desiring reimbursement of eligible expenses from the 911 Fund must prepare and submit a detailed cost recovery plan to the Board. Plans shall be reviewed by Board staff and any committee established by the Board for such purpose. Confidential information shall not be publicly disclosed. To provide the Board adequate information to make an informed decision, CMRS Service Providers seeking reimbursement shall:

1) Upon receipt of a request for wireless E911 service from a primary PSAP, the CMRS Service Provider will develop an implementation plan (the Plan, as described in paragraph b) for that PSAP, or the appropriate service area if the CMRS Service Provider serves more than one PSAP.

2) The relevant portions of the Plan, excluding confidential information, will be presented to the requesting PSAP. Upon acceptance of the Plan by the PSAP, the CMRS Service Provider will present the Plan to the Board for approval.

c) The Cost Recovery Plan shall:

1) Describe the chosen technology or technologies used for delivery of calls to the PSAP (SS7 solutions, LEC solution, third party service bureau, etc.)

2) Describe the architecture to implement the chosen technology(s) in areas or for PSAPs that have requested wireless or enhanced wireless 911 services, within the CMRS Service Provider's service areas, or statewide, as may be appropriate and relevant to the cost recovery plan. Indicate all counties and/or municipalities of the state in which the CMRS Service Provider provides wireless E911 service and where deployment is expected. Indicate areas of the state, if any, where deployment has already occurred.

3) List the known cost elements for the deployment, including non-recurring and recurring charges. Provide statewide costs, if possible.

4) Describe personnel costs (estimated number of hours and rates) and actual or proposed third party service rates, if any.

5) If cost recovery is proposed on a monthly 'per subscriber' rate, indicate the amount and describe the manner in which the rate was calculated.

6) Include an accounting of the estimated total of service charges that the CMRS Service Provider expects to remit to the Board as of the anticipated date of the first sworn invoice. Include an estimate of the anticipated monthly service charge remittances for the subsequent 12 months and the anticipated sworn invoices for the same period.

d) If any CMRS Service Provider believes that it can justify an exception to these CMRS Service Provider 911 Recovery Procedures or to any decision of the 911 Board pursuant to these procedures, it may submit its request and documentation supporting its request to the Board at least fifteen days prior to the Board's next scheduled meeting. The Board will consider the exception request at its next scheduled meeting and shall convey its decision in writing to the requesting CMRS Service Provider.

Note: A list of one-time and recurring costs include: Trunk costs comprising Trunking and Connection fee to 911 Selective Router (per DS0): Engineering & Network Costs comprising Facilities, T-1's, selective router ports, Routing Charges, Operations, Engineering, Switch upgrades, Research & Development, Network design, Test plan development; and Database Costs comprising P-ANI administration, Database management and Reporting/Software.

History note: *Authority: G.S. 62A45*
Eff.

09 NCAC 6C.0303 is proposed for adoption as follows:

09 NCAC 6C.0303 Cost Recovery Plan Review

a) The Board may establish a committee to review CMRS Service Providers' cost recovery plans.

b) Any committee will include the Board's Executive Director, chairperson (or his or her designee), the Board's auditor or financial advisor, and one or more Board members who are familiar with the technical aspects of Enhanced 911 Systems. Board members representing CMRS Service Providers cannot be members of this committee.

1) The initial plan presented to the Cost Recovery committee is intended to allow for the recovery of a CMRS Service Provider's cost on a one-time basis and/or recurring (monthly) basis. The Board may create and periodically revise a list of permitted expenditures consistent with G.S. 62A-45.

2) The committee will refer the plan to the Board with a recommendation that it either be approved or rejected. If the recommendation is for rejection, the committee will provide the reason, in writing, to both the Board and the CMRS Service Provider. The subcommittee shall indicate whether the Plan complies with the limitations of G.S. 62A-45(a).

c) After review by the committee, the CMRS Service Provider will present the plan to the Board at its next regular meeting. Information deemed confidential or proprietary by a CMRS Service Provider as described in G.S. 62A-52 shall not be presented in a public meeting. The Board will not approve payment of any amount in excess of the actual cost of the CMRS Service Provider in providing Enhanced 911. The Board will vote on the plan and provide the CMRS Service Provider, in writing and within 5 working days, either approval or denial. If rejected, the Board will provide documented reasons. The CMRS Service Provider may revise and resubmit its plan at subsequent meetings.

d) Once a plan is approved, the CMRS Service Provider may file claims for reimbursement. One time costs, if any, will be reimbursed upon submission of sworn invoices. The amount of reimbursement that the CMRS Service Provider is entitled to receive on a recurring costs basis may be calculated as follows, or by other method approved by the Board upon request of a CMRS Service Provider:

1) by multiplying the number of CMRS subscribers receiving wireless Enhanced 911 service as reported by the CMRS Service Provider prior to its request for reimbursement, by the amount authorized per subscriber for cost recovery by the Board. CMRS Service Providers will be required to report their subscriber counts no less than once per quarter. The dollar amount paid to the CMRS Service Provider will vary based on total number of subscribers reported by the CMRS Service Provider or

2) by submission of the actual or estimated recurring costs incurred by the CMRS Service Provider and approved by the board. If the estimated costs are submitted, these costs must be corrected by comparison with actual costs not less than annually; or,

3) by a combination of the methods above.

e) The Board may require periodic review and approval of a CMRS Service Provider's plan, but no more often than once per calendar year. After the initial one-year approval period has expired, presentation of a plan for re-approval may be in writing or in person if the Cost Recovery Subcommittee or Board requires.

f) Once a plan is approved, changes to the plan must be submitted in writing and approved by the Board. A CMRS Service Provider may request an adjustment of the reimbursement rate at any time upon written notice to the Board. Proper justification will be required.

History Note: *Authority G.S. 62A-45*
Eff.

09 NCAC 06C.0304 is proposed for adoption as follows:

9 NCAC 6C.0304 CMRS Service Provider Reimbursement

a) Sworn invoices must be attested to by an authorized agent of the CMRS Service Provider. Only costs which comport with an approved Plan are eligible for cost recovery. Costs may be the actual incurred costs of the CMRS Service Provider, an estimate of the incurred costs, or the approved rate per subscriber multiplied by the actual subscriber count. If estimated costs are used, CMRS Service Provider must annually true up its costs to ensure that over-recovery does not occur. CMRS Service Providers must maintain records to demonstrate that costs were actually incurred as invoiced. Internal costs (engineering time, facilities, proportionate share of software, etc.) must be supported by reasonable documentation. All costs are subject to audit by the Board.

b) A CMRS Service Provider may be reimbursed for actual one-time costs incurred for their selected E911 solution prior to the Board's approval of a CMRS Service Provider's Cost Recovery Plan upon authorization of the Board's Chair and Executive Director. As a condition of such reimbursement, the CMRS Service Provider must sign an agreement stating that if a mistake in payment is made, the CMRS Service Provider will refund any amounts determined by the board to be mistakenly distributed.

c) CMRS Service Providers shall not be reimbursed in excess of actual and approved costs.

History note: *Authority: G.S. 62A-45*
Eff.

09 NCAC 06C.0305 is proposed for adoption as follows:

9 NCAC 6C.0305 CMRS Service Provider Reporting

a) CMRS Service Providers shall submit quarterly reports to the Board that identify or graphically depict areas of the state in which wireless or enhanced wireless 911 services have been implemented and indicating the schedule, if known, for implementing such services in the CMRS Service Providers' remaining service areas.

b) Each CMRS Service Provider shall file an annual report with the Board, by February 15th of each year, that provides total customer count as of December 31 of the preceding year. This annual report, as well as the required monthly reports, shall be subject to verification by the Board.

History note: *Authority: G.S. 62A-45, 62A-51*
Eff.

09 NCAC 06C.0306 is proposed for adoption as follows:

9 NCAC 6C.0306 Remittance of Service Charges

a) Service Providers shall remit service charges to the 911 Board:

911 BOARD
INFORMATION TECHNOLOGY SERVICES
P.O. BOX 17209
RALEIGH, NORTH CAROLINA 27619-7209

b) Service Providers may remit funds by check payable to the Board, or by electronic funds transfer upon satisfaction of transaction processing requirements.

c) Voice communications service providers that assess the service charge to resellers of their services shall remit such service charges to the Board.

d) The Office of Information Technology Services (ITS) Fiscal Services will act as the receiving agent for the Service Providers' monthly payments and as the administrator of the 911 Fund.

e) Funds will be deposited in accordance with the State Cash Management Plan.

History note: *Authority: G.S. 62A-43, 147-86.11*
Eff.

09 NCAC 06C.0307 is proposed for adoption as follows:

09 NCAC 06C.0307 PREPAID WIRELESS SERVICE

(a) A Reseller of wireless services is not responsible for collecting and remitting the service charge if such Reseller's voice communication service supplier remits the appropriate service charges for the wireless services resold by such Reseller.

(b) A Reseller of wireless services shall give notice to the Board if the service charges will be remitted to the Board by such Reseller's voice communication service supplier(s). Notice shall include the identity of the voice communication service supplier(s), the contract(s) or other document(s) together with information as may be necessary or proper to calculate the appropriate service charge, and such other information as may be required by the Board.

(c) A Reseller of wireless services that does not remit service charges is not eligible for reimbursement under G.S. 62A-45.

(d) Contract or other information submitted to the Board may be proprietary under G.S. 62A-52. Any confidential information shall be marked accordingly prior to delivery to the Board.

History Note: *Authority G.S. 62A-43;*
Eff.

(Note to Committee: Prepaid providers may be seeking additional legislative changes, and are likely to have interest in these rules. This rule, and any others addressing prepaid services/resellers, should be earmarked for consideration by possibly withheld from rules review until any legislative changes are known.
4/2/08 – Committee wished to hold this rule pending further discussion, review of other issues relating to prepaid, etc.)

09 NCAC 06C.0401 is proposed for adoption as follows:

SECTION .0400 – GRANT FUND

09 NCAC 06C.0401 PSAP GRANTS

(a) After establishing a Grant Account, the Board shall publish a notice of grant availability to primary PSAPs and governing entities operating primary PSAPs.

(b) Any primary PSAP or the governing entity operating a primary PSAP may apply for a grant.

(c) Each applicant applying for Grant funds shall complete and submit an application, in the form prescribed by the Board, which is incorporated herein by reference and which may be obtained from the Board office at the following address:

Executive Director, 911 Board
c/o NC Office of Information Technology Services
P.O. Box 17209
Raleigh, NC 27609

(d) The Board will accept grant applications as stated in the Board's published notice of grant availability. Grant applications submitted that do not conform to the Board's published requirements may be considered in the discretion of the Board, provided that Grant funds are not exhausted by conforming grant applications and non-conforming grant applications satisfy G.S. 62A-47.

(e) Applications for grants for each item over $25,000 must be accompanied by at least three written competitive quotes. The Board will compare the three quotes to any existing state contract in order to determine appropriate funding.

History note: *Authority G.S. 62A-43;*
Eff.

09 NCAC 06C.0402 is proposed for adoption as follows:

09 NCAC 06C.0402 PSAP GRANTS FOR CONSTRUCTION

(a) General.

(1) As a condition for receipt of a grant from the North Carolina 9-1-1 Board for any type of new construction or for a renovation of an existing structure and/or facility incorporated into the construction agreement(s) shall be the following requirements.

(2) The requirements in this Section, PSAP Grants for Construction, shall apply only to new construction and construction renovations funded by the North Carolina 911 Board. Existing PSAP facilities are encouraged to meet these standards, but are not required to meet these standards.

(b) HVAC.

(1) HVAC systems shall be designed to maintain temperature and relative humidity within limits specified by the manufacturer of the equipment critical to the operation of the PSAP.

(2) HVAC systems shall be independent systems that serve only the PSAP.

(3) HVAC system intakes for fresh air shall be arranged to minimize smoke intake from a fire inside or outside the building and to resist intentional introduction of irritating, noxious, toxic, or poisonous substances into the HVAC system.

(4) HVAC emergency controls shall be provided in the operations room to permit closing of outside air intakes.

(5) Backup HVAC systems shall be provided for the operations room and other spaces housing electronic equipment essential to the operation of the PSAP.

(6) HVAC systems shall be designed so that the PSAP is capable of uninterrupted operation with the largest single HVAC unit or component out of service.

(c) Fire Protection.

(1) The PSAP and spaces adjoining the PSAP shall be provided with an automatic fire detection, alarm, and notification system.

(2) The alarm system shall be monitored in the operations room.

(3) Operation of notification appliances shall not interfere with communications operations.

(4) Electronic computer and data processing equipment shall be protected in accordance with the manufacturer's recommended specifications, and common business practices.

(d) Security.

(1) The PSAP and other buildings that house essential operating equipment shall be protected against damage from vandalism, terrorism, and civil disturbances.

(2) Entry to the PSAP shall be restricted to authorized persons.

(3) Entryways to the PSAP that lead directly from the exterior shall be protected by a security vestibule.

(4) Door openings shall be protected by listed, self-closing fire doors that have a fire resistance rating of not less than 1 hour.

(5) Where a PSAP has windows, the following requirements shall apply:

(A) Windows shall be a minimum of 4 ft (1.2 m) above floor level.

(B) Windows shall be rated for bullet resistance to Level 4 as defined in UL 752, Standard for Safety Bullet-Resistant Equipment.

(C) Windows that are not bullet resistant shall be permitted provided that they face an area that cannot be accessed or viewed by the general public.

(D) Windows that are required to be bullet resistant shall be configured so that they cannot be opened.

(E) Walls with bullet-resistant windows shall be required to provide the same level of protection as the window.

(6) Means shall be provided to prevent unauthorized vehicles from approaching the building housing the PSAP to a distance of no less than 82 ft (25 m).

(7) As an alternative to prevent unauthorized vehicles, unauthorized vehicles shall be permitted to approach closer than 82 ft (25 m) if the building has been designed to be blast resistant.

(e) Lighting.

(1) Artificial lighting shall be provided to enable personnel to perform their assigned duties.

(2) Emergency Lighting. The PSAP shall be equipped with emergency lighting that shall illuminate automatically immediately upon failure of normal lighting power.

(3) Illumination levels shall be sufficient to allow all essential operations.

(f) Circuit Construction and Arrangement.

(1) As built drawings shall be provided.

(2) Circuits shall not pass over, pass under, pass through, or be attached to buildings or property that is not owned by, or under the control of, the PSAP or the entity that is responsible for maintaining the system.

(3) Emergency 911 call instruments installed in buildings not under control of the PSAP shall be on separate dedicated circuits.

(4) The combination of public emergency services communication and signaling (C&S) circuits in the same cable with other circuits shall comply with the following:

(A) Other municipally controlled C&S circuits shall be permitted.

(B) Circuits of private signaling organizations shall be permitted only by permission of the PSAP.

(g) Underground Cables.

(1) Underground communication and signal cables shall be brought above ground only at points where the PSAP has determined there is no potential for mechanical damage or damage from fires in adjacent buildings.

(2) All cables that are installed in manholes, vaults, and other enclosures intended for personnel entry shall be racked and marked for identification.

(3) Cable splices, taps, and terminal connections shall be located only where accessible for maintenance and inspection and where no potential for damage to the cable due to falling structures or building operations exists.

(4) Cable splices, taps, and terminal connections shall be made to provide and maintain levels of conductivity, insulation, and protection that are at least equivalent to those afforded by the cables that are joined.

(h) Aerial Cables and Wires.

(1) Protection shall be provided where cables and wires pass through trees, under bridges, and over railroads, and at other locations where damage or deterioration is possible.

(i) Wiring Inside Buildings.

(1) Conductors at the PSAP shall extend to the operations room in conduits, ducts, shafts, raceways, or overhead racks and troughs of a construction type that protects against fire and mechanical damage.

(2) Cables or wiring exposed to fire hazards shall be protected from the hazard.

(3) At the PSAP, cable terminals and cross connecting facilities shall be located either in or adjacent to the operations room.

(4) All wired dispatch circuit devices and instruments whose failure can adversely affect the operation of the system shall be mounted in accordance with the following:

(A) On noncombustible bases, pedestals, switchboards, panels, or cabinets.

(B) With mounting designed and constructed so that all components are readily accessible.

(j) Circuit Protection.

(1) All surge arresters shall be connected to earth ground.

(2) All protective devices shall be accessible for maintenance and inspection.

(3) Wired Surge arresters shall be designed and listed for the specific application.

(4) Each conductor that enters a PSAP from a partially or entirely aerial line shall be protected by a surge arrester.

(k) Grounding.

(1) Sensitive electronic equipment determined by the PSAP to be essential to the operation of telecommunications and dispatching systems shall be grounded.

(2) Listed isolated ground receptacles shall be provided for all cord-and-plug-connected essential and sensitive electronic equipment.

(3) Unused wire or cable pairs shall be grounded.

(4) Ground connection for surge suppressors shall be made to the isolated grounding system.

(l) Access.

All equipment shall be accessible for the purpose of maintenance.

History Note: *Authority G.S. 62A-47; 62A-42*

09 NCAC 06C.0403 is proposed for adoption as follows:

9 NCAC 6C.0403 Grant Agreements

a) Grant agreements shall comply with requirements of G.S. 143C and administrative rules.

b) Unless otherwise determined by the Board, grant agreements will have a term not to exceed one year, and will begin on 1 July of the year awarded.

History note: *Authority: G.S. 62A-42, 62A-47, 143C-6-22,-23*
Eff.

09 NCAC 06C.0404 is proposed for adoption as follows:

9 NCAC 6C.0404 Grant Application Approval

a) The Board will approve grants for leased equipment only if the applicant can demonstrate that a lease agreement would be financially beneficial to the grant program.

b) Priorities for awarding of grants will be determined by the Board.

History note: *Authority: G.S. 62A-47*
Eff.

09 NCAC 06C.0405 is proposed for adoption as follows:

9 NCAC 6C.0405 Grant Funds

a) Grant funds shall be deposited in a bank account maintained by the applicant, and each grant shall be assigned a unique accounting code designation for deposits, disbursements, and expenditures. All Grant funds in the account shall be accounted for separately from other grantee funds. Grant funds may be used only between the beginning and ending dates of the grant, unless an extension is requested and authorized by the Board.

b) Grant funds are not transferable to any other entity. If equipment purchased using grant funds is sold or transferred within three (3) years of the end of the grant period, the grantee must return the grant funds to the Board on a pro-rata basis.

History note: *Authority: G.S. 62A-47*
Eff.

09 NCAC 06C.0406 is proposed for adoption as follows:

09 NCAC 06C.0406 GRANTEE REPORTS

Grantees must submit reports to the Board summarizing expenditures of the grant funds and the activities supported by the grant funds. Unless otherwise stated in a Grant Agreement, the reports are due 15 days after the end of the reporting periods, which end September 30, December 31, March 31, and June 30. A final report must be submitted to the Board no more than 45 days after completion of the grant, detailing the activities, expenditures of the funds, and the ways in which the needs identified in the grant application were met. The final report must be accompanied by supporting documentation for all expenditures of the grant funds.

History Note: *Authority G.S. 62A-47, 143C-6-22, and 143C-6-23;*
Eff.

Addendum 5

Recommendations To The North Carolina 911 Board for Updating The State 911 Plan from the 2012 911 Study Group

Finding Number One:

State and local 911 funding, planning, legislation and authority are functionally tied to the architecture of the current 911 system and state or local public safety operations. Existing laws or authority often do not take into consideration the Next Generation of 911 in which 911 will be an application that utilizes Emergency Services IP Networks (ESInets), along with other emergency services functions.

TARGET AUDIENCE: 911 Board, Public Safety Authorities, Legislature and Governor's Office

WHY: The 911 system and other emergency communications functions are funded by different and disparate funding sources. Those funding structures are used, and indeed are typically required to be used, to create separate and distinctly different systems (e.g. 911; interoperable Police/Fire/EMS radio systems; public health alert networks, poison control centers etc). Absent significant inter-governmental cooperation, this form of planning and funding may not lead to economies of scale that will enable parity of emergency services capabilities, interoperability, increased efficiency or cost savings within all aspects of emergency communications. More so than today, the Next Generation System will be a shared system comprised of multiple entities and components, including 911, the support of which will require coordinated planning and funding.

Recommendation Number One:

The committee recommends that the 911 Board develop alternate and sustainable funding methods be to ensure sufficient resources are made available to implement and operate the existing and Next Generation 911 system.

Finding Number Two:

North Carolina needs to move forward as quickly as possible with Next Generation 911. The current system cannot support new mobile devices and features on the front end or support the transfer of data and emergency information on the back end. NG911 standards are being formulated but there are inconsistencies between states and if not addressed on a statewide basis, these will move into the local level. NG911 cannot be implemented in isolation; it must have standards, a common network, and common databases.

TARGET AUDIENCE: 911 Board, Legislature and Governor's Office

WHY: For North Carolina to have an efficient NG911 system, it must be coordinated from the State level. Currently there is no coordinated effort for planning and technical support for end users (PSAPs and PSAP personnel) regarding issues related to Next Generation 911. Based on national models, NG911 deployment will require the following which does not currently exist in North Carolina:

a. Statewide ALI repository
b. Statewide GIS repository
c. 911 data repository

Recommendation Number Two:

That the Board immediately create a statewide NG911 Committee to develop and maintain a specific plan and deployment model. This Standing Committee should be made up of local subject matter experts, who are tasked with developing a specific plan and update the plan on a periodic basis.

Finding Number Three:

Most current 911 and emergency communications systems are local or regional in nature, both operationally and technically. However, the proposed technical architecture of the NG911 system indicates the need for state-wide management and coordination of IP emergency service networks (ESInets). In addition to technical specifications, the NENA Functional and Interface Standards for Next Generation 911 (i3) provide some guidance on Roles and Responsibilities for ESInets.

TARGET AUDIENCE: 911 and Emergency Services Authorities, Legislature, Regulatory Agencies and Governor's Office

WHY: There are two key aspects to the deployment of ESInets: (1) the physical buildout and coverage of the ESInets and (2) the management and coordination of ESInets. ESInets may be deployed at a state level and there may be increased efficiencies and economies of scale in doing so. However, ESInets will very likely be deployed at a sub-state level (regional/county) in many areas which must then be interconnected with other sub-state ESInets to establish a standardized, interconnected and interoperable state-wide ESInet. In practice there will be a number of different ways to affect statewide ESInet coverage. A state level entity or organization is recommended to implement and manage the interconnected state-wide ESInet (comprised of the interconnected regional/local IP networks or a single state network). A state level entity or organization can play a significant role by providing an IP backbone network to make interconnection of regional/local ESInets more efficient.

No matter who manages the ESInet(s) in a state, it is desirable to have one entity or organization coordinate development and management of the network in order to ensure adherence to appropriate standards and achieve the economies of scale and efficiencies that

NG911 promises. To further improve efficiency, one entity per state should be responsible for arranging interconnect between their network and adjacent state networks. This includes both redundant physical connections and router configuration to allow seamless interagency communications.

Recommendation Number Three:

The North Carolina 911 Board establish a State-Wide Emergency Services IP Networks (ESInets) ensuring that state/regional/local authorities recognize the need and apply directive influence to enable and initiate state-wide ESInets needed for NG911

Finding Number Four:

In the current marketplace Incumbent Local Exchange Carriers (ILECs) are the predominant 911 System Service Providers (SSPs). In the NG911 marketplace it is anticipated that there will be multiple providers offering a variety of service capabilities and options, thereby providing greater choices for 911 governing authorities. As we transition to a full NG911 system, it is also expected, and is indeed a policy objective, that competitive alternatives for current E911 services will emerge as well. An open, competitive E911 environment should be fostered and should be done so with an eye towards a full NG911 system.

TARGET AUDIENCE: 911 and Public Safety Authorities, State Legislature, Regulatory Agencies and Governor's Office, Federal Communications Commission, Congress

WHY: NG911 is not simply an extension of E911. While a full NG911 system must support all E911 functions and features, NG911 is Internet Protocol (IP) based, and software and database controlled in fundamentally new ways, enabling many new technical and operational capabilities to further enhance the coordination and delivery of emergency services nationwide. However, before and during the transition to a full NG911 system, it is expected that new E911 service offerings will be provided by competitive 911 SSPs in direct competition with incumbent SSPs. Such offerings will likely replicate current E911 functions and advance beyond current E911 system capabilities, while, initially, not being a full NG911 system. In many cases, competitive SSPs will offer individual components of 911 solutions. As these competitive E911 service offerings and full NG911 capabilities are deployed, they will necessarily involve new complex technical and business arrangements that current regulations and laws did not fully contemplate.

Recommendation Number Four:

Modify and update current legislation, regulations and tariffs to ensure a competitive E911 environment and a transition to a full NG911 system. The North Carolina 911 Board should become actively involved with State and Federal agencies regarding the transition to Next Generation 911.

Finding Number Five:

Secondary PSAPs add a lot of value for the citizens they serve and contain many resources that public safety could have at their disposal in the event of mass incidents. Conversely, secondary PSAPs can easily become overwhelmed in mass incidents because of their smaller staffing and lack of resources. The lack of 911 funding for secondary PSAPs restricts the ability of the secondary PSAP to be a part of the locally defined 911 system.

TARGET AUDIENCE: 911 Board, State Legislature, and Governor's Office

WHY: Secondary PSAPS need to be funded in such a way as to maximize the resources they have while balancing the services needed by the community. To make this work, there must be a desire to work together with the established Primary PSAP. It is not necessary for equipment and software to be identical in the geo diverse centers but it is necessary that everything work seamlessly together.

- **Telephone:** The system should have the capability to route any call to any telecommunicator whether in the Primary PSAP or Secondary PSAP and that telecommunicator should be able to transfer that call to any other telecommunicator. It should function as one system as it would in a single communication center.
- **CAD:** This is one area where standards need to be in place. The CAD software would not have to be the same in all locations but it would have to have seamless integration that moves information and updates in real time. Again, it should function as one system.
- **Mapping:** Should be seamless and each position, regardless of location, should have access to the same maps.
- **Radios:** Radios would be interoperable across the region and any telecommunicator could dispatch to any agency.
- **Training:** While not technical, it is crucial that all telecommunicators are trained to the same level of proficiency to be able to deal with all calls regardless of PSAP location.

Recommendation Number Five:

Allow secondary PSAPs to function as a part of a primary PSAP and receive 911 funding on a pro-rata basis. The Secondary PSAP must (1) have an MOU with the Primary agreeing to be a part of the 911 system, (2) must meet all standards as established by the NC 911 Board, (3) and must allow the 911 Board to provide and support a system that collects, stores, and

collates data into reports enabling interpretation and evaluation of performance, trends, traffic capacities, and related 911 operations. Pro-rata funding will be based on the 911 call data collected from the secondary PSAP.

Finding Number Six:

Through its oversight of 911 fund use, 911 Board staff has observed marked differences in pricing reported by PSAPs for purchases of similar equipment. These marked differences statewide represent a significant cost to the 911 fund.

TARGET AUDIENCE: 911 Board, State Legislature, and Local Governments

WHY: The disparity in pricing for the same product, and the lack of technical expertise in crafting requests for bid proposals, leaves many entities with less than good outcomes. Having a statewide contract which has vetted the equipment for function, compatibility and interoperability would encourage vendors of CAD, telephone systems and other eligible 911 expenditures to become more cost consistent. A “state contract” type of purchasing agreement with vendors of 911 goods and services within the state could “level the playing field” for such purchases by offering consistent pricing throughout the state and obviating the need for local governments to go to bid for major 911 purchases.

Recommendation Number Six:

The 911 Board work with local governments to implement methods for optimal cost-effective purchasing and management practices such as providing the ability for PSAPs to purchase 911 goods and services through a state contract.