

**D53T00**  
**Maryland Institute for Emergency Medical Services Systems**

***Operating Budget Data***

(\$ in Thousands)

	<u>FY 12</u> <u>Actual</u>	<u>FY 13</u> <u>Working</u>	<u>FY 14</u> <u>Allowance</u>	<u>FY 13-14</u> <u>Change</u>	<u>% Change</u> <u>Prior Year</u>
Special Fund	\$12,290	\$13,452	\$13,053	-\$400	-3.0%
Contingent & Back of Bill Reductions	0	0	-13	-13	
<b>Adjusted Special Fund</b>	<b>\$12,290</b>	<b>\$13,452</b>	<b>\$13,040</b>	<b>-\$413</b>	<b>-3.1%</b>
 Federal Fund	 465	 129	 129	 0	 <b>0.0%</b>
<b>Adjusted Federal Fund</b>	<b>\$465</b>	<b>\$129</b>	<b>\$129</b>	<b>\$0</b>	<b>0.0%</b>
 Reimbursable Fund	 911	 517	 502	 -15	 -2.9%
<b>Adjusted Reimbursable Fund</b>	<b>\$911</b>	<b>\$517</b>	<b>\$502</b>	<b>-\$15</b>	<b>-2.9%</b>
 <b>Adjusted Grand Total</b>	 <b>\$13,666</b>	 <b>\$14,099</b>	 <b>\$13,671</b>	 <b>-\$428</b>	 <b>-3.0%</b>

- The Governor's fiscal 2014 allowance for the Maryland Institute for Emergency Medical Services Systems (MIEMSS) decreases by \$428,000, or 3.0%, from the fiscal 2013 working appropriation.
- Special funds decrease by \$413,000, or 3.1%, net of a \$13,000 across-the-board reduction to health insurance.
- Reimbursable funds decrease by \$15,000 from the fiscal 2013 working appropriation.
- The communication system replacement and the System Communications Center (SYSCOM) renovation project is the most significant change in fiscal 2014, decreasing by \$1.1 million. This decrease is offset by increases in personnel costs and radio purchases for the Statewide 700 MHz Communication System project.

Note: Numbers may not sum to total due to rounding.

For further information contact: Laura M. Vykol

Phone: (410) 946-5530

## ***Personnel Data***

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	<b><u>FY 12 Actual</u></b>	<b><u>FY 13 Working</u></b>	<b><u>FY 14 Allowance</u></b>	<b><u>FY 13-14 Change</u></b>
Regular Positions	94.10	94.10	94.10	0.00
Contractual FTEs	<u>9.50</u>	<u>6.20</u>	<u>6.45</u>	<u>0.25</u>
<b>Total Personnel</b>	<b>103.60</b>	<b>100.30</b>	<b>100.55</b>	<b>0.25</b>

### ***Vacancy Data: Regular Positions***

Turnover and Necessary Vacancies, Excluding New Positions	4.70	4.99%
Positions and Percentage Vacant as of 12/31/12	8.00	8.50%

- Regular positions at MIEMSS do not change in the fiscal 2014 allowance. Contractual full-time equivalents increase by a net 0.25. A communication technician position (0.75) was eliminated due to expiration of the Public Safety Interoperable Communications grant and an education and certification training specialist (1.0) was hired due to new federal testing requirements for emergency medical technicians and paramedics.
- As of December 31, 2012, there were 8.0 vacant positions, accounting for 8.5% of the agency's workforce. The vacancy rate is higher than the agency's budgeted turnover rate.

## ***Analysis in Brief***

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### **Major Trends**

***Maryland Trauma Care:*** Maryland continues to demonstrate consistent outcomes above the national norm as measured by the survivability rate of trauma care center admissions.

***Medevac Transport Trends:*** Following a Maryland Medevac helicopter crash in September 2008, MIEMSS issued revised guidelines for emergency triage protocol directing that all Medevac requests for trauma patients with certain injuries consult with the receiving trauma center before requesting a helicopter to be dispatched. In the years since the crash, the number of Medevac flights has decreased by 41.7% due to a number of factors, including the protocol changes. However, since the lowest point in fiscal 2010, flights have increased by 19.9% into fiscal 2012.

### **Issues**

***Communication Systems Upgrade Delayed:*** MIEMSS coordinates a statewide emergency medical services (EMS) communication system to integrate the delivery of prehospital emergency care with hospitals, trauma centers, and specialty institutions. A recent evaluation of the system found that, due to advanced age, a “catastrophic and unrecoverable failure” of the State’s EMS communication system would be possible. The Maryland General Assembly expressed intent in the 2012 legislative session to replace the communication system, but no funding was provided. During fiscal 2013, the first year of the communication system upgrade and renovation to SYSCOM was initiated by budget amendment, which authorized \$1.1 million from the Maryland Emergency Medical System Operations Fund (MEMSOF). If the project were to continue in fiscal 2014 as intended, MEMSOF would be insolvent. Therefore, continuation of the project has been delayed until fiscal 2015. **MIEMSS should comment on the progress of the communication system upgrade and SYSCOM renovation, as well as discuss the impact of delaying continuation of the project until fiscal 2015. The agency should present alternatives to fund the project if funding does not become available through MEMSOF.**

### **Recommended Actions**

1. Concur with Governor’s allowance.

## **Updates**

***Evaluation of the Network of Trauma and Specialty Referral Centers:*** In the 2009 *Joint Chairmen's Report*, the budget committees requested that MIEMSS, in coordination with the Maryland Health Care Commission (MHCC) and the EMS Board, submit a report that evaluates the network of trauma and specialty referral centers in Maryland by September 30, 2009. The report was actually submitted in January 2012. The report concluded that lower level trauma centers relative to higher level centers are associated with poorer outcomes in patients who are more severely injured. Therefore, after assessing the potential need and costs of establishing new lower level trauma centers, as well as considering consolidation of Level II trauma centers in Baltimore City, MHCC and MIEMSS recommended no changes be made to the existing trauma center system.

***SONET Ring Project Fully Functional:*** Although various aspects of the communication system require significant maintenance or replacement, the most immediate problem in recent years has been the condition of the agency's underground cables that carry all MIEMSS voice and data communications between the agency's headquarters and the Bressler Building on the campus of the University of Maryland, Baltimore. Chapter 396 of 2011, the capital budget, authorized \$1 million to design and construct a system that enables redundant connectivity between the Bressler Building and the MIEMSS building. MIEMSS advises that the synchronous optical networking (SONET) ring project is fully functional and carrying 99.96% of all MIEMSS' critical circuits; the remaining circuits await delivery of special adapters.

**D53T00**  
**Maryland Institute for Emergency Medical Services Systems**

## ***Operating Budget Analysis***

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### **Program Description**

The Maryland Institute for Emergency Medical Services Systems (MIEMSS) oversees and coordinates all components of the State's emergency medical services (EMS) system in accordance with State statute and regulations. MIEMSS provides guidance on medical direction, conducts EMS educational programs, licenses commercial ambulance services, and participates in EMS-related public education and prevention programs.

Chapter 592 of 1993 established MIEMSS as an independent State agency under the direction of the EMS Board. Prior to Chapter 592, MIEMSS was housed within the Department of Health and Mental Hygiene (DHMH) and, subsequently, the University of Maryland, Baltimore (UMB).

The EMS Board oversees the State's EMS plan to ensure effective coordination and administration of these services and appoints the Executive Director of MIEMSS. MIEMSS is funded primarily by the Maryland Emergency Medical System Operations Fund (MEMSOF), which receives the proceeds from a biennial \$22 surcharge on motor vehicle registrations.

MIEMSS coordinates a statewide emergency medical services system that includes over 30,000 licensed or certified EMS providers. MIEMSS works to integrate the delivery of prehospital emergency care with the State's 48 hospital emergency departments, 11 trauma centers, specialty referral centers, primary stroke centers, and perinatal centers. MIEMSS monitored 2,450 completed Medevac helicopter transports in fiscal 2012. The number of completed Medevac transports has decreased significantly in recent years due to a number of factors, including field triage protocol changes.

The EMS system is divided into five regions:

- Region I: Allegany and Garrett counties;
- Region II: Frederick and Washington counties;
- Region III: Central Maryland, including Baltimore City;
- Region IV: the Eastern Shore; and
- Region V: Metropolitan Washington.

The MIEMSS communication system is a complex network that facilitates communication between ambulances, Medevac helicopters, dispatch centers, hospital emergency departments, trauma centers, and law enforcement. The communications system includes (1) the Emergency Medical Resource Center (EMRC), which is a medical channel radio communications system that links EMS providers in the field with hospital based medical consultation; and (2) the System Communications Center (SYSCOM), which is responsible for helicopter dispatch and monitoring of the transport of critically ill or injured patients by helicopter to area hospitals. The MIEMSS communication system handles nearly 400,000 telephone and radio calls annually.

## **Performance Analysis: Managing for Results**

### **1. Maryland Trauma Care**

A key goal of MIEMSS is to provide high-quality, systematic medical care to individuals receiving emergency medical services. The agency measures the achievement of this goal by maintaining the system's trauma patient care performance above the national norm and monitoring the survivability rate of patients that are admitted to a trauma center, as shown in **Exhibit 1**.

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**Exhibit 1**  
**Trauma Care Performance**  
**Calendar 2007-2013**

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>Est.</u> <u>2013</u>
Maryland Trauma Patient Care Exceeds National Norm	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Survivability Rate for Trauma Center Admissions (%)	96.4%	96.6%	96.5%	96.5%	96.6%	96.5%	96.5%

Source: Maryland Institute for Emergency Medical Services Systems

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Maryland's 11 trauma centers maintain electronic registry data on all patients transported for trauma care services. Patients are coded according to a Trauma and Injury Severity Score (TRISS). TRISS data is used to run reports to show mortality/morbidity among trauma center patients. These reports are reviewed by both the hospitals and MIEMSS to monitor trends in outcomes and to identify any deviations. Notable deviations are flagged and reviewed with the respective trauma center.

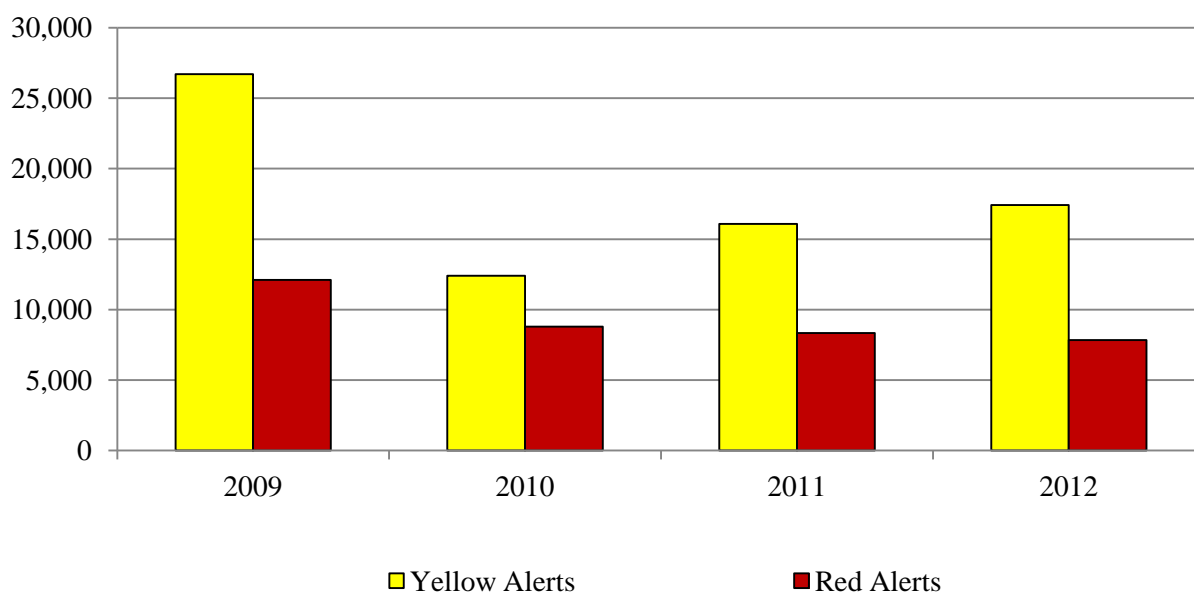
## **Emergency Department Overcrowding**

The County Hospital Alert Tracking System (CHATS) is a real-time computerized monitoring system of emergency department status throughout Maryland. Hospital emergency departments that are temporarily unable to accept ambulance-transported patients due to overcrowding or hospital overload are identified so that ambulances can be diverted to other, less crowded emergency department facilities.

MIEMSS utilizes CHATS to determine hospital bed availability, and while participation is not mandatory, the reporting system aids MIEMSS in diverting ambulances to hospitals with adequate capacity. MIEMSS tracks “yellow” alerts, when an emergency room requests to receive absolutely no patients in need of urgent medical care by ambulance with the exception of certain priority cases, and “red” alerts, when a hospital has no inpatient electrocardiogram monitored beds available.

**Exhibit 2** shows the total number of hours of yellow and red alerts across the State from calendar 2009 through 2012. Hospitals in Washington, DC are not included in this chart, even though Maryland residents utilize those hospitals. Region III and Region V make up the vast majority of yellow and red alert hours. The number of yellow alert hours for emergency room requests decreased significantly between calendar 2009 and 2010, as shown in Exhibit 2. The number of yellow alert hours increased in calendar 2012 but remained well below the pre-2010 level. In general, the reduced level is due to improvement in hospital procedures to facilitate the movement of patients from emergency rooms to other parts of the hospital in order to keep space available for new patients that need emergency room care. In calendar 2012, Region III contributed 61.4% of the yellow alerts and 46.0% of the red alerts for the entire State. Region V constituted 34.3% of yellow alerts and 40.2% of red alerts for the entire State in calendar 2012. **MIEMSS should comment on the increase in yellow alerts in calendar 2012. The agency should also discuss how hospital performance is measured and monitored using CHATS data, and how MIEMSS recommends improvement for hospitals to address increasing alerts.**

**Exhibit 2**  
**Total Hours of Yellow and Red Alerts in the State**  
**Calendar 2009-2012**



Source: Maryland Institute for Emergency Medical Services Systems

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## **2. Medevac Transport Trends**

A key responsibility of MIEMSS is the development and distribution of Maryland Medical Protocols for EMS providers. These triage protocols provide a system of determining priority and appropriateness of medical treatment, transportation, and place of care in emergency situations. The protocols guide the actions of EMS field providers as they respond to emergency transport calls and promote uniformity of care throughout the State. All State-licensed and certified EMS providers, whether public or commercial, are required to function within the scope of practice defined by the protocols.

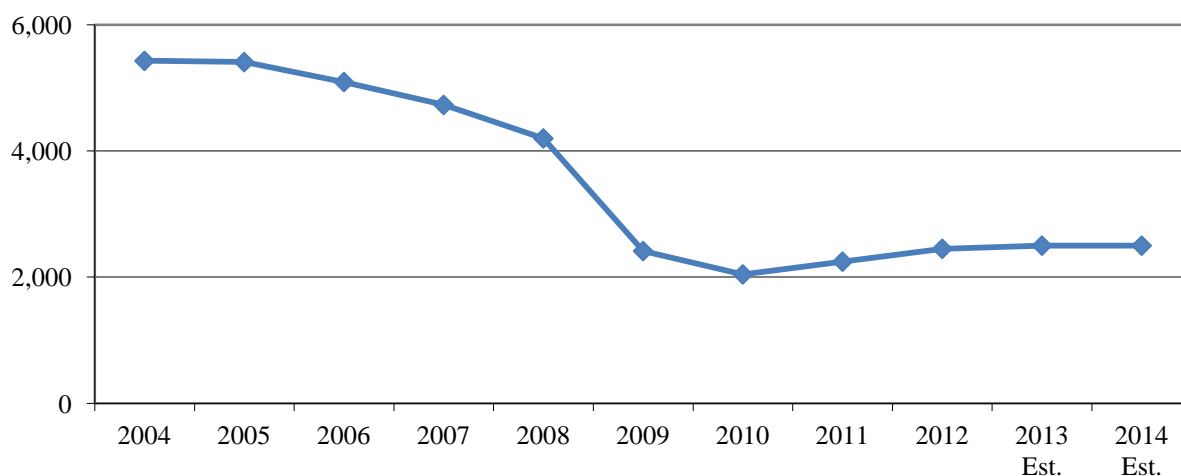
In a regional system of care such as Maryland's, field protocols ensure that more severely injured patients are transported to designated trauma centers. In Maryland, the most critically injured patients are transported to the State's Primary Adult Resource Center, the R Adams Cowley Shock Trauma Center, or to the State's Level I trauma center, the Johns Hopkins Hospital Adult Trauma Center. Less critically injured patients are transported to Level II or III trauma centers, and some patients are directed to specialty centers based on their specific type of injury (*e.g.*, burn victims to specialty burn centers).

Prior to the crash of Trooper 2 in 2008, MIEMSS was engaged in a comprehensive review of the protocols for determining when a patient should be transported by Medevac helicopter. The review included an internal analysis of data from within the State and an external review of protocols and processes used in other states. However, as a direct result of the crash, effective October 9, 2008, MIEMSS changed the protocol for helicopter transport of Category C and D patients to require consultation with the receiving trauma center before requesting helicopter transport. Category A and B patients are the most severely injured and are taken to a trauma center or specialty center, per protocol. Category C and D patients are less severe and must meet certain criteria to be considered for helicopter transport.

In the years following the protocol change, there has been a significant reduction in the number of helicopter scene transports. **Exhibit 3** shows Medevac transports between fiscal 2004 and 2014. There were 2,450 completed Medevac transports in fiscal 2012, which is 41.7% lower than the number of completed transports conducted in fiscal 2008. Even before this precipitous decline, the number of annual Medevac flights had declined steadily between fiscal 2004 and 2008. However, fiscal 2012 shows a 19.9% increase in flights from fiscal 2010, which is when the lowest number of flights was recorded. A variety of factors could be associated with this increase, including the economy improving, vehicle miles traveled increasing, and emergency responders becoming more comfortable with the new protocols. Unlike the Department of State Police (DSP), MIEMSS only reports DSP Medevac transports from inter-hospital transfers and scene Medevac missions; cancelled flights or flights used for other purposes are not included.

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**Exhibit 3**  
**Completed Medevac Transports**  
**Fiscal 2004-2014**



Source: Maryland Institute for Emergency Medical Services Systems

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## **Proposed Budget**

The fiscal 2014 allowance decreases by \$428,000, or 3.0%, as shown in **Exhibit 4**. Special funds decrease by \$413,000, or 3.1%, and reimbursable funds decrease by \$15,000, or 2.9%.

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**Exhibit 4**  
**Proposed Budget**  
**Maryland Institute Emergency Medical Services Systems**  
**(\$ in Thousands)**

<b>How Much It Grows:</b>	<b><u>Special Fund</u></b>	<b><u>Federal Fund</u></b>	<b><u>Reimb. Fund</u></b>	<b><u>Total</u></b>
2013 Working Appropriation	\$13,452	\$129	\$517	\$14,099
2014 Allowance	<u>13,053</u>	<u>129</u>	<u>502</u>	<u>13,684</u>
Amount Change	-\$400	\$0	-\$15	-\$415
Percent Change	-3.0%		-2.9%	-2.9%
Contingent Reductions	-\$13	\$0	\$0	-\$13
Adjusted Change	-\$413	\$0	-\$15	-\$428
Adjusted Percent Change	-3.1%	0.0%	-2.9%	-3.0%

### **Where It Goes:**

#### **Personnel Expenses**

Increments and other compensation.....	-\$44
Employee and retiree health insurance, adjusted for across-the-board reduction .....	25
Employee retirement .....	164
Turnover adjustments.....	-9
Annualization of fiscal 2013 cost-of-living adjustment.....	68
Other fringe benefit adjustments.....	1

#### **Other Changes**

Communication System Replacement and SYSCOM Renovation Project.....	-1,074
Trauma Registry software acquisition .....	32
Maintenance costs and licensure component for EMEDS .....	142
Programming.....	-104
Lease/purchase agreement cost for major server overhaul project .....	60
Radio purchases for the Statewide 700 MHz Communication System.....	428

## *D53T00 – Maryland Institute for Emergency Medical Services Systems*

### **Where It Goes:**

Radio grant funding and reduction in bioterrorism grant.....	-133
Additional textbooks for EMS Children Program.....	17
Other.....	-1
<b>Total</b>	<b>-\$428</b>

EMEDS: Electronic Maryland Emergency Medical Services Data System

EMS: Emergency Medical Services

SYSCOM: Systems Communication Center

Note: Numbers may not sum to total due to rounding.

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## **Personnel Expenses**

Total personnel expenses increase by \$205,000 in fiscal 2014 compared with the fiscal 2013 working appropriation. Regular salaries decrease by \$44,000. Health insurance increases by \$25,000, net of \$13,000 due to an across-the-board reduction. Employee retirement is the primary driver of the personnel increase, adding \$164,000 in fiscal 2014. Contribution rates for the regular employees, teachers, State Police, and law enforcement officers pension plans increase in fiscal 2014. The rate increases are attributable to underattaining investment returns, adjusting actuarial assumptions, and increasing the reinvestment of savings achieved in the 2011 pension reform. Annualization of the fiscal 2013 cost-of-living adjustment (COLA) adds \$68,000 to personnel expenses.

## **Communication System Replacement and SYSCOM Renovation Project**

MIEMSS coordinates a statewide EMS communication system to integrate the delivery of prehospital emergency care with hospitals, trauma centers, and specialty institutions. A recent evaluation of the system found that, due to advanced age, a “catastrophic and unrecoverable failure” of the State’s EMS communication system would be possible. During fiscal 2013, the first year of the communication system upgrade and renovation to SYSCOM was initiated by budget amendment, which authorized \$1.1 million from MEMSOF. The fiscal 2014 allowance does not include funding for the project; the project has been delayed until fiscal 2015 in an attempt to keep MEMSOF solvent through fiscal 2014.

## **Maintenance and Licensure Component Costs for EMEDS**

MIEMSS is responsible for the coordination and public health oversight of the Maryland EMS system. As part of its duties, MIEMSS licenses and certifies EMS providers, develops the protocol under which EMS providers deliver prehospital care, and monitors trauma and specialty hospitals. In order to determine how well the Maryland EMS system is functioning, MIEMSS must gather and analyze appropriate data. To that end, MIEMSS began an update of its Electronic Maryland Emergency Medical Services Data System (EMEDS) to create a new electronic medical records system that improves the quality of data and data sharing by EMS providers.

The new EMEDS is a software system that Maryland jurisdictions can access in order to more efficiently and fully report prehospital patient care data. The Department of Information Technology (DoIT) approved the project and funds were included in the fiscal 2011 budget to move forward to secure a vendor to administer the new system. The system is currently deployed in almost every county statewide after a successful pilot in Cecil, Harford, and Queen Anne's counties. The fiscal 2014 allowance reflects \$142,000 in maintenance costs and costs for the licensure component. **The agency should update the budget committees on the status of deployment of this system.**

## **Grant Programs Receive Less Funding in Fiscal 2014**

MIEMSS provides grant funding for several programs, some of which receive less funding in fiscal 2014. The MIEMSS Radio Grant program fund is eliminated attributing \$100,000 to grant decreases in fiscal 2014. Under the Radio Grant program, which began in fiscal 2010, MIEMSS reimbursed county or volunteer EMS companies for new narrowband mobile and portable radios that met the MIEMSS specifications and complied with Federal Communications Commission mandates for public safety systems. Prior to fiscal 2010, MIEMSS had provided EMS companies with mobile and portable radios through an equipment donation process; MIEMSS continues to focus on statewide replacement of noncompliant mobile and portable radios. The remaining reduction in grant funding is primarily a reduction to a bioterrorism grant.

## ***Issues***

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### **1. Communication Systems Upgrade Delayed**

MIEMSS coordinates a statewide EMS communication system to integrate the delivery of prehospital emergency care with hospitals, trauma centers, and specialty institutions. The system comprises two primary subsystems – the EMRC and SYSCOM – to coordinate care in Maryland. The hub of the communications system is located within the MIEMSS headquarters in Baltimore City. A recent evaluation of the system found that breakdowns in the telephone interface, core patching technology, and primary console interface would be possible due to the advanced age of this equipment. The evaluation concluded that a “catastrophic and unrecoverable failure” of the State’s EMS communication system would be possible, and no adequate backup center exists if the primary communications facility is incapacitated.

#### **System Replacement**

The evaluation proposes a conceptual solution whereby the outdated analog-based equipment is replaced with Internet protocol (IP) based technology. IP-based technology would allow MIEMSS to integrate its communication system with the State’s 700 megahertz (MHz) radio system and fully benefit from the system’s capabilities. Additionally, upgrading these core systems to an IP-based system would allow for the creation of a backup system in the event of a failure at the Baltimore center. An IP-based system may have numerous other advantages compared to the current analog system, including:

- lower risk of critical communications interruption or system failure;
- greater ability to remotely manage equipment and interconnections;
- lower operational and maintenance costs; and
- improved availability of qualified maintenance resources.

Upgrading the system components would likely take five years from start to finish and cost approximately \$12.2 million, as shown in **Exhibit 5**. In addition, it has been determined that the project is not eligible for general obligation bond funding.

#### **Project Initiated by Budget Amendment**

In SB 152 of 2012 (the Budget Reconciliation and Financing Act of 2012, or the BRFA of 2012), the Maryland General Assembly expressed intent to replace the communications system. The bill would have raised the motor vehicle registration fee by \$2 (from \$11 to \$13) which is the primary revenue source for MEMSOF. The MIEMSS communication system upgrade was contingent on this increase. Both the fee increase and the upgrade were excised when the BRFA was reintroduced as SB 1301 (Chapter 1 of the First Special Session of 2012).

**Exhibit 5**  
**MIEMSS Communication System Upgrade and SYSCOM Center Renovation**  
**Cost Schedule**

	<b><u>MIEMSS Communication System Upgrade and SYSCOM Renovation</u></b>	<b><u>MIEMSS Communication System Maintenance</u></b>	<b><u>Total Yearly Costs</u></b>
Year 1	\$1,073,683	\$0	\$1,073,683
Year 2	2,497,277	1,548,421	4,045,698
Year 3	8,540,803	1,594,874	10,135,677
Year 4	37,500	1,642,720	1,680,220
Year 5	12,500	1,692,001	1,704,501
<b>Total Project Upgrade and Renovation Cost</b>	<b>\$12,161,763</b>		

MIEMSS: Maryland Institute for Emergency Medical Services Systems  
SYSCOM: System Communications Center

Source: Maryland Institute for Emergency Medical Services Systems

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In fiscal 2013, the communication system upgrade was initiated by budget amendment. The amendment authorized \$1.1 million in MEMSOF funds for the first year of the communication system replacement project and to renovate SYSCOM in order to accept console equipment required to support the State's 700 MHz radio project. Costs for the replacement project in fiscal 2013 include procurement support and network analysis (\$225,000); independent verification and validation (\$25,000); contract mobilization (\$165,000); EMRC/SYSCOM renovation (\$342,683); dispatch furniture (\$216,000); and heating, ventilation, and air conditioning (\$100,000). The consultant's evaluation also estimated additional annual costs for ongoing maintenance and personnel. Once the system is operational, maintenance costs are likely to be about \$1.6 million annually.

The first year of the communication system upgrade is funded from MEMSOF in fiscal 2013, but the addition of the project further reduces the closing balance of the fund. MEMSOF would be insolvent in fiscal 2014 if the second year of the communication system project continued as scheduled. The current fiscal 2014 allowance for MEMSOF delays the second year of the communication system project until fiscal 2015 in an attempt to keep MEMSOF solvent; however, this change only pushes back insolvency until fiscal 2015. Absent a revenue enhancement to MEMSOF, there will need to be an alternative source of funding for the communication system project.

**MIEMSS should comment on the progress of the communication system upgrade and SYSCOM renovation, as well as discuss the impact of delaying the second year of the project until fiscal 2015. The agency should present alternatives to fund the project if funding does not become available through MEMSOF.**

## ***Recommended Actions***

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1. Concur with Governor's allowance.

## ***Updates***

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### **1. Evaluation of the the Network of Trauma and Specialty Referral Centers**

In the 2009 *Joint Chairmen's Report*, the budget committees requested that MIEMSS, in coordination with the Maryland Health Care Commission (MHCC) and the Emergency Medical Services (EMS) Board, submit a report that evaluates the network of trauma and specialty referral centers in Maryland by September 30, 2009. The report was actually submitted in January 2012. The report concluded that lower level trauma centers relative to higher level centers are associated with poorer outcomes in patients who are more severely injured. After assessing the potential need for and costs of establishing new lower level trauma centers, as well as considering consolidation of Level II trauma centers in Baltimore City, MHCC and MIEMSS recommended no changes be made to the existing trauma center system.

### **2. SONET Ring Project Fully Functional**

Although various aspects of the communications system require significant maintenance or replacement, the most immediate problem in recent years has been the condition of the agency's underground cables that carry all MIEMSS voice and data communications between the agency's headquarters and the Bressler Building on the campus of UMB. These copper and fiber-optic cables (voice and data, respectively) are a single point of failure for the system because there is no redundant path to back up the communications should the cables be compromised. The quality of the cables is declining due to age, and they may be damaged by leaking water or street construction. Chapter 396 of 2011, the capital budget, authorized \$1 million to design and construct a system that enables redundant connectivity between the Bressler Building and the MIEMSS building. MIEMSS advises that the synchronous optical networking (SONET) ring project is fully functional and carrying 99.96% of all MIEMSS' critical circuits; the remaining circuits await delivery of special adapters. There was an initial project delay during procurement because of the untimely expiration of DoIT's Cabling and Wiring Master contract. Since that time, services needed for the project have been successfully completed except for the need of alternative adapters. The project is estimated to be completed during the first quarter of calendar 2013.

## ***Current and Prior Year Budgets***

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### **Current and Prior Year Budgets** **Maryland Institute for Emergency Medical Services Systems** (\$ in Thousands)

	<b><u>General</u></b> <b><u>Fund</u></b>	<b><u>Special</u></b> <b><u>Fund</u></b>	<b><u>Federal</u></b> <b><u>Fund</u></b>	<b><u>Reimb.</u></b> <b><u>Fund</u></b>	<b><u>Total</u></b>
<b>Fiscal 2012</b>					
Legislative Appropriation	\$0	\$12,433	\$129	\$645	\$13,207
Deficiency Appropriation	0	0	0	0	0
Budget Amendments	0	130	724	370	1,224
Reversions and Cancellations	0	-273	-388	-104	-765
<b>Actual</b>					
<b>Expenditures</b>	<b>\$0</b>	<b>\$12,290</b>	<b>\$465</b>	<b>\$911</b>	<b>\$13,666</b>
<b>Fiscal 2013</b>					
Legislative Appropriation	\$0	\$12,313	\$129	\$517	\$12,959
Budget Amendments	0	1,139	0	0	1,139
<b>Working</b>					
<b>Appropriation</b>	<b>\$0</b>	<b>\$13,452</b>	<b>\$129</b>	<b>\$517</b>	<b>\$14,098</b>

Note: Numbers may not sum to total due to rounding.

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## **Fiscal 2012**

The budget for MIEMSS closed at approximately \$13.7 million in fiscal 2012, which is an increase of \$459,000 over the legislative appropriation. The special fund appropriation decreased by a net \$144,000. Two special fund budget amendments allocated a \$750 bonus and distributed additional revenue from Commercial Ambulance Licensing and Inspection fees (\$130,000). However, \$273,000 in special funds was cancelled due to lower than expected expenditures for certain subobjects with restricted purposes and for other miscellaneous revenues not realized.

The federal fund appropriation increased by a net \$336,000 in fiscal 2012. MIEMSS received \$724,000 from two budget amendments for the EMS Children Program and to manage the Metropolitan Medical Response System on behalf of Montgomery County. A total of \$388,000 in federal funds was cancelled; however the agency advises that funds will carry through to continue projects extending into the following fiscal year.

The agency's reimbursable fund appropriation increased by a net \$266,000. MIEMSS received \$370,000 through budget amendments. The agency received (1) \$250,000 from the Maryland Emergency Management Agency for the purchase, installation, and support of 166 patient tracking licenses on handheld computers; and (2) \$120,000 from the State Highway Administration to cover the cost of Phase II of the National EMS Information System Computer-aided Dispatch Integration Program. However, \$104,000 in reimbursable funds was cancelled due to overestimation of expenditures.

## **Fiscal 2013**

The total MIEMSS budget increased by \$1.1 million over the legislative appropriation. The bulk of the increase stems from one budget amendment that initiated the first stages of the MIEMSS Communication System upgrade (\$1.07 million); the remainder comes from a second budget amendment for the COLA.

**Object/Fund Difference Report**  
**Maryland Institute Emergency Medical Services Systems**

<u>Object/Fund</u>	<u>FY 12 Actual</u>	<u>FY 13 Working Appropriation</u>	<u>FY 14 Allowance</u>	<u>FY 13 - FY 14 Amount Change</u>	<u>Percent Change</u>
<b>Positions</b>					
01 Regular	94.10	94.10	94.10	0.00	0%
02 Contractual	9.50	6.20	6.45	0.25	4.0%
<b>Total Positions</b>	<b>103.60</b>	<b>100.30</b>	<b>100.55</b>	<b>0.25</b>	<b>0.2%</b>
<b>Objects</b>					
01 Salaries and Wages	\$ 7,904,210	\$ 8,200,172	\$ 8,417,857	\$ 217,685	2.7%
02 Technical and Spec. Fees	553,726	312,496	292,296	-20,200	-6.5%
03 Communication	849,754	923,208	998,046	74,838	8.1%
04 Travel	169,604	126,022	143,000	16,978	13.5%
06 Fuel and Utilities	106,265	111,370	110,514	-856	-0.8%
07 Motor Vehicles	246,868	208,042	226,978	18,936	9.1%
08 Contractual Services	1,981,928	1,994,466	1,572,372	-422,094	-21.2%
09 Supplies and Materials	132,519	116,736	136,005	19,269	16.5%
10 Equipment – Replacement	71,706	291,500	39,000	-252,500	-86.6%
11 Equipment – Additional	14,870	46,800	547,243	500,443	1069.3%
12 Grants, Subsidies, and Contributions	1,534,285	1,227,000	1,094,000	-133,000	-10.8%
13 Fixed Charges	100,388	98,272	106,688	8,416	8.6%
14 Land and Structures	0	442,683	0	-442,683	-100.0%
<b>Total Objects</b>	<b>\$ 13,666,123</b>	<b>\$ 14,098,767</b>	<b>\$ 13,683,999</b>	<b>-\$ 414,768</b>	<b>-2.9%</b>
<b>Funds</b>					
03 Special Fund	\$ 12,289,537	\$ 13,452,380	\$ 13,052,723	-\$ 399,657	-3.0%
05 Federal Fund	465,225	129,482	129,482	0	0%
09 Reimbursable Fund	911,361	516,905	501,794	-15,111	-2.9%
<b>Total Funds</b>	<b>\$ 13,666,123</b>	<b>\$ 14,098,767</b>	<b>\$ 13,683,999</b>	<b>-\$ 414,768</b>	<b>-2.9%</b>

Note: The fiscal 2013 appropriation does not include deficiencies. The fiscal 2014 allowance does not include contingent reductions.

**Fiscal Summary**  
**Maryland Institute Emergency Medical Services Systems**

<u>Program/Unit</u>	<u>FY 12 Actual</u>	<u>FY 13 Wrk Approp</u>	<u>FY 14 Allowance</u>	<u>Change</u>	<u>FY 13 - FY 14 % Change</u>
01 General Administration	\$ 13,666,123	\$ 14,098,767	\$ 13,256,486	-\$ 842,281	-6.0%
02 Information Technology Project	0	0	427,513	427,513	0%
<b>Total Expenditures</b>	<b>\$ 13,666,123</b>	<b>\$ 14,098,767</b>	<b>\$ 13,683,999</b>	<b>-\$ 414,768</b>	<b>-2.9%</b>
Special Fund	\$ 12,289,537	\$ 13,452,380	\$ 13,052,723	-\$ 399,657	-3.0%
Federal Fund	465,225	129,482	129,482	0	0%
<b>Total Appropriations</b>	<b>\$ 12,754,762</b>	<b>\$ 13,581,862</b>	<b>\$ 13,182,205</b>	<b>-\$ 399,657</b>	<b>-2.9%</b>
Reimbursable Fund	\$ 911,361	\$ 516,905	\$ 501,794	-\$ 15,111	-2.9%
<b>Total Funds</b>	<b>\$ 13,666,123</b>	<b>\$ 14,098,767</b>	<b>\$ 13,683,999</b>	<b>-\$ 414,768</b>	<b>-2.9%</b>

Note: The fiscal 2013 appropriation does not include deficiencies. The fiscal 2014 allowance does not include contingent reductions.