



North Carolina State 911 Plan

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

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North Carolina 911 Board

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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 service¹
 - c. Enables a primary PSAP to dispatch² 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

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.

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.

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:

<u>Source</u>	<u>Standard</u>
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	NFPA1221 Standard 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.

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.

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, or those which present a proposal to the 911 Board for review on a case by case basis.

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

- 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.

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

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 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

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, possibly 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

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 leaseleasing, purchasepurchasing,~~ or ~~maintenancemaintaining~~ of emergency telephone equipment and emergency telephone notification systems, including necessary computer

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.

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.

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 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, trainee~~instructors~~, 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 <i>Chair, State CIO's designee</i>
Jason Barbour 911 Director Johnston County Communications	National Emergency Number Association <i>Appointed by the Governor</i>
Wayne Bowers City Manager City of Greenville	League of Municipalities <i>Appointed by the Governor</i>
Frank J. Cairon Executive Director, Network Verizon Wireless, Carolinas & Tennessee	NC Licensed CMRS Provider <i>Appointed by the Speaker of the House</i>
vacant Chief of Police	Chief of Police <i>Appointed by the President Pro Tem</i>
Alan Cloninger Gaston County Sheriff	Sheriff <i>Appointed by the Speaker of the House</i>
Dave Corn Regulatory, Billing, Revenue Assurance Mgr. Yadkin Valley Telephone Membership Corp.	NC Licensed LEC Provider <200,000 access lines <i>Appointed by the President Pro Tem</i>
Christi Derreberry Government Account Manager Sprint/Nextel	NC Licensed CMRS Provider <i>Appointed by the President Pro Tem</i>
David Dodd 911 Director Cleveland County	Association of Public Safety Communications Officials <i>Appointed by the Speaker of the House</i>

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 (x⁷) 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) Rural⁸. –

§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 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

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.

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 PSAPs⁹

(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 this section is to be used. The 911 Board must designate a percentage of the

⁹ Alternative to Recommendation #5.

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 Reallocation¹⁰. -- 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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