



**EMERGENCY  
NUMBER  
SYSTEMS BOARD**

**9-1-1**

**ANNUAL REPORT  
2012**

MARTIN O'MALLEY  
GOVERNOR

ANTHONY G. BROWN  
LT. GOVERNOR

GARY D. MAYNARD  
SECRETARY - DPSCS

DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONAL SERVICES





## Department of Public Safety and Correctional Services

### Emergency Number Systems Board

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March 18, 2013

Secretary Gary Maynard  
Department of Public Safety and Correctional Services  
300 East Joppa Road - Suite 1000  
Baltimore, MD 21286

Dear Secretary Maynard:

I am pleased to provide you with the Annual Report of the Emergency Number Systems Board (Board) for Fiscal Year 2012. The Board has convened monthly, and more frequently in sub-committees, to consider a variety of 9-1-1 related issues and projects. The attached report outlines the collective efforts of the Board and the larger 9-1-1 community in making Maryland a safer place for its residents, businesses, and visitors.

Maryland continues to benefit from an effective 9-1-1 system. Recent Board statewide efforts include working with the Washington Metropolitan Council of Governments, Verizon, Maryland PSAP personnel, and the Maryland Public Service Commission to review power outages and disruptions to 9-1-1 service caused by the June 29, 2012 Derecho Storm affecting Maryland and Northern Virginia. Ongoing Board activities include providing a vigorous 9-1-1 training program throughout the state, working with vendors to improve 9-1-1 service delivery, and continuing research, planning, and implementation of "Next Generation" technologies.

The Board remains focused on the enhancement of 9-1-1 and the critical role it plays in public safety. On behalf of the members of the Emergency Number Systems Board and the more than nine hundred call takers around the State, I thank you for your continued support and the diligent assistance your staff routinely provides.

The attached document and appendices constitute the 2012 Annual Report of the Emergency Number Systems Board as required by the Public Safety Article.

Sincerely,

A handwritten signature in black ink that reads "Anthony Myers". The signature is written in a cursive style.

Anthony Myers, Chairman  
Emergency Numbers Systems Board

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# ***INTRODUCTION***

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## **ENSB MISSION STATEMENT**

***THE EMERGENCY NUMBER SYSTEMS BOARD WORKS COOPERATIVELY WITH THE COUNTIES TO PROVIDE AN EFFECTIVE AND EFFICIENT MARYLAND 9-1-1 SYSTEM THROUGH THE ADMINISTRATION OF THE 9-1-1 TRUST FUND REVENUES.***

The Board achieves its goals through implementation of the following principals:

## **ENSB VISION STATEMENT**

***THE EMERGENCY NUMBER SYSTEMS BOARD IS DEDICATED TO ENSURING MARYLAND'S 9-1-1 SYSTEM REMAINS ROBUST AND RESPONSIVE TO THE PUBLIC-SAFETY NEEDS OF OUR CITIZENS AND VISITORS. THE BOARD IS COMMITTED TO PROVIDING FISCALLY RESPONSIVE FUNDING TO MAINTAIN A TECHNOLOGICALLY ADVANCED 9-1-1 SYSTEM STAFFED WITH APPROPRIATELY TRAINED EMERGENCY OPERATORS. THROUGH A PARTNERSHIP WITH THE 9-1-1 COMMUNITY, THE BOARD WILL PROVIDE LEADERSHIP AND GUIDANCE FOR MARYLAND TO BE RECOGNIZED NATIONALLY FOR EXCELLENCE IN PROVIDING 9-1-1 SERVICE.***

The Emergency Number Systems Board's (ENSB or Board) duties are defined by Sections §1-301 through §1-312 of the Public Safety Article of the Annotated Code of Maryland. Further clarity of direction and explicit responsibilities of the Board are provided in the Code of Maryland Regulations (COMAR) Title 12, Subtitle 11, Chapter 03. Those duties include coordinating the enhancement of County 9-1-1 systems and the oversight of the 9-1-1 Trust Fund. This report details the activities of the Board during calendar year 2012 and Trust Fund expenditures of fiscal year 2012 (July 1, 2011 to June 30, 2012).

The Public Safety Article requires that the following six topics be included in the annual report:

- |    |  |            |
|----|--|------------|
| 1. | Types of 9-1-1 Systems in Operation          | Page 17    |
| 2. | Total State and County Fees Charged          | Page 21    |
| 3. | Funding Formula in Effect by County          | Page 22    |
| 4. | Statutory or Regulatory Violations by County | None Noted |
| 5. | Efforts to Establish an Enhanced 911 System  | Page 33-37 |
| 6. | Any Suggested Changes to this Subtitle       | Page 8-10  |

This report goes significantly beyond these six areas in an effort to provide additional insight into the work of the Emergency Number Systems Board. As the communications industry introduces new technological enhancements, Maryland's 9-1-1 system continues to evolve to ensure that Maryland's citizens and visitors are afforded a robust and responsive system when they call 9-1-1.

The current direction of the Board is to evaluate and fund local, regional, and statewide plans for enhancements consistent with the Public Safety Article, Board guidelines, the availability of Trust Fund dollars, and technological advancements. The Board is examining the following current issues:

- Integrating "Next Generation (NG)" Internet Protocol (IP) based 9-1-1 service delivery of voice, text, data, and video messaging into the 9-1-1 System;
- Examining current local and national policies, standards, and legislation to identify best practices evolving from governance, planning, regulatory, policy, and funding issues arising from a statewide transition to a NG 9-1-1 environment;
- Working with our 9-1-1 System service providers to establish standards, policies, and procedures that will enhance the redundancy, resilience, and survivability of 9-1-1 service in Maryland;
- Establishing adequate back-up 9-1-1 facilities and furthering other Homeland Security initiatives;
- Working with the Department of Informational Technology (DoIT) to coordinate the development of a "public safety network" that will utilize IP based connectivity for sharing emergency data between all 9-1-1 primary and secondary Public Safety Answering Point (PSAP or 9-1-1 Center) facilities;
- Funding training and "protocol" software enhancements that promote standardization of 9-1-1 call processing throughout the State;
- Exploring advancements in geographical information systems (GIS) to enhance 9-1-1 related mapping, caller location, prioritized call answering, and emergency response routing methodologies;
- Implementing remote 9-1-1 workstations at Secondary PSAPs to provide enhanced caller information associated with transferred 9-1-1 calls; and
- Examining technological advancements that permit regional sharing of 9-1-1 related equipment for call delivery to Primary, Back-Up, and Secondary PSAPs in an IP network environment.

The engagement of local leadership has created a positive and constructive working relationship among Maryland's PSAP community, its legislative delegations, its first responder community, and the Department of Public Safety and Correctional Services to collectively address these issues.

Questions regarding this report and its content should be forwarded to the ENSB Office of the Executive Director at 115 Sudbrook Lane – Suite 201, Pikesville, Maryland 21208.

The ENSB web site is: [www.dpscs.maryland.gov/ensb](http://www.dpscs.maryland.gov/ensb)

## ***EXECUTIVE SUMMARY***

Maryland's Public Safety Article §1-305 defines the membership of the seventeen member Emergency Number Systems Board. Board members are drawn from private and public sectors representing various aspects of public safety and the citizens they serve. The current membership of the Board includes a diverse group of police, fire, emergency management, regulatory, and communications industry professionals. The members serve a Governor, appointed Senate confirmed, four-year term without compensation. While only required to meet quarterly, the ENSB meets at least monthly to examine current trends and funding needs of Maryland's Public Safety Answering Points (PSAP).

The existing 9-1-1 infrastructure has performed admirably for decades, however new data rich communications devices and services are driving the existing 9-1-1 infrastructure towards its operational limits. Consumers are increasingly relying on enhanced wireless and IP-based communications technologies, which offer expanded data capabilities such as text, picture, and video messaging. Many public-safety related service providers are also seeking to share crash notification data, personal health, family, and other pertinent records with emergency responders utilizing the 9-1-1 system.

The Board continues to examine and monitor national standards surrounding the development of Next Generation 9-1-1 system elements that would capture the benefits of expanding mobile and data communications technologies, as well as continuing to provide or enhance existing 9-1-1 functionality.

Some of the more prominent achievements and current activities of the ENSB include:

- Exploring technology and costs associated with the delivery and processing of Next Generation 9-1-1 services (NG 9-1-1) to our primary and secondary PSAPs;
- Working with PSAP personnel and Verizon representatives to review causal circumstances surrounding 9-1-1 service disruptions, augment notification procedures, improve customer service issues, and seek enhancements that will improve Maryland's 9-1-1 Systems;
- Working with the Washington Metropolitan Council of Governments, Verizon, Maryland PSAP personnel, and the Maryland Public Service Commission to review power outages and disruptions to 9-1-1 service caused by the June 29, 2012 Derecho Storm affecting Maryland and Northern Virginia;
- Providing funding to upgrade and refresh 9-1-1 enhanced phone systems for three (3) back-up PSAPs.
- Providing back-up power related equipment for three (3) primary PSAP facilities located in Carroll (generator), Somerset (generator), and Cecil County (UPS);
- Providing diverse fiber connectivity for IP delivery of calls and related data to Carroll and Somerset County primary PSAPs and the Cecil County Back-up PSAP;
- Providing ongoing training on new 9-1-1 technologies and evolving 9-1-1 service delivery techniques, offering 57 training opportunities attended by 1037 students;

- Securing statewide regulatory compliance through annual PSAP inspections;
- Interacting with federal agencies and national organizations to consider evolving 9-1-1 issues, impacts of social media, and explore funding resources;
- Encouraging counties to secure additional funding resources to augment the 9-1-1 Trust Fund;
- Assisting Maryland counties to update and maintain the accuracy of their mapping capacity through new ortho-photography being obtained for the Eastern Shore region;
- Furthering the Managing for Results (MFR) goal and objective to implement emergency police and fire protocol systems at Maryland PSAPs to provide 9-1-1 caller interrogation consistency coupled with an established quality assurance program.

To further facilitate the execution of the mission of the ENSB, the Board established several sub-committees, comprised of Board members and supporting consultative membership from outside the Board. These subcommittees include:

- **Training and Education** – to provide and enhance entrance level and in-service training opportunities for 9-1-1 call takers;
- **Standards** – to provide guidance on best practices and funding guidelines for selecting and purchasing PSAP equipment;
- **Policy/Legislative** – to establish and publish policy guidance for ENSB membership and PSAP Directors and to make recommendations for Legislative changes; and
- **Technology** – to investigate and educate the Board on current and future technological advancements impacting the delivery of 9-1-1 services.

By statutory directive, the Board also enjoys membership and actively participates on the following Maryland Board:

- **SEMSAC Board** – to assist the Statewide Emergency Medical Systems Advisory Council, comprised of representatives from organizations involved in providing emergency medical care services.

The ENSB remains committed to enhancing Maryland’s 9-1-1 system and taking advantage of proven technological advances in service delivery. Maryland continues to be a national leader in providing enhanced emergency wireline, wireless, and VoIP services. With the advancements made in IP based telephony equipment, Maryland is again poised to embrace a new technology and work towards a smooth transition as “next generation” 9-1-1 systems and service is realized.

## ***PUBLIC SAFETY ARTICLE***

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The Maryland Public Safety Article (Title-1, Subtitle-3) is the enabling legislation that established the 9-1-1 Trust Fund and the Emergency Number Systems Board. It was originally crafted to create a funding mechanism and oversight Board to provide for the orderly installation, maintenance, and operation of 9-1-1 systems in Maryland and establish the three-digit number, 9-1-1, as the primary emergency telephone number to summon emergency assistance. The Public Safety Article remains responsive to the needs of the Maryland's citizens.

The legislation established the Maryland 9-1-1 Surcharge, derived from a monthly surcharge levied on each telephone bill, to provide a constant funding source for enhancing and maintaining Maryland's 9-1-1 system. The 9-1-1 Surcharge is comprised of two separate fees designated to offset 9-1-1 related capital and operational costs. The first portion of the Maryland 9-1-1 Surcharge is the "9-1-1 state fee." The state fee is distributed to the Maryland counties at the discretion of the Emergency Number Systems Board in response to county 9-1-1 system enhancement requests. The level of the second portion is the "Additional Charge" is determined by each county through local resolution. The Public Safety Article limits the "Additional Charge" to a maximum of \$0.75. Legislation requires that the amount of the additional charges received may not exceed a level necessary to cover the total eligible maintenance and operation costs of the county. The Public Safety Article further defines that maintenance and operation costs may include telephone company charges, equipment costs, equipment lease charges, repairs, utilities, personnel costs, and appropriate carryover costs from previous years. To ensure compliance, the Board shall provide for an audit of each county's expenditures for the maintenance and operation of the county's 9-1-1 system. All Maryland Counties have taken advantage of this legislative authority and have passed local resolutions establishing their "Additional Charge."

In 2003, the Public Safety Article was updated to provide the mandate and fiscal support for Maryland's 9-1-1 call takers to receive callback phone number and location information of wireless callers (defined as "enhanced wireless 9-1-1"). This milestone was achieved in June 2005 when Maryland became only the eighth state in the nation to receive and display enhanced wireless information, when available from a wireless carrier, at all primary Maryland PSAPs.

The 2003 revisions also expanded the definition of "9-1-1 accessible service" to include "telephone service or another communications service that connects an individual dialing the digits 9-1-1 to an established public safety answering point." This new definition expanded the communication service providers required to collect and remit the 9-1-1 surcharge to include carriers utilizing Internet Protocol technology (VoIP) for voice connectivity to 9-1-1 Centers.

In 2008, this legislation was revised to increase the membership of the Board from 15 to 17 members. Responding to technological advancements in geographical information

systems (GIS) and the integration of wireless location technology into the 9-1-1 system, this legislation established a new Board position to represent the State's GIS community. Since 2001, the role and capacity of local emergency management services (EMS) and nationwide homeland security efforts have increased significantly. Because 9-1-1 plays a vital role in identifying incidents where emergency management services are to be deployed, the Public Safety Article was amended to increase the EMS representation on the Board from one to two positions.

In 2012 (HB 1235), the legislation was expanded to include a definition of Next Generation 9-1-1 services as an Internet Protocol (IP)-based system, comprised of hardware, software, data, and operational policies and procedures, that:

- provides standardized interfaces from emergency call and message services to support emergency communications;
- processes all types of emergency calls, including voice, text, data, and multimedia information;
- acquires and integrates additional emergency call data useful to call routing and handling;
- delivers the emergency calls, messages, and data to the appropriate public safety answering point and other appropriate emergency entities;
- supports data or video communications needs for coordinated incident response and management; and
- provides broadband service to public safety answering points or other first responder entities.

This legislative change also tasked the Board with establishing planning guidelines for next generation 9-1-1 services system plans and deployment of next generation 9-1-1 services in accordance with this subtitle.

In 2012, Senate Bill 1301 changed how 9-1-1 Trust Fund interest is to be accrued. The new language amended the State Finance and Procurement Article Section §6-226 to include that *“net interest on all State money allocated by the State Treasurer under this section to special funds or accounts, and otherwise entitled to receive interest earnings, as accounted for by the Comptroller, shall accrue to the General Fund of the State.”*

### **Recommended Legislative Change**

The wireless industry is experiencing a significant change in how its service is being utilized by consumers. Nationally, over 30% of households have elected to drop their traditional wireline phone service in favor of using wireless based communications. There has also been a shift in how communication services are being purchased with “pre-paid” wireless service becoming the fastest growing segment in the industry; capturing approximately 24% of the wireless market. Consumers are opting for prepaid wireless service whereby a specified number of minutes are purchased at retail outlets or online, rather than the traditional monthly-billed wireless service.

Maryland's current legislation defines the 9-1-1 Surcharge to be assessed on a monthly "per-bill" basis, which could prevent the fee from being applicable to the retail purchase of "pre-paid" wireless communication services.\* During the past several years, the above market changes and legislative restriction has resulted in a significant loss of \$ 5-6 million in 9-1-1 surcharge revenue.

During the 2013 Legislative Session, the Department of Public Safety and Correctional Services introduced legislation that would establish the collection and remittance of 9-1-1 Surcharge fees by Maryland retail outlets, referred to as the "Point of Sale (POS) Collection Model." The POS model would add the 9-1-1 Surcharge to each retail transaction of prepaid wireless telecommunications service for any purpose other than resale. This legislative change is being requested because prepaid wireless service does not fit within current statutes/regulations regarding the collection and remittance of the 9-1-1 fee. Should this legislation change become enacted, amounts collected in this manner, minus a processing fee, will be deposited to the State 9-1-1 Trust Fund. The fees collected will be utilized to fund 9-1-1 enhancement projects and offset PSAP recurring operational/maintenance costs in the same fashion as currently collected 9-1-1 fees.

Ensuring that the 9-1-1 system is funded in a fair and equitable manner by those utilizing communication devices that provide accessible 9-1-1 service is a priority for the sustainability of Maryland's 9-1-1 system.

\* The marketing of pre-paid wireless service is done through the purchase of "service minutes" from retail or on-line outlets, which does not produce monthly bills.

# ***THE CODE OF MARYLAND REGULATIONS***

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The Code of Maryland Regulations (COMAR) Title 12, Subtitle 11, Chapter 03 further codifies the activities of the Board and describes in detail its essential functions, responsibilities, and training standards. Recent recommendations made by the Emergency Number Systems Board's Policy Subcommittee for updating COMAR were adopted. Significant updates include:

- Redundant wording of items appearing in COMAR that were verbatim to the Public Safety Article were removed and language added to reference the reader back to the appropriate section of the Public Safety Article;
- The Board requires a majority of confirmed members to be present at a meeting to constitute a quorum;
- PSAPs shall provide access to services for individuals who do not speak or understand the English language\*;
- PSAPs shall have sufficient call takers and equipment to consistently answer incoming calls on a daily average, of 10 seconds or less\*\*;
- Within six months of hiring a Public Safety Answering Point call taker, a county shall train the new call taker using a curriculum adopted or approved by the Board\*\*;
- A county shall provide a Public Safety Answering Point call taker with yearly in-service training using a curriculum adopted or approved by the Board\*\*; and
- In requesting funding from the Board, the county shall ensure that the county's procurement laws and policies are followed.

**COMAR is sufficient in its current content to be responsive to the needs of Maryland's 9-1-1 community and no further changes are recommended.**

\* All PSAPs provide immediate language assistance through contractual translation services.

\*\* Through the annual inspection process, all PSAPs were found to be compliant.

# ***HISTORY OF 9-1-1 IN MARYLAND***

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## **1970s and 1980s**

- In March 1973, the White House's Office of Telecommunications issued a national policy statement that recognized the benefits of 9-1-1, encouraged the nationwide adoption of 9-1-1, and provided for the establishment of a Federal Information Center to assist units of government in planning and implementation.
- In 1972, Charles County was the first in Maryland to adopt 9-1-1, followed by Prince George's in 1973 and Montgomery in 1974.
- In 1979 Maryland became the second state in the nation to adopt 9-1-1 as the statewide universal number for emergency services access. The Emergency Number Systems Board was established to coordinate 9-1-1 implementation efforts.
- The emergency communications industry established standards for automatic number information (ANI) and automatic location information (ALI) to be presented with each 9-1-1 call. This automatic ANI/ALI data delivery to 9-1-1 call takers was designed to streamline the information gathering/dispatch processes and allow locating persons unable to identify their location or to verbally communicate.
- Maryland established a ten-cent phone bill surcharge to fund 9-1-1 development efforts.
- The Statute enabling the ENSB was amended to include authority for Counties to charge an "additional fee" via monthly phone bills to offset 9-1-1 operational expenses.

## **1990s**

- By 1995, all Maryland counties had implemented enhanced wireline 9-1-1 service (ANI/ALI displayed with each 9-1-1 call).
- The 9-1-1 Surcharge fee was modified to encompass wireless telecommunication services and the ENSB was expanded to include a member of the wireless industry.
- The ENSB Training Sub-Committee and the Dundalk Community College developed a standardized 40-hour entrance level training course for 9-1-1 dispatchers.

## 2000 - 2012

- In 2002, Anne Arundel County is selected as the State's test site for providing enhanced wireless service and becomes Wireless Phase I operational (call back number displayed).
- In 2003, the 9-1-1 Surcharge is increased to 25 cents per bill per month and the County "Additional Fee" is increased from a maximum of 50 cents per bill per month to 75 cents. Board membership increased to 15 by adding representatives from the Maryland Emergency Number Association, a large county (population > 200,000), and a small county (population < 200,000), while deleting a public at large position.
- By 2004, in most jurisdictions, more than 50% of all 9-1-1 calls originated from wireless callers.
- By June 2005, all of Maryland's primary PSAPs become Wireless Phase II operational (ANI/ALI with all wireless calls), making Maryland, according to the National Emergency Number Association, only the eighth state in the nation to accomplish this milestone.
- Maryland establishes the Telecommunicator Emergency Response Taskforce (TERT) program to assist PSAPs cope with the demands of a natural or manmade disaster. PSAP administrators and potential TERT team members were identified and trained under the National Emergency Number Association's national TERT initiative program.
- The Board worked in cooperation with the Maryland State Highway Administration to obtain statewide aerial-photography to assist Maryland counties in updating and maintaining the accuracy of their mapping capacity to locate wireless callers.
- The Governor established Homeland Security Core Goals and in response, the Board established "back-up" PSAP criteria, should the primary PSAP not fulfill its role because of power outages, telephone system interruptions, building evacuations, or other natural or manmade disasters. The Board began providing funding for each PSAP to have a viable back-up facility that met Board established standards.
- The Board encourages and funds the utilization of Emergency Protocol Systems to provide a standardized means to consistently query and process information from 9-1-1 callers. All Maryland primary PSAPs utilize emergency medical dispatch protocols, while 96% of primary PSAPs use emergency fire and or police dispatch protocols.

- In 2008, Board membership increased to 17 members, adding representation from the Geographic Information Services (GIS) community and an additional representative from Emergency Management Services.
- In 2009, Board established policy to fund remote workstations at Maryland's secondary PSAPs, which receives transferred 9-1-1 calls. The Frederick City Police Department completed the first installation utilizing the Frederick County PSAP phone equipment and IP connectivity between facilities. Through this effort, the Board intends to advance the dissemination of enhanced 9-1-1 data to secondary PSAPs.
- In 2009, the Harford County PSAP became the first PSAP in the nation to be recognized by the National Academy of Emergency Dispatch as an accredited "Center of Excellence" in all protocol disciplines (police, fire, and EMS).
- In 2010 - 2011, the Board continued to explore solutions to provide Secondary PSAPs, including the Maryland State Police, with "Next Generation" 9-1-1 Systems technologies for call delivery that will provide ANI/ALI, capacity to rebid, and other call related data when available.
- In 2012, the enabling legislation was amended to include a definition of Next Generation 9-1-1 services and tasking the Board with developing guidelines for NG 9-1-1 deployment.

## ***BOARD MEMBERSHIP***

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The membership of the ENSB includes a diverse and technically astute group of professionals from the emergency services, the communications and public safety industries, as well as the public at large. The members serve a Governor appointed Senate confirmed, four-year term. While only required to meet quarterly, the ENSB has met at least monthly to examine current trends and needs of the twenty-four Public Safety Answering Points.

The Board has enjoyed the support of the Department of Public Safety and Correctional Services (DPSCS) fiscal offices in providing auditing and accounting support. In recognition of time demands, the ENSB through DPSCS has employed a full time fiscal coordinator and accountant to support the ENSB's efforts in administering the 9-1-1 Trust Fund.

The Board recognizes the need for entrance and in-service level training for call takers and supervisors. The Department established an administrative assistant position, working directly for the Office of the Executive Director, to advance the training efforts described in COMAR and handling special projects as assigned.

The following page outlines Board membership and the organization each member represents.

**DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONAL SERVICES**

**Emergency Number Systems Board**

**Board Member Listings**

<b>Term</b>	<b>Represent</b>	<b>Member Name</b>
8/30/99 - 6/30/16	Public Service Commission	Anthony Myers
4/1/08 - 6/30/15	MIEMSS <sup>1</sup>	Richard Berg
7/1/04 - 6/30/16	Volunteer Fire Service	Brian C. Ebling
2/1/10 - 6/30/13	Career Fire Service	Captain Colleen O’Neill
9/07/11 - 6/30/15	Public-At-Large	Scott Whitney
9/07/11- 6/30/14	Emergency Management Systems	Teresa Owens
4/1/08 - 6/30/15	Telephone Utility	Kevin M. Green
10/1/08 - 6/30/13	APCO <sup>2</sup>	Susan E. Greentree
7/1/06 - 6/30/13	Maryland State Police	Lt. Col. William Pallozzi
4/26/11 - 6/30/14	Police Services	Captain Peter Lazich
7/1/04 - 6/30/16	Public-At-Large	Roderick W. Hart
12/29/03 - 6/30/13	Large County	Andrew M. Johnston
7/1/04 - 6/30/13	Wireless Industry	Brian Josef
11/10/03 - 6/30/14	Small County	Steve Marshall
4/1/08 - 6/30/15	NENA <sup>3</sup> – Local Chapter	William A. Frazier
10/1/08 - 6/30/16	Emergency Management Systems	John E. Markey
10/1/08 - 6/30/16	Geographic Informational Systems	Ken Miller

1 – Maryland Institute for Emergency Medical Services Systems

2 – Association of Public-Safety Communications Officials

3 – National Emergency Number Association

## ***TYPES OF 9-1-1 SYSTEMS***

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In the late 1980s, Maryland PSAPs achieved “enhanced” capability, successfully enabling each to display Automatic Number Information (ANI) and Automatic Location Information (ALI) for wireline 9-1-1 calls. Previously, emergency services were requested through unique local phone exchanges to police and fire service agencies or by dialing “0” for the operator. The caller’s phone number and address were not displayed to the call taker.

The advent and proliferation of wireless communications caused the public safety community to demand the same “enhanced” capacity as their wireline counterparts. The Federal Communications Commission required the wireless industry, by regulation, to provide ANI/ALI data of a wireless caller to the PSAP. Today, the wireless industry is in compliance with the FCC regulations and has been able to provide enhanced wireless service to technologically capable PSAPs. In June 2005, Maryland became only the eighth state in the nation to have all primary PSAP’s (24) receive and display the ANI and ALI information from wireless 9-1-1 calls.

During 2012, the Board continued to approve project funding to upgrade various PSAP phone systems and mapping capacity to receive and display enhanced wireless data. The caller location information (ALI) provided through enhanced wireless service is received at the PSAP in measurements of latitude and longitude. Mapping of this information is required to facilitate meaningful application in processing the 9-1-1 call. The Board obtained statewide aerial-photography to assist Maryland counties to update and maintain the accuracy of their mapping capacity. This cooperative effort of providing current statewide aerial-photography to PSAPs is anticipated to be an ongoing project.

In coordination with the Board, Voice over Internet Protocol (VoIP) and Telematics emergency 9-1-1 services are now being directed through the Verizon selective router to the appropriate PSAP, in the same fashion as traditional communication services with caller related emergency information displayed to the call taker.

The Board is currently examining the feasibility of migrating to an IP network based 9-1-1 system for receiving voice, data, text, and video messaging. Currently, twenty (20) of Maryland’s twenty-four (24) primary PSAPs have diversely routed fiber connectivity from the Verizon 9-1-1 Local Central Office. As a pilot-project, the Board provided funding, sponsored by Dorchester County on behalf of all Maryland PSAPs, to the Maryland State Police (MSP) to implement Next Generation 9-1-1 Systems technologies for the delivery of transferred emergency calls and related data to their Barracks on the Maryland Eastern Shore.

## Maryland 2012 PSAP Statistics\*

### 9-1-1 Calls

County	Director	Wireline	Wireless	Total
Allegany	Roger Bennett	13,328	33,738	47,066
Anne Arundel	Lt. Kenneth Arbaugh	84,436	255,786	340,222
Baltimore City	Lisa Allen	804,256	922,519	1,726,774
Baltimore	Marie Whisonant	193,760	400,914	594,674
Calvert	Yvette Myers	15,505	27,844	43,349
Caroline	Bryan Ebling	4,853	14,101	18,954
Carroll	Randy Waesche	23,122	39,349	62,470
Cecil	Richard Brooks	15,669	47,955	63,624
Charles	Tony Rose	21,415	53,072	74,523
Dorchester	Kim Browning	5,636	17,905	22,131
Frederick	Chip Jewel	26,244	111,602	137,846
Garrett	Jon Bradley Frantz	9,570	71,589	81,159
Harford	W. Mitch Vocke	29,175	76,409	105,584
Howard	Lt. Edward Sprinkle	71,331	97,338	168,669
Kent	Wayne Darrell	3,607	6,993	10,600
Montgomery	Brian Melby	153,449	360,923	514,422
Prince George's	Charlynn Flaherty	299,306	647,704	947,010
Queen Anne's	Kevin Aftung	5,622	17,796	23,418
Somerset	Steve Marshall	4,009	12,098	16,107
St. Mary's	Robert Kelly	13,725	38,407	52,132
Talbot	Clay Stamp	7,362	13,119	20,481
Washington	Bardona Woods	24,747	69,180	93,927
Wicomico	David Shipley	17,325	49,943	67,268
Worcester	Teresa Owens	9,802	30,989	40,791

**Maryland Total 9-1-1 Calls 1,857,254 3,417,273 5,273,201**

\* As reported by each County's PSAP Director

## ***PSAP INSPECTIONS***

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In 2012, the Office of the Executive Director inspected each of Maryland's 24 PSAPs. Inspections are conducted annually to ensure each county's compliance with COMAR, to determine what areas need to be improved, and to learn about new trends in call handling that may have statewide implications.

Areas reviewed during the PSAP inspection process:

- The state of each county's mapping capacity and accuracy;
- A discussion of each PSAP's diverse fiber optic connectivity to the central office and utilizing "Network Maryland" connectivity,
- A review of Verizon service issues and their *9-1-1 System Outage Notification List* provided to Verizon;
- A review of each county's electronic security policy to determine each county's efforts to protect the equipment within its PSAP. A discussion to determine if changes to COMAR are required to adopt common practices to safeguard Maryland's 9-1-1 network;
- A discussion regarding the remote hosting of 9-1-1 phone systems;
- A review of each county's secondary PSAPs to include the agency, number of calls transferred, network connectivity and how the secondary PSAP currently receives ANI and ALI;
- A review of each county's efforts to educate the public about 9-1-1;
- A review of each county's disaster mitigation and recovery plans;
- Other sources of funding the counties may have used for communications related projects (radio, CAD, 9-1-1, mapping, etc.);
- A check of PSAP equipment to make certain that it meets COMAR requirements;
- A review of 9-1-1 call metrics to see if each county meets the COMAR requirement of answering 9-1-1 calls on a daily average of 10 seconds on a consistent basis;
- A discussion of trends for managed data services, and the effects of Next Generation 9-1-1 on PSAP funding;
- A check of each county's participation in the Telecommunicator Emergency Response Team (TERT) program;
- A review of the quality assurance review of 9-1-1 calls and protocol use;
- A discussion of staffing concerns and a review of each county's three-year plan;
- A review of training records to determine if each county meets the COMAR standards for entrance level and annual in-service training;
- A review of ENSB funded Emergency Telecommunicator Course (ETC) certifications of 9-1-1 operators;
- Any suggestions by the county to improve ENSB processes and training offered.

Where deficiencies were noted, the Office of the Executive Director has worked collaboratively with the county to achieve compliance with COMAR.

## ***FUNDING***

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The Maryland Public Safety Article (§1-310 & §1-311) establishes two funding streams to support 9-1-1. The first is the State “9-1-1 Fee”, which is \$0.25 per subscriber per month. The second is the County “Additional Fee” in an amount determined by each county, through local ordinance, up to maximum of \$0.75 per bill per month. All Maryland counties and Baltimore City currently have passed local ordinances establishing the “Additional Fee” at \$0.75. Telephone companies, wireless carriers, and other 9-1-1 accessible service providers, collect and remit both portions of the 9-1-1 Surcharge to the State Comptroller, monthly, for deposit into the 9-1-1 Trust Fund.

Quarterly, the County “Additional Fee” portion is distributed to each county prorated in accordance with the level of fees collected in each jurisdiction (*Public Safety Article §1-309*). Annually, the Secretary of the Department of Public Safety and Correctional Services requests a budget appropriation from the 9-1-1 Trust Fund in an amount sufficient to carry out the purposes of the enabling legislation, pay administrative costs, and reimburse counties for the cost of enhancing their 9-1-1 system (*Public Safety Article §1-309*). Through this budget appropriation process, the State “9-1-1 Fee” is distributed from the 9-1-1 Trust Fund to the Maryland counties at the discretion of the Emergency Number Systems Board in response to county 9-1-1 enhancement requests.

Maryland has established written criteria identifying the allowable uses of funds collected. Money collected from the State “9-1-1 Fee” may be used to reimburse counties for the cost of enhancing Maryland’s 9-1-1 system through payment to a third party contractor (*Public Safety Article §1-308*). COMAR (12.11.03.12) further defines equipment qualifying for funding or reimbursement. Money distributed quarterly to the counties from the collection of the County “Additional Fee” may be spent on the installation, enhancement, maintenance, and operation of a county or multi-county 9-1-1 system. Maintenance and operation costs may include telephone company charges, equipment costs, equipment lease charges, repairs, utilities, personnel costs, and appropriate carryover costs from previous years (*Public Safety Article §1-312*).

The following chart indicates the 9-1-1 Surcharge fees associated with each jurisdiction and the date of resolution modifying the county additional fee.

### Maryland 9-1-1 Surcharge Fees

County	State Fee	County Fee	Effective Date
Allegany	\$0.25	\$0.75	October 1, 2003
Anne Arundel	\$0.25	\$0.75	July 1, 2005
Baltimore City	\$0.25	\$0.75	June 23, 2004
Baltimore	\$0.25	\$0.75	April 23, 2004
Calvert	\$0.25	\$0.75	June 15, 2004
Caroline	\$0.25	\$0.75	November 9, 2004
Carroll	\$0.25	\$0.75	June 8, 2004
Cecil	\$0.25	\$0.75	October 1, 2003
Charles	\$0.25	\$0.75	January 1, 2004
Dorchester	\$0.25	\$0.75	October 1, 2003
Frederick	\$0.25	\$0.75	July 1, 2004
Garrett	\$0.25	\$0.75	October 1, 2003
Harford	\$0.25	\$0.75	May 4, 2004
Howard	\$0.25	\$0.75	July 1, 2007
Kent	\$0.25	\$0.75	January 30, 2004
Montgomery	\$0.25	\$0.75	October 1, 2003
Prince George's	\$0.25	\$0.75	March 5, 2004
Queen Anne's	\$0.25	\$0.75	October 1, 2003
Somerset	\$0.25	\$0.75	February 10, 2004
St. Mary's	\$0.25	\$0.75	July 1, 2004
Talbot	\$0.25	\$0.75	May 11, 2004
Washington	\$0.25	\$0.75	October 21, 2003
Wicomico	\$0.25	\$0.75	January 1, 2004
Worcester	\$0.25	\$0.75	October 1, 2003

The chart below reflects the Fiscal Year 2012 distribution of the collected “additional charge” fees.

### FY 2012 “Additional Fee” Payments to the Jurisdictions

County	Population *	FY 12 Disbursement	Percent of Total **
Allegany County	75,087	\$496,740	1.27%
Anne Arundel County	537,656	\$3,864,840	9.88%
Baltimore City	620,961	\$5,144,900	13.16%
Baltimore County	805,029	\$4,544,914	11.62%
Calvert County	88,737	\$582,155	1.49%
Caroline County	33,066	\$185,642	0.47%
Carroll County	167,134	\$1,030,268	2.63%
Cecil County	101,108	\$598,054	1.53%
Charles County	146,551	\$991,949	2.54%
Dorchester County	32,618	\$199,502	0.51%
Frederick County	233,385	\$1,478,360	3.78%
Garrett County	30,097	\$263,724	0.67%
Harford County	244,826	\$1,585,654	4.05%
Howard County	287,085	\$2,146,957	5.49%
Kent County	20,197	\$131,315	0.34%
Montgomery County	971,777	\$6,751,703	17.26%
Prince George's County	863,420	\$5,928,725	15.16%
Queen Anne's County	47,798	\$306,637	0.78%
Somerset County	26,470	\$119,173	0.30%
St Mary's County	105,151	\$606,920	1.55%
Talbot County	37,782	\$260,221	0.67%
Washington County	147,430	\$903,532	2.31%
Wicomico County	98,733	\$550,095	1.41%
Worcester County	51,454	\$436,692	1.12%
<b>TOTALS</b>	<b>5,773,552</b>	<b>\$39,108,672</b>	<b>100.00%</b>

\* 2010 Actual Census (Maryland Manual)

\*\* Percent of total disbursement - used to calculate disbursement of non-designated funds (i.e. Interest)

## ***ENSB EXPENDITURES***

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The Department of Public Safety and Correctional Services FY 2012 annual budget appropriation for the Emergency Number Systems Board is approximately \$ 14.4 M.

The technical nature of 9-1-1 communications has evolved over time to include the advent of computer-aided dispatch, multiple agencies providing emergency response, national standard setting organizations, wireless telephone communications, and most recently, IP based communication and telematics (automatic crash notification) services. These have brought about fundamental changes in the 9-1-1 infrastructure and added training and equipment challenges.

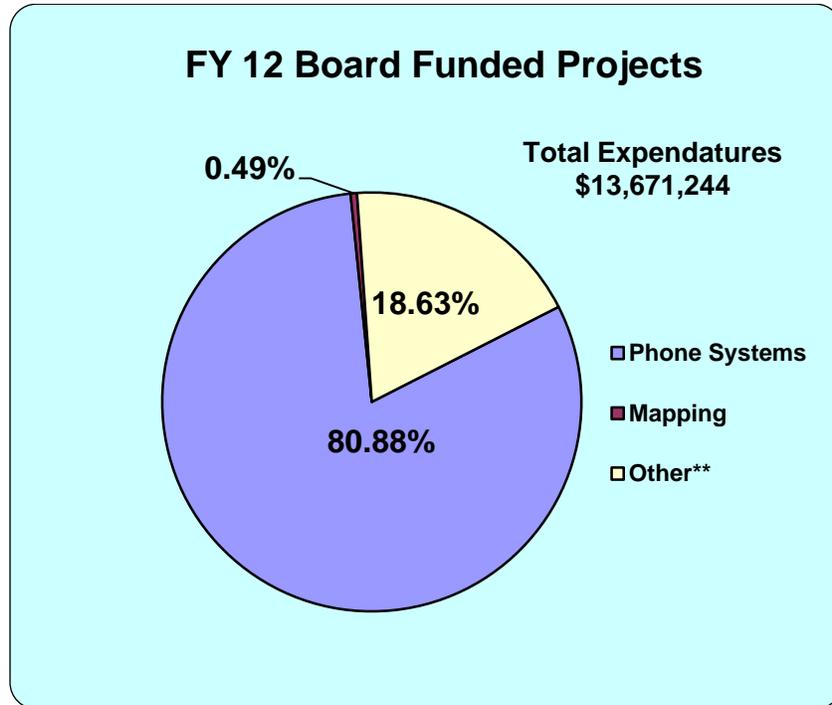
Historically, the vast majority of funds are allocated to upgrading phone systems, keeping current with technological advances, providing adequate back-up facilities, and enhancing mapping capacity. Current phone systems funded by the Board must be IP capable and ready to accept next generation 9-1-1 data once national delivery and presentation standards have been established. All Maryland PSAPs now have the capability of mapping the position of 9-1-1 callers, when location information is received by the call taker.

Should circumstances arise that prevents a PSAP from receiving or processing emergency calls, it is critical that back-up 9-1-1 service and relocation strategies are in place and regularly exercised. During 2012, the Board funded several projects for PSAPs to enhance or establish capacity for back-up service and emergency relocation procedures. Referring to the Board's "back-up" PSAP guidelines, the Board worked with noncompliant 9-1-1 Centers to establish approved back-up facilities with appropriate service functionality.

Utilizing technological advances in 9-1-1 phone systems and IP connectivity, the Board began the process of expanding the 9-1-1 system to encompass Secondary PSAPs. Through the use of remote workstations, linked directly to the primary PSAP, secondary PSAPs call takers experience the same functionality, mapping capacity and data delivery on all transferred 9-1-1 calls.

The Maryland Emergency Number Systems Board and the Maryland State Police (MSP) have recognized that the potential exists for faster emergency response times and improved emergency services to the citizens of the State of Maryland. This can be accomplished by modernizing the routing and delivery of E9-1-1 calls being transferred to MSP throughout the State. To that end the ENSB funded, as a pilot project on Maryland's Eastern Shore, an IP-enabled phone system to provide connectivity for delivery of E9-1-1 traffic to the Eastern Shore MSP Barracks, from Primary PSAPs utilizing "Network Maryland" fiber connectivity.

## The chart below reflects FY 12 Board expenditures



### \*\* Other Funding:

“Other” funding is comprised of capital expenditures related to 9-1-1 call processing or its enhancement. Some examples of these capital expenditures are listed below:

- 9-1-1 Center security;
- Back-up power systems;
- Redundant/diverse 9-1-1 call routing;
- Training – entry-level, in-service and supervisory/administrative;
- Lightning/surge protection; and
- Protocol call processing systems

## **PHONE SYSTEM PROJECTS – FY 12**

Receiving and processing 9-1-1 calls requires specialized phone system equipment to optimize voice, data, and location technologies. These complex phone systems leverage advances in communication equipment to provide responsive 9-1-1 call handling, data management, and mapping capacity, while maintaining enhanced 9-1-1 services with legacy systems. In response to technological advances in the communication industry, the Board anticipates updating PSAP phone equipment in five to six year cycles. During FY 12, the Board provided funding to upgrade and refresh 9-1-1 enhanced phone systems for three (3) back-up PSAPs in Anne Arundel, Prince George's, and Howard counties.

## **HIGHLIGHTED FY 12 PHONE SYSTEM UPGRADES**

### **Prince George's County, Howard County, and Anne Arundel County**

Should circumstances arise that prevents a PSAP from receiving or processing emergency calls, it is critical that back-up 9-1-1 service and relocation strategies are in place and regularly exercised. In 2012, the Board funded phone equipment at the designated Back-Up PSAP facilities in Prince George's, Howard, and Anne Arundel Counties. Each is exercised on a regular basis and can augment their Primary PSAP to significantly increase call answering capacity during emergency conditions.

## ***COUNTY AUDITS***

The Public Safety Article requires each county to annually report to the Board how the monies received from the trust fund were spent. The Board is charged with the responsibility of evaluating the expenditures for compliance with applicable laws and regulations. To this end, the Board funds independent audits of county expenditures.

All of the audits for FY 12 were received and auditors compensated. The audits were reviewed and each county found in compliance with the spending limits articulated in the Public Safety Article. Operational expenses typically include 9-1-1 related personnel salaries/benefits, recurring maintenance and service fees, mapping maintenance/updating, network associated fees, and capital expenditures not covered by the Board.

<b>COUNTY</b>	<b>COUNTY 9-1-1 FEE REVENUES</b>	<b>COUNTY 9-1-1 EXPENSES *</b>	<b>% of 9-1-1 FEE OFFSET</b>
Allegany County	\$496,740.00	\$1,924,774.00	26%
Anne Arundel County	\$3,864,840.00	\$6,262,509.00	62%
Baltimore City	\$5,144,900.00	\$8,845,747.88	58%
Baltimore County	\$4,544,914.00	\$10,437,016.00	44%
Calvert County	\$582,155.00	\$2,631,349.00	22%
Caroline County	\$185,642.00	\$1,061,202.00	17%
Carroll County	\$1,030,268.00	\$2,176,220.00	47%
Cecil County	\$598,054.00	\$1,891,367.00	32%
Charles County	\$991,949.00	\$1,932,646.00	51%
Dorchester County	\$199,502.00	\$1,328,566.00	15%
Frederick County	\$1,478,360.00	\$4,854,637.00	30%
Garrett County	\$263,724.00	\$1,959,211.00	13%
Harford County	\$1,585,654.00	\$5,797,153.00	27%
Howard County	\$2,146,957.00	\$5,261,003.00	41%
Kent County	\$131,315.00	\$855,301.00	15%
Montgomery County	\$6,751,703.00	\$12,816,421.00	53%
Prince George's County	\$5,928,725.00	\$39,233,366.00	15%
Queen Anne's County	\$306,637.00	\$2,001,240.00	15%
Saint Mary's County	\$606,920.00	\$2,295,152.00	26%
Somerset County	\$119,173.00	\$1,141,692.00	10%
Talbot County	\$260,221.00	\$915,315.00	28%
Washington County	\$903,532.00	\$3,473,849.00	26%
Wicomico County	\$550,095.00	\$1,126,319.00	49%
Worcester County	\$436,692.00	\$2,763,241.00	16%

**Average % of Operational Cost Offset by 9-1-1 Fee    32%**

\* 9-1-1 related operational costs as reported by County selected independent auditors

## ***ENSB SPECIAL MEETINGS***

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### **DERECHO STORM – JUNE 29, 2012**

On June 29, 2012, the State of Maryland was struck by a fast moving storm with high winds known as a Derecho. The storm rapidly moved through Maryland and other parts of the Mid-Atlantic Region, causing widespread damage and disruptions of public utilities. The below summarizes the efforts of the Board, working in cooperation with Maryland counties, to understand the impact of the storm and how to improve the resiliency and redundancy of Maryland's 9-1-1 system. The following report examines issues that occurred in Maryland as well as those occurring in Northern Virginia due to 9-1-1 architecture similarities. Also outlined are the efforts of the Board and counties to work with Verizon to fashion intermediate and permanent solutions to issues that arose. This report further examines a series of procedures and policies that were implemented in Maryland over the past several years, in cooperation with Verizon, intended to mitigate outages and enhance service delivery.

#### **County Impact**

Following the storm, the Board queried each of Maryland's counties to determine if any county suffered outages or disruptions to their 9-1-1 operations. Of the twenty-four (24) counties, only four reported that they had issues during or immediately after the Derecho. Garrett County reported that two (2) of thirty-two (32) US Cellular of Cumberland cellular trunks were routed to the county's wireline 9-1-1 trunks, rather than the wireless trunks. Verizon assisted the county in contacting US Cellular, and the issue was resolved. Verizon reports that there was no loss of Phase II automatic location information (ALI). There was no impact to the public's ability to reach 9-1-1 services. Caroline County reported issues with their wireless 9-1-1 trunks, which caused their wireless 9-1-1 calls to be routed to Talbot County through a predefined back-up routing scheme. The county attempted to contact the Verizon Customer Care Center (CCC) but experienced longer than normal hold times resulting from a high volume of calls to the CCC. In response to previous trouble reporting issues, an escalation process was collectively developed by Verizon, Maryland counties, and the Board. Utilizing this procedure, the PSAP employee was able to reach the service manager for the region and open a trouble ticket. The problem was corrected following a restart of the Caroline County PSAP's phone system.

Montgomery County experienced a high volume of calls in a short period of time, also known as a "mass call event", as a result of this storm. During a mass call event, requests for available trunks occur so frequently that there is a "wink failure" between the telephone switch and available 9-1-1 trunks. As a result of the wink failure, the Verizon network automatically takes the trunk out of service under the belief that the trunk is compromised. This can become a cascading failure that disables all of the trunks. Following a similar event in 2011, the Board worked with Verizon to develop a "mass call mitigation" plan. This plan allows only one trunk in a group to be taken out of

service automatically during a mass call event, so that there is no cascading failure of all the 9-1-1 trunks going to a PSAP. As a result of this previously established mitigation procedure, Montgomery County experienced little impact on their 9-1-1 services.

A deficiency was discovered with the mass call mitigation plan where there was no follow-up by Verizon to ensure that all trunks were returned to service subsequent to the mass call event. This was discovered by Montgomery County when they determined that four 9-1-1 trunks (each from a separate trunk group) remained out of service several days after the storm. The trunks were returned to service by Verizon, and Verizon has since updated their mass call mitigation plan to include making sure all trunks are restored prior to closing the trouble ticket.

Prince George's County reported the loss of certain non 9-1-1 lines following the storm. It was determined that the Bowie Central Office had a power disruption, which took an optical carrier network card out of service. Verizon technicians reseated the card and service was restored on June 30. The same problem recurred on July 1, and was also remedied in a similar fashion.

### **Regional Issues**

The effects of the Derecho storm also affected other jurisdictions in the Mid-Atlantic region, specifically Northern Virginia. The Board is sensitive to these outages due to similarities that may exist between Maryland and Virginia 9-1-1 architectures. In large measure, the outages in Northern Virginia were caused by commercial power outages, and failures with emergency power in the Arlington and Fairfax central offices.

### **Board Actions**

This section outlines a series of meetings that the Board has conducted with the counties and Verizon.

- The Maryland Emergency Number Systems Board has met with Verizon at each monthly public meeting.
  - Verizon appeared at the July 26, August 31 and September 27 meetings to provide the Board with an update of the issues that occurred in Maryland, as well as the issues and remediation efforts that occurred in Northern Virginia.
- The Board has issued a series of data requests to Verizon to gain a better understanding of what occurred in Maryland and Virginia, and to remediate any potential problems in Maryland.
- The Board has participated in a number of meetings held by the Metropolitan Washington Council of Governments (COG).
  - Chairman Anthony Myers has provided updates to the COG relative to the activities of the Board and the Maryland Public Service Commission (PSC) with regards to Verizon 9-1-1 service, as well as the power utilities regulated by the PSC.
  - The Board has shared best practices and lessons learned from previous Verizon outages with both Virginia and the District of Columbia.

- The Board has met with representatives from the Office of the Governor and the Maryland Emergency Management Agency (MEMA) to provide updates regarding the efforts of the Board, and an overview of Maryland's 9-1-1 network.

### **Verizon Activities**

This section outlines the actions taken by Verizon since the storm, in cooperation with the Board.

- Verizon responded to a host of written and oral data requests made by the Board.
- The Board has requested Verizon to examine and report on their electrical power backup systems in Maryland's central offices.
  - Verizon related that there are no issues like those discovered in Virginia, nor are there any outstanding issues with emergency power in Maryland.
  - Verizon is conducting a series of power audits in Maryland to determine vulnerabilities, and to remedy those vulnerabilities when discovered.
  - The audits are scheduled to be completed by first quarter of 2013.
- Verizon will enhance their emergency power practices and procedures.
  - Site specific back-up power system procedures at critical facilities will be done so that anyone entering such a facility will be able to determine if the site is on emergency power. This will be completed in the first quarter of 2013.
  - Verizon has created site specific manual generator starting procedures, including prioritized system loads, to ensure a rapid start in case of the failure of automatic starting systems.
  - Verizon has improved its training and testing compliance so that procedures are followed to ensure the rapid correction of issues that can compromise the individual offices.
- Verizon will conduct testing that involves the termination of commercial power into each central office. This process, known as blackout testing, assesses the emergency power's ability to automatically engage to keep the central office operating. This will be done on a continual basis starting in 2013.
- Verizon has committed to the Board to review the network design for 9-1-1 trunks and ALI links to ensure that there are no choke points or single points of failure in a central office that can inhibit a PSAP from receiving 9-1-1 calls or location information. This is a three step process.
  - High-level network drawings have been developed to determine if the 9-1-1 trunk groups or ALI links intersect in a common piece of equipment within a Verizon central office, such as a router or switch.
  - The 9-1-1 trunks are traced from the PSAP to each of the tandems, and the ALI links are traced from the PSAP to the Freehold and Fairland data centers.
  - Drawings have been completed for each PSAP (Primary and Back-Up), and will be reviewed with each county PSAP Director.

- Verizon engineers will do a detailed review of each 9-1-1 and ALI circuit to make certain that there are no single points of failure, and if diversity violations are discovered, to design solutions to create diversity within the network where physically possible and with PSAP concurrence.
  - It is anticipated that the detailed reviews will be completed in the first quarter of 2013.
  - Verizon will follow-up with each county to review the findings and recommendations made by the engineering group.
  - Verizon will then schedule the remediation with each county at a time that minimizes the impact to the county PSAP operations.
  - This entire process is being done concurrently with Virginia.
  - The remainder of the Verizon footprint will be done sometime after Maryland and Virginia are completed.
- Verizon has implemented a new alerting system to provide voice, text message and e-mail communication to the PSAP community in the event of a major outage that affects multiple jurisdictions. This will provide each county with updated information as quickly as possible. This is not a substitute for any other notification processes agreed to by Verizon, the counties and the Board. The process augments previously established procedures, by adding text messaging.

### **Next Steps**

The Board anticipates the following actions to be completed on the dates indicated:

- Continue to meet with Verizon and the counties to discuss new information regarding the impact of the Derecho storm on 9-1-1. **Ongoing**
- Receive updates from Verizon and the counties regarding the network diversity reviews as they are completed. **Estimated Completion Time: First Quarter 2013**
- Assist each county with making certain that they have Verizon network diversity from PSAP to tandem for 9-1-1 calls, and PSAP to data center for ALI data. **Estimated Completion Time: First Quarter 2013**
- Review with Verizon the results of the power audits at the mission critical Verizon facilities. **Completed**
- Follow up with Verizon to ensure all power remediation is completed at the mission critical Verizon facilities. **Estimated Completion Time: First Quarter 2013**
- The Board has requested from Verizon the revised diversity guidelines for network telemetry published on August 15, 2012. **Received from Verizon on October 23, 2012 and reviewed at the October 25, 2012 Board meeting**
- Continue to participate in the Metropolitan COG process. **Ongoing**

The Board's process is an iterative process. The Board continues to meet with Verizon and counties to enhance Maryland's 9-1-1 system to ensure its reliability and resiliency, and to provide the best service to Maryland's citizens.

## ***MANAGING FOR RESULTS***

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Maryland's Managing for Results (MFR) initiative requires the identification of an organizational mission accompanied by specified goals and performance measures. This is incorporated in the Department's Strategic Plan. The Emergency Number Systems Board established two Managing for Results (MFR) objectives that would track the quality and consistency of the emergency response information extracted from 9-1-1 callers by Emergency Number Operators (call takers) staffing Maryland's twenty-four (24) Public Safety Answering Points.

Formerly, PSAPs in Maryland relied solely on the training and experience of the call taker to process a 9-1-1 call. Police and fire protocol systems have been established by national organizations to provide a standard means to query 9-1-1 callers to elicit the information required to properly respond to an emergency call. The response made by the 9-1-1 caller to initial questions identify subsequent questions needed to guide the Emergency Number Operator in appropriately processing the emergency call and providing the 9-1-1 caller with suitable pre-arrival instructions. The utilization of nationally established protocols for processing 9-1-1 calls will enhance consistency of 9-1-1 call handling.

**Goal**    **To meet compliance standards for emergency number operator use of nationally established emergency processing protocols in Maryland to extract optimum information for improved emergency response.**

**Objective 1.1** – By June 2012, at least 95% of the 9-1-1 Centers (Public Safety Answering Points) will utilize nationally established police and/or fire emergency protocol systems for emergency number operators to process 9-1-1 calls.

**Performance:** Objective 1.1 was designed to target the “use” (implementation) of police and fire protocol systems, and Objective 1.2 was designed to target subsequent compliance with protocol standards after implementation. During fiscal year 2012, ENSB funded an additional PSAP's requests to implement protocol systems. With 23 PSAPs implementing these protocol systems, the target of 95% (96% actual) was achieved.

**Objective 1.2** – By June 2012, at least 92% of those 9-1-1 Centers (Public Safety Answering Points) that utilize nationally established police and/or fire emergency protocol systems for emergency number operators to process 9-1-1 calls will achieve at least a 90 % standards compliance rate.

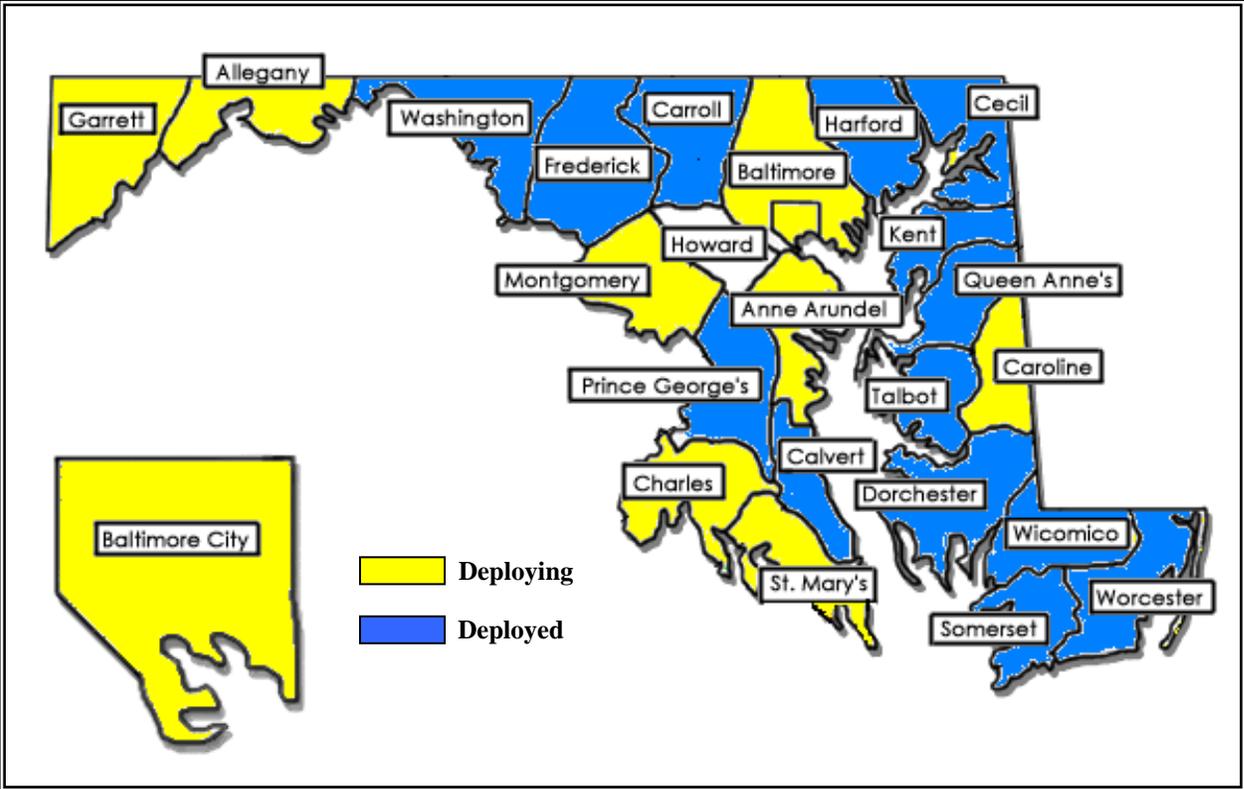
**Performance:** ENSB's protocol funding policy requires implementation of protocol systems be accompanied by the implementation of their associated quality assurance (standards) program, which requires a careful review of the “processing of 9-1-1 calls” handled by each Emergency Number Operator to

determine the percentage of protocol compliance for each PSAP. In fiscal year 2012, the target of 92% was met when thirteen of fourteen PSAPS reported quality assurance scores consistently exceeding the 90% compliance standard.

Maryland’s statewide utilization of nationally established protocols for processing 9-1-1 calls, to ensure consistency of 9-1-1 call handling in any PSAP and thus to measurably improve public safety, must be tracked by how well the PSAPs comply with the protocols. Objective 1.1 will track the “use” (implementation) of these protocols; this objective (1.2) will track the compliance with the protocols. Police and fire protocol systems utilize a quality assurance checklist to review actions taken by Emergency Number Operators to determine the percent of protocol compliance. All Emergency Number Operators that have completed protocol training will be subject to quality assurance review.

“Police and fire protocols” are two sets of standardized “question and answer” systems that guide the Emergency Number Operator to obtain appropriate (police or fire) emergency response information and to provide pre-arrival instructions to 9-1-1 callers. The protocols can be implemented either manually employing a card-set system or be integrated into an existing computer system to be utilized in an electronic format.

**Maryland Deployment of Protocol Usage – June 2012**



## ***PLANNING DAY***

The Emergency Number Systems Board held a Planning Day on January 18, 2013 at the Prince George’s County PSAP. The purpose of the day was to network with peers, to promote information sharing, and to discuss developments, direction, and options for the delivery of emergency service through the 9-1-1 system. This document reflects the effort of that day and the ongoing planning process. Additional meetings will be held as deemed appropriate by the Emergency Number Systems Board (ENSB). Action items were assigned to various individuals and committees with reports due to the Board at various times in the future.

### **PRESENTATIONS & DISCUSSION ITEMS**

#### **Cassidian Communications – NG 9-1-1 Planning and Services**

Ken Shuler, Bob Freinberg, Leon Malinoski and Michael Mangini presented a review of the Cassidian Communication’s offerings for NG 9-1-1 products and services.

Cassidian currently has 53 phone systems with 679 positions in the State of Maryland. These systems are comprised of the VESTA M1/CS, VESTA DMS, VESTA Pallas, Sentinel Patriot, and VESTA 4.0. Other solutions offered in Maryland by Cassidian include MapStar and VELA mapping, Magic and Aurora MIS, as well as hosted and premise-based mass notification systems.

Traditionally, public safety networks have consisted of wireline and wireless voice communications. Now, those networks are evolving because of long-term evolution and generational enhancements (i.e. 4G LTE), P25 radio, vehicle and handheld applications, secure data centers, text, video, pictures, warning sensors and alarming. The call taker will need to use a multi-media platform, which will be possible with VESTA 5.0.



**Mike Mangini of Cassidian discusses the future of 9-1-1.**

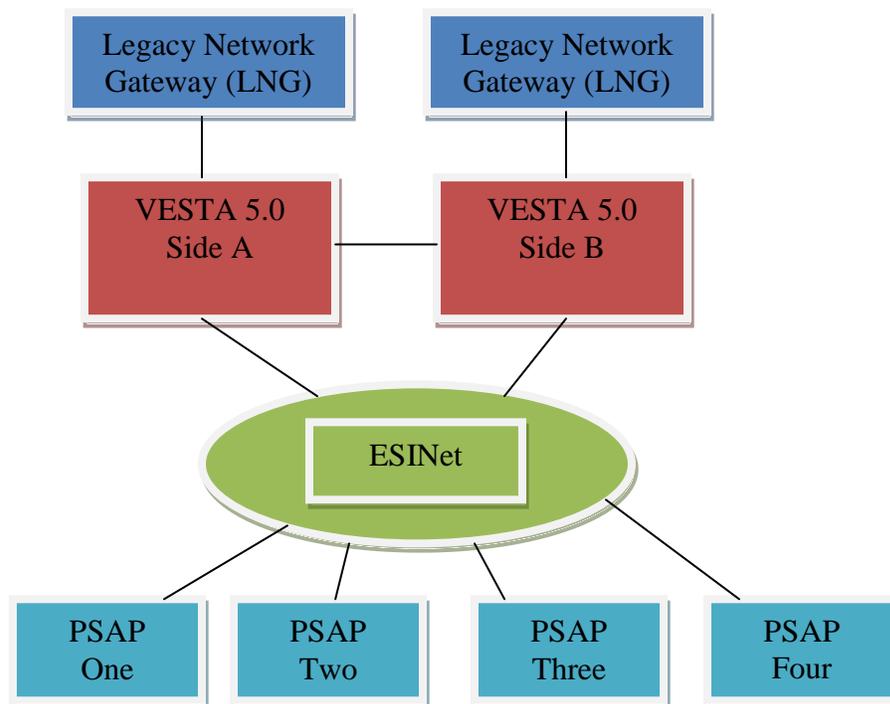
Today’s network is designed with CAMA trunks delivering calls from selective routers to the PSAPs. Soon, legacy network gateways will be introduced that will convert analog trunks to IP, and become the first step in moving towards a NG 9-1-1 system. 9-1-1 “calls” will become 9-1-1 “requests for service,” and will need intelligent applications

that can deal with these “requests” in a logical and actionable way. This will allow 9-1-1 requests for service to be handled in the same manner as today’s 9-1-1 voice calls. NG 9-1-1 System providers will need to partner with PSAPs for a smooth and manageable migration. Future call routing will be dynamic, utilizing Geographic Information Systems (GIS) and be location dependent, replacing current table-based models.

The current VESTA/Sentinel 4.X solution offered by Cassidian was developed to combine both platforms into one to efficiently use development resources. Cassidian has also developed a combined communications platform that is being shipped overseas, which merges radio and CAD into a single piece of hardware to conserve space and equipment. Cassidian complies with P25 standards, as can also conform to conventional radio applications. Cassidian asked if this solution would be useful in Maryland’s PSAPs. Most of the directors present stated that it would. One director offered that as the PSAPs merge to a single network, it makes sense for the equipment to reside on one piece of hardware. Mr. Hart posed that this combination of equipment would challenge the Board’s current funding methodology.

The current 4.0 platform can be stand-alone, geo-diverse, or hosted with remote and mobile positions.

### **VESTA 5.0 PLATFORM**



In this design, the Legacy Network Gateways are further back in the network, such as at a tandem site. VESTA 5.0 adds Data Sync VM (virtualized machine), Aurora Enterprise and Aurora VM, and Cassidian 5.0 VM all virtualized on a single server. Also added to

that server are location information, Emergency Call Routing Function (ECRF) and Emergency Service Routing Proxy (ESRP).

Cassidian is developing a multi-media Smartphone application that can be installed onto an Android device to initiate a 9-1-1 requests for service. The app will be developed for other operating systems in the future.

Today's 9-1-1 equipment only uses mapping to plot the location of a caller. In the future, it will be critical for dynamic routing, and will support Emergency Call Routing Function (ECRF), Emergency Service Routing Proxy (ESRP), and the Location Information Server (LIS). PSAPs will have the ability through geospatial routing to draw a polygon on a map and reroute calls to another answering point.

Managed services will allow for better network monitoring, virus protection, software updates, and application white listing (identifying permitted applications), and disaster recovery. This evolution will allow for flexibility and added services.

### **Verizon – Remote Hosting of CPE**

Mr. Bob Blevins and Mr. Hawley Hansen of Verizon discussed the future of hosting 9-1-1 equipment. The network will evolve from the current legacy 9-1-1 network, to NG 9-1-1 and then to i3. It will be necessary for PSAPs to partner in this new environment to manage risks. Verizon has built up its core MPLS network, and has the Unionet and MCI backbone still in use. Verizon can provide a diverse network, which can be made even more diverse with the addition of LTE and wireless. *Terremark* is Verizon's hosting division.

The advantages to using an IP network are its transferability, intelligent routing, better reporting, data convergence, control, and an open path to the future. When moving to an IP network, it will be important to keep the PSAP operations personnel informed. An ESINet network will allow for more cloud based services. Location-based routing will allow for calls for a major incident to be answered at selected locations within or external the PSAP, such as a command post.

Next generation solutions will be based on diversely routed networks monitored from a network operations center. A Telecommunications Service Priority (TSP) will be required for IP networks, so that priority is given for the repair of circuits. Most PSAPs today are Priority 2, with the military being Priority 1. Verizon uses crises management structure and training, with a focus on mission critical networks and systems. Wireless networks are not able to prioritize data in their current delivery environment.

Verizon will be encouraging PSAPs to have wireless back-up capacity this year for an additional layer of redundancy to the existing network.

The current hosted offering by Verizon today is the Intrado A9-1-1 solution. Verizon is working with the counties for the hosting of equipment at the PSAP. Mr. Blevins

described the Caroline County conceptual design, where the “back room” equipment would be on site at the PSAP and another location, such as another PSAP or county building. From there, remote positions could be located at the Kent County backup, Town of Easton PD, Wicomico County Sheriff’s Department, and the Town of Cambridge PD. Another conceptual design presented was for Harford County, where the CPE would be split between the Harford County primary and backup PSAPs, with remote workstations added at Cecil County’s backup and the Town of Bel Air. These systems could continue to expand as additional remote workstation positions are deployed at other facilities.

Additional options offered by Verizon for locating hosted premise equipment are Central Office hosting and Data Center hosting. Central office hosting will be entertained, but must be approved by the Verizon DLM group. It will likely not be done except in a few stand-alone cases. Data center hosting can be done at the *Terremark* facility in Culpepper, VA, or a Verizon Data Center in Beltsville, MD.

Verizon believes that there are some challenges to the hosted solution:

- In a Data Center solution, who will own the equipment? Will one county own the equipment to be shared with other counties, or will the State own the equipment?
- Will Verizon be able to do a service model where more maintenance is paid up front, rather than on a monthly basis?
- Verizon will need to determine how refresh costs will be handled as PSAP phone system refreshes are not done at the same time.
- Will host-to-host connectivity be done with a customer provided network or with the Verizon Business Network?
- The time to market for a Data Center hosted solution will be 12 to 18 months to allow for circuit orders. Verizon will need to keep the pricing reasonable for marketability.

### **TCS and Verizon – Text Messaging to 9-1-1**

Mr. Bob Gojanovich and Mr. Bob Ehrlich presented the audience with an update of TCS’s text to 9-1-1 solution. TCS is located in Annapolis, MD and they have a data center in Hanover, MD. TCS provides 9-1-1 services to wireless and VOIP providers, text message processing, location infrastructure, telematics, satellite solutions, and cyber security.

Those in the deaf and hard of hearing community demand to have direct access to 9-1-1, as guaranteed by the *Americans with Disabilities Act*. They prefer not to use “relay centers.” The general public expects 9-1-1 to keep pace with technology, and recognize that in certain situations that require silence texting to 9-1-1 may be the only safe option. Some examples are kids in cars being driven by impaired drivers wanting to be pulled over by law enforcement, women in abusive situations, victims hiding in their homes during crimes in progress, and submitting crime tips.

The FCC has issued a series of notices requiring “bounce back” messages informing the public of the “non-availability of text messaging to 9-1-1 in that area” by June 30, 2013, and making texting to 9-1-1 service available to all PSAPs by May 15, 2014.

Verizon has been an early adopter of texting to 9-1-1, with deployments in York County, VA, Central Texas, Frederick County, MD, Steuben County, NY, and the State of Maine. All are using the WEB JEM client except for Maine, which will use a “text to TTY” solution.

The TCS solution uses existing carrier network infrastructure with the single short code (911), automatic location of GPS enabled handheld devices, and SMS session management. TCS is pioneering standards and delivering 9-1-1 text messages via a private web client, TTY conversion of text, direct IP routing of text to legacy equipment (CPE, CAD or i3 ESINet), or through a SMS mediation call center. Each of these solutions has been proven and provides a scalable architecture.

The system web browser requirements for the WEB JEM client are Microsoft Internet Explorer 8, Google Chrome, or Mozilla Firefox. The PSAP will need IP connectivity via an ESINET or the worldwide web to establish a persistent VPN connection to the host.

The web browser displays:

- Latitude and longitude with horizontal uncertainty;
- A map image;
- Updateable location display and “bread crumbing” (displaying a location trail);
- Time and date stamping on message;
- Session history management;
- Message delivery confirmation;
- Preprogrammed messages;
- Session will remain with PSAP until terminated.

The solution uses Bing maps. The PSAP’s CAD map may be used if desired.

### **MIEMSS – Cardiac Arrest Steering Committee**

Dr. Kevin Seaman, MD presented the group an update of hands-only CPR. There is a 10 minute optimum survival window for heart emergencies. It is the Maryland Institute for Emergency Medical Services Systems (MIEMSS) goal that the state maximizes the survival potential for sudden cardiac arrest incidents through the early use of CPR. This involves a rapid, effective PSAP dispatch using over the phone CPR instructions, high-performance CPR by first responders, and citizen performed CPR at the scene of the sudden cardiac arrest. Defibrillation, where available, and CPR are proven to be the most beneficial for survivability of sudden cardiac arrest.

## **Panel Discussion – Implementing a New 9-1-1 Center**

Ms. Charlynn Flaherty and Marie Whisonant presented the group with a discussion of the challenges that each faced when constructing their new PSAPs. Ms. Whisonant informed the group that Baltimore County moved into their new facility on February 1, 2012. They had to retrofit an existing space, and were met with challenges with layout and security. The county elected to use a general contractor selected through a competitive bid process. The county solicited bids, and selected the lowest overall bid that met the requirements of the RFP. As the contractor offered one price for the entire center, there was no breakout of the items that the Board typically funds. She recommended to the group that when soliciting a general contractor bid, to be sure to specify Board funded items be identified separately in the RFP response for ease of identifying costs to the Board. She also noted that the contractor will bill based on a percentage of overall completion, so the contractor should be required to provide separate line items on their billing for Board reimbursable items.

Another challenge faced by the county was the specification of delivery times for the vendors. The phone vendor wanted to know the cutover date for the center, which they took as the delivery date. This did not allow time for testing and training before the county went live on the new phone system. Be sure to specify that systems should be delivered with enough time to train staff before use. Also, coordinate the construction dates, as equipment vendors may not be able to access the facility to install equipment while the general contractor is working. Ms. Whisonant also suggested that there be tiered training, where training is delivered to the staff upon delivery, and again once the equipment is used to address any questions or problems that may manifest themselves once the vendor is no longer on site.

Ms. Whisonant also reminded the group to not overlook certain creature comforts. In the case of Baltimore County, they had forgotten to provide display cases for awards, which were added later. She did allow her staff to tour the center at various stages of construction so that they could see how the center was being constructed, and how existing problems with the current center were being remedied in the new center.

Ms. Flaherty discussed their new PSAP identified as the Prince George's County Emergency Communications Center. Their PSAP was constructed entirely new. This required that the county select a site, and hire an architect and engineer. One challenge the county faced was the requirement to provide a proposed budget for the new center before the actual fiscal expenditures were determined. They had to get "ball-park" pricing, using existing NENA guidelines and NFPA Standard 1221. In addition to the construction of the PSAP, the staff had to become familiar with zoning regulations and permitting. Ms. Flaherty recommended that when building a new center to always be prepared for the unexpected. For example, the county originally wanted natural gas to power the generators. To do so would require more generators than would be required with diesel fuel. By switching to diesel for fuel, the county had to permit and locate a 40,000 gallon diesel supply tank. Zoning also required that the HVAC system be located

on the roof of the building, which required added sound insulation so that the staff could effectively hear both the phone and the radio.

Ms. Flaherty suggested the need for honest buy-in from the staff. At first, the staff only required sufficient parking and restrooms. As the construction of the new center became a reality, the staff added requests. It is important to know the people and their needs.

Ms. Flaherty recommended that when constructing a center, leave room for expansion, but not so much room that it becomes attractive to others. She gave tours to county officials before construction was completed, which gave the officials the illusion that the center had extra, unused space. Also, when building a facility, a county should plan for adequate storage.

Prince George's County was not able to install and train on the new equipment until they received a certificate of occupancy. They were able to get waivers, but the staff had to work without heat and bathrooms.

Chairman Myers asked if any of the Board's processes required reevaluation. Ms. Whisonant remarked that the requests of the Board to the county were reasonable, and no changes were required. Ms. Flaherty commented that due to the start and stop nature of the construction, they were able to work with the Board on their funding requests. With lessons learned, as they implement their back-up center renovations, they will get separate pricing for Board funded items.

## **Open Forum**

### Local Mapping Issues and National Efforts

Mr. Ken Miller presented an update to the State's efforts in mapping. The State has hired Russell Provost under a Federal grant to create a central, standardized repository of address points. Mr. Provost will be going to each county to collect their data and create the statewide resource. The local jurisdictions will continue to be the stewards of their data, and upload changes to the state servers so that the data does not become static. This project will geocode existing data, and not be a re-addressing project.

Mr. Provost will notify the counties of the project in March 2013 with face-to-face meetings to follow shortly thereafter. A plan of action will be developed and implemented. Gaps and resources will be identified to develop statewide best practices and standards. Mr. Hart suggested that MSAG data could also be used in this project.

### Pandemic Flu and Alternate Triage

Mr. Deans and Mr. Roper presented an overview of the Maryland Department of Health and Mental Hygiene and Maryland Institute for Emergency Medical Service Systems' alternate triage plan for pandemic emergencies. This plan allows for calls to 9-1-1 for pandemic related conditions that cannot be responded to due to the demands on the

emergency service system to be referred to an alternate call center. The current plan is to use 2-1-1, which has four centers in Maryland. Calls would be transferred from the PSAP to 2-1-1, where the caller would receive medical advice by phone, and possibly directed to a distribution site for medication. The Board is providing guidance to this process to ensure that the calls are transferred appropriately, and that 2-1-1 can transfer calls back to 9-1-1 in the event of a true emergency that requires a medical response.

### State of the 9-1-1 Trust Fund

Mr. Deans provided a *State of the 9-1-1 Trust Fund* report. The prepaid legislation introduced in last year's General Assembly session had support from 9-1-1, the counties, retail industry, and carriers, but did not get released from committee. The Department of Public Safety and Correctional Services (DPSCS) will evaluate options and seek to move forward with the Pre-Paid legislation in this or an upcoming session. Mr. Deans asked the counties to evaluate the \$.75 fee to determine if it should be raised. The Maryland Association of Counties (MACo) or county delegations should develop legislation based upon need. State 9-1-1 Surcharge legislation would only permit the counties to raise the fee to a set maximum. Local ordinance changes would be required before the fee could be enacted.



Various items affecting 9-1-1 are discussed at the meeting, with the goal of creating meaningful solutions.

### Recruitment and Retention Concerns and Strategies

Recruitment and retention issues were discussed. Ms. Bardona Woods stated that some people were only applying at her PSAP for a position to use as a stepping stone into other county agencies. She is working with veterans' organizations to encourage applications and hire veterans to fill PSAP positions. Mr. Bill Ferretti has long-serving employees (25 years of service or greater) that are struggling with the increasing pressures of new technology, expanding workload, and occupational fatigue. Their retirement system went from a 30 year retirement to a 401K plan, leaving many employees unable to afford to retire. Dispatchers should be classified and recognized as public safety employees, similar to police, fire and EMS personnel, for retirement purposes. Mr. Chip Jewell added that the Federal Fair Labor Standards Act (FLSA) needs to be changed so that restrictions on shift staffing can be lifted to provide better scheduling for their staff. He felt that this could be addressed with lawmakers during the National Emergency Number Association's *9-1-1 Goes to Washington*.

Ms. Susan Greentree added that APCO's "Pro-Chart" addresses PSAP personnel benefits, stress, turnover, and the learning curve for telecommunicators with the aim of elevating the call taker and dispatcher to a professional level.

The Metropolitan Washington Council of Governments (COG) and FCC Reports on the June 29, 2012 Derecho Storm

Chairman Myers shifted the discussion to the disruption of 9-1-1 service caused by the June 29, 2012 Derecho storm. Maryland fared much better than Virginia during the storm. The outages in Virginia have received national attention. The Washington Metropolitan Area COG report described failures in power and communications as the reasons for the outages. After extensive hearings, the FCC issued a report outlining a series of recommendations. The Virginia State Corporation Commission has also issued a preliminary report, and is expected to release a second report this month.

Maryland fared better due to collaborative efforts to improve outage communication processes, network resiliency and reliability. The Board, counties, and Verizon worked together to create mitigation strategies that may have prevented many of the issues seen in Northern Virginia. Many of our strategies are recommendations in the COG and FCC reports.

The Board's efforts will continue to focus on the resiliency and reliability of Maryland's 9-1-1 System. The Maryland Public Service Commission was also instrumental in reviewing previous 9-1-1 disruptions and continues working to improve all aspects of the 9-1-1 system. The Board will continue to reach out to the PSAP community to get information and develop improvement strategies. Mr. Hart suggested that Verizon should conduct annual reviews of network design and disaster recovery plans with the PSAPs.

Chairman Myers added that the Board would like to see each PSAP obtain a visual indicator system for their primary and back-up centers so that PSAP personnel will know if they are on commercial, battery, or generator power. Understanding the critical need for this type of power notification system, counties without proper notification in place should develop a funding request to the Board by the May meeting. The Board will also be conducting a survey of emergency power so that it can determine best practices to recommend to each county, and to remediate any deficiencies.

Mr. Myers thanked everyone for their participation during the day's discussions and that the Board is looking forward to further analysis of the presentations and ideas that were shared.

## ***9-1-1 TRAINING IN MARYLAND***

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Maryland continues to be a national leader in its 9-1-1 training efforts and remains one of the few states to establish legislation mandating 9-1-1 personnel training standards. Telecommunicator training has recently received national media attention and improving 9-1-1 personnel training has become the focus of several organizations and foundations (i.e. Denise Amber Lee Foundation). At the inception of 9-1-1 in the early 1980s, Maryland understood the importance of training and through the Code of Maryland Regulations (COMAR) established mandatory 9-1-1 PSAP training standards for both entry-level and in-service programs under the purview of the Emergency Number Systems Board (ENSB). These mandates continue to be updated to maintain current relevance. Compliance is verified through a yearly inspection process conducted by Board staff. It is evident that Maryland's ENSB and Public Safety Answering Points have taken obligation of providing timely and pertinent training very seriously.

In the early 2000's, to provide a consistent entry-level training program the ENSB selected a nationally offered Emergency Telecommunicator Course (ETC) developed and maintained current by the National Academy of Emergency Dispatch (NAED). The ETC curriculum and instruction was developed to deliver the information and educational experiences needed to prepare entry-level emergency telecommunicators to begin their careers in public safety in a standardized and consistent manner. The ENSB funded ETC instructor training to provide each Maryland PSAP with certified ETC instructors. Today, the Board funded ETC instructor and entry-level training programs continues to be the foundation for developing competent 9-1-1 call takers.

In response to COMAR, in-service training programs are provided by local jurisdictions and supplemented through training funded by the Board. Training officers develop local agency specific programs, while the Board, at the recommendation of the Training Subcommittee, offers 9-1-1 related training courses on a statewide basis throughout the year (see chart on page 49). These training sessions are open to all Maryland PSAP personnel and address disciplines designed to enhance the skills and abilities of new or veteran call takers, supervisors, and administrators.

Locally developed training programs are reviewed by the ENSB Training Subcommittee for content, relevance, and statutory compliance. Also during the annual PSAP inspection process, each local jurisdiction's training program records are inspected by ENSB staff to validate that all 9-1-1 employees are receiving COMAR compliant training.

Maryland has been recognized nationally for its statewide utilization of police, fire, and medical "protocol" based call-processing systems. Nationally certified protocol systems provide a systematic methodology to query emergency response information from 9-1-1 callers that follows predetermined questioning guidelines and to provide standardized instructions to the caller prior to the first responder's arrival. Protocols offer more consistent 9-1-1 call processing and a quantifiable quality assurance review process.

Embracing the value of continuing education, Maryland remains a national leader in the ongoing training of 9-1-1 personnel, through the support of the ENSB. The Board's emphasis on entry-level training, with the ETC program, and support of utilizing emergency medical, fire, and police protocols has significantly enhanced the delivery 9-1-1 service. The evaluation of 9-1-1 personnel through a disciplined quality assurance process is also required of jurisdictions receiving ENSB funding for protocol programs. The NAED protocol quality assurance process identifies individual, unit, and overall Center compliance scores. National standards have been established to recognize Centers that achieve superior quality assurance scores. Harford County, Maryland became the first Center in the nation to receive the Tri-ACE (Accredited Center of Excellence) Certification from the NAED for superior quality assurance scores attained in all three disciplines (police, fire, and medical). In 2012, Prince George's County, Maryland became the second center in Maryland and the fifth center in the world to receive Tri-ACE Certification.

## ***POLICY/STANDARDS SUBCOMMITTEE***

The Policy/Standards Subcommittee\* is tasked with developing the policy, and guidelines to provide guidance to the Board and PSAPs with regard to requesting and encumbering funding from the 9-1-1 Trust Fund. They also craft and respond to recommendations for legislative changes affecting the Public Safety Article and the Code of Maryland Regulations (COMAR) as it relates to 9-1-1 service.

### **STRATEGIES**

- Develop written guidelines to be used by the ENSB in its consideration of the pricing, functionality, and quantities proposed for routine 9-1-1 equipment and service purchases.
- Develop procurement standards including equipment replacement cycles, spare/back-up equipment purchase guidelines, and minimum qualifications.
- Review the standards and procurement activities of national associations and efforts of other jurisdictions/states, to adopt best practices in Maryland.
- Identify synergistic procurement opportunities in Maryland and foster the competitive bidding process.
- Develop statistical models to capture and reflect information relative to the Board's procurement activities and pricing trends.
- Work with the other subcommittees as needed to support the overall goals and objectives of the Board.

<b>Policy/Standards Subcommittee</b>
<b><u>Chairman</u></b> Kevin Green
Anthony Myers - ENSB
Charles Summers - ENSB
Andrew Johnston - ENSB
Brian Josef - ENSB
Susan Greentree - ENSB
William Frazier - ENSB
Lt. Col. William Pallozzi - ENSB
Ken Miller - ENSB
Ray Windisch - Baltimore County
Wally Campbell – Anne Arundel County

\* Currently the Policy and Standards Subcommittee are acting together to achieve their missions.

Through the efforts of this committee working with the Training Subcommittee, Board standards were established to fund Police and Fire Protocol recertification costs that are required to be renewed every two years.

The Policy Subcommittee also presented Federal Communication Commission (FCC) updates to members concerning expanded service outage reporting, national text to 9-1-1 pilots, and national NG 9-1-1 framework efforts.

Following an unfavorable House Committee review of last session's submitted bill, the Policy/Standards Subcommittee re-submitted legislation that would establish the collection and remittance of 9-1-1 fees by Maryland retail outlets, referred to as the "Point of Sale (POS) Model." The POS model adds a 9-1-1 Surcharge to each retail transaction of prepaid wireless telecommunications service for any purpose other than resale. Amounts collected, minus a processing fee, would be deposited to the State 9-1-1 Trust Fund. Fees collected from prepaid retail transactions would be distributed proportionally in the same fashion as those remitted via the "monthly billing" process.

This legislative change was proposed because prepaid wireless service is a growing segment within the overall consumer wireless industry. Increasingly, consumers are opting for a form of prepaid wireless service whereby a specified number of minutes are purchased at retail outlets or online rather than the traditional monthly-billed wireless service. Ensuring that the 9-1-1 system is funded in a fair and equitable manner is a priority for the sustainability of the 9-1-1 system. These efforts are similar to those currently being conducted in other states.

The re-submitted POS Bill is anticipated to receive further consideration in the upcoming 2013 legislative session.

## ***TECHNOLOGY SUBCOMMITTEE***

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The Technology Subcommittee is responsible for the investigation, and research of technology related issues and the dissemination of technical information to the membership of the ENSB. This subcommittee will be focused on issues that could impact the management, operation, and maintenance of E9-1-1 systems serving the citizens of the State of Maryland.

<b>Technology Subcommittee</b>
<b><u>Chairman</u></b> Rod Hart - ENSB
Rich Berg - ENSB
Anthony Myers - ENSB
Steve Marshall - ENSB
Charles Summers - ENSB
Andy Johnston - ENSB
Ray Windisch – Baltimore County

The Technology Subcommittee is currently reviewing the feasibility of implementing a Next Generation 9-1-1 System (NG 9-1-1) in Maryland. Working in conjunction with the Board's consultant and monitoring activities of national organizations, the Technology Subcommittee is following NG 9-1-1 technological advancements and establishment of industry standards/regulations to better prepare the Board as to NG 9-1-1 implementation options.

The Technology Subcommittee met with Cassidian Communications (9-1-1 Customer Premise Equipment (CPE) vendor) to explore the feasibility and best practices of regionally hosting CPE and utilizing remote 9-1-1 workstations located at the PSAP. This solution is currently being used in other states.

The Technology Subcommittee coordinated presentations to the Board concerning Cassidian Communications VESTA 4.0 and 5.0 NG 9-1-1 Phone Systems, University of Maryland's Communication Center use of NG 9-1-1 services phone app, and current NG 9-1-1 ongoing initiatives in Pennsylvania.

## ***TRAINING SUBCOMMITTEE***

The Training Subcommittee is comprised of members of the Board and the PSAP community, chaired by the Caroline County PSAP Director and ENSB member, Bryan Ebling. In order to provide Maryland with a robust training program that will meet the requirements of the Code of Maryland Regulations (COMAR), the Training Subcommittee reviewed numerous training opportunities, programs, and seminars before deciding which programs to offer for the 2012 training sessions.

<b>ENSB Training Subcommittee</b>
<b><u>Chairman</u></b> Bryan Ebling – ENSB
William Frazier – ENSB
Sue Greentree – ENSB
John “Chris” McNamara – Howard County
Mitch Vocke – Harford County
Andrew Johnston – ENSB
Randy Waesche – Carroll County
Jennifer Swisher – Washington County
Scott Roper – Coordinator

The Code of Maryland Regulations (COMAR) provides specific guidance on the topical requirements for training but does not address job relatedness, testing standards, or instructional methodologies for new, in-service, or supervisory employees. The Board, through the recommendation of the Training Subcommittee, partnered with the National Academy of Emergency Dispatch (NAED) to provide an Emergency Telecommunicator Course (ETC) to instruct Maryland’s newly hired 9-1-1 call takers. This course provides a comprehensive review of the skills and abilities needed for successful handling of 9-1-1 emergency calls and is presented utilizing curriculum designed for adult based learning. Trainers from each PSAP attend NAED sponsored classes and earn their ETC Instructor certification. During 2012, 253 9-1-1 call takers successfully completed the ETC entry-level training. For additional information of the program, the web address for the National Academy is <http://www.naemd.org/>.

In-service training, utilizing a curriculum approved by the Training Subcommittee, is a requirement of all jurisdictions as established in COMAR. Training programs can be provided by each local jurisdiction as well as on a statewide basis. Training officers at the local level develop agency specific training programs and evaluate individual training

based on the needs for their center and county. A variety of educational resources is utilized by each jurisdiction to insure local personnel are properly trained and prepared for any emergency requests they may receive. Locally developed standards training and national programs are all used to provide a robust and thorough in-service training program in Maryland. The Training Subcommittee annually reviews each PSAPs training program to ensure curricula meets established guidelines.

Throughout 2012, the Training Subcommittee reviewed new programs and local training requests to determine appropriateness to enhance 9-1-1 service in Maryland. Upon Subcommittee recommendation, various training programs are offered to PSAP personnel and held at locations around the state to ensure accessibility to all jurisdictions. The Training Subcommittee will continue to look for training opportunities to take advantage technological advances in training media and presentation.

During 2012, programs from nationally recognized training vendors including the International Leadership Development Consortium (ILDC), the Association of Public-Safety Communications Officials-International, Inc. (APCO), Public Safety Training Consultants, Priority Dispatch and the Public Safety Group were offered

The Training Subcommittee continues to utilize the facilities of the Public Safety Training Center, located in Sykesville, Maryland. This facility, which is centrally located, provides a rich learning environment with state of the art technology and ample classroom space that is able to accommodate up to 75 students in one room.

The Emergency Number Systems Board supports a variety of training programs and encourages the use of protocol systems throughout Maryland. Over 95 percent of the jurisdictions are currently using either Emergency Fire or Emergency Police Dispatch, in addition to Emergency Medical Dispatch protocols. In support of this effort, various protocol classes and protocol Quality Assurance training have been presented around the State.

In 2011, the Training Subcommittee examined the value of training programs offered in an on-line format and found that the scheduling flexibility and consistency of presentation makes this a very worthwhile training experience and fiscally prudent expenditure. During 2012, Training Subcommittee implemented a pilot project with Cecil County to explore the feasibility of using on-line training to supplement classes offered by the Board. It is hoped that the use of on-line classes will reduce the expenses for counties to send personnel to training. It is also anticipated that on-line training will rapidly disseminate information to a wider group than is traditionally done through classroom education.

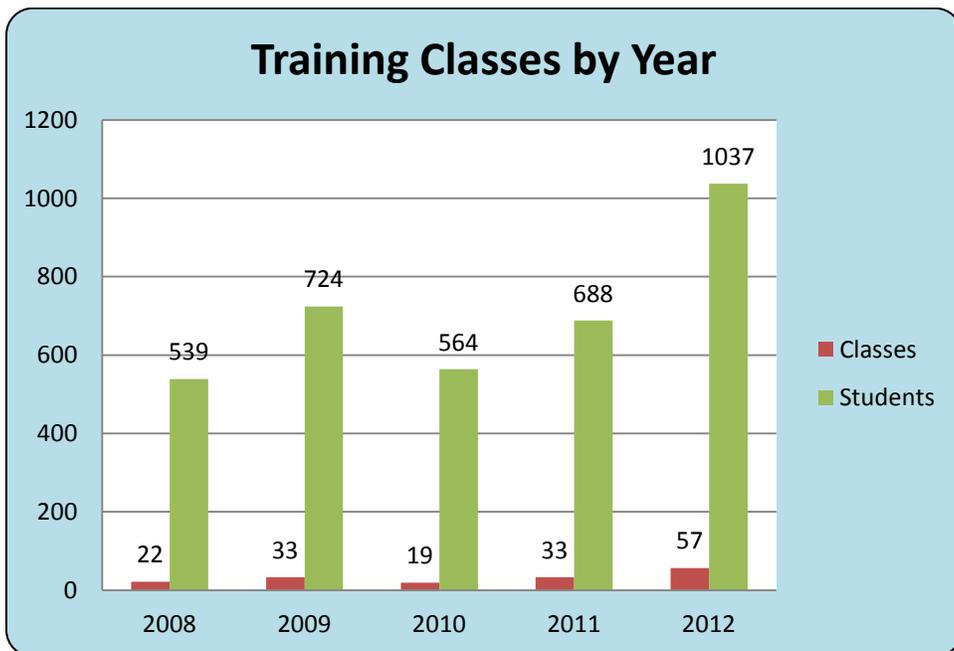
The Training Subcommittee reviewed various training programs recommended by our 9-1-1 Centers. Course selections were made and offered throughout the year to best accommodate employee scheduling. Training programs were typically provided at least twice, once on the Eastern Shore and once in the central to western part of the State. **See list of training programs on next page.**

**2012 Training Programs**

<b><u>You Just Never Know</u></b>	<b><u>59 Attendees</u></b>
<b><u>Strengthening Your Supervisory Skills</u></b>	<b><u>63 Attendees</u></b>
<b><u>Fire!</u></b>	<b><u>57 Attendees</u></b>
<b><u>Quality Assurance</u></b>	<b><u>62 Attendees</u></b>
<b><u>Customer Service the 9-1-1 Way</u></b>	<b><u>62 Attendees</u></b>
<b><u>Social Media Liability</u></b>	<b><u>174 Attendees</u></b>
<b><u>Communications Training Officer</u></b>	<b><u>20 Attendees</u></b>
<b><u>Advanced Supervisory Skills</u></b>	<b><u>57 Attendees</u></b>
<b><u>Crimes in Progress</u></b>	<b><u>67 Attendees</u></b>
<b><u>Change Management</u></b>	<b><u>43 Attendees</u></b>
<b><u>Conflict Management</u></b>	<b><u>52 Attendees</u></b>
<b><u>Protocol Classes (33 Sessions)</u></b>	<b><u>296 Attendees</u></b>

**2012 TOTAL ATTENDEES**

**1037**



# ***ENSB/MENA DAY OF CELEBRATION***

**SEPTEMBER 11, 2012**

The Emergency Number Systems Board (ENSB), in cooperation with the Maryland Emergency Number Association (MENA) presented the tenth annual 9-1-1 Day of Celebration on September 11, 2012. This event is intended to recognize the dedication and professional service provided by Maryland's Telecommunicators that answer 9-1-1 calls from the citizens and visitors of our State requesting emergency services. Howard County hosted the 2012 "Day of Celebration" at the Elkridge Volunteer Fire Department in Elkridge, Maryland. More than 170 Telecommunicators, supervisors, and other 9-1-1 service related personnel were welcomed to Howard County by Jennifer Swisher, President of the Maryland Chapter of NENA. Attendees then began the morning session with a training seminar titled "*New Media-Challenges and Pitfalls*" presented by Public Safety Training Consultants (PSTC), a nationwide leader in 9-1-1 Center training. Barbara Jaeger, ENP, President of NENA presented the keynote speech.



Jennifer Swisher – MENA, William Frazier - ENSB, and Barbara Jaeger – NENA (left to right) presented a "Telecommunicator of the Year" award to Monica Dietz of Wicomico County (holding plaque)

"Telecommunicator of the Year" awards were presented to exemplary Telecommunicators selected by their local 9-1-1 Center directors and Maryland State Police Barrack Commanders for outstanding service and dedication to Public Safety through 9-1-1 communications. Twenty-one of Maryland's twenty-four 9-1-1 Centers and MSP participated. The telecommunicators that were honored were presented with a plaque recognizing their achievement and were acknowledged by their peers. The President of the Maryland Chapter of NENA, Jennifer Swisher, made the award presentations to the Telecommunicator of the Year recipients. Assisting in the presentation of these awards was William Frazier - ENSB member and Barbara Jaeger – President of NENA.

## **Marilyn Farndon "Excellence in Training" Award**

Marilyn Farndon was the first Executive Director of the Emergency Number Systems Board. Marilyn played a critical role in establishing many of the Board's policies and guidelines. She understood the critical need of standardized training and one of her signature achievements was bringing the 9-1-1 community together to develop our State's first certified entry-level training program. In recognition of this, and Marilyn Farndon's many other accomplishments, the Board has established the Marilyn Farndon "Excellence in Training" Award, to recognize Maryland's most deserving 9-1-1 Instructor who has demonstrated a superior commitment to training through the development and presentation of relevant training curricula that enhances 9-1-1 service in

Maryland. The nominee will be selected by the Board’s Training Subcommittee and the presentation of this award will be made each year as part of the ENSB/MENA Telecommunicator of the Year Awards at the 9-1-1 Day of Celebration, starting with this year’s event on September 11, 2012.

**The 2012 “Excellence in Training” award was presented to:**

**Chris McNamara, Training Coordinator with Howard County**

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Throughout 2012, the Board and executive office fostered relationships with a number of professional organizations in support of 9-1-1. These included the National Emergency Numbers Association (NENA), the Maryland Emergency Number Association (MENA – local chapter of NENA), the Association of Public-Safety Communications Officials (APCO), the 9-1-1 Institute, and the National Association of State 9-1-1 Administrators (NASNA).

**TELECOMMUNICATORS OF THE YEAR  
2012**

<b>Award Winner</b>	<b>County/City/MSP</b>
Jason Morgan	Allegany County
PCO II Marjorie Keifline	Anne Arundel County
PCO II Inger Priegel	Anne Arundel County
FF Autumn Snyder	Anne Arundel County
Dispatcher Allison McPhaul	Baltimore City
Mary Weinreich-Ritchie	Baltimore County
Midnight Shift	Baltimore County
Thomas H. Smith Jr.	Calvert County
Samantha Flater	Carroll County
Janette Moser	Carroll County
Captain Holly Trego	Cecil County
Supervisor George Hayden	Charles County
Tricia Rogerson	Charles County
ECS Debbie Wallace	Dorchester County
Tina Weakley	Frederick County
Jon Brad Frantz	Garrett County
Rich Cacace	Harford County
Stacy Williams	Harford County
Andrew Cummins	Howard County
TEAM Award	Montgomery County
Dispatch Aide Regina McCoy	Prince George's County
Dispatcher IV Howard Ewing	Prince George's County
D Shift	Queen Anne's County
Emergency Communications Division	St. Mary's County
Dale Smith	Talbot County
ECS James M. Miller	Washington County
Monica Dietz	Wicomico County
Jennifer Kosko	Worcester County

Award winners were selected by their respective organizational leaders.

# STATE OF MARYLAND

## **PUBLIC SAFETY ARTICLE**

### **§1-301.**

- (a) In this subtitle the following words have the meanings indicated.
- (b) “Additional charge” means the charge imposed by a county in accordance with § 1-311 of this subtitle.
- (c) “Board” means the Emergency Number Systems Board.
- (d) “Commercial mobile radio service” or “CMRS” means mobile telecommunications service that is:
- (1) provided for profit with the intent of receiving compensation or monetary gain;
  - (2) an interconnected, two-way voice service; and
  - (3) available to the public.
- (e) “Commercial mobile radio service provider” or “CMRS provider” means a person authorized by the Federal Communications Commission to provide CMRS in the State.
- (f) “County plan” means a plan for a 9-1-1 system or enhanced 9-1-1 system, or an amendment to the plan, developed by a county or several counties together under this subtitle.
- (g) (1) “Customer” means:
- (i) the person that contracts with a home service provider for CMRS; or
  - (ii) the end user of the CMRS if the end user of the CMRS is not the contracting party.
- (2) “Customer” does not include:
- (i) a reseller of CMRS; or
  - (ii) a serving carrier under an arrangement to serve the customer outside the home service provider’s licensed service area.
- (h) “Enhanced 9-1-1 system” means a 9-1-1 system that provides:
- (1) automatic number identification;
  - (2) automatic location identification; and
  - (3) any other technological advancements that the Board requires.
- (i) “FCC order” means an order issued by the Federal Communications Commission under proceedings regarding the compatibility of enhanced 9-1-1 systems and delivery of wireless enhanced 9-1-1 service.
- (j) “Home service provider” means the facilities-based carrier or reseller that contracts with a customer to provide CMRS.

(k) “Next generation 9–1–1 services” means an Internet Protocol (IP)–based system, comprised of hardware, software, data, and operational policies and procedures, that:

(1) provides standardized interfaces from emergency call and message services to support emergency communications;

(2) processes all types of emergency calls, including voice, text, data, and multimedia information;

(3) acquires and integrates additional emergency call data useful to call routing and handling;

(4) delivers the emergency calls, messages, and data to the appropriate public safety answering point and other appropriate emergency entities;

(5) supports data or video communications needs for coordinated incident response and management; and

(6) provides broadband service to public safety answering points or other first responder entities.

(l) “9-1-1-accessible service” means telephone service or another communications service that connects an individual dialing the digits 9-1-1 to an established public safety answering point.

(m) “9-1-1 fee” means the fee imposed in accordance with § 1-310 of this subtitle.

(n) (1) “9-1-1 service carrier” means a provider of CMRS or other 9-1-1-accessible service.

(2) “9-1-1 service carrier” does not include a telephone company.

(o) (1) “9-1-1 system” means telephone service that:

(i) meets the planning guidelines established under this subtitle;

and

(ii) automatically connects an individual dialing the digits 9-1-1 to an established public safety answering point.

(2) “9-1-1 system” includes:

(i) equipment for connecting and outswitching 9-1-1 calls within a telephone central office;

(ii) trunking facilities from a telephone central office to a public safety answering point; and

(iii) equipment to connect 9-1-1 calls to the appropriate public safety agency.

(p) “9-1-1 Trust Fund” means the fund established under § 1-308 of this subtitle.

(q) “Public safety agency” means:

(1) a functional division of a public agency that provides fire fighting, police, medical, or other emergency services; or

(2) a private entity that provides fire fighting, police, medical, or other emergency services on a voluntary basis.

(r) “Public safety answering point” means a communications facility that:

(1) is operated on a 24-hour basis;

(2) first receives 9-1-1 calls in a 9-1-1 service area; and

(3) as appropriate, dispatches public safety services directly, or transfers 9-1-1 calls to appropriate public safety agencies.

(s) “Secretary” means the Secretary of Public Safety and Correctional Services.

(t) “Wireless enhanced 9-1-1 service” means enhanced 9-1-1 service under an FCC order.

### **§1–302.**

(a) The General Assembly:

(1) recognizes the paramount importance of the safety and well-being of the public;

(2) recognizes that timely and appropriate assistance must be provided when the lives or property of the public is in imminent danger;

(3) recognizes that emergency assistance usually is summoned by telephone, and that a multiplicity of emergency telephone numbers existed throughout the State and within each county;

(4) was concerned that avoidable delays in reaching appropriate emergency assistance were occurring to the jeopardy of life and property; and

(5) acknowledges that the three digit number, 9-1-1, is a nationally recognized and applied telephone number that may be used to summon emergency assistance and to eliminate delays caused by lack of familiarity with emergency numbers and by confusion in circumstances of crisis.

(b) The purposes of this subtitle are to:

(1) establish the three digit number, 9-1-1, as the primary emergency telephone number for the State; and

(2) provide for the orderly installation, maintenance, and operation of 9-1-1 systems in the State.

### **§1–303.**

(a) (1) This subtitle does not require a public service company to provide any equipment or service other than in accordance with tariffs approved by the Public Service Commission.

(2) The provision of services, the rates, and the extent of liability of a public service company are governed by the tariffs approved by the Public Service Commission.

(b) (1) This subtitle does not require a 9-1-1 service carrier to provide any equipment or service other than the equivalent of the equipment and service required of a telephone company under subsection (a) of this section.

(2) This subtitle does not extend any liability to a 9-1-1 service carrier.

**§1-304.**

(a) Each county shall have in operation an enhanced 9-1-1 system.

(b) If implementation is preceded by cooperative planning, the enhanced 9-1-1 system required under subsection (a) of this section may operate as part of a multicounty system.

(c) (1) Services available through a 9-1-1 system shall include police, fire fighting, and emergency ambulance services.

(2) Other emergency and civil defense services may be incorporated into the 9-1-1 system at the discretion of the county or counties served by the 9-1-1 system.

(d) (1) The digits 9-1-1 are the primary emergency telephone number in the 9-1-1 system.

(2) A public safety agency whose services are available through the 9-1-1 system:

(i) may maintain a separate secondary backup telephone number for emergency calls; and

(ii) shall maintain a separate telephone number for nonemergency calls.

(e) Educational information that relates to emergency services made available by the State or a county:

(1) shall designate the number 9-1-1 as the primary emergency telephone number; and

(2) may include a separate secondary backup telephone number for emergency calls.

(f) (1) Each public safety answering point shall notify the public safety agencies in a county 9-1-1 system of calls for assistance in the county.

(2) Written guidelines shall be developed to govern the referral of calls for assistance to the appropriate public safety agency.

(3) State, county, and local public safety agencies with concurrent jurisdiction shall have written agreements to ensure a clear understanding of which specific calls for assistance will be referred to which public safety agency.

(g) Counties, other units of local government, public safety agencies, and public safety answering points may enter into cooperative agreements for the allocation of maintenance, operational, and capital costs attributable to the 9-1-1 system.

**§1-305.**

(a) There is an Emergency Number Systems Board in the Department of Public Safety and Correctional Services.

(b) (1) The Board consists of 17 members.

(2) Of the 17 members:

(i) one member shall represent a telephone company operating in the State;

(ii) one member shall represent the wireless telephone industry in the State;

(iii) one member shall represent the Maryland Institute for Emergency Medical Services Systems;

(iv) one member shall represent the Department of State Police;

(v) one member shall represent the Public Service Commission;

(vi) one member shall represent the Association of Public-Safety Communications Officials International, Inc.;

(vii) two members shall represent county fire services in the State, with one member representing career fire services and one member representing volunteer fire services;

(viii) one member shall represent police services in the State;

(ix) two members shall represent emergency management services in the State;

(x) one member shall represent a county with a population of 200,000 or more;

(xi) one member shall represent a county with a population of less than 200,000;

(xii) one member shall represent the Maryland chapter of the National Emergency Numbers Association;

(xiii) one member shall represent the geographical information systems in the State; and

(xiv) two members shall represent the public.

(3) The Governor shall appoint the members with the advice and consent of the Senate.

(c) (1) The term of a member is 4 years and begins on July 1.

(2) The terms of the members are staggered as required by the terms provided for members of the Board on October 1, 2003.

(3) At the end of a term, a member continues to serve until a successor is appointed and qualifies.

(4) If a vacancy occurs after a term has begun, the Governor shall appoint a successor to represent the organization or group in which the vacancy occurs.

(5) A member who is appointed after a term has begun serves only for the rest of the term and until a successor is appointed and qualifies.

(d) The Governor shall appoint a chairperson from among the Board members.

(e) The Board shall meet as necessary, but at least once each quarter.

(f) A member of the Board:

(1) may not receive compensation as a member of the Board; but

(2) is entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.

(g) The Secretary shall provide staff to the Board, including:

(1) a coordinator who is responsible for the daily operation of the office of the Board; and

(2) staff to handle the increased duties related to wireless enhanced 9-1-1 service.

**§1-306.**

(a) The Board shall coordinate the enhancement of county 9-1-1 systems.

(b) The Board's responsibilities include:

(1) establishing planning guidelines for enhanced 9-1-1 system plans and deployment of wireless enhanced 9-1-1 service in accordance with this subtitle;

(2) establishing procedures to review and approve or disapprove county plans and to evaluate requests for variations from the planning guidelines established by the Board;

(3) establishing procedures for the request for reimbursement of the costs of enhancing a 9-1-1 system by a county or counties in which a 9-1-1 system is in operation, and procedures to review and approve or disapprove the request;

(4) transmitting the planning guidelines and procedures established under this section, and any amendments to them, to the governing body of each county;

(5) submitting to the Secretary each year a schedule for implementing the enhancement of county or multicounty 9-1-1 systems, and an estimate of funding requirements based on the approved county plans;

(6) developing, with input from counties, and publishing on or before July 1, 2004, an implementation schedule for deployment of wireless enhanced 9-1-1 service;

(7) reviewing and approving or disapproving requests for reimbursement of the costs of enhancing 9-1-1 systems, and submitting to the Secretary each year a schedule for reimbursement and an estimate of funding requirements;

(8) reviewing the enhancement of 9-1-1 systems;

(9) providing for an audit of county expenditures for the operation and maintenance of 9-1-1 systems;

(10) ensuring inspections of public safety answering points;

(11) reviewing and approving or disapproving requests from counties with operational enhanced 9-1-1 systems to be exempted from the expenditure limitations under § 1-312 of this subtitle; and

(12) authorizing expenditures from the 9-1-1 Trust Fund that:

(i) are for enhancements of 9-1-1 systems that:

1. are required by the Board;

2. will be provided to a county by a third party

contractor; and

3. will incur costs that the Board has approved before

the formation of a contract between the county and the contractor; and

(ii) are approved by the Board for payment:

1. from money collected under § 1-310 of this subtitle;

and

2. directly to a third party contractor on behalf of a

county.

(13) establishing planning guidelines for next generation 9-1-1 services system plans and deployment of next generation 9-1-1 services in accordance with this subtitle.

(c) The guidelines established by the Board under subsection (b)(1) and (13) of this section:

(1) shall be based on available technology and equipment; and

(2) may be based on any other factor that the Board determines is appropriate, including population and area served by 9-1-1 systems.

### **§1-307.**

(a) The Board shall submit an annual report to the Governor, the Secretary, and, subject to § 2-1246 of the State Government Article, the Legislative Policy Committee.

(b) The report shall provide the following information for each county:

(1) the type of 9-1-1 system currently operating in the county;

- (2) the total 9-1-1 fee and additional charge charged;
- (3) the funding formula in effect;
- (4) any statutory or regulatory violation by the county and the response of the Board;
- (5) any efforts to establish an enhanced 9-1-1 system in the county; and
- (6) any suggested changes to this subtitle.

**§1-308.**

- (a) There is a 9-1-1 Trust Fund.
- (b) The purposes of the 9-1-1 Trust Fund are to:
  - (1) reimburse counties for the cost of enhancing a 9-1-1 system;
  - (2) pay contractors in accordance with § 1-306(b)(12) of this subtitle;and
  - (3) fund the coordinator position and staff to handle the increased duties related to wireless enhanced 9-1-1 service under § 1-305 of this subtitle, as an administrative cost.
- (c) The 9-1-1 Trust Fund consists of:
  - (1) money from the 9-1-1 fee collected and remitted to the Comptroller under § 1-310 of this subtitle;
  - (2) money from the additional charge collected and remitted to the Comptroller under § 1-311 of this subtitle; and
  - (3) investment earnings of the 9-1-1 Trust Fund.
- (d) Money in the 9-1-1 Trust Fund shall be held in the State Treasury.
- (e) The Secretary shall administer the 9-1-1 Trust Fund, subject to the guidelines for financial management and budgeting established by the Department of Budget and Management.
- (f) The Secretary shall direct the Comptroller to establish separate accounts in the 9-1-1 Trust Fund for the payment of administrative expenses and for each county.
- (g)
  - (1) Any investment earnings shall be credited to the 9-1-1 Trust Fund.
  - (2) The Comptroller shall allocate the investment income among the accounts in the 9-1-1 Trust Fund, prorated on the basis of the total fees collected in each county.

**§1-309.**

- (a) On recommendation of the Board, each year the Secretary shall request an appropriation from the 9-1-1 Trust Fund in an amount sufficient to:
  - (1) carry out the purposes of this subtitle;

- (2) pay the administrative costs chargeable to the 9-1-1 Trust Fund; and
- (3) reimburse counties for the cost of enhancing a 9-1-1 system.

(b) (1) Subject to the limitations under subsection (e) of this section, the Comptroller shall disburse the money in the 9-1-1 Trust Fund as provided in this subsection.

(2) Each July 1, the Comptroller shall allocate sufficient money from the 9-1-1 fee to pay the costs of administering the 9-1-1 Trust Fund.

(3) As directed by the Secretary and in accordance with the State budget, the Comptroller, from the appropriate account, shall:

- (i) reimburse counties for the cost of enhancing a 9-1-1 system;

and

- (ii) pay contractors in accordance with § 1-306(b)(12) of this

subtitle.

(4) (i) The Comptroller shall pay to each county from its account the money requested by the county to pay the maintenance and operation costs of the county's 9-1-1 system in accordance with the State budget.

(ii) The Comptroller shall pay the money for maintenance and operation costs on September 30, December 31, March 31, and June 30 of each year.

(c) (1) Money accruing to the 9-1-1 Trust Fund may be used as provided in this subsection.

(2) Money collected from the 9-1-1 fee may be used to:

- (i) reimburse counties for the cost of enhancing a 9-1-1 system;

and

- (ii) pay contractors in accordance with § 1-306(b)(12) of this

subtitle.

(3) Money collected from the additional charge may be used by the counties for the maintenance and operation costs of the 9-1-1 system.

(d) (1) Reimbursement may be made only to the extent that county money was used to enhance the 9-1-1 system.

(2) Reimbursement for the enhancement of 9-1-1 systems shall include the installation of equipment for automatic number identification, automatic location identification, and other technological advancements that the Board requires.

(3) Reimbursement from money collected from the 9-1-1 fee may be used only for 9-1-1 system enhancements approved by the Board.

(e) (1) The Board may direct the Comptroller to withhold from a county money for 9-1-1 system expenditures if the county violates this subtitle or a regulation of the Board.

(2) (i) The Board shall state publicly in writing its reason for withholding money from a county and shall record its reason in the minutes of the Board.

(ii) On reaching its decision to withhold money, the Board shall notify the county.

(iii) The county has 30 days after the date of notification to respond in writing to the Board.

(3) (i) On notification by the Board, the Comptroller shall hold money for the county in the county's account in the 9-1-1 Trust Fund.

(ii) Money held by the Comptroller under subparagraph (i) of this paragraph does not accrue interest for the county.

(iii) Interest income earned on money held by the Comptroller under subparagraph (i) of this paragraph accrues to the 9-1-1 Trust Fund.

(4) County money withheld by the Comptroller shall be withheld until the Board directs the Comptroller to release the money.

(f) (1) The Legislative Auditor shall conduct fiscal/compliance audits of the 9-1-1 Trust Fund and of the appropriations and disbursements made for purposes of this subtitle.

(2) The cost of the fiscal portion of the audits shall be paid from the 9-1-1 Trust Fund as an administrative cost.

### **§1-310.**

(a) Each subscriber to switched local exchange access service or CMRS or other 9-1-1-accessible service shall pay a 9-1-1 fee.

(b) The 9-1-1 fee is 25 cents per month, payable when the bill for the telephone service or CMRS or other 9-1-1-accessible service is due.

(c) (1) The Public Service Commission shall direct each telephone company to add the 9-1-1 fee to all current bills rendered for switched local exchange access service in the State.

(2) Each telephone company:

(i) shall act as a collection agent for the 9-1-1 Trust Fund with respect to the 9-1-1 fees;

(ii) shall remit all money collected to the Comptroller on a monthly basis; and

(iii) is entitled to credit, against the money from the 9-1-1 fees to be remitted to the Comptroller, an amount equal to 0.75% of the 9-1-1 fees to cover the expenses of billing, collecting, and remitting the 9-1-1 fees and any additional charges.

(3) The Comptroller shall deposit the money remitted in the 9-1-1 Trust Fund.

(d) (1) Each 9-1-1 service carrier shall add the 9-1-1 fee to all current bills rendered for CMRS or other 9-1-1-accessible service in the State.

- (2) Each 9-1-1 service carrier:
- (i) shall act as a collection agent for the 9-1-1 Trust Fund with respect to the 9-1-1 fees;
  - (ii) shall remit all money collected to the Comptroller on a monthly basis; and
  - (iii) is entitled to credit, against the money from the 9-1-1 fees to be remitted to the Comptroller, an amount equal to 0.75% of the 9-1-1 fees to cover the expenses of billing, collecting, and remitting the 9-1-1 fees and any additional charges.
- (3) The Comptroller shall deposit the money remitted in the 9-1-1 Trust Fund.
- (4) The Board shall adopt procedures for auditing surcharge collection and remittance by CMRS providers.
- (5) On request of a CMRS provider, and except as otherwise required by law, the information that the CMRS provider reports to the Board shall be confidential, privileged, and proprietary and may not be disclosed to any person other than the CMRS provider.
- (e) Notwithstanding any other provision of this subtitle, the 9-1-1 fee does not apply to an intermediate service line used exclusively to connect a CMRS or other 9-1-1-accessible service, other than a switched local access service, to another telephone system or switching device.
- (f) A CMRS provider that pays or collects 9-1-1 fees under this section has the same immunity from liability for transmission failures as that approved by the Public Service Commission for local exchange telephone companies that are subject to regulation by the Commission under the Public Utility Companies Article.

**§1-311.**

- (a) In addition to the 9-1-1 fee, the governing body of each county, by ordinance or resolution enacted or adopted after a public hearing, may impose an additional charge to be added to all current bills rendered for switched local exchange access service or CMRS or other 9-1-1-accessible service in the county.
- (b) (1) The additional charge imposed by a county may not exceed 75 cents per month per bill.
- (2) The amount of the additional charges may not exceed a level necessary to cover the total eligible maintenance and operation costs of the county.
- (c) The additional charge continues in effect until repealed or modified by a subsequent county ordinance or resolution.
- (d) After imposing, repealing, or modifying an additional charge, the county shall certify the amount of the additional charge to the Public Service Commission.

(e) The Public Service Commission shall direct each telephone company that provides service in a county that imposed an additional charge to add, within 60 days, the full amount of the additional charge to all current bills rendered for switched local exchange access service in the county.

(f) Within 60 days after a county enacts or adopts an ordinance or resolution that imposes, repeals, or modifies an additional charge, each 9-1-1 service carrier that provides service in the county shall add the full amount of the additional charge to all current bills rendered for CMRS or other 9-1-1-accessible service in the county.

(g) (1) Each telephone company and each 9-1-1 service carrier shall:

(i) act as a collection agent for the 9-1-1 Trust Fund with respect to the additional charge imposed by each county;

(ii) collect the money from the additional charge on a county basis; and

(iii) remit all money collected to the Comptroller on a monthly basis.

(2) The Comptroller shall deposit the money remitted in the 9-1-1 Trust Fund account maintained for the county that imposed the additional charge.

### **§1-312.**

(a) During each county's fiscal year, the county may spend the amounts distributed to it from 9-1-1 fee collections for the installation, enhancement, maintenance, and operation of a county or multicounty 9-1-1 system.

(b) Subject to the provisions of subsection (c) of this section, maintenance and operation costs may include telephone company charges, equipment costs, equipment lease charges, repairs, utilities, personnel costs, and appropriate carryover costs from previous years.

(c) During a year in which a county raises its local additional charge under § 1-311 of this subtitle, the county:

(1) may use 9-1-1 trust funds only to supplement levels of spending by the county for 9-1-1 maintenance or operations; and

(2) may not use 9-1-1 trust funds to supplant spending by the county for 9-1-1 maintenance or operations.

(d) The Board shall provide for an audit of each county's expenditures for the maintenance and operation of the county's 9-1-1 system.

(e) (1) For a county without an operational Phase II wireless enhanced 9-1-1 system within the time frames established by the Board under § 1-306(b)(6) of this subtitle, the Board shall adopt procedures, to take effect on or after January 1, 2006, to assure that:

(i) the money collected from the additional charge and distributed to the county are expended during the county's fiscal year as follows:

1. for a 9-1-1 system in a county or a multicounty area with a population of 100,000 individuals or less, a maximum of 85% may be spent for personnel costs; and

2. for a 9-1-1 system in a county or multicounty area with a population of over 100,000 individuals, a maximum of 70% may be spent for personnel costs; and

(ii) the total amount collected from the 9-1-1 fee and the additional charge shall be expended only for the installation, enhancement, maintenance, and operation of a county or multicounty system.

(2) The Board may grant an exception to the provisions of paragraph (1) of this subsection in extenuating circumstances.

(3) A county with an operational Phase II wireless enhanced 9-1-1 system is exempt from the provisions of paragraph (1) of this subsection.

# CODE OF MARYLAND REGULATIONS

*12.11.03.00*

Title 12 DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONAL SERVICES

## ***Subtitle 11 OFFICE OF THE SECRETARY***

### **Chapter 03 9-1-1 Emergency Telephone System**

**Authority: Public Safety Article, Title 1, Subtitle 3, Correctional Services Article, §2-109; Annotated Code of Maryland**

*12.11.03.01*

#### **.01 Emergency Number Systems Board Authority.**

The Emergency Number Systems Board shall coordinate the implementation, enhancement, maintenance, and operation of county or multicounty 9-1-1 systems.

*12.11.03.02*

#### **.02 Definitions.**

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "Additional charge" has the meaning stated in Public Safety Article, §1-301, Annotated Code of Maryland.

(2) "Board" means the Emergency Number Systems Board.

(3) "9-1-1 system" means a telephone service or any other communication service that meets the planning guidelines under Public Safety Article, §1-306, Annotated Code of Maryland, and automatically connects an individual dialing the digits 9-1-1 to a public safety answering point.

(4) "Public safety answering point" has the meaning stated in Public Safety Article, §1-301, Annotated Code of Maryland.

*12.11.03.03*

#### **.03 The Emergency Number Systems Board.**

A. The Emergency Number Systems Board is under the direction of the Secretary of Public Safety and Correctional Services.

B. Board membership shall be according to Public Safety Article, §1-305, Annotated Code of Maryland.

C. The Board shall meet as necessary, but not less than quarterly each calendar year.

- D. The Board requires a majority of confirmed members present at a meeting to constitute a quorum.
- E. The Board requires a majority vote of members present at a meeting before taking action.
- F. The Board shall coordinate enhancement of county or multicounty 9-1-1 systems according to provisions under Public Safety Article, §1-306, Annotated Code of Maryland.

*12.11.03.04*

#### **.04 Implementation by County or Multicounty Area.**

A county or multicounty area shall maintain an enhanced 9-1-1 system that:

- A. Uses the digits 9-1-1 as the published emergency telephone number for access to emergency services;
- B. Has public safety answering points that provide 24-hour public access and dispatch service;
- C. Provides transfer and referrals to related public safety services;
- D. Provides for staffing all public safety answering points with personnel trained as required by this chapter;
- E. Provides for equipping all public safety answering points with adequate access to TTY equipment to facilitate use by an individual with a speech or hearing disability;
- F. Provides access to services for an individual who does not speak or understand the English language;
- G. May provide access to local emergency management centers for all public safety answering points;
- H. Permits a county to designate a public safety answering point using cooperative arrangements acceptable to the participating agencies;
- I. Permits public safety answering points to transfer or relay emergency calls received requiring services outside of the jurisdiction of the system receiving the call;
- J. Maintains a current master street address guide and communicates updated information to parties responsible for an automatic number identification (ANI) and automatic location identification (ALI) system;
- K. Uses telephone equipment and services that provide:
  - (1) A visual or audible indication, or both, of an incoming call;
  - (2) The capability for the call taker to monitor a transferred call to ensure that the call is properly transferred;
  - (3) Annual telephone company monitoring of service to determine the grade of service and, if appropriate, to make recommendations to ensure that not more than one busy signal in every 100 incoming calls during an average busy hour is maintained; and
  - (4) Documentation of the date and time a 9-1-1 call is received; and
- L. Has a sufficient number of call takers and equipment to consistently answer incoming calls on a daily average of 10 seconds or less.

12.11.03.05

### **.05 Plans for More Than One Public Safety Answering Point in a County.**

A county with a plan for more than one public safety answering point in the county shall submit the plan to the Board for consideration subject to the following:

- A. The county administration submitting the plan and not the individual agency within the county shall receive and distribute funding; and
- B. The plan shall meet the criteria established under this chapter, unless the Board approves a variation.

12.11.03.06

### **.06 Minimum Enhanced 9-1-1 System Requirements.**

At a minimum, an enhanced 9-1-1 system implemented in Maryland shall include:

- A. Sufficient incoming 9-1-1 lines for each telephone central office to ensure that not more than one in 100 call attempts during the average busy hour is blocked;
- B. Connections to all public safety agencies covered by the system;
- C. 24 hour, 7 day operation of the public safety answering point staffed with personnel trained as required under this chapter;
- D. First priority to answering 9-1-1 calls;
- E. Electronic recording of all 9-1-1 calls;
- F. Playback capability of all 9-1-1 calls;
- G. Connection to adjacent public safety answering points by private lines when there is a telephone exchange and jurisdictional boundary not covered by selective routing;
- H. Security measures sufficient to minimize intentional disruption of the operation;
- I. Standby emergency electrical power to keep the public safety answering point operating when commercial power fails;
- J. At least one administrative line for nonemergency calls;
- K. Written operational procedures;
- L. Automatic location identification (ALI) which displays, at the public safety answering point, the address or location of the calling instrument;
- M. Automatic number identification (ANI) which displays, at the public safety answering point, the calling telephone number;

N. Central office identification used to identify dedicated lines or trunks from a central office when a public safety answering point serves more than one central office;

O. A distinct tone, visible signal, or other process for:

- (1) Alerting the call taker that an incoming 9-1-1 call was disconnected; and
- (2) Receiving and displaying the telephone number with ANI and ALI information for a disconnected 9-1-1 call, when available;

P. Providing access to services for an individual:

- (1) With a speech or hearing disability; or
- (2) Who does not speak or understand the English language; and

Q. Other technical advances approved by the Board.

*12.11.03.07*

### **.07 Minimum Features of a 3-1-1 System.**

A. A county or multicounty system may establish a 3-1-1 system to reduce congestion on the 9-1-1 system operation.

B. At a minimum, a 3-1-1 system shall include the following:

- (1) Switching or programming to direct a 3-1-1 call to a nonemergency answering position;
- (2) A 3-1-1 answering position that shall be capable of:
  - (a) Immediately transferring an emergency call to a 9-1-1 answering position or an adjoining public safety answering point;
  - (b) Transferring a nonemergency call to an adjoining jurisdiction or appropriate agency; and
  - (c) Providing an individual:
    - (i) With a speech or hearing disability access to TTY services; or
    - (ii) Who does not speak or understand the English language access to alternative communication services; and
- (3) A 3-1-1 call taker trained to handle nonemergency calls and to transfer emergency calls to a 9-1-1 call taker.

*12.11.03.08*

### **.08 Operational Plan.**

A. A county or multicounty system shall have and maintain a written operational plan for public safety services signed by public safety agencies within the public safety answering point area of responsibility.

B. A public safety agency included in an operational plan under §A of this regulation shall be familiar with the operational procedures of the other public safety agencies included in the same operational plan.

C. An operational plan shall provide for uniform methods and procedures to ensure effective interagency communications.

*12.11.03.09*

### **.09 Safeguarding Telephone Circuits by Telephone Companies.**

A. A facility housing 9-1-1 telephone equipment shall:

- (1) Be equipped at all exposed terminations, including central office distributing frames, with protective devices that prevent accidental worker contact; and
- (2) Include clearly identified protected terminations to distinguish protected terminations from other circuitry.

B. A protected circuit may not be opened, grounded, short-circuited, or manipulated in any way by a telephone company worker without the local telephone company first obtaining approval for circuit release from the appropriate public safety answering point.

C. A telephone company shall ensure that telephone company employees who work in facilities associated with the 9-1-1 service are familiar with procedures for safeguarding 9-1-1 system equipment.

*12.11.03.10*

### **.10 Public Safety Answering Point Training.**

A. A county shall staff a public safety answering point with personnel who can properly process a call from a machine used by an individual who has a speech or hearing impairment.

B. Within 6 months of hiring a public safety answering point call taker, a county shall train the new call taker using a curriculum adopted or approved by the Board.

C. A county shall provide a public safety answering point call taker with yearly in-service training using a curriculum adopted or approved by the Board.

D. Training shall include:

- (1) Public safety answering point orientation;
- (2) Communication skills;
- (3) Electronic systems;
- (4) Policies and procedures;
- (5) Call processing;
- (6) Documentation;
- (7) Dispatch procedures;
- (8) Stress management;
- (9) Public relations;
- (10) Administrative duties; and
- (11) Disaster and major incident training.

12.11.03.11

### **.11 9-1-1 Fees.**

A. The Board shall ensure that collection, maintenance, dispersal, and auditing of 9-1-1 fees is conducted according to Public Safety Article, §§1-308—1-312, Annotated Code of Maryland.

B. Additional Charges—Local Government.

(1) In addition to the fee charged under Public Safety Article, §1-310, Annotated Code of Maryland, a county with an operational 9-1-1 system under Public Safety Article, §1-304, Annotated Code of Maryland, may, by ordinance or resolution after public hearing, enact or adopt an additional monthly charge not to exceed the limits under Public Safety Article, §1-311, Annotated Code of Maryland, to be applied to current bills, within that county, for:

(a) Switched local exchange access service; and

(b) Wireless telephone service or other 9-1-1 accessible service.

(2) A county authorizing an additional charge under §B of this regulation and maintaining an enhanced 9-1-1 system shall be subject to an annual Board-authorized independent audit of authorized 9-1-1 expenditures pursuant to Public Safety Article, §1-312, Annotated Code of Maryland.

12.11.03.12

### **.12 Equipment Which Qualifies for Funding or Reimbursement.**

A. Equipment that qualifies for purchase with funds from the 9-1-1 Trust Fund includes:

- (1) Equipment for connecting and outswitching 9-1-1 calls within a telephone central office;
- (2) Trunking facilities from the central office to a public safety answering point;
- (3) Equipment to connect 9-1-1 calls to the appropriate public safety agency; and
- (4) Equipment for a 3-1-1 system.

B. Equipment necessary to constitute an enhanced 9-1-1 system shall be used for:

- (1) Automatic number identification (ANI);
- (2) Automatic location identification (ALI); or
- (3) Other technical equipment the Board may require.

C. Computer aided dispatch equipment is not a part of a 9-1-1 system, except when the Board determines that an interface is necessary to properly process 9-1-1 calls.

12.11.03.13

### **.13 Submission of 9-1-1 Plan.**

A. A county requesting reimbursement from the 9-1-1 Trust Fund for mandated equipment, 9-1-1 enhancements, or technological advancements shall submit the request to the Board for approval.

B. A county shall submit a plan, request, report, or question to the Chairman, Emergency Number Systems Board.

*12.11.03.14*

### **.14 Request for Reimbursement from the 9-1-1 Trust Fund.**

A. A county shall submit a request for reimbursement from the 9-1-1 Trust Fund to the Board in a format and according to procedures established by the Board.

B. Reimbursement Processing.

(1) A county public safety answering point director or a 9-1-1 administrator shall submit a written or electronic request for reimbursement to the Board so that it is received at least 2 weeks before a Board meeting at which it is to be considered.

(2) The county's public safety answering point director or 9-1-1 administrator, or a designee, shall attend the meeting at which the request is to be considered.

(3) The Board shall review the request and, if approved, encumber funds up to the amount of the request.

(4) The county shall ensure that the county's procurement laws and policies are followed.

*12.11.03.15*

### **.15 Variations or Waivers of Regulations.**

A. Upon request by a county, the Board may grant a waiver or variance of the regulations contained in this chapter.

B. A county may submit a written or electronic request for waiver or variance to the Board that includes:

- (1) Number of persons affected;
- (2) Impact of a variance or waiver;
- (3) Alternative methods;
- (4) Technical difficulties;
- (5) Cost.

C. The Board shall consider:

- (1) The information for each of the areas cited in §B of this regulation; and
- (2) The best interests of the affected parties, the applicant, and the Emergency Number Systems Board.

D. An affected party shall have the right to present, either in writing or through oral testimony, information which may bear on the Board's final decision.

E. Processing a Request for Waiver or Variance.

(1) Upon receipt of a written request for waiver or variance, the Board shall:

(a) Within 10 days of receipt of the request, direct a letter to the applicant, which shall:

(i) Acknowledge receipt; and

(ii) Notify the applicant that additional information may be submitted, within 30 days, for the Board to consider during the review; and

(b) Review the documents or conduct a hearing.

(2) If the Board elects to review the documents, the review shall be conducted at a regular Board meeting within 60 days after the expiration of the 30-day period granted to the applicant to submit additional information.

(3) If the Board elects to conduct a hearing, the Board shall:

(a) Notify the applicant and affected parties of the hearing at least 10 days before the hearing and provide the hearing:

(i) Date;

(ii) Time; and

(iii) Location; and

(b) Conduct the hearing according to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.

*12.11.03.16*

## **.16 9-1-1 System Violations.**

A. The Board may instruct the State Comptroller to withhold funds from a county for 9-1-1 system expenditures for a violation under:

(1) Public Safety Article, §1-312, Annotated Code of Maryland; or

(2) The regulations in this chapter.

B. Withholding Funds.

(1) If the Board decides to withhold funds, the Board shall:

(a) Identify, in writing, the reason or reasons for withholding funds;

(b) Record the reason or reasons in the minutes of the meeting;

(c) Notify the county that the county has 30 days from the date of notification to respond in writing to the Board; and

(d) Notify the State Comptroller to hold funds, in that county's account within the 9-1-1 Trust Fund, until the Board advises the Comptroller that the funds may be released.

(2) Funds held by the Comptroller under this section may not accrue interest for a county.

(3) Interest income earned on funds held by the Comptroller under this regulation shall be diverted to the 9-1-1 Trust Fund.

C. The Board shall notify the Secretary of action taken under §A or B of this regulation.

12.11.03.17

### **.17 Decisions of the Board.**

After the Board conducts a hearing or a review of a request under this chapter, the Board shall ensure that the Board's decision is:

- A. In writing and stated in the record;
- B. Accompanied by findings of fact and conclusions; and
- C. Provided to the applicant with a copy of the written record containing the information noted under §§A and B of this regulation.