This report summarizes the findings from a 2016-2017 survey of state EMS offices on how EMS offices are organizationally situated, how EMS offices are staffed, the specific areas in which EMS offices have definitive functional authority, and trends which may create change in these characteristics.
ACKNOWLEDGMENTS AND DISCLAIMER

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BACKGROUND

A survey instrument was created and utilized to provide information to describe current and future state EMS office purposes and needs, to improve NASEMSO’s ability to help members realize those purposes and to enable NASEMSO to better meet those needs.

This report provides a key informational foundation which the survey assessed. That foundation is how state EMS officials define the organization of each EMS office within state government, including how it is staffed and what its functions are. It also looks to the future by attempting to assess what trends state EMS officials view as potentially affecting state EMS office organization, staffing and functions.

The survey was sent to EMS directors of all member states, territories\(^1\), and the District of Columbia (DC). Out of the 56 members, 42 responses were received, for a response rate of 73%. Throughout this report, “state” is inclusive of DC, commonwealths, and territories.

A copy of the survey can be found in Appendix A of this report.

\(^1\) Territories include American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.
DEMOGRAPHICS

Represented States

The states listed below responded to this survey:

- Alabama
- Alaska
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- District of Columbia
- Florida
- Georgia
- Guam
- Idaho
- Iowa
- Kansas
- Louisiana
- Maine
- Massachusetts
- Michigan
- Mississippi
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Ohio
- Oklahoma
- Oregon
- Pennsylvania
- Rhode Island
- South Dakota
- Tennessee
- Texas
- Utah
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
## EMS Office Structure

### Organizational Position of EMS Unit

**Question:**

Which of the following most closely describes the organizational position of the EMS unit within your state government hierarchy?

- an organizationally independent unit reporting directly to the Governor.
- an organizationally independent unit reporting indirectly to the Governor through a board or commission.
- incorporated in a cabinet-level department of government and reports directly to that department head.
- incorporated in a cabinet-level department of government and reports to a direct subordinate of the department head.
- incorporated in a division of a governmental department and reports directly to the head of that division.
- incorporated in a division of a governmental department and reports to a direct subordinate of the head of that division.
- incorporated in a lower section of a governmental division and reports directly to the head of that section.
- incorporated in a lower section of a governmental division and reports to a direct subordinate of the head of that section.

### CHART 1

```
<table>
<thead>
<tr>
<th>Position</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department - Dept. Head</td>
<td>16%</td>
</tr>
<tr>
<td>Lower Division - Sub. Section Head</td>
<td>7%</td>
</tr>
<tr>
<td>Independent Board - Indirect to Governor</td>
<td>5%</td>
</tr>
<tr>
<td>Department - Dept. Head</td>
<td>9%</td>
</tr>
<tr>
<td>Lower Division - Sub. Section Head</td>
<td>7%</td>
</tr>
<tr>
<td>Division - Sub. Division Head</td>
<td>8%</td>
</tr>
<tr>
<td>Division - Division Head</td>
<td>10%</td>
</tr>
</tbody>
</table>
```

Revised April 28, 2017
FIGURE 1

Legend

- Independent Board /Commission – Indirect Report to Governor
- Cabinet-level Department - Reports to Department Head
- Cabinet-level Department - Reports to Subordinate Department Head
- Division of Department - Reports to Division Head
- Division of Department - Reports to Subordinate Division Head
- Lower Section Division - Reports to Section Head
- Lower Section Division - Reports to Subordinate Section Head
- No Information Available
Discussion

In describing the EMS office’s organizational position within state government hierarchy, no state EMS office described a direct report to the governor, though six (14%) said that they had second level reports to a cabinet member, or to a board/commission, reporting to the governor. Another seven states (16%) have a third level report to a deputy cabinet position. Eighteen state EMS offices (42%) have fourth or fifth level reports to division officials within cabinet departments. Eleven state EMS offices have sixth or seventh level reports through section officials within divisions under cabinet departments.

State Agency

<table>
<thead>
<tr>
<th>Question:</th>
<th>In your state, which of the following most closely describes the state agency within which EMS is organized?</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Health and Human Services</td>
<td></td>
</tr>
<tr>
<td>- Public Safety</td>
<td></td>
</tr>
<tr>
<td>- Other (please specify)</td>
<td></td>
</tr>
<tr>
<td>- None (EMS is separately organized; not within another department or agency)</td>
<td></td>
</tr>
</tbody>
</table>

CHART 2

*Other: Department of Health (which is different than HHS in New Mexico)*
Discussion

An overwhelming majority (86%) of state EMS offices are organized within the state’s department of health or health and human services. Only one state (Kansas) has an independent Board which is part of no other agency.

Organizational Placement of HPP or PHEP

**Question:**

Compared to ten years ago, how has the organizational placement of the hospital preparedness program (HPP) or public health emergency preparedness (PHEP) program in your state changed?

CHART 3
(n=40; 2 states did not respond)

<table>
<thead>
<tr>
<th>Status</th>
<th>No Change</th>
<th>Has Changed</th>
<th>Comments Unclear</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>45%</td>
<td>18</td>
<td>12</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“No Change” Comments

- Remained essentially the same. Elevated from an Office to a Bureau but structurally really no difference.
- It hasn’t changed. Both programs are still housed within the Center of Emergency Preparedness.
- No change—run through public health.
- Both exist in the Department of Health and Human services, as they did 10 years ago.
- The organizational placement of HPP and PHEP has remained unchanged. Each has its own program manager and reports to the same person in DPH.
• It hasn’t. EMS was not involved then and still is not. We are trying to change that, but with decreasing funds with these programs, that is not easily accomplished.

• Not at all. EMS owns HPP, PHEP is a sister unit.

• Still remains with OEMS.

• None, continues to be on the Public Health side of the Department of Health.

• No changes - still within the Department of Health and Environment and separate from EMS.

• Not much

“Has Changed” Comments

• Changed divisions or offices within the health department, but has always been in the health department.

• They are both now in the same Bureau as EMS and Time Sensitive Emergencies.

• EMS and HPP/PHEP were formerly within one bureau, but now are contained within separate bureaus.

• The EMS Section is now part of the Office of Preparedness.

• The EMS and Preparedness Programs (HPP and PHEP) are completely merged.

• It was moved from reporting to Public Health Division Director to integration into one of three centers.

• It currently has more power than EMS due to location and leadership preference. It is not integrated yet.

• They have combined.

“Unclear” Comments

• It seems that their funding has diminished so much, it’s difficult for them to accomplish substantive goals.

• A vast change in understanding of the process has allowed a forward movement in our organization.

• Now a more permanent part of our state organization.

• Focused more on disease threats and access to care.

• PHEP and HPP is administered in a separate service area within the Department. We support their role in disasters and response.

• It is integrated into the health department, separate from the EMS Office.
• The HPP and PHEP programs are strong, nationally recognized and working closely with EMS on several projects including EMSC, mass casualty response plans, a state triage system, sharing the Health alert network and other resources. Working collaboratively on the Pediatric hospital recognition project and developing other EP initiatives.
• Both are located in the Center for Emergency Preparedness and Response, not affiliated with the Center for EMS.
• Works with EMS and Emergency Management.
• This is in the Department of Health and we have little contact with this funding opportunity.
• We are a Division within Emergency Preparedness which includes the Divisions of HPP and PHEP.
• Actively providing educational opportunities to practice concepts in the community.

“Unknown” Comments (n=2)
• Cannot answer only been here 3 years.
• Unknown

Discussion
Following 9-11, Hurricane Katrina, and large scale disease outbreaks (e.g. Ebola), there has been an increased awareness of the potential for health-targeted terrorism, health and health system impacting natural disasters, and pandemic events. This led to the creation of such emergency health system planning and response initiatives as the Office of Assistant Secretary of Preparedness and Response (ASPR) in the federal Department of Health and Human Services, and similar development in state governments across the country. These were added to new health and medical programs in the Department of Homeland Security (DHS), and older programming such as the Disaster Medical Assistance Team structure of the National Disaster Medical System across the country (now coordinated by ASPR and DHS).

As state government emergency health preparedness capabilities began to grow, they reflected the federal planning and response models and federal grant guidance involved in funding that growth. Absent a broad, federal EMS planning and response program since the early 1980’s, there has been no obvious guidance for how to
universally merge existing state EMS offices with the new state-level public health and hospital planning and response initiatives. This has resulted in myriad different ways in which existing state EMS system offices have interacted with these initiatives in the post-Katrina era.

This survey question sought to characterize the evolution of those relationships from 2006 to the present. The question could have been more pointed in asking about the organization of public health or hospital emergency preparedness programs with regard to the existing EMS office within state government, but the comments reflect that most respondents answered from this perspective anyway. Some “unclear” comments may have resulted from this missing specificity.

Eighteen state EMS offices (45%) indicated that these health/hospital preparedness programs have remained organizationally stable in the past ten years, while twelve (30%) cited organizational changes. Ten EMS offices (25%) responded in such a manner that it was not possible to discern whether change had occurred. The comments in all categories do not reflect any trends in changing relationships among HPP, PHEP, and EMS offices in state government. There is a mix of changing relationships, perhaps slightly more being combined than growing apart. This is a tendency of state governments under budget constraint, so may or may not indicate logical bureaucratic reorganization. Likewise, there is a mix of relationships that have been stable or are unclear as to change over the past ten years. As many HPP, PHEP, and EMS programs seem organized together, as are those organized apart.
Principal Board or EMS Committee

**Question:**
Which of the following most closely describes your principal EMS board or committee?
- A regulatory board with appointing, budget or rule promulgation authority
- An advisory board with little formal authority
- No formally established board or committee

CHART 4
(n=41; 1 state did not respond)
Discussion

The grant guidance for EMS planning efforts supported by funds attached to the EMS Systems Act of 1973 was largely aimed at sub-state EMS regions. A common requirement of regional program development was to have an advisory committee or council of stakeholders to guide program development. Regional EMS programs were often operated as non-profit corporations with boards guiding the business of the corporation. The mission of regional councils often became a part of state EMS enabling legislation as state EMS programs were developed. So, the mission and authority of regional EMS groups ranged from advisory, to corporate authority, to some authority under the state EMS act.

From this model it was common, as state EMS offices developed, that stakeholder advisory committees would be formed, often from representatives of regional programs and other interest groups. Even as regional EMS programs have disappeared from some states, the state level stakeholder groups have persisted. Only three states (7%) reported having no such entity, while thirty-one (76%) have advisory boards with little authority, and seven (17%) have a regulatory board with appointing, budgetary, or rule promulgation authority. In some of the states that have regulatory boards, the stronger stakeholder oversight evolved in early development from political or bureaucratic differences among stakeholder interests, EMS office staff, or other issues.
EMS OFFICE STAFF

Total Staff (Current)

**Questions:**

*Staffing of the EMS unit (including EMS director and all positions whether filled or vacant):*

- Number of regular full time staff positions in the EMS unit?
- Number of regular part-time staff positions in the EMS unit?
- Number of contractual full or part-time staff positions in the EMS unit?

**CHART 5**

<table>
<thead>
<tr>
<th># of Staff</th>
<th>Full-Time</th>
<th>Part-time</th>
<th>Contract</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>5</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>6-10</td>
<td>10</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>11-15</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>16-20</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>26-30</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>31-35</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>41-45</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>51-55</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Discussion**

All responding state EMS offices employ from one to seventy full-time staff, from one to twenty-six part-time staff, and from one to twenty-three contract staff. The median (less affected by the large outliers) is thirteen full-time, two part-time, and two contract staff members. At the high end of staffing, nine offices (21%) reported twenty-six to seventy...
staff members. In the middle range, eighteen offices (43%) have eleven to twenty staff and, at the low end, fifteen offices (36%) have one to ten staff members.

The emergence of HPP and PHEP functions and staffs, and the various places they are housed (which may or may not include the EMS office) may affect these numbers.

**Staffing Changes**

<table>
<thead>
<tr>
<th>Questions:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over the last 5 years, have the net number of EMS staff positions:</td>
</tr>
<tr>
<td>- Increased?</td>
</tr>
<tr>
<td>- Decreased?</td>
</tr>
<tr>
<td>- Remained the same?</td>
</tr>
</tbody>
</table>

If increased or decreased, by what net number?

**Decrease in Staff**
- Least = 1
- Median = 3
- Most = 11

**Increase in Staff**
- Least = 1
- Median = 4
- Most = 19

*One state did not indicate the net decrease number*
Discussion

Eighteen state EMS offices (43%) decreased staff, while twelve (29%) increased, and twelve (29%) stayed the same. Using the median (to mitigate the effect of large outliers), those that decreased did so by three staff, and those that increased did so by four staff.

The impact of HPP and PHEP function reorganization is unknown, but may have had an impact on the larger increases and decreases.
DEFINITIVE AUTHORITY

Question:

Please indicate whether your state EMS unit has definitive authority in the following areas:

(Functions listed in Table 1 below)

Licensure of EMS personnel was not included in this question because it was documented in the 2015 Personnel Licensing Policies, Practices and Procedures of State EMS Offices (And Variances for Military EMS Personnel) monograph.

“In almost all states, state EMS offices are responsible for the licensure of EMS personnel. Four exceptions exist:

- **Alaska** - The Alaska State Medical Board is the governing body for Paramedic licensure.
- **Delaware** - The Delaware State Fire Prevention Commission certifies EMTs, while operating under the State Medical Director’s medical license. Paramedics are issued their certification by the Division of Public Regulation, Board of Medical Licensure and Discipline.
- **Montana** – The Board of Medical Examiners licenses Paramedics and EMTs.
- **South Dakota** – Paramedics are licensed by the Board of Medical and Osteopathic Examiners .”

**TABLE 1**

All numbers listed below represent those states who responded “yes”, the state ems unit has definitive authority in the identified area.

<table>
<thead>
<tr>
<th>#</th>
<th>%</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td><strong>93%</strong></td>
<td>Ambulance service investigation and discipline</td>
</tr>
<tr>
<td>38</td>
<td><strong>90%</strong></td>
<td>EMS personnel training and certification course standards</td>
</tr>
<tr>
<td>38</td>
<td><strong>90%</strong></td>
<td>Ambulance vehicle staffing requirements</td>
</tr>
<tr>
<td>38</td>
<td><strong>90%</strong></td>
<td>Prehospital data reporting</td>
</tr>
<tr>
<td>#</td>
<td>%</td>
<td>FUNCTION</td>
</tr>
<tr>
<td>----</td>
<td>----</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>37</td>
<td>88%</td>
<td>Ambulance vehicle equipment and medications approval</td>
</tr>
<tr>
<td>36</td>
<td>86%</td>
<td>EMS instructor credentialing or qualifications</td>
</tr>
<tr>
<td>35</td>
<td>83%</td>
<td>Ambulance vehicle inspection</td>
</tr>
<tr>
<td>35</td>
<td>83%</td>
<td>Ambulance vehicle certification or licensing</td>
</tr>
<tr>
<td>34</td>
<td>81%</td>
<td>Ambulance service operational/level of service requirements</td>
</tr>
<tr>
<td>33</td>
<td>79%</td>
<td>Ambulance vehicle operational requirements</td>
</tr>
<tr>
<td>33</td>
<td>79%</td>
<td>EMS medical director qualifications</td>
</tr>
<tr>
<td>33</td>
<td>79%</td>
<td>Trauma system of care – <em>general coordination and specialty center categorization</em></td>
</tr>
<tr>
<td>32</td>
<td>76%</td>
<td>Administration of EMS personnel licensure or certification examinations</td>
</tr>
<tr>
<td>32</td>
<td>76%</td>
<td>Trauma registry reporting</td>
</tr>
<tr>
<td>31</td>
<td>74%</td>
<td>Specialty EMS transport systems credentialing or licensure</td>
</tr>
<tr>
<td>30</td>
<td>71%</td>
<td>Ambulance service establishment requirements</td>
</tr>
<tr>
<td>29</td>
<td>69%</td>
<td>EMS continuing education session approval</td>
</tr>
<tr>
<td>28</td>
<td>67%</td>
<td>Ambulance vehicle design specifications</td>
</tr>
<tr>
<td>28</td>
<td>67%</td>
<td>EMS triage transport protocols</td>
</tr>
<tr>
<td>24</td>
<td>57%</td>
<td>Development or approval of EMS field treatment protocols</td>
</tr>
<tr>
<td>#</td>
<td>%</td>
<td>FUNCTION</td>
</tr>
<tr>
<td>----</td>
<td>----</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>24</td>
<td>57%</td>
<td>EMS field treatment protocol or standing order approval</td>
</tr>
<tr>
<td>20</td>
<td>48%</td>
<td>Stroke system of care – <em>general coordination and specialty center categorization</em></td>
</tr>
<tr>
<td>19</td>
<td>45%</td>
<td>Coordination of local or regional resources during a disaster or terrorist attack</td>
</tr>
<tr>
<td>18</td>
<td>43%</td>
<td>Domestic preparedness &amp; response planning for EMS at local or regional levels</td>
</tr>
<tr>
<td>17</td>
<td>40%</td>
<td>Cardiac system of care – <em>general coordination and specialty center categorization</em></td>
</tr>
<tr>
<td>15</td>
<td>36%</td>
<td>Ambulance service area approval</td>
</tr>
<tr>
<td>14</td>
<td>33%</td>
<td>Mutual aid agreements between EMS provider agencies</td>
</tr>
<tr>
<td>12</td>
<td>29%</td>
<td>EMS dispatcher training or credentialing</td>
</tr>
<tr>
<td>10</td>
<td>24%</td>
<td>Dispatch agency approval</td>
</tr>
<tr>
<td>12</td>
<td>29%</td>
<td>Other systems of care – <em>general coordination and specialty center categorization</em></td>
</tr>
<tr>
<td>9</td>
<td>21%</td>
<td>Public health emergency preparedness</td>
</tr>
<tr>
<td>8</td>
<td>19%</td>
<td>Other legislative mandates**</td>
</tr>
</tbody>
</table>

**Other Legislative Mandates**

- Certify EMS providers; license air ambulance agencies; recognize education programs; distribute grant funds; trauma data reporting; state advisory councils.
- Chartering of fire training institutions (56) & certification of firefighters, fire safety inspectors, & fire instructors (approximately 45,000 certifications); compliance and enforcement for fire, EMS, and medical transportation.
- Disaster teams composed of registered nurses and EMT’s.
• EMS-Children.
• Injury Prevention - poison control, opioid abuse.
• Just added Mobile Integrated Health Care.

Discussion

These results indicate that a number of regulatory functions are common to most state EMS offices, with “Ambulance Service Investigation and Discipline” leading the list. Standards development for the qualifications and operation of ambulance services, vehicles, and personnel also fall in the top of this general list. The development and approval of treatment protocols, and the approval of ambulance equipment and medications also fall in the functions performed by at least half of the responding EMS offices. A variety of expected testing, inspection, licensing, certification, and approval functions are performed by most state EMS offices.

Many of the standards and protocols development processes also fall into the state EMS office’s system leadership role. In addition, more than half of the responding offices indicated that they operate prehospital data systems, trauma registries, and generally coordinate their trauma system of care. Just under half also coordinate cardiac and stroke systems of care, coordinate local or regional resources during a disaster or terrorist attack, and lead domestic preparedness and response planning for EMS at local or regional levels. Twenty-nine percent coordinate other specialty systems of care, and only nine state EMS offices (21%) have authority for public health preparedness.

A few states relegate some licensing, certification, approval, or system coordination processes to a local EMS planning agency (e.g. California) or by another state agency such as the medical licensing board (e.g. Montana and South Dakota).

The EMS for Children program was not included in the survey, as it is not often a subject of legislated or definitive authority, but is commonly a function of state EMS offices. Comments noted that some state EMS offices are picking up functional authority for some injury prevention activities (e.g. poison control, opioid abuse) and for mobile integrated healthcare.
### Emerging Trends

#### Question:
What emerging trends do you see developing that may have an impact on state EMS offices in 5 to 10 years?

#### Comments

- (1) Shrinking funds; (2) Less focus on preparedness due to shrinking funding in that arena (3) Increased regionalization of services.
- (1) Consolidation of stroke, STEMI, trauma, and sepsis to Time Critical Emergencies (system of care approach); (2) Questioning necessity of / evidentiary support of hours-based continuing education (CE) vs. competency based CE; (3) Regulation of emergency medical dispatching and qualified dispatch centers; (4) Regionalization of resources and creating tiered systems of care.
- An increase in technology vs people-based production; electronic document retention vs hard-copy retention.
- Budget, and staffing reductions.
- Community based medicine. education standards changing rapidly. Concerned about dumbing down of EMS profession to meet short term financial goals with no clinical impact understanding.
- Community Paramedicine.
- Community paramedicine, emergency medical dispatching, EMS 3.0.
- Constant legislative threats, funding, integrated healthcare/expanded role of EMS providers, increased training/certification requirements, declining eligibility of new recruits (drug usage, convictions, work ethic), increasing training/certification costs from national organizations, drug shortages, increasing/ever-changing EMS data collection (NEMSIS).
- Cost effectiveness. Reimbursement for service.
- Data, data, data. It’s too expensive to collect and who has time to analyze it anyway??
- EMS offices are phased out and integrated into Fire agencies.
- EMS Performance based reimbursement. Financial survival.
• Ever diminishing EMS work force! Increased educational/training demands. Stagnant CMS and state reimbursement for EMS.

• Funding and personnel.

• Funding Cuts, The increasing merge of Fire Departments into EMS care, loss of EMS providers.

• Funding is a threat to the stability of State offices as they try to move nationwide issues to the forefront. EMS reimbursement and integration of mobile integrated health programs into the fee structure. Violence in the workplace. Our state has had legislation introduced to allow EMS to carry Tasers!

• Funding national and locally.

• Healthcare changing so quickly that state laws, rules and policies have a hard time keeping up.

• Healthcare is changing and EMS needs to change with it. How do we help EMS leaders and offices be leaders in these changes? EMS offices need to show value in order to exist and they need to help local EMS systems show value so that they can continue to exist.

• Increased EMS growth and lack of coordination may evolve EMS into transportation only and not treatment and transportation. Clinical care will continue to be important for best outcomes.

• Increased mission breadth and depth, shrinking budgets and staff.

• Integrated health care.

• Less funding, travel restrictions, changing roles in state EMS offices.

• MIH/CP; reimbursement for patient care versus transports; competition for limited funds; influence of fire services on EMS as fire services attempts to justify their continued existence at their current levels of funding and service; use and integration of new technologies/communications and field interventions; growing and aging population; recruitment of personnel in the EMS industry - in addition, salaries are lower than counterpart positions.

• Necessity of EMS to evolve into integrated partner in health system. Success of EMS data system and performance measures. Diminishing reimbursement for EMS. More aggressive competition between public and private EMS providers. Efforts for control of local and state systems by public providers.
• Obviously, there are changes in federal and state offices to reduce governmental regulations. I was asked to show the value/ROI of the “state EMS office”. It is very difficult to show the value/ROI of regulation. I see this becoming more and more questioned as we move into the next 5 to 10 years.

• Reduced income, reduce staff, emerging disease, community paramedicine (working with nursing associations). Inability for services to stay above water financially (two services failed in the last two years in our state). Survivability of rural EMS.

• Rural areas face one of the most troubling trends. Lack of system building. We still build in silos.

• Specifically, a shift from a fee-for-service, treat and transport model to a population-based system that is integrated with other healthcare organizations.

• Systems of care, CMS reimbursement.

• Technology and communication reimbursement, PHAB accreditation for state health departments.

• Telemedicine will be a big one. Reimbursement for Community Paramedics, Payments for EMS in general.

• The changing healthcare system. Traditional EMS will become a component of a larger medical services organization that also includes Mobile Integrated Healthcare, Community Paramedicine, etc.

• The continued bleed-over from other allied health - ultrasound skills, home healthcare, etc. - will no doubt effect the state offices and our function in the future. I think the length of EMS training, particularly at the EMT and AEMT level, is going to go from a simmering concern to a potential problem as well.

• Unfunded mandate on states to collect and report EMS patient care reports to NEMSIS; decline of EMS volunteerism; excessive rates of ePCR maintenance costs.

• Value based reimbursement and community paramedicine.
Discussion

The “Word Cloud” shown in Figure 4 displays the most important words and phrases used in the question about emerging trends in EMS. The Word Cloud highlights distinguishing words rather than common words (i.e., word frequency is not the primary factor). The size of the words indicates frequency of mention (the larger the more frequently cited).

While not a perfect representation of the concepts involved, Figure 4 clearly indicates the following trends as perceived by state EMS officials:

- **Funding/Reimbursement for EMS** – Both decreased funding for state and other EMS system coordination and regulation operations, and for operation of EMS in general. Inadequate and poorly conceived reimbursement for EMS services. The need for EMS to be funded by other than a supplier of transport services basis. The need for EMS to provide and be funded as a provider of emergency and other care services. The requirement that EMS service leaders prepare for value-based rather than volume-based incentives for service funding.

- **Integrated/Care/Services/Community Paramedicine** – Ninety-two percent of state EMS offices have reported in other recent NASEMSO surveys that there is community paramedicine (CP) activity in their states. This may be only preliminary discussions or it may be one of the 200 operational CP-type programs believed to be operating actively. Whether CP or a mobile integrated
healthcare (MIH) approach, state EMS offices are seeing this type of integration with the healthcare system occurring more frequently. It blends with the funding concepts mentioned above and underscores the need for EMS to broaden its scope of service into primary and tertiary prevention and care in addition to its current secondary prevention/care role.

• **EMS Offices** – State EMS offices will be called upon to provide system leadership and enablement of the trends cited here. This will include legislative and regulatory enablement and encouragement while protecting the public, sources of information and tools for services wishing to provide CP, MIH, and other related services, and coordination with funding sources such as Medicaid, third party insurers, and health systems. EMS offices are increasingly required to show return on investment and value for state dollars spent.

• **Technology** – The advent of FirstNet and the technologies it enables, such as EMS telemedicine, will assuredly change the practice of EMS. It will enable both technology to replace training and experience for some types of diagnostics and care, and the CP services discussed above. Data systems must go beyond the electronic patient care report (ePCR) focus of today and into information sharing and data communications for real-time operations. Coordination of ePCR systems, health information exchanges, and hospital and other medical information systems must occur. Statewide EMS e PCR systems must not just prioritize effective data collection, but will need to provide meaningful data for both real-time operations and performance improvement, as well as other critical system support services.

• **Education** – The adequacy of the current education system is strained. There is pressure to add to education programs for licensure. This increases cost and complexity. Some of the new trends cited here have education impact (e.g. training for CP).

• **Rural** – Rural EMS faces service closures and added pressure from hospital closures or service reduction and movement of specialty services to cities. Reliance on volunteers is commonly thought to be decreasingly viable. System development is greatly needed to address these issues and to explore new approaches to service delivery. Integrating CP, MIH, and regionalized response and system support solutions are thought to have promise.
CONCLUSION

The status of state EMS office organization, staffing, and functions do not seem dramatically changed for staff whose roles as NASEMSO members takes them back ten or more years. Even the post-Katrina ramp up of HPP and PHEP does not appear to have changed the status of most EMS offices in a consistent fashion, though some have been clearly affected by it.

The striking issue that this survey reveals is that state EMS offices are very much involved in functions of the EMS system of the past, and have work to do to prepare to be a leader in enabling their systems and providers to meet the challenges of the EMS system and healthcare trends that state EMS officials perceive to be occurring.

The results of this survey, similar previous surveys, and a facilitated discussion at the NASEMSO Board retreat in December 2016, will be used in the near future to describe changes that need to occur to help state EMS offices become effective leaders and regulators as the trends identified play out. This will then become a tool to prepare NASEMSO to revise its services to state EMS officials to help them in this effort.
APPENDIX A – SURVEY QUESTIONS

1. Which of the following most closely describes the organizational position of the EMS unit within your state government hierarchy?
   - EMS is an organizationally independent unit reporting directly to the Governor.
   - EMS is an organizationally independent unit reporting indirectly to the Governor through a board or commission.
   - EMS is incorporated in a cabinet-level department of government and reports directly to that department head.
   - EMS is incorporated in a cabinet-level department of government and reports to a direct subordinate of the department head.
   - EMS is incorporated in a division of a governmental department and reports directly to the head of that division.
   - EMS is incorporated in a division of a governmental department and reports to a direct subordinate of the head of that division.
   - EMS is incorporated in a lower section of a governmental division and reports directly to the head of that section.

2. In your state, which of the following most closely describes the state agency within which EMS is organized?
   - Health and Human Services
   - Public Safety
   - None (EMS is separately organized; not within another department or agency)

3. Compared to ten years ago, how has the organizational placement of the Hospital Preparedness Program (HPP) or Public Health Emergency Preparedness (PHEP) program in your state changed? ________________

4. Which of the following most closely describes your principal EMS board or committee?
   - A regulatory board with appointing, budget or rule promulgation authority
   - An advisory board with little formal authority
   - No formally established board or committee

5. Staffing of the EMS unit (including EMS director and all positions whether filled or vacant):
   - Number of regular full time staff positions in the EMS unit?
   - Number of regular part-time positions in the EMS unit?
   - Number of contractual full or part-time positions in the EMS unit?

6. Over the last 5 years, have the net number of EMS staff positions:
   - Increased
   - Decreased
7. If staff numbers increased or decreased, by what net number? __________

8. Please indicate whether your state EMS unit has definitive authority in the following areas:
   - EMS personnel training and certification course standards
   - EMS instructor credentialing or qualifications
   - EMS continuing education session approval
   - Administration of EMS personnel licensure or certification examinations
   - Development or approval of EMS field treatment protocols
   - Ambulance vehicle design specifications
   - Ambulance vehicle staffing requirements
   - Ambulance vehicle equipment and medications approval
   - Ambulance vehicle operational requirements
   - Ambulance vehicle inspection
   - Ambulance vehicle certification or licensing
   - Ambulance service area approval
   - Ambulance service establishment requirements
   - Ambulance service operational/level of service requirements
   - Specialty EMS transport systems credentialing or licensure
   - Ambulance service investigation and discipline
   - EMS medical director qualifications
   - EMS field treatment protocol or standing order approval
   - EMS triage transport protocols
   - Mutual aid agreements between EMS provider agencies
   - Dispatch agency approval
   - EMS dispatcher training or credentialing
   - Prehospital data reporting
   - Trauma system of care – general coordination and specialty center categorization
   - Cardiac system of care - general coordination and specialty center categorization
   - Stroke system of care - general coordination and specialty center categorization
   - Other systems of care - general coordination and specialty center categorization
   - Trauma registry reporting
   - Domestic preparedness and response planning for EMS at local or regional levels
   - Public health emergency preparedness
   - Coordination of local or regional resources during a disaster or terrorist attack

9. What other emerging trends do you see developing that may have an impact on state EMS offices in 5 to 10 years? ________________________________
APPENDIX B - ACRONYMS

ASPR – Assistant Secretary of Preparedness and Response
DHS – Department of Homeland Security
CE - Continuing Educations
CMS – Centers for Medicare & Medicaid Services
CP – Community Paramedicine
DPH – Department of Public Health
ePCR – Electronic Patient Care Record
HPP – Hospital Preparedness Program
NEMSIS - National Emergency Medical Systems Information System
MIH – Mobile Integrated Healthcare
OEMS – Office of Emergency Medical Services
PHAB – Public Health Accreditation Board
PHEP – Public Health Emergency Preparedness
ROI – Return on Investment