Final Report

Regional Emergency Medical Sevices Council Study

Presented to the
Commonwealth of Virginia
Department of Health, Office of Emergency Medical Services

August 2007

Prepared by
ASMI, Inc.

Kevin K. McGinnis, MPS, EMT-P
Richard Narad, DPA, JD
Leslee Stein-Spencer, RN

Final Report:
Regional Emergency Medical Services Council Study

Presented to the
Commonwealth of Virginia
Department of Health
Office of Emergency Medical Services

August, 2007

Prepared by
ASMI, Inc.

Kevin K. McGinnis, MPS, EMT-P
Richard Narad, DPA, JD
Leslee Stein-Spencer, RN

Table of Contents

I. Executive Summary

ASMI, Inc. was engaged by Virginia EMS to review the regional EMS structure in the Commonwealth and to make recommendations for improving the effectiveness of that structure.

In order to accomplish this, ASMI conducted a statewide survey with response from 789 EMS leaders, providers and others; conducted 244 interviews with system participants and stakeholders; attended a State Governor's EMS Advisory Board and related meetings, attended a town hall style regional meeting; visited all State and regional EMS program main offices; conducted an extensive internal and external literature and business document review; and attempted to perform detailed cost benefit analyses.

This report endeavors to describe these activities and their results which ultimately led to eight general recommendations, some of which have detailed sub-recommendations. There are some 29 recommendations in all. Because the path leading to any one recommendation may originate in one area of investigation, the interview process for instance, and be impacted by others, that path and paths leading to other recommendations become complex, intermingled, and difficult to report cleanly. In this report, some of the recommendations begin with hints of a forming path in the discussion sections of the various investigation processes. The actual recommendations begin to appear in the results of reviewing external literature (p.60) and those remaining are summarized in a following section called "Key Findings" (p.63).

The following are some of the overarching recommendations and their paths. Single recommendations are numbered "X.0", while multi-part recommendations begin with "Y.1"and continue.

The changing needs of EMS agencies as they go from purely volunteer to other forms of agency, the disparate needs of rural and urban services, and the recommendations of consensus-based literature on the changing role of regionalization all suggest **Recommendation 1.0**, which calls for implementation uniform needs assessment processes in the regions. These same external, consensus-based literature sources, in particular the *EMS Agenda for the Future* and its derivatives and the recent Institutes of Medicine (IOM) EMS study lead to **Recommendations 2.1 to 2.3** to develop and implement a mandatory patient/call report system and performance measures system, and to organize regions on a larger basis, more consistent with IOM regionalization concepts. Interviews and surveys also underscored weaknesses in data collection and performance improvement areas across the Commonwealth.

The recommendation from the IOM study to organize regions on a larger basis, combined with observations about the vulnerability of regions with very small staffs to disruption when the director leaves, when other staff problems become apparent, and/or when staff/council issues emerge led to **Recommendations 7.1 through 7.7** and a complex of sub-recommendations on the organization of the regional councils. Overall, a reduction

of the number of councils from eleven to eight is recommended, under the guidance of a process action team (PAT) of OEMS leaders and those identified as leading regional directors during the interview process and as confirmed by internal document review and survey results. The resulting regions would be larger, have deeper staff resources, effect some economies of scale, be able to offer varying services to urban and rural providers, and begin to implement system performance improvement on a scale and with boundaries better resembling specialty care regions. The regions which would be combined under the primacy of other regions are either currently troubled (in one case) or have small staffs and are thought to be vulnerable to trouble as also underscored by survey and interview results indicating constituent satisfaction or awareness issues. The interview process and comments solicited during the survey process also indicated some need for subregional offices in at least two regions and boundary fine-tuning, and these are also recommended.

Difficulty in adequately gathering internal documents with which to perform "apples-to-apples" cost benefit analyses led to **Recommendation 3.0**. This calls for the development of uniform financial reporting practices and the provision of information on expenses not now reported such as salaries by job type and description.

Interviews and the review of internal documents indicating the ability of regions to leverage state funds to generate local and other money for the benefit of EMS system development were persuasive in generating **Recommendation 4.1**. This recommends that the regional EMS council structure have as its foundation the type of independent, non-profit organizations serving it today. From a cost/benefit point of view, a state-based system of regional offices could not compete in this regard, nor would it contend as successfully to employ some of the talent found in the regional system at the salary levels that it is able to offer currently.

On the other hand, survey results indicate that regions have a problem in carrying out their Virginia Code specified and other responsibilities. Constituent satisfaction with overall regional performance hovers in the 50 to 60% range on the whole. When questioned about specific services, a troubling number answered with "don't know" or have "no opinion". These responses frequently outnumbered those who answered that they were satisfied with those services. Interviews gave a clear impression that constituents are confused by the role of the regions versus OEMS and where the boundaries lie between regulatory and technical assistance roles. Further, internal document review and interviews established a pattern of fragmented delivery, quality, and reporting on services delivered. These paths lead to **Recommendations 4.2 and 4.3**. The first urges OEMS to establish and "brand" its regulatory and technical assistance/system leadership services and staff as distinct entities and to include regions and their staffs under the latter with no regulatory responsibility. The second recommends placing at least one OEMS staff member, on the technical assistance side, in each regional office to represent OEMS, and to make sure that Code mandated services are made available, well communicated to constituents, and reported on uniformly.

Interviews and internal document review indicated a desire for greater uniformity in prehospital treatment protocols, performance review, and medical direction in general. While the need for regional variation in practice is recognized, the current system produces exactly the kind of fragmentation of patient care against which the IOM recommendations caution. These lead to **Recommendation 5.0** which calls for stronger state and regional medical director presence, and a clearly defined chain of authority, responsibility, and relief from liability linking these leaders together and to local medical directors. It also calls for a well-defined process for adopting protocols on a regional and state basis which encourages local OMD and provider participation and supports a degree of local variation.

Discussion at a State Advisory Board meeting led to inclusion of a question about the location of OEMS in the Executive Branch in the interview process. The concept of moving OEMS from the Department of Health to the Secretariat of Public Safety is supported by many well-informed EMS leaders. Also well-informed colleagues offer cautionary words about possible unintended consequences of such a move like making the OEMS director vulnerable to replacement as an appointee, potential loss of "position count", and pressure to conform to Public Safety regional boundaries. **Recommendation 6.0** is to give this move serious consideration while evaluating potential unintended consequences.

The interview process and internal document review (including the JLARC report), as well as dialogue at meetings indicates dissatisfaction with some $4 for Life funds being used for the State Police helicopter program and other purposes. There are sufficient non-governmental providers of helicopter EMS in the state to create significant controversy over territory, dispatch practices, transfer destination practices and other issues. The need to address these is obvious, but beyond the scope of this study. What is indicated is that the need to subsidize a State agency to do what non-governmental services are prepared to do is not necessary. **Recommendation 8.0** calls for delivering the million dollars saved by not funding the State Police helicopter program to support the costs of the additional regional OEMS staff and other costs created by the recommendations of this report. It also suggests evaluating the $4 for Life allocations for additional support of these recommendations.

II. Introduction

A. Regional and State EMS Programs Across the Nation: Why We Are Where We Are

Through the mid-1960's, before the birth of modern emergency medical services (EMS) as we know them today, there was no general system of EMS care on any level: local, regional, or state. Certainly, ambulance transport had existed for hundreds of years as a "horizontal taxicab" service. Some efforts began through the American Red Cross, civil defense agencies, and other spotty attempts by governmental entities and private parties

to better equip and train ambulance attendants. Physicians had even begun to experiment with more sophisticated field care in some locales.

But, the 1966 publication of the publication *Accidental Death and Disability: The Neglected Disease of Modern Society* by the National Academy of Sciences, National Research Council concluded that this nationwide non-system of patient emergency treatment was perhaps doing patients as much harm as good. It recommended massive changes to then-current emergency medical intervention practices. In 1966, the federal Highway Safety Act followed, establishing funding and an agency, the National Highway Traffic Safety Administration (NHTSA) with an EMS arm. It began to focus on developing EMS training curricula and other tools which remain important resources today. It also emphasized, for the first time, the creation of EMS regions.

Arguably, modern EMS was conceived with the 1966 *Accidental Death and Disability…* and birthed by the 1973 Federal EMS Systems Act which pumped not only money into EMS development but specified the 15-component architecture by which EMS was to grow as a system. As Dr. David Boyd, one of its key authors, was fond of saying it envisioned "wall to wall EMS regions" across the nation, each having the same uniform, system-based configuration. The basic building blocks of this plan were regions often configured on the boundaries of federal health-planning regions within states. These regions were generally organized as 501 (C) (3) non-profits headed by regional EMS councils or boards with an executive director as well as training, planning and other staff. In some states they were organized in local government.

The EMS Systems Act created a federal EMS agency within the US Department of Health, Education and Welfare (later US Department of Health and Human Services). One quirk of the program created by the Act was the lack of focus on state level organization of an EMS system for leadership and coordination among a state's newly founded EMS regions and for regulation of EMS providers. In 1980, a report of the progress made by the federal EMS program following the EMS Act, and in the shadow of the looming shutdown of the EMS program, was done for the federal government by System Sciences, Inc. It documented the direct federal EMS agency to regional EMS organization orientation of the federal program, and stated the need for the establishment of stronger state level leadership, coordination and regulation.

In 1981, the federal EMS program and its categorical EMS funding ended. Funding to states and, now through states to regions, for EMS was continued at a reduced level in a Preventive Health and Health Services block grant program. While this shifted the balance of use of federal funds more in favor of states (or at least made access to them a state, not regional prerogative with the state balancing its own funding needs with political pressure to distribute funds to regions), it also subjected the once largely EMS-purposed funds to competition from public health programs like rat control.

A world of sharply reduced EMS system funding, now shared between regional and state EMS entities, with state EMS agencies proliferating and taking on greater responsibilities, continued to strain state-regional relationships. The rapidly increasing

sophistication of EMS care and the need for concomitantly more sophisticated sub-system component development (e.g. human resources and training, specialized facilities, medical direction, quality assurance, communications systems) usually fell to regional programs to address, particularly in areas largely served by volunteer EMS provider agencies.

Models of regional EMS system coordination and support began to vary from state to state. In some states, regional structures disappeared where there was a weak state EMS structure or otherwise no ability, or perhaps will, to pass federal money to them and they were not able to be sustained locally based on the strength or value of their services to EMS system participants. As stronger EMS offices developed in these states, some would develop regional EMS offices staffed by state personnel to perform regulatory and technical assistance functions while other states would handle these activities centrally. At least one state had and still has regional state office staffs and has created regional advisory boards for local input. In yet other states, state EMS or health structures passed federal block grant, new state general fund, and other monies to its EMS regions to encourage regions to address these issues, recognizing their diversity of needs and ability of representative EMS councils to best address them. Some of these states also chose to establish regional offices with state staffs to carry out regulatory and technical assistance and to interact with the independent councils.

State EMS office models have also varied over time, with some having responsibilities narrowly defined and limited to regulatory/licensing functions, and some sharing these functions with other state agencies such as boards of medicine, professional regulation, and education. Other state EMS offices have the broad responsibility, beyond regulation, to lead, plan and coordinate the statewide EMS system. And between these ends of the spectrum lie yet other variants. Some state EMS offices are independent agencies; some are within departments of public safety or emergency management, while most are within a health-related department. Some have state advisory boards, while others have state-level authority boards. The National Association of State EMS Directors (now Officials) began its life in the early 1980's and has become a primary leadership organization in EMS in the country, helping its members to become stronger as well.

In the leadership vacuum left by the elimination of the federal EMS program, a number of efforts came and went in attempt to fill that vacuum in part or in whole. In 1984, the establishment of the ASTM Committee F30 on EMS (ASTM is a standards development organization for a diverse set of industries) was intended to begin creating standards across the spectrum of EMS. While becoming a damaged process in the eyes of many in the EMS community in its early years, it has produced a number of highly regarded standards and has continued its activities into the present.

Two of these standards addressed local, regional, and state structures of leadership and oversight for EMS. These were:

- F 1086 Standard Guide for Structures and Responsibilities of Emergency Medical Services Systems Organizations, and

- F1339 Standard Guide for Organization and Operation of Emergency Medical Services Systems

Work on these standards began in the late 1980's however, because of the contentious nature of relationships between regional and state entities, they were not approved until the early 1990's. They are subsequently reapproved every five years.

F1086 offers the following general role and responsibility descriptions for state and regional EMS organizations:

> ***3.1 State EMS System***—*A state EMS system includes all of the components of all EMS systems within the state, however, particular emphasis is placed upon the following:*
>
> *3.1.1 Legislation establishing authority and responsibility for EMS systems.*
>
> *3.1.2 Development and enforcement of minimum regulations and standards.*
>
> *3.1.3 Development and dissemination of a statewide plan and goals for EMS systems.*
>
> *3.1.4 Provision of technical assistance.*
>
> *3.1.5 Funds for the development, maintenance, and enhancement of EMS systems.*
>
> *3.1.6 Supportive components, including training, communications systems, record keeping and evaluation, public education, and acute care center designation.*
>
> *3.1.7 Overall coordination of EMS programs within the state and in concert with other states or federal authorities as needed.*
>
> ***3.2 Regional EMS System***—*A recommended method of structuring substate EMS systems to provide for EMS planning, development, and coordination is to delineate specific geographic areas within which one organization is designated as responsible for the arrangement of personnel, facilities, and equipment for the effective, coordinated, and expeditious delivery of health care services in a region (3.2.1) under emergency conditions occurring as a result of the patient's condition or because of accidents, natural disasters, or similar situations.*

3.2.1 Region—To implement a regional EMS system, the state lead agency will identify the geographic or demographic area that is a natural catchment area for EMS provision for most, if not all, patients in the designated area. Since this cannot be a perfect definition from an EMS delivery point of view, administrative and coordinating efficiency considerations will have to be made in establishing boundaries. The state lead agency should determine and define the substate structure for planning, coordination, and provision of emergency medical services. When a regional EMS system lies near a state border such that appropriate and efficient care of patients will require cooperation of prehospital systems in another state and medical centers in another state, the state lead agency will develop a plan with the adjoining state lead agency. This plan must provide for the triage and transfer of patients across the state border under supervision of the REMSO.

3.2.2 Regional EMS Organization (REMSO)—A REMSO is a staffed organization responsible and accountable to the state EMS lead agency for coordinating the system across a region including system operations, and organization and coordination of resources. A REMSO should have a medical director and other technical expertise in order to provide the necessary assistance to its EMS system. A REMSO should work on a regional or subregional basis in liaison with professional societies, public safety, other governmental agencies, local EMS systems, and legislative bodies to establish standards and program policies for continued system improvement.

3.2.2.1 The REMSO should be a substate unit of government or a private entity that may be single or multijurisdictional. The REMSO should have the capacity and authority to receive and disburse public and private funds and must be designated by the state EMS lead agency.

F1339 elaborated on the manner in which operations are carried out at the local, regional, and state levels, and delves into the detail of the elements summarized in Table 1 taken from that standard:

TABLE 1

	State	Regional[A]	Local
Standard Setting	Legislation Regulations Guidelines/policies/procedures State protocols	Regional policies Regional protocols Assistance re: personnel	Employment standards Operating policies
System Coordination	Statewide coord. and planning Licensure/certification Facility licensure Service approval/licensure Training approval MIS/QA Inter-regional coord. Inter-state coord. Statewide SMI planning Design of sub-state structure	System planning Implementation Inter-organizational coordination Regional SMI Medical audit/QA Operational coordination System evaluation Personnel authorization accreditation	Daily operations
Service Delivery	Training Technical assistance Communications guidelines Funding PI&E	Training coordination Group purchasing Technical assistance PI&E	First response Ambulance (BLS, ALS; ground, helicopter, fixed wing) Hospital services PI&E

[A]If there are no regional organizations, within the state, the State EMS will need to accomplish, either directly or through delegation, regional tasks.

While the US DHHS EMS program disappeared in 1982, the NHTSA EMS division has remained a constant source of federal leadership. Though generally constrained within the scope of its highway-related mission, it has stretched that mission to fill the void by providing many programs and services for the benefit of EMS development in general. One of these is the State Technical Assistance Team program begun in 1988. It has been utilized, or copied, by virtually all states and territories to assess the status of the statewide EMS system. It generally reinforces the broader definition of the state EMS office's role in statewide leadership, planning, coordination, and regulation described by the ASTM documents above, with its own ten component standards for state roles and responsibilities. One of these standards, on "Regulation and Policy", describes state and regional roles and responsibilities:

To provide a quality, effective system of emergency medical care, each (statewide) *EMS system must have in place comprehensive enabling legislation with provision for a lead EMS agency. This agency has the authority to plan and implement an effective EMS system, and to promulgate appropriate rules and regulations for each recognized component of the EMS system (authority for statewide coordination; standardized treatment, transport, communication and evaluation, including licensure of out-of-hospital services and establishment of medical control; designation of specialty care centers; PIER programs). There is a consistent, established funding source to adequately support the activities of the lead agency and other essential resources which are necessary to carry out the legislative mandate. The lead agency operates under a single, clear management structure for planning and policy setting, but strives to achieve consensus among EMS constituency groups in formulating public policy, procedures and protocols. The role of any local/regional EMS agencies or councils who are charged with implementing EMS policies is clearly established, as well as their relationship to the lead agency. Supportive management elements for planning and developing effective statewide EMS systems include the presence of a formal EMS Medical Director, a Medical Advisory Committee for review of EMS medical care issues, and an EMS Advisory Committee (or Board). The EMS Advisory Committee has a clear mission,*

specified authority and representative membership from all disciplines involved in the implementation of EMS systems.

Since the second ASTM standards document was published in 1994, and with the exception of the routine review of those standards by ASTM, the major consensus-based documents on EMS system management and organization have focused not on the structure and "ownership" of regional EMS entities (i.e. the independent staffed council model versus the state EMS regional office model) but on functions that benefit from being regionalized at a multijurisdictional, sub-state basis (as well as on local and state EMS system functions). In these three documents, The *EMS Agenda for the Future, The Rural and Frontier EMS Agenda for the Future,* and the Institute of Medicine's (IOM) *Emergency Medical Services at the Crossroads,* "regionalization" does not mean the regional EMS structure remaining from the 1970's, nor does it preclude such regions from being vehicles for the regionalization they recommend. The IOM cautions, however, that realizing the potential of EMS systems will require overcoming entrenched interests. As at all levels of the EMS structure within a state there are traditional regional programs that are vehicles of creative, responsive change and there are others that are not.

The *EMS Agenda for the Future,* published by NHTSA in 1996, talks about integrating EMS systems with other health care disciplines many of which, like managed care, are operated on a regional basis. It also urges EMS systems to establish regional collaborative networks with all potential transportation resources. Like these messages, the themes throughout its system-component based sections address local EMS systems which must join neighboring systems to aggregate to a critical mass to more effectively be supported and deliver services on a regional basis. It does not assume that an existing regional structure born of the 1970's is geographically or functionally appropriate (or inappropriate) to effect these changes.

The *Rural and Frontier EMS Agenda for the Future* was published by the National Rural Health Association in 2004. It is instructive in setting the stage for the Virginia study for three reasons.

First, like the 1996 *EMS Agenda for the Future,* it recommends that local EMS systems join together in regional cooperatives or networks (its version of "regionalization") to effect services they cannot afford independently such as medical direction (both on- and off-line), patient billing, data collection, and performance improvement.

Second, it recognizes the "traditional" federal EMS Act EMS region as having a successful track record in the provision of education and training resources in rural areas dependent upon volunteers. It must be recognized, though, that in regional programs serving rural and urban areas there develops a disparity of need as urban services become all career-staffed and self-sufficient in meeting training, local indirect medical direction, and performance improvement.

Third, it characterizes the dilemma of EMS planning and coordination infrastructure development in states like the Commonwealth. There is increasing tension between the

groups in rural communities representing those who have provided volunteer EMS under mounting adversity for years and those who want the fastest, highest-level care possible for their family and perceive that it is not available. Enough of the latter, added to those who are unaware of their local EMS capabilities but have formed expectations based on media exposure, creates a critical mass of a majority in the community expecting a level of service unavailable locally. In a 1995 Virginia poll, 55% of respondents expected paramedic-level response. In 1993 poll in Maine, a similarly rural state, 87% of those asked said that they expected this. The *Rural and Frontier EMS Agenda…* characterizes this 1970's-to-present evolution as follows:

As standards for training, equipment and care changed, so too did the providers of rural/frontier EMS. Dedicated ambulance vehicles staffed by trained EMTs operated by independent volunteer organizations, volunteer fire departments, local hospitals, and others replaced hearses as many of the previous operators balked at the required investment to meet emerging standards.

In the past three decades, the EMS field, with its capabilities and role as a unique discipline at the crossroads of medicine, public health and public safety, has matured dramatically. At a rural car crash, the gold standard medical response has gone from hearse to helicopter. The pressure to provide advanced life support (ALS), created at first by enthusiastic EMTs within EMS agencies themselves, has become compounded by media-generated public expectation. The drive to provide ALS has had an effect similar to that experienced by funeral home ambulance operators pressed to provide safe, basic care in the early 1970's.

EMS agencies dependent on volunteers for staffing and fund-raising for revenue, have found advancement difficult. Indeed, it is often a challenge to continue to assure the timely response of a basic life support ambulance in these settings. In the current era of preparing public safety for effective response to manage terrorist and other events, the reality of rural/frontier EMS is that the infrastructure upon which to build such a response is itself in jeopardy.

The 1996 NHTSA "EMS Agenda for the Future",[41] the visionary guide upon which this document is based, states that "EMS of the future will be community-based health management which is fully integrated with the overall health care system". A theme running through the Rural/Frontier EMS Agenda for the Future is that such EMS integration is not only a reasonable approach to making community health care more seamless and to meeting community health care needs that might not otherwise be met, but that providing a variety of EMS-based community health services may be crucial to the survival and advancement of many rural/frontier EMS agencies.

Another related theme is that EMS should not only weave itself into the local health care system but into the fabric of the community itself. Communities can objectively assess and publicly discuss the level and type of EMS care available, consider other options and accompanying costs, and then select a model to subsidize. Where this happens through a well-orchestrated and timely process of informed self-determination, community EMS

can be preserved and advanced levels of care can be attained. This document suggests other means of maintaining an effective EMS presence as well such as alternative methods of delivering advanced life support back-up, and the formation of regional cooperatives for medical oversight, quality improvement, data collection and processing…

The rural/frontier emergency medical services system of the future will assure a rapid response with basic and advanced levels of care as appropriate to each emergency; and will serve as a formal community resource for prevention, evaluation, care, triage, referral, and advice. Its foundation will be a dynamic mix of volunteer and paid professionals at all levels, as appropriate for and determined by its community. Fulfilling this vision will require the application of significant federal, state, and local resources as well as committed leadership at all levels to address such issues as:

- *Staff recruitment and retention;*
- *The role of the volunteer;*
- *Adequate reimbursement and subsidization;*
- *Effective quality improvement;*
- *Appropriate methods of care and transportation in remote, low-volume settings;*
- *Assurance of on-line and off-line medical oversight;*
- *Adequacy of data collection to support evaluation and research;*
- *Adequacy of communications and other infrastructure; and*
- *Ability to provide timely public access and deployment of resources to overcome distance and time barriers.*

The 2006 IOM publication *Emergency Medical Services at the Crossroads* offers the following challenge, echoing those recommendations of the previous two documents described but with a greater sense of urgency.

THE VISION OF A 21ST CENTURY EMERGENCY CARE SYSTEM
While today's emergency care system offers significantly more medical capability than was available in years past, it continues to suffer from severe fragmentation, an absence of systemwide coordination and planning, and a lack of accountability. To overcome these challenges and chart a new direction for emergency care, the committee envisions a system in which all communities will be served by well planned and highly coordinated emergency care services that are accountable for their performance.

In this new system, dispatchers, EMS personnel, medical providers, public safety officers, and public health officials will be fully interconnected and united in an effort to ensure that each patient receives the most appropriate care, at the optimal location, with the minimum delay. From the patient's point of view, delivery of services for every type of emergency will be seamless. The delivery of all services will be evidence-based, and innovations will be rapidly adopted and adapted to each community's needs. Ambulance diversions --instances where crowded hospitals essentially close their doors to new

ambulance patients -- will never occur, except in the most extreme situations. Standby capacity appropriate to each community based on its disaster risks will be embedded in the system. The performance of the system will be transparent, and the public will be actively engaged in its operation through prevention, bystander training, and monitoring of system performance.

While these objectives involve substantial, systemwide change, they are achievable. Early progress toward the goal of more integrated, coordinated, regionalized emergency care systems has become derailed over the last 25 years. Efforts have stalled because of deeply entrenched political interests and cultural attitudes, as well as funding cutbacks and practical impediments to change. These obstacles remain today, and they represent the primary challenges to achieving the committee's vision. However, the problems are becoming more apparent, and this provides a catalyst for change. The committee calls for concerted, cooperative efforts at multiple levels of government and the private sector to finally break through and achieve the goals outlined above.

The IOM study also has reports on hospital ED care and EMS for children. *EMS at the Crossroads* mentions regionalization in two ways that impact this study report. First and foremost, it emphasizes the need for the designation and publication of regional specialty emergency intervention centers such as trauma, cardiac, and stroke intervention centers. These must be supported by sub-systems to identify, stabilize and transfer to those centers patients who will most benefit from bypassing other facilities. Secondly, the report identifies regional arrangements among ground and air ambulance providers as a regionalization of services approach to reducing rural response times and improving rural access to advanced life support (ALS) care. Again, regionalization does not equate regional EMS programs, nor does it preclude regional EMS programs from becoming vehicles or hindrances to regionalization.

It is clear that the evolution of state and regional EMS programs through the mid-1990s was not a formula for happy interdependence. The funding driver's seat changed hands from regions to states. Funding became increasingly scarce and state general fund-dependent. States EMS offices tried to define their role in a partial federal vacuum with a need to fulfill sometimes conflicting leadership, advocacy and regulatory responsibilities.

It is also clear that the regionalization mission called for by the most recent consensus-based EMS system planning documents is not an endorsement for regional programs, but a challenge for both regional and state EMS organizations.

A 2007 poll of state and territorial EMS directors with 28 responses (50% of 56 states and territories) found nine states (32% of the respondents) with no regional structure. Nine of the responding directors (32%) reported an independent council structure. Of these, three (33%) were characterized as not working at all (although, because of political pressure, they would change answers to "working somewhat" or "working for the most part" if answers were associated with specific respondents), three (33%) were said to be "working somewhat", two (22%) said the set up worked "for the most part", and one (11%) said that it "worked well". Five of the 28 respondents (18%) said that they have

regional state EMS offices without regional independent council/board. Of these five, four (80%) were characterized as working well, while one (20%) "works somewhat". Two directors (7%) have a mixed system of advisory councils and regional offices staffed by state EMS personnel. One of these was characterized as "working for the most part" while the other was "working very well". Three states have other regional type entities which represent trauma regions only, districts based around all hospitals with a mix of staffed and unstaffed approaches, or regions in name only for the purpose of representation on a state board.

B. Virginia: Why It Is Where It Is

Developmentally, there is little that sets Virginia's EMS system apart from the national forces described above, making the Commonwealth fall into the typical profile of a state that has a history of regional EMS programs and a strong, broadly missioned State EMS office and which has maintained those entities through the present.

At the local level is a tradition of volunteer rescue squads as strong as or stronger than in any state in the country. Issues of recruitment and retention and public expectation for level and timeliness of medical response received have clearly created a pattern of shift from purely 24/7 volunteer services to mixed coverage by volunteer and career services, and finally to almost exclusively career services especially in urban/suburban areas. As EMS provider agencies become increasingly staffed by career personnel, and as they increase call volume in their own response areas, many also find themselves serving on more of a regional basis to cover areas served by neighboring volunteer squads during weekday and other shifts that volunteers have difficulty covering. These agencies (e.g. in the Northern Virginia region) find themselves developing in-house training, performance improvement, data collection, and medical direction services to meet their growing needs.

At the Commonwealth level, the EMS office and first statutes were created as largely regulatory arms in the late 1960's. With statutory revisions in 1974 and further evolution to present, the Virginia Office of EMS has become a system leader in the state, carrying out not only a regulatory function but providing training resource development and other technical assistance, planning, problem-solving and system coordination functions as well. Examples of these include Virginia's national leadership in prehospital "do not resuscitate" and recruitment/retention support programs. As the Virginia Office of EMS (OEMS) staff stays attuned to national trends in EMS system improvement and attempts to encourage change accordingly in the Commonwealth, this inevitably creates pressure on the regional EMS programs to integrate the change successfully in their regions. The move to accredited education and training programs is an example. State planning and initiatives can be crippled, and relationships made more difficult, if communications with regional staff are less than excellent. On the other hand, even when excellent communications prevail, initiatives may be jeopardized when regional staff or council/board members reject their change-integrator role and pursue political/legislative avenues. This is not necessarily right or wrong. It is simply a fact of life that a state-regional coordinating structure with frequently co-dependent staff will be frustrated by poor communication or subversion of a chain of command that only informally exists.

The regional EMS programs were first designated by the Commonwealth's Board of Health in 1980, while some of the programs functionally date back to at least 1974. The Commonwealth used Public Health and Health Services block grant funding to fund the regions when the federal EMS program met its demise in 1981. The innovative "dollars for life" program ($4 for life at present) and other resources have allowed the mix of funds to change with availability and regional support has increased over the years. The regions were created as 501(c)(3), non-profit entities with the legal and credible ability to raise local funds to match state funds, which they have done to a greater or lesser degree to date.

The regions are governed by councils/boards which have the blended roles of directing the regional program's business affairs and fiduciary responsibilities, and of guiding purely EMS system development decision-making as a representative body of EMS provider/consumer constituents. This mix can create conflicts of interest. Also, expertise in one area does not always carry through to the other as can also be said for regional EMS staff, which is an even more critical issue in the smaller offices where principals are depended on for both. It is important to note that, as in any discipline, there are degrees of aptitude displayed in carrying out this mix of responsibilities. In Virginia there are regions which excel and regions which do not, while most sit somewhere along the spectrum in between. To add to the complexity of handling this mix of responsibilities are the politics of personality, hospital competition, prehospital agency competition, and resource allocation which are everywhere, though more evident in some regions than others.

Add to these factors, the pressures coming from the changing profile and needs of local providers and pressures from the state to integrate change and manage accountably, and it is clear the regional EMS programs sit in the middle of a difficult dynamic. From the locals' point of view they sometimes don't get the access or level of service they might want from their region. From the state point of view, OEMS spends nearly $3 million a year to support regional services, are accountable for that money, and expect cooperation --not hindrance-- from regions in carrying out its perceived mission.

It is no wonder then, that in studies and forums in 1998, 2001, 2004, and now in 2007 the role of regional councils has been called into question. And given the experience in other states and the dynamic of changing expectations and needs in the provision of EMS care, it will again be called into question, regardless of what is implemented following this study's conclusion.

III. Purpose and Methods of the Regional Council Study

The general purpose of the regional council study is stated in the request for proposals issued by the Commonwealth:

"The principal function of the consultant is to assist OEMS by conducting an objective review to evaluate the current structure and functions of the Regional Emergency Medical Services (EMS) Councils to determine and identify a system that is an effective and efficient method of providing those EMS System services that are defined in the Code of Virginia."

As described in a January, 2007 OEMS memorandum to constituents, the study envisioned a number of activities:

> A. OEMS has contracted with a qualified consultant to evaluate the effectiveness and efficiency of the current model of Regional EMS Councils in providing EMS System services that are defined and required by statute, defined by contracts between OEMS and the Regional EMS Councils, or other services provided at the discretion of the Regional EMS Councils. In order to complete the task at hand, the contractor will consider, but not be limited to: the 2004 JLARC Report on the EMS System, the current Virginia State EMS Plan, the Institute of Medicine (IOM) report "EMS at the Crossroads", and the American Society for Testing and Materials (ASTM) designation F 1086-94: Standard Guide for Structures and Responsibilities of EMS Systems Organizations in their analysis, evaluation, and recommendations.
>
> B. ASMI proposes to conduct the study involving a combination of activities, including, but not limited to: document review and analysis, survey creation, implementation and result review, and interviews, both in person, and via telephone. Reports from previous similar studies and forums will be considered, but not replicated in favor of activities listed above.
>
> C. The study shall include:
>
> > 1. Review of regional EMS council geographical area of operation, catchment areas, patient flows, etc. Propose the appropriate number and alignment of service areas that will improve coordination of emergency medical care and integration with public safety services (state law enforcement, emergency management, and fire programs) as well as maximize opportunities to receive federal grants for state emergency preparedness and response activities to include but not be limited to Medical 9-1-1 and Emergency Medical Dispatch, prehospital EMS (ground and air), hospital based emergency and trauma care, and medical related disaster preparedness.
> >
> > 2. Review of relationships of Regional EMS Council staff to EMS agencies served, associated agencies such as hospitals and medical centers, local authorities, local governing bodies, etc.
> >
> > 3. Review of Regional EMS Council staff relationship to Regional EMS Council Board of Directors.

4. Review of Regional EMS Council Boards of Directors and their roles, responsibilities, and function within the organization.

5. Review of general statewide consistencies in Regional EMS Council delivery of programs, review of proposed performance/program standards and designation guidelines, and funding.

6. Identification of the advantages/disadvantages of the current structure of Regional EMS Councils, versus an alternative structure of field offices in performing the tasks and functions designated in the Code of Virginia.

7. Cost-benefit analysis of current versus other structures.

8. Personnel, total compensation, and qualifications of positions.

9. Review statutory/regulatory requirements for system development and support, regulatory oversight, and delivery of services to EMS providers, and the general public. Review of state/regional contracts with each region, and review of reports of such services delivered under the contracts will be conducted.

10. Economies of scale that may be realized in a more centralized environment as compared to decentralized and independent organizational environment, utilizing review of reports of such services delivered under the contracts, as described previously will be conducted.

To accomplish this, ASMI staff:

1) **Conducted 244 formal interviews** with 232 interviewees, in person or by phone. Of these, 166 regional staff, board/council members, EMS providers and others were interviewed in the 11 regional offices; 27 OEMS staff members were interviewed; and 39 people were interviewed at random or by specific discretion of ASMI staff in an attempt to clarify impressions created in previous interviews. An additional 12 follow-up interviews of people already interviewed were conducted for clarification purposes. The interviews were conducted on the basis of confidentiality, but nonetheless three interviewees requested total anonymity in the process. A list of interviewees is included in Appendix A.

   The interview question form is included as Appendix B. Among other questions asked in follow-up to the questions included in the form were:

   - How would you feel about trying to create a system to produce statewide standard protocols? (Asked of a subset of physicians and EMS providers as appropriate to the discussion and as time allowed).

- Some feel that OEMS would benefit by moving into the department of public safety and out of the department of health. How do you feel about that? (Asked of a subset of Governor's Advisory Board members, OEMS staff, regional board/council members and others as appropriate to position, discussion and time available).

2) **Conducted a survey online and by regular mail.** A total of 7,065 invitations to participate in the survey were sent by mail and e-mail (regional and state EMS staff, primarily). The initial invitation letter was sent by bulk mail and a reminder was sent by first class post card. The latter were returned to OEMS when addresses were incorrect (in addition many of the bulk mailed letters going to those same addresses were returned, though the Post Office was not obligated to do so…these totaled nearly 600 pieces of mail). OEMS sent ASMI 460 returned reminder cards, a 7% return on approximately 6,900 invitations sent by regular mail. Upon analysis of a 10% sample (46 cards), 27 of the cards bore the address as provided in the data base provided by OEMS, 3 of the cards had a wrong zip code digit, and 16 cards had correct street addresses but wrong city or state information.

   The 7,065 invitations included a **sampled** "Leaders" group of State OEMS staff (40), regional EMS staff (55), localities (139), certified EMS agency chiefs (716), VAGEMSA members (50), EMS instructors (300), ALS coordinators (200), trauma centers (13), regional EMS board/council members (including hospital representatives - 275), operational medical directors (200), and state EMS advisory board (26). This constituted a total of 2,014 "Leaders".

   Also sampled were approximately 33,700 certified EMS providers listed by OEMS. The 5,051 member group constituted well over a 15% sample of the 33,700 minus those also in the "Leaders" group.

   While the majority of respondents took the survey online, some 30 respondents requested hard-copy surveys mailed to them. When 26 of these were returned, they were entered by staff.

   The survey was held open from early April to mid-July. There were 789 responses, representing an 11% response rate.

3) **Conducted a document review.**

   ASMI made the following request for documents and materials in January, 2007:

   (1) Financial statements for the most recently completed fiscal year for which they are available, which reflect the overall operation of the state EMS program and each of the regional EMS programs, showing all types and sources of revenue, expense and fund transfer…the same material for the fiscal year ten years prior to this most recent fiscal year (e.g. if FY 2005 is provided, FY 1995 as

well). If a regional program was not operating ten years ago, then … the material from the first full fiscal year of operation. These materials may lead to requests for additional items to explain changes over the ten year period.

(2) Financial statements for the three most recently completed fiscal years for which they are available, which detail the operation of the state EMS program and each of the regional EMS programs (and sub-councils if maintained separately), showing all types and sources of revenue, expense and fund transfer. These should go beyond general balance sheets and should detail revenue, expense and transfer account activities and give a clear picture of where funds were obtained and where funds were expended. This should include an accounting of specific project and program expenditures (preferably as they relate to statutorily-specified roles for the state and contractually-specified roles for the regions), and should include detail on personnel salaries and benefits down to individual staff member lines. These should be easily linkable to detailed job descriptions for all positions within OEMS and the regions, which we also request.

(3) Contracts between the state EMS office and each of the regions for the same three year period as in (2), all progress reports from regions that detail their activity under these contracts, and any reports from the state EMS office that summarize progress from these activities. We also would like copies of state EMS advisory board and regional council and sub-council minutes for the same three year period.

ASMI was provided with or otherwise obtained and reviewed the following:

a. Regional council contracts; summary, revised contract, status, deliverable rating and other related materials for 2004 – 2008.
b. Regional council financial statements for 2004 – 2006.
c. Regional council annual reports for 2004-2006.
d. Minutes samples of regional council and state advisory board meetings in 2006-2007.
e. Detailed OEMS regional council expense record account files for 2000 – 2006.
f. Detailed OEMS expense summaries for general fund and "$2-4 for life" 2000 – 2006.
g. 2007 RSAF requests by regional councils.
h. Article on "The Participative Revolution" submitted by Connie Purvis.
i. Presentation on The Virginia Office of EMS and Alternative Organizational Structures within State Government submitted by Bruce Edwards.
j. Samples of regional council treatment protocol, and ambulance restocking and drug box exchange agreements.

k. Current regional council strategic plans for all councils. Samples of trauma, performance improvement, and other materials from regional EMS councils.
l. Virginia EMS plans including strategic and trauma triage plans.
m. FY07 Regional Council deliverables timeline.
n. FY 06 OEMS expense/revenue summary.
o. "Virginia's Regional EMS Councils – Overview" by regional council executive directors group.
p. EMSSTAR consulting report: "An Assessment of the Virginia Regional Emergency Medical Services System"
q. Regional EMS Council Focus Group Meeting minutes, July 16, 2001.
r. Joint Legislative Audit and Review Commission (JLARC – 2004) report: "Review of Emergency Medical Services in Virginia" and related survey instruments and result details.
s. Joint Legislative Audit and Review Commission (JLARC – 2004) report: "The Use and Financing of Trauma Centers in Virginia".
t. Regional Council Open Forum Review summary, June 6, 2006.
u. ASTM Committee F30 on EMS: F1339-92/98 - "Standard Guide for Organization and Operation of Emergency Medical Services Systems".
v. ASTM Committee F30 on EMS: F1086-94/02 – "Standard Guide for Structures and Responsibilities of Emergency Medical Services Systems Organizations".
w. "Emergency Medical Services Agenda for the Future"; NHTSA/USDOT, 1996.
x. "Rural and Frontier EMS Agenda for the Future:; National Rural Health Association, 2004.
y. "Emergency Medical Services at the Crossroads", Institutes of Medicine, 2006.
z. "Review of Emergency Medical Services in Virginia", JLARC staff briefing, 2004.
aa. Virginia OEMS Rules and Regulations including proposed changes for regional EMS councils.
bb. Virginia Code § 32.1-111.1 (and as follows) on emergency medical services.
cc. Materials provided by regional EMS council staff during council office visits.
dd. Virginia OEMS, VAEMS, and 11 regional EMS council websites.
ee. "Staff Report on Virginia EMS Councils", TEMS, 1992
ff. Various memoranda sent by regional council staff to constituents in advance of 2007 regional EMS council study.
gg. NHTSA Performance Measures Project draft report. December, 2006.

IV. Study Results

A. Survey Results

The following are the results of an online and mailed survey returned by 789 respondents. The Survey methodology is contained in the preceding section. In addition, survey results for individual councils have been made available to OEMS.

The following are the results to Questions 1 through 27. A general question on suggestions for improving councils constituted Question 28. These raw results have been provided to OEMS, as have raw responses in questions with an "Other" response.

Question 1

1. Please identify the type of organization for which you work:

answer options	Response Percent	Response Count
Local Government	15.59%	123
Regional EMS Council	4.06%	32
Virginia Office of EMS	2.28%	18
Law Enforcement Agency	1.65%	13
Dispatch Center	1.01%	8
Rescue Squad	17.74%	140
Fire Department/Fire-Rescue	33.46%	264
Private Ambulance Service Provider	6.08%	48
Municipal Third Service EMS	3.17%	25
Hospital-Based EMS	1.14%	9
Industrial Rescue	0.76%	6
Air-Medical Service	1.01%	8
Hospital Emergency Department	2.53%	20
Hospital Trauma Service	0.51%	4
Hospital (Other Department)	1.01%	8
Local Physician Group	0.51%	4
Other (please specify)	7.48%	59
answered question		789
skipped question		0

Question 1 details the organizational affiliation of the respondents. Some 65% of respondents were first responders, primarily EMS and EMS/fire/rescue affiliated.

Question 2

2. Please identify the best title for your primary position:		
answer options	Response Percent	Response Count
EMS Service Chief/Director/Officer	11.53%	91
Other Public Safety Chief	5.20%	41
Paramedic (Incl. Flight, Firefighter Medics)	17.24%	136
EMT (All other levels. Incl. Firefighter EMTs)	37.64%	297
Other Medical First Responder	1.65%	13
Other Public Safety Responder/Officer	2.41%	19
Public Safety Dispatcher	1.01%	8
Educator/Training Officer	2.28%	18
Administrator/Manager	10.14%	80
Physician	2.28%	18
Registered Nurse	1.90%	15
Other Clinician	0.51%	4
Other (please specify)	6.21%	49
answered question		789
skipped question		0

Question 2 identifies the primary job position of respondents. Over half were primarily EMTs of various levels and Paramedics, while 27% identified themselves as chiefs, directors or other types of administrators and managers.

Question 3

3. How long have you been in your current position?		
answer options	Response Percent	Response Count
Less than a year	10.10%	79
One year to five years	37.34%	292
Six years to ten years	21.36%	167
Eleven years to twenty years	16.75%	131
Move than twenty years	13.81%	108
Don't know	0.64%	5
answered question		782
skipped question		7

Question 3 is self-explanatory.

Question 4

4. How long have you been a part of Virginia's EMS system?		
answer options	Response Percent	Response Count
Less than a year	4.09%	32
One year to five years	18.41%	144
Six years to ten years	18.16%	142
Eleven years to twenty years	29.28%	229
More than twenty years	29.67%	232
Don't know	0.38%	3
answered question		782
skipped question		7

Question 4 demonstrates a pronounced preponderance of personnel (60%) with over ten years' experience in the system. This indicates that the survey reflects the views of personnel with significant length of experience. An interesting phenomenon appears in looking at both the results of Questions 3 and 4. One might expect the numbers associated with "years in position" to fluctuate but generally be less than "years in EMS system" (e.g. one might be an EMT, then paramedic, then educator or service chef for a number of years in each of those positions, and the total of those years in each position would be generally be the number of years in the EMS system). Comparing the "Less than a year" through "Six to ten year" categories in each table, there are consistently less respondents in the "years in EMS system " table than in the "years in EMS position" table. This reverses to the more expected situation for those in both tables with more than eleven years of experience in each.

Question 5

5. With which regional EMS council are you or your organization most closely affiliated?		
answer options	Response Percent	Response Count
Old Dominion	18.54%	145
Northern Virginia	12.40%	97
Tidewater	10.87%	85
Western Virginia	10.87%	85
Peninsulas	7.42%	58
Rappahannock	6.01%	47
Southwest Virginia	8.82%	69
Central Shenandoah	6.14%	48
Blue Ridge	4.09%	32
Thomas Jefferson	5.50%	43
Lord Fairfax	4.86%	38
Don't Know	2.30%	18
Not Applicable	2.17%	17
answered question		782
skipped question		7

Question 5 results present no major surprises in distribution of respondents in general comparisons with EMS agency and personnel distributions based on spot comparisons.

Question 6

6. How often would you say you interact with a regional EMS council?		
answer options	Response Percent	Response Count
Once a week or more (but I am not a state OEMS or regional council employee)	11.51%	90
Once a month	15.73%	123
Several times a year	33.50%	262
Never	23.91%	187
Don't know	10.61%	83
I am a state OEMS employee, or regional council employee or board member	4.73%	37
answered question		782
skipped question		7

Question 6 indicates that a significant number have a weekly interaction. One might speculate that these are instructors and students involved in current training and agency chiefs and others charged with administrative details of their services. Over a third of respondents know of no contact with their regional council.

Question 7

7. Please rate the services provided by the regional EMS council with which you are most closely affiliated in the following areas in calendar year 2006:		
a. Training	Response Percent	Response Count
Excellent	25.10%	193
Good	38.62%	297
Fair	16.38%	126
Poor	5.46%	42
Have not used this service	14.43%	111
b. Grants writing assistance	Response Percent	Response Count
Excellent	11.05%	85
Good	21.07%	162
Fair	10.92%	84
Poor	4.16%	32
Have not used this service	52.80%	406
c. Medical direction/protocols	Response Percent	Response Count
Excellent	27.96%	215
Good	39.66%	305
Fair	12.87%	99
Poor	3.12%	24
Have not used this service	16.38%	126

d. Squad management assistance	Response Percent	Response Count
Excellent	7.80%	60
Good	20.94%	161
Fair	12.35%	95
Poor	7.80%	60
Have not used this service	51.11%	393
e. Personnel recruitment	Response Percent	Response Count
Excellent	5.46%	42
Good	15.08%	116
Fair	15.86%	122
Poor	14.95%	115
Have not used this service	48.63%	374
f. Technical assistance	Response Percent	Response Count
Excellent	15.21%	117
Good	29.00%	223
Fair	15.34%	118
Poor	4.55%	35
Have not used this service	35.89%	276
g. Critical incident stress management	Response Percent	Response Count
Excellent	20.55%	158
Good	24.19%	186
Fair	7.41%	57
Poor	1.69%	13
Have not used this service	46.16%	355
h. Consolidated testing	Response Percent	Response Count
Excellent	23.02%	177
Good	31.73%	244
Fair	11.70%	90
Poor	3.12%	24
Have not used this service	30.43%	234
i. Regional planning	Response Percent	Response Count
Excellent	13.91%	107
Good	27.18%	209
Fair	14.56%	112
Poor	5.85%	45
Have not used this service	38.49%	296

Question 7 rates a variety of regional services from traditionally universal services such as training and testing to more position-specific services like grant writing, recruitment and retention, and squad management assistance.

The "Have not used this service" rates vary predictably. For instance, while 14% of respondents not using regional training services might seem high, with more urban services (in the areas providing the preponderance of respondents for the survey) becoming self-reliant for training, this figure seems reasonable. That 30% of respondents say that they have not used consolidated testing services seems high unless it reflects the high proportion of seasoned respondents as providers who typically receive waivers for recertification testing. This may create some question as to the purpose of maintaining recertification testing.

Those using the services generally rate them highly with more "Excellent" ratings than "Poor" and the totals of "Excellent/Good" predominating over "Fair/Poor". Exceptions to this appear in:

- Squad management assistance – "Excellent" and "Poor" receive equal votes, and there is less difference between "Excellent/Good" and "Fair/Poor".
- Personnel recruitment – "Poor" exceeds "Excellent" and overall ratings lean strongly toward "Fair/Poor" especially when compared to results for other services.
- Critical incident stress management – More strongly rated in favor of "Excellent/Good" than other services.
- Regional planning – This service is core to all regional councils. The interview process identified this type of activity as one of the more important services provided by councils. It should be a sentinel indicator of constituent perception of regional council effectiveness. That 167 (35%) of 473 who rated "regional planning" as "Fair/Poor" is not a ringing endorsement. A spot check shows individual regional council results on this question generally parallel the results for sentinel indicators in Questions 8 through 10, though small numbers reduced further by the "Have not used this service" effect hamper comparison among regions for performance in this area.

Question 8

8. The regional EMS councils were formalized under the "Code of Virginia" to assess, identify, coordinate, plan, and implement efficient and effective regional delivery systems. How would you rate the regional EMS council with which you are most closely affiliated in carrying out these responsibilities?

answer options	Response Percent	Response Count
Excellent	24.71%	190
Good	39.14%	301
Fair	20.55%	158
Poor	4.16%	32
Don't Know	11.44%	88
answered question		769
skipped question		20

See discussion following “Region by Region Summary of Questions 8 – 10”.

Question 9

9. How would you rate the effectiveness of the regional EMS council with which you are most closely affiliated in coordinating the regional EMS system?		
answer options	Response Percent	Response Count
Excellent	21.46%	165
Good	38.10%	293
Fair	19.12%	147
Poor	4.68%	36
Don't Know	16.64%	128
answered question		769
skipped question		20

See discussion following “Region by Region Summary of Questions 8 – 10”.

Question 10

10. How would you rate the overall accessibility of the regional EMS council with which you are most closely affiliated, including communications and the location of the council office?		
answer options	Response Percent	Response Count
Excellent	29.65%	228
Good	37.71%	290
Fair	16.25%	125
Poor	5.85%	45
Don't Know	10.53%	81
answered question		769
skipped question		20

See discussion following “Region by Region Summary of Questions 8 – 10”.

Table 2 Region by Region Summary of Questions 8 – 10

8	BREMS		CSEMS		LFEMS		NVEMS		ODEMSA		PEMS		REMS		SWEMS		TEMS		TJEMS		WVEMS	
Excellent	6	19%	17	36%	6	16%	17	18%	32	22%	11	19%	10	22%	17	26%	26	31%	16	37%	26	31%
Good	11	34%	22	47%	13	35%	31	33%	58	41%	27	47%	19	41%	31	47%	33	39%	13	30%	33	39%
Fair	11	34%	6	13%	14	38%	15	16%	31	22%	15	26%	12	26%	10	15%	12	14%	9	21%	19	22%
Poor	2	6%	0	0%	3	8%	2	2%	3	2%	4	7%	4	9%	4	6%	3	4%	2	5%	3	4%
Don't Know	2	6%	2	4%	1	3%	29	31%	19	13%	1	2%	1	2%	4	6%	11	13%	3	7%	4	5%
Total	32	99%	47	100%	37	100%	97	100%	143	100%	58	101%	46	100%	66	100%	85	101%	43	100%	85	101%
9	BREMS		CSEMS		LFEMS		NVEMS		ODEMSA		PEMS		REMS		SWEMS		TEMS		TJEMS		WVEMS	
Excellent	7	22%	17	36%	5	14%	9	10%	30	21%	12	21%	7	15%	16	24%	21	25%	12	28%	24	28%
Good	10	31%	23	49%	18	49%	35	37%	56	39%	24	41%	18	39%	23	35%	31	36%	17	40%	30	35%
Fair	9	28%	3	6%	8	22%	15	16%	28	20%	12	21%	10	22%	13	20%	21	25%	4	9%	20	24%
Poor	3	9%	0	0%	3	8%	3	3%	6	4%	5	9%	5	1%	3	5%	2	2%	2	5%	3	4%
Don't Know	3	9%	4	9%	3	8%	32	34%	23	16%	5	9%	6	13%	11	17%	10	12%	8	19%	8	9%
Total	32	99%	47	100%	37	101%	94	101%	143	100%	58	101%	46	100%	66	101%	85	100%	43	101%	85	100%
10	BREMS		CSEMS		LFEMS		NVEMS		ODEMSA		PEMS		REMS		SWEMS		TEMS		TJEMS		WVEMS	
Excellent	11	34%	23	49%	8	22%	26	28%	34	24%	17	29%	14	30%	18	27%	26	31%	16	37%	31	36%
Good	15	47%	19	40%	16	43%	31	33%	52	36%	25	43%	22	48%	27	41%	28	33%	15	35%	28	33%
Fair	5	16%	4	9%	8	22%	5	5%	31	22%	4	7%	7	15%	10	15%	18	21%	8	19%	20	24%
Poor	0	0%	1	2%	4	11%	5	5%	8	6%	10	17%	3	7%	6	9%	4	5%	1	2%	3	4%
Don't Know	1	3%	0	0%	1	3%	27	29%	18	13%	2	3%	0	0%	5	8%	9	11%	3	7%	3	4%
Total	32	100%	47	100%	37	101%	94	100%	143	101%	58	99%	46	100%	66	100%	85	101%	43	100%	85	101%

Questions 8 and 9 ask variants of the same question, which is "How well does your regional EMS council work?" Question 8 asks it in more detail and using the more formal language of the statutory charge of the regions, while Question 9 asks it more simply. Analysis of the differences in responses between the two proves little. Basically, the councils get an "Excellent/Good" rating of 60% to 64%, a 20% to 25% "Fair/Poor" rating, and 11 to 17% of respondents don't know how their council rates. The survey finds that 36% to 41% of respondents do not know enough about their council to rate it or rate it only "Fair" at best.

The table directly above, "Region by Region Summary of Questions 8 – 10", breaks these questions out on a council by council basis. The reader is cautioned of the effect of small numbers in some of the council tables. The *yellow* color coding portrays councils that fall below the "Excellent/Good" average of 60 – 64% for Questions 8 and 9 (an average range is used to lessen the small number impact in color categorizing these), those that fall at the average (*blue*), and those that fall above the average (*orange*).

Question 10 addresses the "accessibility" of the regional EMS including its communications and office location. Two-thirds of respondents rated accessibility as "Excellent/Good", 22% rated it "Fair/Poor" and 11% said that they didn't know.

The council by council breakdown in "Region by Region Summary of Questions 8 – 10", awards *blue* for those falling within two points on either side of an "Excellent/Good" rating of 67%, *yellow* for those falling below that range and *orange* for those falling above.

Question 11

11. Do local Basic Life Support providers receive continuing education (CE) through regional councils?		
answer options	Response Percent	Response Count
Yes	60.60%	463
No	18.98%	145
Don't Know	20.42%	156
answered question		764
skipped question		25

See discussion following Question 14.

Question 12

12. Do local Advanced Life Support providers receive continuing education (CE) through regional councils?		
answer options	Response Percent	Response Count
Yes	62.30%	476
No	14.27%	109
Don't Know	23.43%	179
answered question		764
skipped question		25

See discussion following Question 14.

Question 13

13. Do local Basic Life Support providers receive training through regional councils?		
answer options	Response Percent	Response Count
Yes	60.34%	461
No	19.11%	146
Don't Know	20.55%	157
answered question		764
skipped question		25

See discussion following Question 14.

Question 14

14. Do local Advanced Life Support providers receive training through regional councils?		
answer options	Response Percent	Response Count
Yes	61.26%	468
No	15.05%	115
Don't Know	23.69%	181
answered question		764
skipped question		25

Questions 11 through 14 indicate that 60 – 62 % of respondents feel that Basic and Advanced Life Support (BLS and ALS) providers receive training and continuing education through their regional councils. Some 14 to 19% said they don't, and 20 to 24% said that they don't know. The "no's" may, again, be those from larger agencies that provide their own training services. The "don't knows" may be consuming such council-affiliated services without realizing that the programs are coordinated through regional councils.

Question 15

15. Is sufficient Advanced Life Support training available in your area?		
answer options	Response Percent	Response Count
Yes	49.74%	380
No	32.46%	248
Don't Know	17.80%	136
answered question		764
skipped question		25

Responses to Question 15 indicate that ALS training resources are needed in some areas. A spot check of the regional breakdown for this question indicates that only Central Shenandoah, Thomas Jefferson, and Northern Virginia region respondents indicated significantly lower "No" rates on this question (13 – 24%). The rest demonstrated average or greater "No" rates.

Question 16

16. What would you say is the most important issue to you that regional EMS councils should address? (check only one)		
answer options	Response Percent	Response Count
Raising adequate funds to operate the agency	3.17%	24
Recruiting and retaining adequate numbers of volunteers and/or paid staff	19.39%	147
Meeting EMS training requirements (initial and re-certification)	16.36%	124
Availability and proximity of Basic Life Support training programs	3.03%	23
Availability and proximity of Advanced Life Support training programs	7.92%	60
Obtaining funds to pay tuition for EMS training programs (Basic Life Support or Advanced Life Support)	3.03%	23
Providing quality emergency care to patients	21.64%	164
Meeting response time goals	1.19%	9
Keeping abreast of medical advances in EMS	3.69%	28
Maintaining vehicles and equipment	0.13%	1
Standard drug box	1.58%	12
Regional medical protocols	9.76%	74
Trauma triage	0.00%	0
Emergency operations	1.98%	15
Other (please specify)	7.12%	54
answered question		758
skipped question		31

See discussion following Table 3 “16 to 18 Summary…” below.

Question 17

17. What would you say is the second most important issue to you that regional EMS councils should address? (check only one)		
answer options	Response Percent	Response Count
Raising adequate funds to operate the agency	4.49%	34
Recruiting and retaining adequate numbers of volunteers and/or paid staff	13.46%	102
Meeting EMS training requirements (initial and re-certification)	15.44%	117
Availability and proximity of Basic Life Support training programs	5.01%	38
Availability and proximity of Advanced Life Support training programs	6.73%	51
Obtaining funds to pay tuition for EMS training programs (Basic Life Support or Advanced Life Support)	9.10%	69
Providing quality emergency care to patients	8.31%	63
Meeting response time goals	2.64%	20
Keeping abreast of medical advances in EMS	9.10%	69
Maintaining vehicles and equipment	1.19%	9
Standard drug box	3.03%	23
Regional medical protocols	10.16%	77
Trauma triage	1.32%	10
Emergency operations	5.28%	40
Other (please specify)	4.75%	36
answered question		758
skipped question		31

See discussion following Table 3 “16 to 18 Summary:…” below.

Question 18

18. What would you say is the third most important issue to you that regional EMS councils should address? (check only one)		
answer options	Response Percent	Response Count
Raising adequate funds to operate the agency	4.09%	31
Recruiting and retaining adequate numbers of volunteers and/or paid staff	9.23%	70
Meeting EMS training requirements (initial and re-certification)	12.27%	93
Availability and proximity of Basic Life Support training programs	4.22%	32
Availability and proximity of Advanced Life Support training programs	7.26%	55
Obtaining funds to pay tuition for EMS training programs (Basic Life Support or Advanced Life Support)	8.58%	65
Providing quality emergency care to patients	8.31%	63
Meeting response time goals	3.30%	25
Keeping abreast of medical advances in EMS	13.98%	106
Maintaining vehicles and equipment	1.85%	14
Standard drug box	3.17%	24
Regional medical protocols	12.01%	91
Trauma triage	1.45%	11
Emergency operations	5.94%	45
Other (please specify)	4.35%	33
answered question		758
skipped question		31

See discussion following Table 3 “16 to 18 Summary:…” below.

Table 3 16. – 18. SUMMARY: What would you say is the most important issue to you that regional EMS councils should address?

answer options	Most Important	2nd Most Important	3rd Most Important	Total Count	Total Percent
Raising adequate funds to operate the agency	24	34	31	89	3.91%
Recruiting and retaining adequate numbers of volunteers and/or paid staff	147	102	70	319	14.03%
Meeting EMS training requirements (initial and re-certification)	124	117	93	334	14.69%
Availability and proximity of Basic Life Support training programs	23	38	32	93	4.09%
Availability and proximity of Advanced Life Support training programs	60	51	55	166	7.30%
Obtaining funds to pay tuition for EMS training programs (Basic Life Support or Advanced Life Support)	23	69	65	157	6.90%
Providing quality emergency care to patients	164	63	63	290	12.75%
Meeting response time goals	9	20	25	54	2.37%
Keeping abreast of medical advances in EMS	28	69	106	203	8.93%
Maintaining vehicles and equipment	1	9	14	24	1.06%
Standard drug box	12	23	24	59	2.59%
Regional medical protocols	74	77	91	242	10.64%
Trauma triage	0	10	11	21	0.92%
Emergency operations	15	40	45	100	4.40%
Other (please specify)	54	36	33	123	5.41%
answered question		**2274**		2,274	100.00%
skipped question		**93**			

The absolute most important issue that respondents feel that regional councils should address is “Providing quality emergency care to patients”. What does this mean, beyond “motherhood and apple pie”? The next most frequent “most important” answers (except “Other” indicating that lots of respondents have lots of ideas on the subject) add pretty consistently with the “second” and “third most important” responses in the table directly above to shed light on this. A clear group of identified needs emerge:

- Meeting EMS training requirements (initial and re-certification);
- Recruiting and retaining adequate numbers of volunteers and/or paid staff;
- Providing quality emergency care to patients;
- Regional medical protocols; and
- Keeping abreast of medical advances in EMS.

This provides some interesting contrast with views on the quality of regional council services in Question 7, and raises the question of a need for greater emphasis on the areas that matter most to respondents which needs to be answered on a region by region basis (though, for instance, recruitment and retention is identified as both a top issue and service in need of improvement statewide).

Question 19

19. The regional EMS councils would work most effectively if:		
answer options	**Response Percent**	**Response Count**
Regional staff organizations remain independent contractors with the Virginia Office of EMS	20.56%	155
Regional staff were Virginia Office of EMS employees	20.56%	155
I do not have enough information	49.07%	370
I have enough information but do not have an opinion	9.81%	74
answered question		**754**
skipped question		**35**

The responses to Question 19 are self-explanatory, but clearly do not show overwhelming support for change or for the status quo.

Question 20

20. There are currently 11 regional EMS councils that are based on political subdivisions. Please rate how strongly you agree or disagree with the following statements about their number and configuration. **A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."**		
a. The current number and configuration of EMS regions is appropriate.	Response Percent	Response Count
5-Strongly agree	15.38%	116
4-Agree	20.03%	151
3-"I have enough information but do not have an opinion"	13.79%	104

2-Disagree	8.62%	65
1-Strongly disagree	7.56%	57
DK-Don't know	34.62%	261
b. The number of regions should be increased.	Response Percent	Response Count
5-Strongly agree	7.82%	59
4-Agree	10.21%	77
3-"I have enough information but do not have an opinion"	13.66%	103
2-Disagree	11.01%	83
1-Strongly disagree	20.82%	157
DK-Don't know	36.47%	275
c. The number of regions should be decreased.	Response Percent	Response Count
5-Strongly agree	6.76%	51
4-Agree	4.38%	33
3-"I have enough information but do not have an opinion"	12.86%	97
2-Disagree	10.08%	76
1-Strongly disagree	29.58%	223
DK-Don't know	36.34%	274
d. It would be better served if regions were configured based on patient flow patterns.	Response Percent	Response Count
5-Strongly agree	8.62%	65
4-Agree	14.85%	112
3-"I have enough information but do not have an opinion"	17.51%	132
2-Disagree	8.36%	63
1-Strongly disagree	16.45%	124
DK-Don't know	34.22%	258

e. It would be better served if regions were configured based on geography/population/land area.	Response Percent	Response Count
5-Strongly agree	11.14%	84
4-Agree	24.93%	188
3-"I have enough information but do not have an opinion"	16.71%	126
2-Disagree	9.81%	74
1-Strongly disagree	11.14%	84
DK-Don't know	26.26%	198
f. It would be better served if regions were configured based on distribution of EMS agencies and providers.	Response Percent	Response Count
5-Strongly agree	7.03%	53
4-Agree	18.17%	137
3-"I have enough information but do not have an opinion"	21.35%	161
2-Disagree	12.60%	95
1-Strongly disagree	13.40%	101
DK-Don't know	27.45%	207
g. It would be better served if regions were based on other Virginia state public safety agency jurisdictions (Virginia State Police, Virginia Department of Emergency Management, and Virginia Department of Fire Programs).	Response Percent	Response Count
5-Strongly agree	10.21%	77
4-Agree	13.40%	101
3-"I have enough information but do not have an opinion"	13.93%	105
2-Disagree	9.55%	72
1-Strongly disagree	21.88%	165
DK-Don't know	31.03%	295

h. It would be better served if regions were configured based on local planning district commissions.	Response Percent	Response Count
5-Strongly agree	4.77%	36
4-Agree	7.03%	53
3-"I have enough information but do not have an opinion"	18.97%	143
2-Disagree	10.48%	79
1-Strongly disagree	23.61%	178
DK-Don't know	35.15%	265

Should the number of regions be increased, decreased or stay the same? Consistently, about half of the respondents "don't know" or have no opinion. Question 20-a establishes that 35% of respondents feel that the number of current regions is appropriate while 17% disagree. One might expect that the 122 respondents disagreeing would then be divided among those favoring more or fewer regions in Question 20-b and Question 20-c, while 220 respondents actually favored increasing or decreasing the number. Thirty to forty percent of those answering these last two questions disagreed with increasing or decreasing the number of regions while 18% felt they should be increased and 11% favored decreasing the number.

If regions were to be reconfigured, on what model should that be based: patient flow patterns, geography/population/land area, distribution of EMS agencies/providers, regions of other Virginia state public safety agency jurisdictions (State Police/ Emergency Management/Virginia Department of Fire Programs which are now the same), or planning commission districts?

Some 42% to 54% had no opinion or didn't know. Questions 20-d through 20–h indicate the following order of popularity:

1. Geography/population/land area (36% agree; 21% disagree);
2. Distribution of EMS agencies and providers (25% agree; 26% disagree);
3. Patient flow patterns (23% agree; 25% disagree);
4. VSP and other public safety regions (24% agree; 31% disagree); and
5. Planning district commissions (12% agree; 34% disagree).

Overall, there seems to be little clear opinion, and no majority opinion, on the appropriate number of regions or method for basing that number.

Question 21

21. LEADERSHIP A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."		
a. The regional EMS council provides strong leadership within the EMS community.	Response Percent	Response Count
5-Strongly agree	16.99%	123
4-Agree	27.62%	200
3-"I have enough information but do not have an opinion"	16.44%	119
2-Disagree	15.75%	114
1-Strongly disagree	8.43%	61
DK-Don't know	14.78%	107
b. The regional EMS council has clearly defined mission, vision, and value statements, which serve as the basis for all agency activities.	Response Percent	Response Count
5-Strongly agree	17.27%	125
4-Agree	32.18%	233
3-"I have enough information but do not have an opinion"	15.33%	111
2-Disagree	12.29%	89
1-Strongly disagree	4.97%	36
DK-Don't know	17.96%	130
c. The regional EMS council's staff regularly reviews, articulates and personally demonstrates the agency's vision, mission and values to the EMS community.	Response Percent	Response Count
5-Strongly agree	13.67%	99
4-Agree	23.62%	171
3-"I have enough information but do not have an opinion"	17.40%	126
2-Disagree	13.95%	101

1-Strongly disagree	8.29%	60
DK-Don't know	23.07%	167
d. The regional EMS council adequately includes customers when developing regional EMS council plans, goals and evaluation measures.	Response Percent	Response Count
5-Strongly agree	14.50%	105
4-Agree	21.41%	155
3-"I have enough information but do not have an opinion"	14.50%	105
2-Disagree	11.74%	85
1-Strongly disagree	7.04%	51
DK-Don't know	30.80%	223
e. Regional EMS council staff seeks out and values my opinion on issues within my area of expertise.	Response Percent	Response Count
5-Strongly agree	17.27%	125
4-Agree	18.09%	131
3-"I have enough information but do not have an opinion"	13.26%	96
2-Disagree	14.23%	103
1-Strongly disagree	19.34%	140
DK-Don't know	17.82%	129
f. Regional EMS council staff promotes ongoing interaction with agency customers.	Response Percent	Response Count
5-Strongly agree	18.09%	131
4-Agree	19.89%	144
3-"I have enough information but do not have an opinion"	15.75%	114
2-Disagree	13.67%	99
1-Strongly disagree	9.67%	70

DK-Don't know	22.93%	166

Questions 21a and b establish that 44% to 49% of respondents agree that council leadership of EMS is strong mission and vision are clear while 17% to 24% disagree and a third don't know or have no opinion. Agreement drops to 35% to 38%, and disagreement rises to 19% to 34% for the remaining questions involving how effective councils are in actually articulating mission/vision and involving customers in planning and other activities. Some 31% to 45% say they don't know or have no opinion on these issues.

Question 22

22. INFORMATION AND ANALYSIS **A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."**		
a. The regional EMS council keeps me aware of critical information necessary for me to perform my job.	Response Percent	Response Count
5-Strongly agree	20.30%	147
4-Agree	31.35%	227
3-"I have enough information but do not have an opinion"	15.88%	115
2-Disagree	12.71%	92
1-Strongly disagree	9.53%	69
DK-Don't know	10.22%	74
b. The regional EMS council utilizes effective, efficient and accessible mechanisms to share system information with the local EMS community.	Response Percent	Response Count
5-Strongly agree	17.68%	128
4-Agree	33.56%	243
3-"I have enough information but do not have an opinion"	15.06%	109
2-Disagree	13.40%	97
1-Strongly disagree	6.22%	45
DK-Don't know	14.09%	102

c. I have easy access to all regional EMS council reference documents necessary to perform my job effectively.	Response Percent	Response Count
5-Strongly agree	22.65%	164
4-Agree	28.04%	203
3-"I have enough information but do not have an opinion"	15.19%	110
2-Disagree	9.94%	72
1-Strongly disagree	7.46%	54
DK-Don't know	16.71%	121
d. The regional EMS council provides adequate data reports and feedback on EMS system performance.	Response Percent	Response Count
5-Strongly agree	11.88%	86
4-Agree	20.30%	147
3-"I have enough information but do not have an opinion"	15.88%	115
2-Disagree	14.09%	102
1-Strongly disagree	14.64%	106
DK-Don't know	23.20%	168
e. The regional EMS council reports sensitive data in a responsible way.	Response Percent	Response Count
5-Strongly agree	20.03%	145
4-Agree	20.03%	145
3-"I have enough information but do not have an opinion"	14.09%	102
2-Disagree	6.22%	45
1-Strongly disagree	4.28%	31
DK-Don't know	35.36%	256

In Questions 22-a through c, respondents are asked how well councils inform them about the system or provide documents and other information to do their jobs. Approximately

half of the respondents agreed that this is well done while 17% to 22% do not, and a quarter to a third don't know or have no opinion.

For Question 22-d: "The regional EMS council provides adequate data reports and feedback on EMS system performance", respondents were split with 32% agreeing, 29% disagreeing, and 39% saying they don't know or have no opinion. As for whether councils responsibly report sensitive data, 40% felt this to be true, 10% did not, and half didn't know or had no opinion.

Question 23

23. STRATEGIC PLANNING **A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."**		
a. The development of the regional EMS council's EMS plan, and the annual updates to that plan, include active involvement and buy-in of EMS system participants.	Response Percent	Response Count
5-Strongly agree	12.15%	88
4-Agree	16.02%	116
3-"I have enough information but do not have an opinion"	14.23%	103
2-Disagree	9.39%	68
1-Strongly disagree	5.66%	41
DK-Don't know	42.54%	308
b. The EMS plan guides regional EMS council activities and priorities.	Response Percent	Response Count
5-Strongly agree	11.60%	84
4-Agree	19.61%	142
3-"I have enough information but do not have an opinion"	17.13%	124
2-Disagree	5.94%	43
1-Strongly disagree	2.76%	20
DK-Don't know	42.96%	311
c. The regional EMS council regularly evaluates progress in reaching the annual goals and	Response Percent	Response Count

objectives of the EMS plan with the EMS system participants.		
5-Strongly agree	11.74%	85
4-Agree	17.54%	127
3-"I have enough information but do not have an opinion"	15.06%	109
2-Disagree	7.18%	52
1-Strongly disagree	4.42%	32
DK-Don't know	44.06%	319

As far as how well councils do planning, evaluate progress, and involve customers in planning, most respondents said they "don't know" (43% to 44% in all three questions; 57% to 60% adding in the "no opinions"). Approximately a third of respondents thought these were done adequately, while 10 to 15% did not.

Question 24

24. HUMAN RESOURCE DEVELOPMENT AND MANAGEMENT **A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."**		
a. Regional EMS council sponsored meetings and planning workshops are usually well-organized and effective.	Response Percent	Response Count
5-Strongly agree	17.57%	127
4-Agree	23.24%	168
3-"I have enough information but do not have an opinion"	13.00%	94
2-Disagree	8.16%	59
1-Strongly disagree	3.32%	24
DK-Don't know	34.72%	251
b. The regional EMS council ensures that adequate training and continuing education classes are offered.	Response Percent	Response Count
5-Strongly agree	19.09%	138
4-Agree	26.42%	191

3-"I have enough information but do not have an opinion"	14.52%	105
2-Disagree	11.76%	85
1-Strongly disagree	9.82%	71
DK-Don't know	18.40%	133

Question 24-a indicates that 41% of respondents believe the councils offer good meeting products while 11% are not satisfied with them. Forty-eight percent of respondents didn't know or had no opinion, which seems a large number for a primary council function.

Responses to Question 24-b, indicate that 46% feel that enough education and training offerings exist through the councils while 22% do not, and a third don't know or have no opinion. Again, for what are key functions for most councils, these numbers don't seem to support that availability of these services are being effectively assured or perhaps simply not communicated as well as they might be.

Question 25

25. EMS PROCESS MANAGEMENT **A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."**		
a. Regional EMS council staff are well-informed, are well-trained, and are considered experts in their assigned areas.	Response Percent	Response Count
5-Strongly agree	22.10%	160
4-Agree	30.52%	221
3-"I have enough information but do not have an opinion"	13.54%	98
2-Disagree	8.56%	62
1-Strongly disagree	4.01%	29
DK-Don't know	21.27%	154
b. The design of new services and processes by the regional EMS council is based on customer expectations and priorities.	Response Percent	Response Count
5-Strongly agree	12.02%	87
4-Agree	21.55%	156

3-"I have enough information but do not have an opinion"	14.78%	107
2-Disagree	10.50%	76
1-Strongly disagree	3.18%	23
DK-Don't know	37.98%	275
c. The regional EMS council has specific and effective processes established for revision of policies, which involve local stakeholders and constituency groups.	Response Percent	Response Count
5-Strongly agree	12.98%	94
4-Agree	20.03%	145
3-"I have enough information but do not have an opinion"	14.50%	105
2-Disagree	6.91%	50
1-Strongly disagree	3.87%	28
DK-Don't know	41.71%	302

Question 25-a indicates that half of the respondents feel that regional staff are qualified experts, while 13% do not, and a third don't know or have no opinion.

Questions 25-b and 25-c are additional questions probing opinion on the adequacy of constituent inclusion in the council processes. As in parts of Question 23 on the same subject, over half of the respondents have no opinion or "don't know". Similarly, about a third feel that constituents are involved in council processes, and 10% to 15% do not.

Question 26

26. EMS SYSTEM RESULTS **A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."**		
a. The regional EMS council carries out its EMS system responsibilities in an equitable and responsible manner.	Response Percent	Response Count
5-Strongly agree	20.17%	146
4-Agree	28.73%	208

3-"I have enough information but do not have an opinion"	16.44%	119
2-Disagree	7.73%	56
1-Strongly disagree	3.59%	26
DK-Don't know	23.34%	169
b. Objective measures are used by the regional EMS council at least quarterly to evaluate and report the quality of patient care provided by the local EMS system.	Response Percent	Response Count
5-Strongly agree	8.43%	61
4-Agree	19.06%	138
3-"I have enough information but do not have an opinion"	15.47%	112
2-Disagree	6.35%	46
1-Strongly disagree	6.22%	45
DK-Don't know	42.48%	322
c. Automated reports developed by this regional EMS council are concise, effective and easily used.	Response Percent	Response Count
5-Strongly agree	9.12%	66
4-Agree	13.40%	97
3-"I have enough information but do not have an opinion"	16.44%	119
2-Disagree	6.08%	44
1-Strongly disagree	6.08%	44
DK-Don't know	48.90%	354

Just under half of the respondents felt that councils conducted themselves in a fair and equitable manner, while 11% did not. Forty percent didn't know or had no opinion. Some 48% to 65% of respondents don't know or have no opinion about the status of council reports on patient care and other issues. Approximately a quarter of those responding felt that councils are evaluating patient care objectively and produce effective automated reports while half that number do not.

Question 27

27. CUSTOMER SATISFACTION **A "5" rating means "strongly agree," while a "1" rating means "strongly disagree." A "3" rating means "I have enough information but do not have an opinion." A "DK" rating means "I don't know, or I do not have enough information."**		
a. As a customer of the regional EMS council, my organization is very satisfied with the regional EMS council's customer services.	Response Percent	Response Count
5-Strongly agree	17.84%	129
4-Agree	24.62%	178
3-"I have enough information but do not have an opinion"	17.43%	126
2-Disagree	11.89%	86
1-Strongly disagree	7.05%	51
DK-Don't know	21.16%	153
b. The regional EMS council has effective methods in place to routinely identify the current needs and expectations of customers.	Response Percent	Response Count
5-Strongly agree	13.97%	101
4-Agree	21.44%	155
3-"I have enough information but do not have an opinion"	15.21%	110
2-Disagree	13.00%	94
1-Strongly disagree	6.36%	46
DK-Don't know	30.01%	217
c. The regional EMS council has effective mechanisms in place to facilitate the ease of daily customer contact.	Response Percent	Response Count
5-Strongly agree	18.95%	137
4-Agree	23.24%	168
3-"I have enough information but do not have an opinion"	16.32%	118
2-Disagree	8.99%	65

1-Strongly disagree	5.53%	40
DK-Don't know	26.97%	195
d. This regional EMS council responds quickly and effectively to problems brought to their attention.	Response Percent	Response Count
5-Strongly agree	22.96%	166
4-Agree	22.54%	163
3-"I have enough information but do not have an opinion"	13.55%	98
2-Disagree	7.47%	54
1-Strongly disagree	5.95%	43
DK-Don't know	27.52%	199
e. When customers submit legitimate complaints regarding the regional EMS council, it makes constructive efforts to quickly make improvements that resolve the complaint to the customer's satisfaction.	Response Percent	Response Count
5-Strongly agree	14.66%	106
4-Agree	17.01%	123
3-"I have enough information but do not have an opinion"	15.08%	109
2-Disagree	6.22%	45
1-Strongly disagree	4.70%	34
DK-Don't know	42.32%	306
f. The regional EMS council satisfactorily facilitates our organization's efforts to fulfill our mission.	Response Percent	Response Count
5-Strongly agree	17.70%	128
4-Agree	23.10%	167
3-"I have enough information but do not have an opinion"	16.32%	118
2-Disagree	10.10%	73

1-Strongly disagree	6.36%	46
DK-Don't know	26.42%	191

Two questions, 27-a and 27-f, ask about the satisfaction of the respondent's organization with the council and its aid to that organization. In both, approximately 40% agree that they are satisfied in these areas while about half that are not satisfied. As many "don't know" or have no opinion as are satisfied. The remaining questions have similar results, though some ask for fairly detailed knowledge of council processes.

As a "satisfaction spot check, we tallied individual council responses to Question 21-a: "As a customer of the regional EMS council, my organization is very satisfied with the regional EMS council's customer services." The results follow:

Table 4 Region by Region Responses to Question 21-a

Region	Agree		No Opinion		Disagree		Don't Know		Total
CSEMS	32	71.11%	7	15.56%	4	8.89%	2	4.44%	45
PEMS	30	53.57%	10	17.86%	6	10.71%	10	17.86%	56
TJEMS	20	48.78%	4	9.76%	11	26.83%	6	14.63%	41
REMS	20	45.45%	4	9.09%	15	34.09%	5	11.36%	44
SWEMS	28	44.44%	9	14.29%	13	20.63%	13	20.63%	63
WVEMS	36	44.44%	15	18.52%	17	20.99%	13	16.05%	81
LFEMS	14	40.00%	6	17.14%	12	34.29%	3	8.57%	35
TEMS	32	40.00%	21	26.25%	11	13.75%	16	20.00%	80
BREMS	12	38.71%	6	19.35%	10	32.26%	3	9.68%	31
ODEMSA	50	37.31%	29	21.64%	21	15.67%	34	25.37%	134
NVEMS	28	32.94%	9	10.59%	13	15.29%	35	41.18%	85

"Agree" is the total of "Strongly agree" and "Agree". "Disagree" is the total of "Strongly disagree" and "Disagree". Results indicate varying levels of satisfaction with councils from a high of 71.1% to a low of 32.94%.

Question 28 invited open-ended suggestions for regional EMS council improvement. The 334 suggestions have been provided to OEMS.

The overall impression given by the survey is of a regional structure that does not leave a strong impression on respondents, with significant numbers saying that they have "no opinion" on or "don't know" how their councils function in many respects. Indications of satisfaction with council services and how they are planned generally do not constitute a majority and are often out-numbered by indications of a lack of familiarity or impression. There are no striking levels of frank dissatisfaction with the councils as a whole. There is, however, a striking variation of perception of individual councils from well known and perceived, to known and less well perceived, to poorly known and/or creating little impression.

B. Interview Results

The interview methodology is described in a previous section, and the primary interview questions may be found in Appendix B.

The interview process was a powerful tool in constructing a picture of the regional EMS structure and operations in Virginia. Of the 244 interviews, approximately 80% were in person while the remainder were accomplished by phone. With only a couple of exceptions, the interviews were conducted individually in a confidential setting.

We undertook the interviews that were scheduled for us by regional staff in regional offices or by state staff with the expectation of hearing a party line to a large extent, on the major issues. We had reviewed informational pieces distributed by some regional staff to their constituents prior to the interviews. While those expectations were certainly validated in the early going in most interviews, and in some cases throughout, we found that by the end of what averaged a thirty minute session, the follow-up discussion became frankly revealing. Virginia EMS folk we found, like those most places, are proud of their EMS vocation/avocation, are not timid about expressing their opinions, and are not about to toe anyone's party line for long without revealing their true selves. In fact, at least a dozen interviewees chafed at the "propaganda" (as a couple of fellows called it), feeling that it was insulting or manipulative.

Before describing responses to the major questions asked, the following are some overall general impressions created by the interviews. The statements below are not presented as "fact" but as what appeared to interview staff as a majority opinion. Anecdotal information used to substantiate statements was confirmed with multiple sources.

a. Virginia's EMS system is perceived by interviewees as a fine, mature system. Its volunteer rescue squad network is a proud tradition that is challenged by recruitment and retention problems that have engendered an inevitable transition to partial or entire replacement by paid personnel or other paid services. There is a troubling but understandable attempt to cling to foundering rescue squads despite accounts of negligently long (multi-hour) emergency response times of which we were regaled in several regions. Locales that have overcome these issues have exhibited an ability to provide state of the art EMS and exist throughout the state, some systems led by nationally renowned experts such as Jerry Overton, Mary Beth Michos, and Joseph Ornato.

b. State government is viewed as cumbersome and fraught with bureaucracy. While this is certainly not unique to Virginia, anecdotes abounded and confirmed one another about significant delays and other episodes experienced by interviewees. One area involves the move of information technology support staff to a centralized state unit (VITA). Establishing an OMD web page has taken over a year and similar delays in other

related projects were reported. The move of the OEMS headquarters from a relatively accessible site on the outskirts of Richmond to a largely inaccessible building in central downtown is another.

This general view of state government does not, for the most part, pass to OEMS itself. While a significant number of interviewees complained about the difficulty of getting OEMS staff members by phone or getting calls returned in a timely fashion, there seemed to be a general respect for the organization and staff of the Virginia OEMS, and especially for the leadership of the Director and Assistant Director. Many comments were heard about "empire-building" and the increase in OEMS staff numbers in recent years (particularly in light of the Study question about making the regional office staffs state employees under OEMS). However, equally resounding was the praise for the "overworked and understaffed" OEMS team. There was a general scratching of heads about the changes in OEMS field representative coverage areas. Not an interview day went by without at least a couple, and often more, songs of praise heard for Ernestine Sutton, a frequent source of information and assistance sought by callers to OEMS.

The general view presented by interviewees is that the regional EMS programs have always had a significant degree of being perceived as arms if not offices of OEMS, and their staffs official representatives of OEMS if not state employees. As reported below, regional offices are valued for their general accessibility as a source of information on a variety of subjects including OEMS programs, initiatives, policy, operations, regulation and statute. Interviewees, particularly state staff but some regional staff and many regional constituents, expressed concern about well-intended but wrong information, and in some cases seemingly purposeful misinformation, given out on occasion by certain regional staff. The concern is that this may be viewed as reliable and official OEMS, and eventually wrong, information.

Some generally shared perceptions of the quality and effectiveness of the regional councils and their staffs were evident. The value of independent 501(c)(3) organizations for leveraging state support with local, grant and other support, and their ability to reflect local priorities in program development, was generally respected. The tendency of this structure to produce very different approaches to and levels of quality of regional service delivery, system development and coordination, and system oversight was recognized as much as a flaw as a positive, however. This was especially true in areas of performance improvement, medical direction, Rescue Squad Assistance Fund (RSAF) administration and technical assistance, and planning. A number of Regional councils/boards were characterized as "old boys clubs" largely hand-picked by staff and not necessarily representative. There does not appear to be much

council/board orientation to the council's state contract and other responsibilities. Regional directors vary in the experience and job skills they bring to their role.

Individual regions have reputations both internally and externally:

The star performers, based on the office visits, interviews, surveys, and documents reviewed, are the Tidewater and Western Virginia regions. They have strong leadership in Jim Chandler and Rob Logan who have developed capable and dedicated staffs, broad and well-conceived programs and services and expertise that is often sought and utilized by other regions and by OEMS. They leverage state money very well, and have insinuated themselves into controlling positions in emergency preparedness and other roles, bringing in significant funding from other sources and becoming influential in related arenas, all for the benefit of their overall EMS systems.

Joining Tidewater and Western Virginia in the respected "best practices" council arena as programs that deliver substance and quality are the Central Shenandoah and Rappahannock regions. Dave Cullen's experience around the state and in OEMS, and his reputation as a thorough program builder, brings his region to this category. He is sharing his expertise with the Lord Fairfax region and is influential there as well as on a statewide basis. Tina Skinner is respected on all levels as the chair of the regional executive directors group; not an easy role to do well. She is in strong charge in a region that resulted from a conflict-ridden combining of regions and has shown how to do such merging successfully. She has built a solid team and new facility and other resources, and her region seems on an upward growth path.

The remaining regions vary by reputation from transitional/improving to troubled. Southwest Virginia EMS is emerging from a dark period that necessitated OEMS intervention, and assistance from Western Virginia EMS. Greg Woods is felt to be doing an excellent job in rebuilding a council board, staff and program. Some feel that field offices and additional staff might benefit service delivery in this large region.

The Thomas Jefferson EMS Council is enjoying a relatively new director, Chris Price, and seems to be improving its program and products despite a small staff, a history of a cliquish/politically distracting council, and the resultant "revolving door" for directors and fairly weak program. It is discussed as a merger candidate. The concern with smaller regions and smaller staffs is the dependence on a strong executive director to make the program fly well. The council can quickly go from being very strong to troubled if that director leaves.

A case in point is the Lord Fairfax region, which has experienced exactly this and is now viewed as troubled, receiving aid from Central Shenandoah. It is frequently identified as a candidate for combining with another council area, most suggesting Central Shenandoah, given its recent record of assistance. Another is the Peninsulas region whose director has just retired. Though not considered troubled, largely because of a fairly strong and deep office team and program building by Don Wilson, the immediate past executive director, it is viewed as pivotal and has been mentioned as a candidate for combining with the Tidewater EMS program. PEMS employs a unique talent in Jeff Meyer, who is now the assistant director. Mr. Meyer is a performance improvement (PI) specialist who has been shared among the regions and is assisting the state in PI development.

The Northern Virginia EMS region is noted for its large, advanced agencies which have become virtually self-reliant for training, protocols development, and medical direction. The need for some the traditional EMS regional services such as training course and continuing education development and coordination have lessened to a great extent. In addition to many of the services provided by other councils such as RSAF grant assistance and review and plans development, staff is heavily involved in capital region preparedness planning and coordination on behalf of the region's agencies. Nonetheless, they are the focus of internal (in some cases) and external (more widespread) speculation about "what it is they exactly do".

The Old Dominion EMS Alliance (ODEMSA) is a very large region with an extensive sub-council structure. Internally, some characterize this as an efficient two-way conduit of information for decision-making and dissemination of information and resources. Others feel that the southern part of the region is significantly short-changed in these regards and has had to become largely self-reliant (some suggest that the Southside Sub-council, or "south of Dinwiddie" as a whole, should have its own staffed council). The use of part-time field coordinators in the south should be addressed and perhaps an office established there. While most of the councils reflected the effects of hospital system and provider politics, ODEMSA seems affected much more than most, to the point that some find distracting from the patient care mission. Many feel that the leadership is "metro-centric" and that "business development" competes with system development. This is the only council to have significant division among interviewees about the value of the council, with some in leadership roles saying that the council is more a bureaucratic hindrance than a help.

The Blue Ridge EMS Council is led by Connie Purvis who seems well-respected in her region and by her colleague directors and state staff as

someone who really tries to make the state-regional system work. The Council volunteered to have its staff become the pilot for staffing regions with state staff, though this approach was nixed by the Attorney General's office. This is a small staff in a small office serving a small region and is the subject of merger suggestions. The program offered seems to meet regional needs and appears well run. The area could benefit from a new office with training center.

c. The statewide EMS system and the care that is provided are fragmented in the sense described by the "*IOM's EMS at the Crossroads*". Years and years of "local rule" by operational medical directors with little effective attempt until the recent era at coordinating protocols, drug boxes, and quality improvement methods have produced inconsistent types and quality of care in the field with varying degrees of medical oversight. The lack of an effective, compliance-enforced statewide data system to feed performance improvement systems utilizing consistently defined indicators contributes to this fragmentation. There is support for more emphasis on regional medical directors and their more full-time employment, as well as a full-time state medical director.

   This traditional local rule has extended to the regions throughout their history, again until the past several years. They have had great latitude in establishing their own individual system development priorities. Many were established and spent their formative years after the effective decline of the federal EMS program, so had no immersion in the "15 component" system-centric development process. All of this has resulted in structural fragmentation through an inconsistency in program emphasis and support services delivered by regions across the state which contributes to fragmentation in service delivery at the patient care level.

d. Virginia's $4 for Life program provides resources that other states' EMS programs envy. There is speculation whether the program is meeting the evolving needs of EMS agencies and their patients. Is it necessary to use these funds for a state police medical helicopter program when there are commercial medevac providers readily available in the state (and is it ethical to compete with them in this way)? Is it wise to pour monetary resources into basic equipment and vehicles for services which are marginal or should we encourage services to be created in, or expand into, areas served by threatened services which can be self-reliant for such funding, allowing us to focus $4 for Life on other needs?

   Between concerns such as these and the evolving role of councils, there is a need for detailed needs analysis done on a uniform, statewide basis, in each region.

The following are the results of specific interview questions:

a. State/Regional Office Relations: Levels of trust and collegiality vary by region. Regional staffs seem to have very good access to OEMS staff at all levels and vice-versa. OEMS field representatives seem at home in some regional offices and less welcomed and more on a formal level in others. State staff members feel that some regional staff are "team players" trying to make the state/regional delivery of system planning, implementation, and coordination services as smooth as possible, while others use opportunities to serve personal or business interests of the council at the expense of OEMS.

   Regional staff members feel that state staff colleagues don't always proactively involve them in planning that will impact them, or respond adequately to their efforts to be involved. The OEMS staff, for instance, was viewed in this manner in the case of developing regional council regulations and considering input from the regional directors in early 2007.

   The transition from "less-restrictive" regional/state contracts to contracts with more specifics and requirements for deliverables and reporting has increased tension between staffs. Regional staffs feel that much of this is an exercise in bureaucratic paper-pushing, while state staff see this as an attempt at increased accountability and an encouragement for more uniformity in service delivery and less fragmentation. Regional staff see themselves sandwiched between competing demands of the boards to which they report and demands of OEMS with which they contract.

b. How effective is the council in representing local interests? Varies from council to council, but most respondents generally felt positive in this regard. The ODEMSA, NVEMS, TJEMS, and PEMS councils (in order of frequency mentioned) had constituents who felt the council did nothing for them.

c. How effective is the council in providing services? Same as "b" above.

d. What are the 2 or 3 most needed services that councils provide well and do not provide well?

   i. Well:
      1. Training coordination and equipment resource
      2. Central point of information accessibility
      3. Consolidated testing
      4. Coordinating meetings to do planning
      5. Ambulance restocking agreements
      6. Drug box coordination
      7. Protocol development

ii. Not well:
    1. Protocols
    2. Outreach services/field offices
    3. Training equipment availability
    4. Performance improvement

That some items appear in both lists reflects variation in service delivery among regions.

e. Should regional staff be state OEMS staff? Of the 215 interviewees who expressed an opinion, 54 (26%) said yes; 99 (47%) said no; and 62(30%) expressed mixed feelings. Those who were in favor said that this would provide more consistency and accountability for regional services statewide and that this would lead to less fragmentation. Some regional staff in favor of this sought better benefits unless the cost of reduced pay were too great. Those opposed said that the system works fine as is, that independent council can generate additional funding state offices couldn't, and that staff reporting to a regional board makes them more responsive to local needs.

f. More regions, less regions, or change the borders of existing regions? It was hard to pin some individuals down on this one. Of the 180 interviewees who expressed an opinion, 29 (16%) wanted more regions, 79 (44%) wanted to leave them the same (there were many suggestions for specific border adjustments which will be discussed in the question on regional boundaries to follow below; many suggested heeding patient flow patterns in adjusting boundaries), 50 (28%) wanted fewer regions (most said to configure like state police, fire programs and emergency management regions), and 22 (12%) had mixed feelings. Those who wanted more regions (and others) were concerned about the distance from their agency to a regional office where meetings occur, training often occurs, training equipment is housed, and staff are located. Sub-regional field offices would also address much of this concern.

g. Statewide Protocols? This question was asked of operational medical directors (OMDs) and field providers when time allowed. The purpose was to gauge the level of contentment/concern with current system of protocol development, and arose spontaneously in early interviews with OMDs about the state of the medical direction system. Of 70 interviewees asked whether they would favor a system of statewide protocols, 49 (70%) said yes, 8 (11%) said no, and 13 (19%) had mixed feelings. In the latter group were concerns that many who favored statewide protocols also shared. The over-arching concern was that there be a well-defined system for statewide protocol development that assured representative flow of opinion and review from field providers and OMDs at the local level through regional medical directors and OMD groups to the state medical

director and regional medical director group which should have the final say. There was also a concern that statewide protocols without opportunity for regional or local variation would become a "lowest common denominator" for practices allowed. There is now significant variation from region to region and locale to locale in the treatments allowed and the degree of autonomy with which providers may treat. Many practicing in areas with aggressive medications/procedures lists and high degrees of autonomy did not want to lose those. The resulting theme seemed to be "statewide protocols in a well-defined system with the ability for regional if not local variance as approved under review by the system".

In further discussions with OMDs about this and the overall medical direction system, it was found that there is great regional variation in OMD participation in protocol and other medical oversight system development and coordination at the regional and state levels. Some OMDs enjoy their ability to create protocols and quality improvement practices, while others are concerned about the potential liability and time consumption this involvement implies.

h. Should OEMS stay in the Virginia Department of Health (VDH) or move into the Secretariat of Public Safety? This question was asked of Governor's Advisory Board and regional council/board and staff members as seemed appropriate to their knowledge and experience and as time allowed. This was inserted into interviews because of the Advisory Board's attention to this topic earlier this year. Of the 102 interviewees asked, 50 (49%) were in favor of moving to Public Safety, 28 (27%) were not, and 24 (24%) had mixed feelings. There was general recognition that EMS' strongest tie is to the health/medical discipline and that, other considerations aside, VDH is the appropriate location. However, those that favored moving, and some with mixed feelings or opposed to the move, were appalled at the indifference to OEMS demonstrated by VDH in the move of the office location and in the degree of attention afforded OEMS, EMS system activities (e.g. Symposium) and the Advisory Board. There is a sense of feeling lost, several levels down in a large bureaucracy.

There was a general sense of caution, even among many who favored moving, because of the risks involved. While most felt that OEMS should be at a department level with state police and emergency management, rather than under one of those public safety departments, they acknowledged the risk that this posed for the OEMS director who would become a governor's appointee.

C. Results of Document Review

The external guidance literature utilized for reference (e.g. ASTM standards, *Agenda for the Future…*reports, IOM *EMS at the Crossroads*) are described in the Introduction section. Summary observations include:

- The ASTM documents may be instructive to Virginia's EMS regions as to a framework for their structure and operations and may, at least in part or through adaptation, be useful as primers for council/board members and staff. Since the regions matured largely after the decline of the federal EMS program with its system-centric emphasis, these references may be useful.
- The *EMS Agenda for the Future and Rural and Frontier EMS Agenda for the Future* speak about regions as collectives of local agencies coming together to integrate with other health, medical, public health, and public safety services more effectively. These collectives can also position themselves to acquire group purchasing, medical direction, performance improvement, data processing, billing and other services more effectively.

Recommendation 1.0: **Regions should perform a needs assessment process to determine if these or other services might benefit provider agencies. The needs assessment process should be developed on the state level and then applied regionally so that results may be utilized in determining future state EMS resource needs and allocation as well.**

- The *EMS Agenda for the Future and Rural and Frontier EMS Agenda for the Future* describe the need for integrated and uniform data collection, performance improvement and medical direction systems. These should be meaningfully linked to system governance and education/training systems. The IOM study report echoes that these components be in place with an emphasis on producing accountable, uniform, evidence-based practice at the patient's side. It also calls for regionalization by which it means a focus on trauma, cardiac, stroke, pediatric and other emergency care subsystems and how well and timely patients arrive at the right type and level of care for the nature of their emergency.

Recommendation 2.1: OEMS should continue to develop and implement a mandatory, uniform statewide data system linkable to trauma and other specialty registries, and meaningfully integrated with state and regional performance improvement and medical direction systems. Recommendation 2.2: A specific set (initially just a few chosen from the NHTSA Performance Measures draft report) of response, treatment, transport and interfacility transfer decision-making performance indicators should be mandated. State staff should partner with staff in each region to establish and monitor these and recommend actions to medical direction, education/training and governance responsible decision-makers. Recommendation 2.3: Regions should be large enough, and/or must partner with neighboring regions (in Virginia and in neighboring states) to effectively monitor patient movement to specialty facilities for appropriateness and timeliness.

Internal document review often mired study staff in the vast records of financial performance, contract deliverables performance, the regional services, plans and other deliverables themselves, program reporting and the like. At the detail level, the lack of uniformity in financial, program service, and contract deliverables reporting, and in the regional approaches to providing services, developing plans, staffing, job descriptions and other operational details defy uniform assessments such as cost/benefit analyses though efforts were made to accomplish these. To meaningfully accomplish apples to apples comparisons of money spent and services and staff provided would require a detailed financial and service audit, which this study specifically did not set out to do.

<u>Recommendation 3.0</u>: Regions should be required to either submit a separate annual financial annual report in a format and with definitions that make it directly comparable to other regions, or to alter their accounting practices and standard year-end financial reports to accomplish this. Of specific interest are all types of local, state, federal funding revenue as well as all funds from services provided and from donations. Also of specific interest are all administrative, program service, fund-raising and other categories of expense including specific salary and benefits information by employee category and job description.

At a higher level, these documents affirm the impressions gleaned from survey and interview activity, of an historically fragmented regional approach to providing services and reporting on services provided, and an increasingly intensive state effort to make regions more uniform in their approach to service provision and accountable in comparable terms for the use of state funds to provide services. Dedicating a state staff member to the oversight and provision of technical assistance for these activities has been positively received by the regions. The contract process has evolved over the years. Interviews indicate that early funding was relatively "strings free" in terms of deliverables. Earlier contracts that were reviewed demonstrated a level of specificity (e.g. specific funding amounts for medical directors, field coordinators and other positions which varied by region, as well as specific amounts for certain activities like protocols development) which has disappeared in the past two years in favor of lump sums. On the other hand, product deliverables and reporting specifications have become more detailed. Staff has developed reporting and plan templates, process and deliverables timelines and internal contract deliverables report cards to aid in communicating requirements and in monitoring compliance. Regional staff balk at the detail and complexity of the specifications and the time required for reporting compliance. There is also concern about the need for more negotiation of terms going into contract development and the lack of availability of "front money" to carry programs into new contract periods.

As long as the regional/state contracting relationship is mediated by regional staff who must be responsive to board/council and EMS agency demands on a day to day basis as well as to meeting contractual requirements, and state staff who are focused on bringing uniformity to statewide subsystems such as medical direction, performance improvement and (IOM type) regionalization planning, these issues will persist. Contract terms will continue to evolve, becoming more specific in some regards and less specific in others as

they are negotiated from year to year. The contract process, in all its parts, could become more time-consuming and distracting if a better bridge between council/board priorities and state priorities isn't found. The solution of replacing regions as they now exist with state run field offices and regional advisory boards would resolve the issue of accountability for state priorities, but perhaps at the cost of decreasing accountability to other system stakeholders. It is not recommended for reasons discussed below.

At the other end of the spectrum, the solution of funding the regions and allowing boards/councils to solely dictate program priorities will just continue fragmentation at all levels down to the patient's side and contradicts the current external guidance literature.

While detailed cost/benefit analyses based on the data provided would create a slippery slope of using financial information that could be challenged as inaccurate and distract from the higher level findings of this report, those findings can benefit from a higher level cost/benefit discussion without duplicating too much the findings of other sections. The primary area of interest for this discussion is the independent regional organization model versus a state run regional model. The question of maintaining the current number of regions versus increasing or decreasing that number of regions has cost implications of providing more or less staff to accomplish the change. In the absence of our discovery of initiatives to increase the number of regions (except for one suggestion in the ODEMSA region that could be addressed by a sub-regional office), we anticipate keeping the number the same or decreasing the number. Decreasing the number of regions may produce some savings in administrative staff and overhead, however maintaining a subregional presence in consolidated areas will eat some of those savings. There are more important considerations presented elsewhere in this report (IOM regionalization, decreasing regional vulnerability) than cost impact, so we will not discuss that further here.

The current structure of independent regions costs the State well in excess of $3 million annually and has been increasing. In 2004, the JLARC study (Table 5, below) found that regions brought in 44% of their revenue from non-state sources (approximately $1.9 million versus some $2.4 million from the State). Our review of 2006 financial statements indicates that this trend continues. These funds not only allow regions to provide additional services, but to hire more staff and to be able to offer competitive salaries to attract qualified candidates. An untoward cost of the current structure is the lack of uniformity in the assessment of needs, provision of services, and reporting of service delivery. This has caused an escalation of contract detail, negotiation processes, and investment of regional staff time. Under the current model, local input is encouraged in theory (survey results have mixed support of this), and regional boards and staff the have flexibility of small bureaucracies to enable them to take advantage of time-constrained opportunities for revenue or service provision. OEMS itself takes advantage of this, employing council staff to carry out functions that would be cumbersome to do in the State system.

In a State-run regional system, economies of scale in purchasing on a statewide basis, hiring through the State employment system with likely lower salaries in certain cases,

and increased uniformity and adeptness at planning processes with the standardization of a centralized administration, could bring overall expense savings. While this system might still qualify for some federal funding enjoyed by the current regions, the likelihood of localities paying assessments, or local firms or foundations providing donations to state-run regions is significantly reduced. This would cost EMS at least hundreds of thousands of dollars each year. The ability of the state to attract the caliber of staff now enjoyed by the regions, and to allow operational flexibility in a bureaucracy that has proven burdensome to those in the EMS system is questionable. Uniformity of services and reporting would increase in a centralized setting. Loss of local input is feared.

These considerations suggest a hybrid solution: maintaining the independent status of the regions so that they can continue to attract non-State revenue and remain operationally nimble, but place OEMS technical assistance staff liaisons in each regional office to encourage increased standardization of services and reporting, reduce the burden of contract negotiation, servicing, and reporting on regional staff, and increase the profile of Code-mandated service availability in the regions. It is not known whether existing regional staff position equivalents or regional consolidations could play a role in reducing the overall incremental cost of this arrangement (potentially $500,000 in an eleven region system). Elimination or significant reduction of the worst fall-out in each of the two models above (loss of non-State funds and continued fragmentation) appears to be a benefit worth this cost, especially in a State with significant EMS financial resources.

D. Key Findings

The charge to ASMI was to assess the regional structure for its fitness to serve in the system building and support function required by the Virginia Code and with reference to the contemporary literature on EMS system development and organization. In addition to recommendations already offered above, this section provides our major findings and addresses a number of sub-issues that we are required to address. We have organized this in three sub-sections around two key issues: state/regional office organization, function and staffing (the state regional office versus independent regional office issue, among others) and the number and configuration of regions. The third sub-section discusses meeting cost considerations of our recommendations. Single recommendations are numbered “X.0”, while multi-part recommendations begin with “Y.1”and continue. Note that some recommendations are found in the immediately preceding section because of their primary source in external literature.

1. State/Regional Office Organization, Function and Staffing

The EMSSTAR study in 1998 and the JLARC study in 2004 both considered the proposition of changing the independent regional EMS offices into state employee staffed OEMS regional offices and both rejected it. The ability of these 501(c)(3) entities to leverage state funding to receive additional funding through locality contributions, fund-raising, and grants is cited as the primary benefit of retaining this structure. In addition,

the ability to attract quality staff is thought to be less under the state bureaucracy's schedule of pay.

The JLARC study demonstrated the state fund leveraging in the following table.

Table 5

Total Regional Council Revenues
FY2004

Region	Total	Non-State Revenue as % of Total
Tidewater	$992,031	70%
Lord Fairfax	216,512	55%
Central Shenandoah	234,411	54%
Rappahannock	380,866	52%
Thomas Jefferson	243,091	51%
Old Dominion	549,516	48%
Western Virginia	656,515	43%
Northern Virginia	317,530	34%
Blue Ridge	280,326	34%
Southwest Virginia	404,257	24%
Peninsulas	318,484	11%
Statewide Total	$4,350,088	44%

In our review of financial statements, we confirmed that this persists (e.g. in 2006, Western Virginia brought in 42% of its revenue from non-state sources; including a federal grant this figure rose to 71%). Figures for 2006 are not presented and analyzed as a whole here because the financial statements provided by the councils do not clearly provide apples-to-apples comparisons of revenue across the 11 regions. For instance, it is not always clear what revenue is from locality assessments, from non-state grants and from donations or other sources such as local or federal grants. It is adequately clear through these document reviews and through examples given during the interview process, that the independent non-profit structure leverages additional funding and other resources in a way that could not be reproduced with state run regional offices.

The rationale for changing to state run regional offices is to increase the uniformity of system development and service provision quality, quantity and coordination across the state. We have already affirmed that there is a great need for such consistency in order to fight fragmentation at all levels.

In 2003, OEMS changed its contracting policy to more specifically address the deliverables expected in exchange for state funding. The contracts have become quite specific and the processes of negotiating them, monitoring them, complying with and reporting on accomplishments required by them have become time-consuming for all involved. These changes, along with the assignment of an OEMS staff member as a liaison with the regions and to oversee the contract process and compliance has improved accountability according to state staff and Advisory Board members.

Our survey results were neutral on this question, while our interviews were more negative than positive (47% to 26%) on changing regional offices over.

The Virginia EMS office is charged by the Code of Virginia in a fairly broad manner to provide leadership in EMS system development as well as to regulate certain aspects of EMS operations. The Code also specifies that regions will do much the same within their geographic areas minus the regulatory responsibility. The 2004 JLARC EMS study found that OEMS is often perceived mostly in its regulatory role and that regions are perceived as providers of technical assistance and services to providers and provider agencies. It also said that in some ways councils appear to operate as extensions of OEMS. Our interview process found that there is a pervasive perception among EMS providers that the regional offices are state offices in some manner. As we reported above, there is also concern that in this guise, information given out by regional staff on OEMS policy, procedures, programs and other matters is considered "official" though in some cases the information is wrong.

Recommendation 4.1: Based on the preceding discussion, including the cost/benefit discussion in the preceding section, we are convinced that the current independent agency structures should be maintained rather than transitioning by force to state-employee staffed offices, and so recommend.

We suggest, however, that there is a role for state staff to physically exist in regional program offices and that there is a need for a technical restructuring within OEMS to accommodate this.

Recommendation 4.2: We recommend that OEMS be more formally organized into regulatory and leadership/technical assistance divisions (and "branded" in some recognizable fashion like "FedEx Green" and "FedEx Blue") at the level of the two heads of those divisions and below. Regions and regional staff would formally be included under the technical assistance arm of Virginia EMS by contract and would have no regulatory role.

Recommendation 4.3: We recommend that technical assistance staff be derived from regional staff that wish to transition to state employment or be otherwise hired and placed in every regional office (or sub-regional office with regular contact with staff at the primary office). These staff would report to a technical assistance supervisor at OEMS in a position like the current regional liaison. These staff would have performance improvement backgrounds or be given training in PI methods from OEMS staff and individuals such as Jeff Meyer in PEMS. They would be responsible for overseeing contract compliance and reporting for the region. They would help regional staff develop required programs and services in a manner consistent with other regions and would meet regularly with colleagues and the supervisor to assess consistency and timeframes of progress. They would also be the primary regional office public contacts for information related to OEMS policy, programs, services and the like. They would have complete access to state data system, trauma registry, performance improvement and other resources to help the

regions progress in the areas now covered in contracts and required by the Code. They would be the primary assistants to regional medical directors in maintaining system oversight. It is hoped that as these new state staff and their roles in the regions mature, the detail and scope of contracts may decline.

During the course of all aspects of the study, we were struck by the inconsistency statewide in medical direction practices, protocol development methods and protocols, performance improvement and its ties to medical direction decision-making and oversight. There is also inconsistency and a general disconnect in communications and lines of authority and liability protection from OMDs to regional medical directors to OEMS and the state medical director. During the course of interviews, 70% of OMDs and prehospital providers asked said that they favor statewide treatment protocols. These findings go to the very nature of the type of system/service fragmentation the IOM study has warned us about in its call for increased accountability and regionalization.

<u>Recommendation 5.0</u>: Therefore, we recommend that a uniform system of medical direction be adopted with formal linkages and authorities existing from OEMS and a full-time state medical director reporting to the director. This would define a legal reporting relationship from at least quarter to half time regional medical directors to the state medical director and on down to OMDs and provide regional medical directors with the ability to serve as temporary OMDs in areas where effective medical direction is lacking. Authority for developing protocols should lie with the state and regional medical directors as a group. A formal system of OMD/provider participation in the development and review of protocols should be put in place that allows local and regional practice variations and emphasizes evidence-based decision-making.

During the course of the study we were made aware of the concerns surrounding OEMS' role in the Health Department and the suggestion that it be moved to the Secretariat of Public Safety. As a result we added a question to our interviewing process on this for those with knowledge of the issue.

As reported above, 50 (49%) were in favor of moving to Public Safety, 28 (27%) were not, and 24 (24%) had mixed feelings. The organizational table below compares the two Secretariats. If OEMS were to become a department in Public Safety it would move at least one level closer to the Governor's office.

It is our experience in other settings that state EMS agencies that move away from their more natural home of a health department to a smaller, related or independent structure for purely logistical reasons can fair very well and need not lose all ties to the health department. Again, this transition brings hazard especially when an agency has the resources possessed by OEMS. For instance, state rules on permitted ratios of employees may prevent the whole complement of employees from transferring. Most departments in Public Safety have directors that are appointed by the governor which makes the OEMS director vulnerable (OEMS should not move in at less than the departmental level). At least one state in a similar situation vested authority in its governor appointed

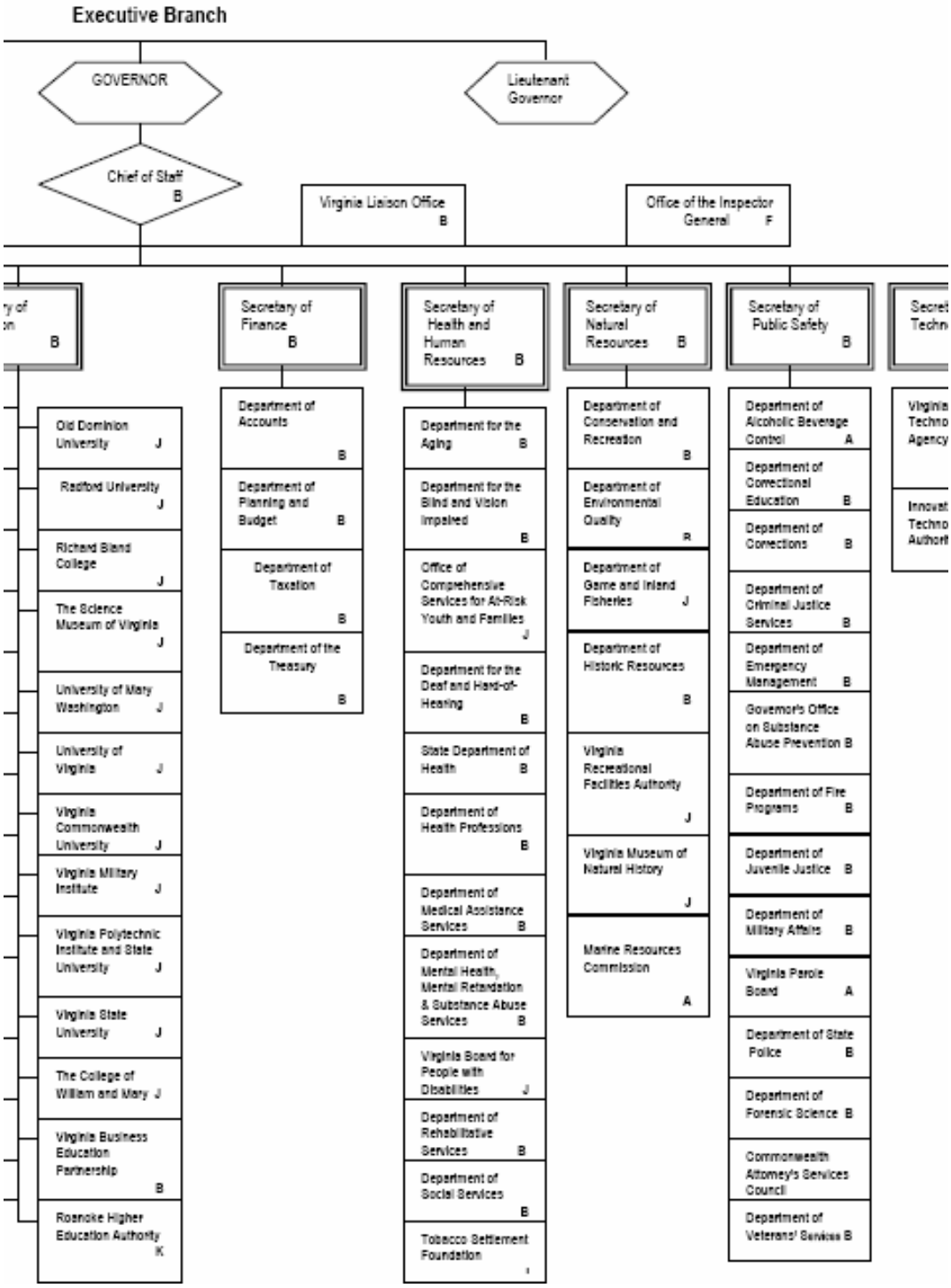
board to name the director when transitioned from health department to public safety department. Similar arrangements exist within Virginia's executive branch. This, or at least specific job qualifications could be written into the legislation transferring OEMS should this come to pass.

Another of these hazards will be pressure to conform to the regional structure of the other public safety state agencies. This is not bad but must be managed through negotiation, further study and a purposeful and moderate transition process. It should not be a forgone conclusion that EMS will conform to the existing public safety regions. Some consolidations are recommended below to bring regional numbers more in line with Public Safety's number of regions, though not with its borders. However negotiations, it should be recognized as a part of the transition to the Public Safety, may result in Public Safety's regions adjusting to meet the needs of EMS patient flow and other considerations, or in there being a majority overlap of regions but some differences in border detail.

Decisions made by the Health Department, such as relocating OEMS to a largely inaccessible office site, strike us as uninformed or neglectful. Our experience with other states is that concerns about cutting ties with the health/medical discipline do not bear out if efforts are made to maintain them with state health colleagues. The opportunity to more closely coordinate with other public safety agencies and with emergency management should help in joint response planning and management and possibly in homeland security funding.

Recommendation 6.0: **We recommend serious consideration of this move from Health Department to Public Safety Secretariat which so many informed Virginia EMS professionals deem appropriate.**

Table 6 Partial Organizational Chart of Virginia State Executive Branch

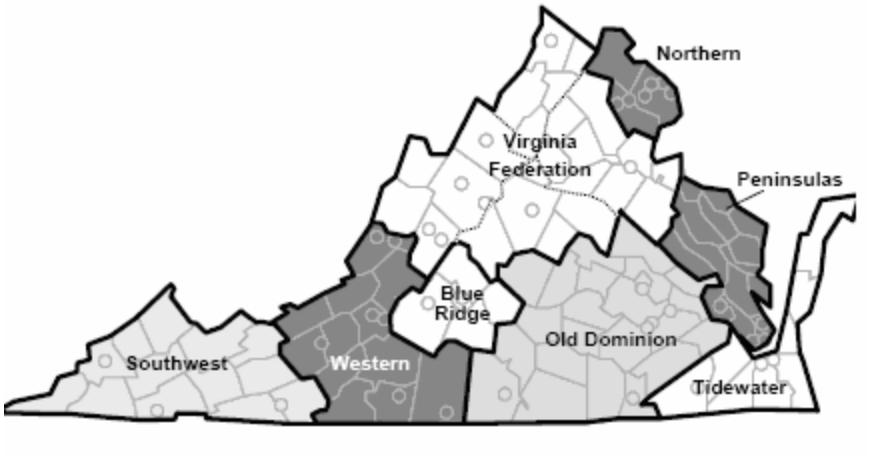


2. Number and Configuration of Regions

Natural EMS systems form based on communication/interaction patterns, shared resources (e.g. training) and patient flow. The goal is to match administrative boundaries for system lead agencies to these natural systems.

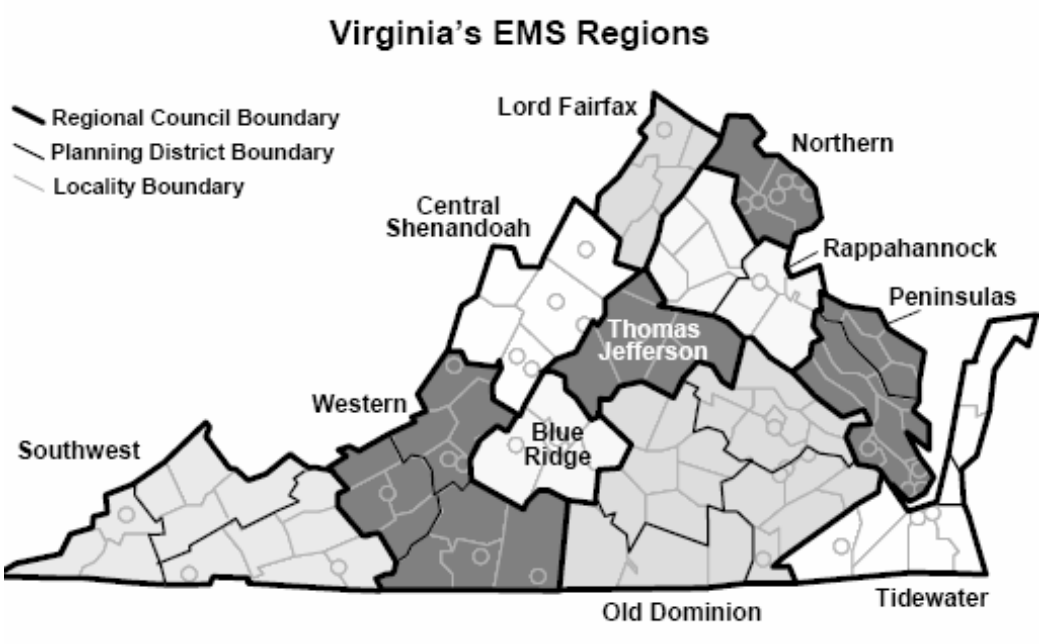
Prior to the dissolution of the Virginia Federation of EMS Councils in 1998, there were eight regions in the Commonwealth as portrayed in Map 1.

Map 1 Virginia EMS Regions Prior to 1998



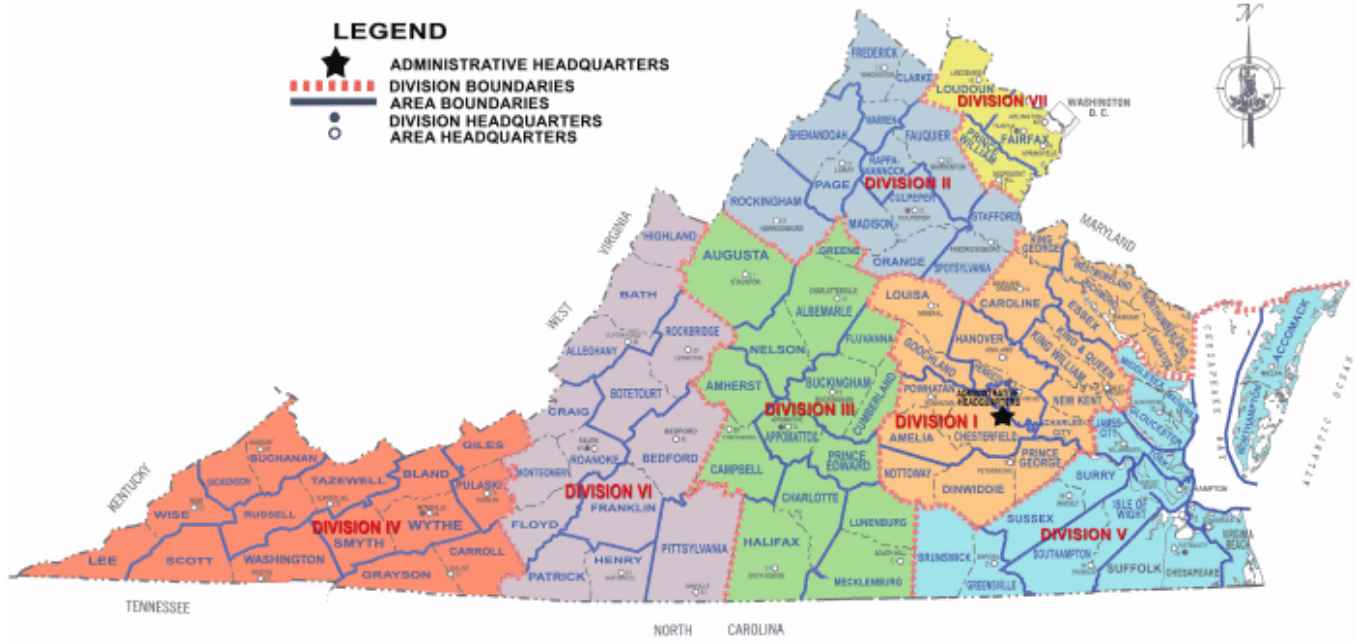
A number of internal sub-council issues led to the Federation dissolution into the structure and distribution of regions depicted below. The Rappahannock region resulted from the merger of two Federation sub-councils. The others were based on existing sub-councils.

Map 2 Current Virginia EMS Regions



One suggestion reviewed in the study was the reorganization and redistribution of regions along the seven divisions established for years by the Virginia State Police according to Map 3. This organization also establishes sub-division areas and area offices.
A gubernatorial policy goal to make service regions uniform resulted in other programs now within the Public Safety Secretariat, such as Fire Programs and Emergency Management, to adopt similar divisions.

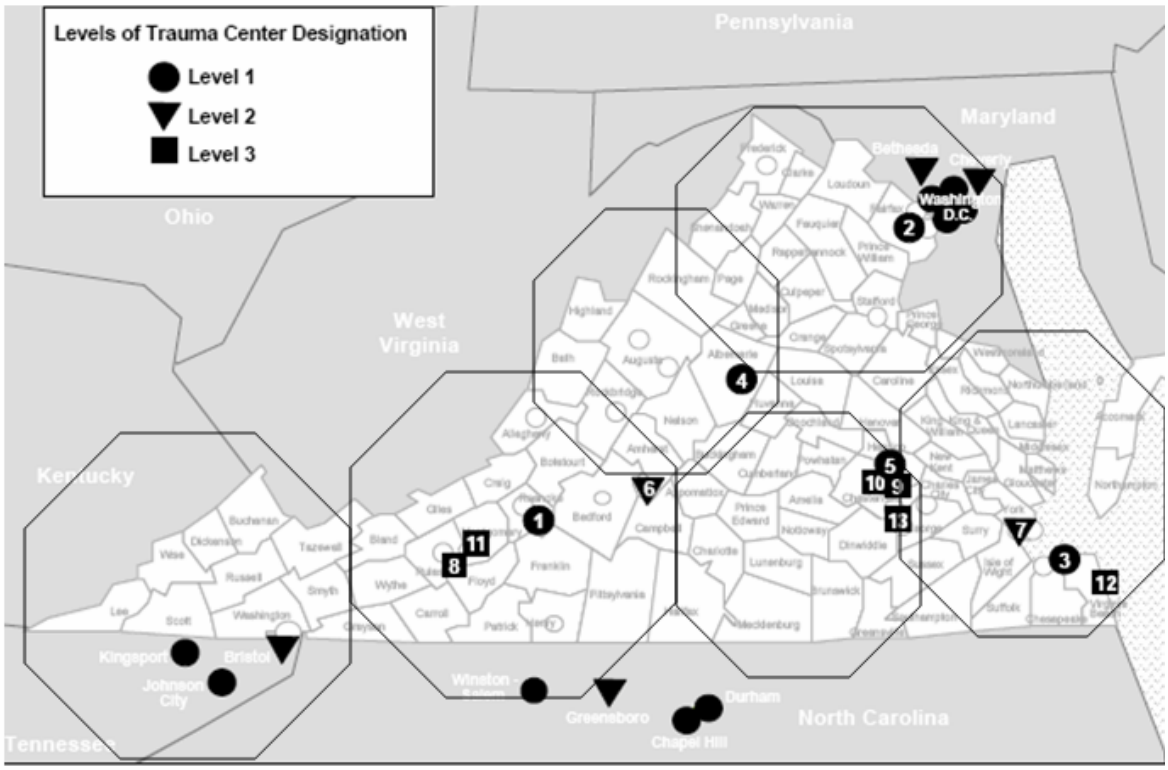
Map 3 Virginia State Police and Other State Public Safety Agency Regions



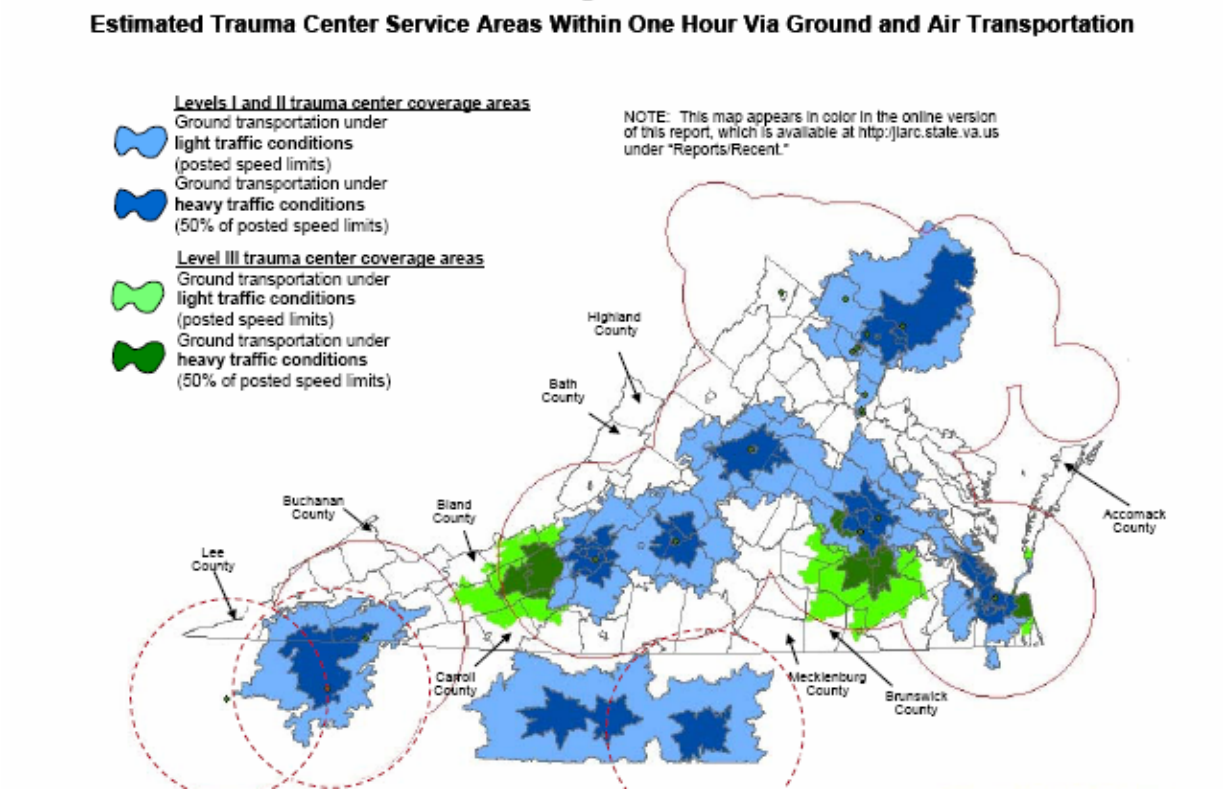
Another suggestion was configuring regions with ambulance transportation and patient flow considerations. With some 90 acute care facilities in the Commonwealth, it is not practical to consider a one-to-one hospital region or even sub-council structure nor is that the way EMS system coordination is usually arranged as multiple agencies routinely transport patients to multiple facilities that often sit in fairly describable natural regions. The existing regional structure was established with these considerations in mind, and there are still disconnects in many areas where providers on the fringe of one region transport largely into another. One cause of this is the use of planning district commission divisions as building blocks of the EMS regions. Some regions utilize the planning district commissions to carry out their missions while others may not. Patient flow and planning district commission boundaries should be considered in the final refinement of any regional change plan, but should not be the primary considerations.

In consideration of the IOM's regionalization recommendations, we looked at patient flow on the larger scale of trauma care regions. Organizing around Level I and Level II trauma center catchment areas also tends to coincide with regionalization for cardiac, stroke and other major emergency interventions. Such a structure is roughly depicted directly below, and supported by a similar configuration in another diagram below that based on a 2004 JLARC trauma system report.

Map 4 Trauma Centers and Regionalization Suggested by Their Locations

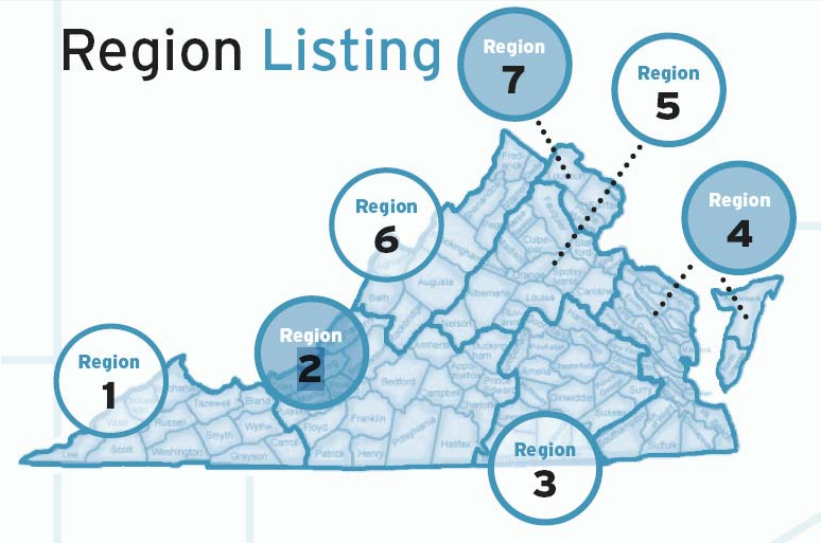


Map 5 Second View of Regionalization by Trauma Center Coverage



It has also been suggested that Department of Medical Assistance Services(DMAS) regions be considered as they have been configured around health systems and patient catchment area considerations. Review of DMAS web offerings indicates that current focus in the department, where maps and divisions are concerned, seem to revolve around managed care catchment and enrollment areas which match none of the other regional configurations we are considering nor reflect what would be ”natural” systems for EMS. A DMAS-related non-emergency patient transportation service offers the following regional divisions which may reflect earlier DMAS orientation.

Map 6 DMAS Non-Emergency Patient Transportation Regions



It has also been suggested that regions be divided to get better equality in numbers of providers and provider agencies. The current distribution is shown in the table below.

Table 7 Regions by Agencies and Localities

Regional Council Characteristics, 2004

Council	Total Providers	Total Localities	Total Agencies
Old Dominion	6,343	27	133
Northern Virginia	5,371	9	53
Tidewater	4,540	10	75
Western Virginia	3,448	18	112
Peninsulas	2,278	16	51
Rappahannock	2,273	10	75
Southwest Virginia	2,188	16	103
Central Shenandoah	1,768	10	67
Blue Ridge	1,428	6	45
Thomas Jefferson	1,374	6	39
Lord Fairfax	1,018	6	47

Source: OEMS Licensure and Compliance Database.

Finally, it has been suggested that regions be divided primarily with population, land area and geographic considerations in mind. These are certainly considerations, but don't equate to natural EMS systems.

The survey (Question 20) conducted for the study indicated that respondents generally wanted to keep the number of regions as is with a slight edge toward increasing the number if anything as opposed to decreasing the number. The interview process yielded somewhat different results with the largest number (44%) in favor of keeping regions where they are in number, while a significant number (28%) favored fewer regions and most often mentioned was the Public Safety model, and 16% favored an increase in regions. The interviews also revealed that most wanting more regions were more interested in access to an office and staff than necessarily a whole council structure.

The survey (Question 20) also suggested that respondents are pretty equivocal about how regional divisions should be based except that they seem to favor geography/ population/ land area considerations and not planning district commission considerations. The public safety model was disliked more than it was liked (46% to 34%) but is still a contender.

A required consideration is to recommend a regional configuration that:
"will improve coordination of emergency medical care and integration with public safety services (state law enforcement, emergency management, and fire programs) as well as maximize opportunities to receive federal grants for state emergency preparedness and response activities"

While we do not believe that improved coordination of emergency medical care and integration with state public safety entities are mutually exclusive propositions, the latter suggests the Public Safety model division of regions and possible co-location of offices for "one stop shopping" and improved routine staff contact benefits. That is not an unattractive model, but we are not convinced that the disruption to regional EMS organization and services that this cookie cutter approach might cause would be worth those benefits. We have seen in the Tidewater and Western Virginia regions the ability of talented professionals to obtain significant federal funding for emergency preparedness and response configured just as they are. Such funds are generally funneled through health departments and emergency management agencies with prescriptions for including classes of providers like EMS and hospital providers. We therefore do not see that regional organization has relevance to maximizing opportunities to receive such funding for emergency medical dispatch, 9-1-1 or any other purpose mentioned.

The various schemes reviewed above suggest a smaller number of regions based on EMS (IOM type) regionalization considerations, and Virginia public safety considerations (presumably originally developed based on highway and patrolling considerations, which are certainly relevant to EMS and patient flow). While geography/population/land area considerations must be made, they are generally reflected in the location of providers, provider agencies, hospitals, and specialty centers, as well as patient flow considerations.

Our interviews, survey results and review of documents have revealed great variation in program quality from region to region. There are clearly stronger program and weaker programs. We have observed that the programs that have become troubled programs in the past have had small staffs and little depth of CEO talent (Southwest, Thomas Jefferson, and Lord Fairfax are examples). If a director were to leave any of the four programs described previously as best practices examples (TEMS, WVEMS, REMS, and CSEMS), there is someone in the organization that can take over and provide for continuity of service. We are concerned about the smaller regions' vulnerability in this regard, as well as their limitation, by sheer virtue of size and the mix of specialty facilities encompassed, to play a meaningful role in IOM type regionalization.

We believe that the number and configuration of regions that best fits given these considerations and given the status of current councils looks most like the trauma center maps array above. We don't preclude the possibility of a Public Safety model array, but it would have to be negotiated as previously described. As a target, some six to eight regions in the state would give each region staff depth and the ability to take a meaningful part in regionalization.

These regions would have to employ field offices and perhaps sub-regional councils. There could be some savings as current directors in combined regions leave or take different positions, and there will be savings from other reductions in duplicated administrations and processes. With the inconsistencies found in financial reporting practices and products, it is not possible to provide meaningful estimates of savings or to compare costs and benefits of the proposed structure with the existing structure, those the were attempted.

Based on the preceding considerations, and in consideration of specific requests for border alterations by locales, we offer the following recommendations, that:

- **Recommendation 7.1: An ad hoc regional process action team (PAT) be formed consisting of the outstanding regional EMS leaders identified earlier in the interview results section of this report. These should be joined by OEMS and Governor's Advisory Board leaders.**
- **Recommendation 7.2:This PAT be responsible for developing and monitoring the transition to Public Safety and negotiating its terms in so far as the regional structure is affected.**
- **Recommendation 7.3: The PAT be responsible for recommending to OEMS and its parent agency the details of the regional consolidation recommended below, assuring the following considerations:**
    - **Recommendation 7.3.1: Maintenance of a staffed sub-regional office as appropriate in locations formerly housing a regional office, and the establishment and staffing of sub-regional offices where distance to primary office dictate (particularly if a region is recommended to be divided among more than one region);**
    - **Recommendation 7.3.2: Maintenance of a sub-regional council where a regional council once existed unless a region is divided among more than one other region;**

    - **Recommendation 7.3.3: Patient flow, especially through to major specialty centers in the spirit of the IOM's regionalization theme**
    - **Recommendation 7.3.4: Progress toward a negotiated middle-ground with Public Safety on regions and their boundaries;**
    - **Recommendation 7.3.5: Maintenance of relationships with planning district commissions where they offer advantage.**
- **Recommendation 7.4: The Central Shenandoah Region and the Lord Fairfax region be combined into one region under the primacy of Central Shenandoah;**
- **Recommendation 7.5: The Northern Virginia EMS Region be combined with the Rappahannock Region under the primacy of Rappahannock. The capital district liaison function must remain intact.**
- **Recommendation 7.6: The Blue Ridge EMS Region be combined the Thomas Jefferson region under the primacy of the Thomas Jefferson region. Areas of BREMS for which patient flow primarily goes to WVEMS or CSEMS should be annexed to those regions. Remaining qualified staff should be given the option of becoming state employees under the state/regional staffing recommendation above, and an expanded sub-regional office and training center facility in Lynchburg should be considered in affiliation with the Thomas Jefferson region.**
- **Recommendation 7.7: The following border adjustments should be considered, based on substantiated requests from the locales involved:**
    - **Recommendation 7.7.1: Bath County from Central Shenandoah to Western Virginia;**
    - **Recommendation 7.7.2: Sub-regional offices in the Southwest region should be encouraged;**
    - **Recommendation 7.7.3: Sub-regional offices in the ODEMSA region (adequately addressing the needs of the Southside Council, the Crater EMS Council (especially Greenville, Sussex and Surry Counties) and the South Central EMS Council (especially Buckingham, Charlotte, and Lunenburg Counties)) should be required;**
    - **Recommendation 7.7.4: Fauquier County should become affiliated with the Northern Virginia sub-council of Rappahannock region as reconstituted;**
    - **Recommendation 7.7.5: Orange County in the Rappahannock region should move to the Thomas Jefferson region;**
    - **Recommendation 7.7.6: Buckingham County in the ODEMSA region should move to the Thomas Jefferson region**

3. Cost

The recommendations above will result in some savings from the combination of regions, but we have no way of estimating that as previously described. We suggest that the expenses involved in adding technical assistance staff to the resulting 8 regions, and for paying for increased regional medical director and state medical director salaries may be covered by these savings as well as savings from eliminating duplicative protocols development processes (formerly included in regional contracts at $10,000 per region per year). Further, interviews, town hall meeting testimony, and document review indicate that the Commonwealth is potentially adequately served by non-governmental air medical service providers without subsidizing the State Police to operate a medical helicopter program. Finally, the interview process indicated concern in some quarters about how the $4 for Life monies are being allocated, particularly in funding major equipment purchases for rescue squads whose membership issues jeopardize their response capabilities.

<u>Recommendation 8.0</u>: We recommend that state police medevac funding now covered by the $4 for Life program ($1 million) be utilized to support the recommendations contained in this report. The $4 for Life program should be evaluated for the appropriateness of allocations and for its potential to further support the recommendations contained in this report.

Appendix A List of Those Interviewed for Regional Council Study

Table 8 List of Those Interviewed for Regional Council Study

Randy	Abernathy
Coan	Agee
Debbie	Akers
Jeff	Alberts
Mary Kathryn	Allen
Billy	Altman
Byron	Andrews
Anonymous	Provider
Anonymous	Provider
Anonymous	Provider
Bobby	Baker
Don	Barklage
Carol	Barr
Robert	Bass
Marianna	Bedway
Mike	Berg
Charles	Berger
Wayne	Berry
Maxie	Bishop
Chad	Blosser
J.C.	Bolling
John	Boon
Paige	Bordwine
Max	Bornstein
Asher	Brand
John	Brandrup
George	Brown
Gary	Brown
Rohn	Brown
Maurice	Bruce
R.L.	Bucher
Bill	Bullock
Jimmy	Burch
Donna	Burns
Jim	Cady
Heather	Calhoun
Paul	Callahan
Becky	Callaway
Dustin	Campbell
Janet	Carbaugh
Shaun	Carpenter
Mindy	Carter

Earl	Carter
Jimmy	Carter
Jim	Chandler
Richard	Childress
Nancy	Christian
Jennie	Collins
Helen	Compton
Harold	Conley
Cookie	Conrad
John	Cooke
Chris	Corbin
David	Coulling
Andrew	Cox
Terry	Coy
Kim	Craig
Gary	Critzer
Mark	Crnarich
Ken	Crumpler
Dave	Cullen
Bethany	Cummings
Gary	Dalton
Steve	Davis
Robin	Davis
Amanda	Davis
Harinder	Dhindsa
Kester	Dingus
Wayne	Dodson
Jon	Donnelly
Tim	Dotson
James	Dudley
Melinda	Duncan
Bruce	Edwards
Steve	Elliott
Chris	Eudailey
Donna	Evatt
Tom	Ezell
Pier	Ferguson
Eddie	Ferguson
Brad	Ferguson
Mark	Franke
Will	Fritz
Holly	Frost
Bev	Gage
Heidi	Gamblin
Mike	Garnett
D.J.	Garrett Sr.

Lonny	Gay
Louisa	Gay
Carol	Gilbert
Julie	Glover
Jay	Gouge
Jay	Gould
Daniel	Green
Marcia	Grimm
Kelly	Hale
Linda	Hale
Linda	Harris
Carey	Harveycutter
Kirk	Havens
Paul	Helmuth
Rick	Helton
Perlista	Henry
Christie	Hodge
Vince	Holt
Heidi	Hooker
William	Howlett
Roger	Hudson
Don	James
Tom	Jarman
Lewis	Jenkins
Heidi	Johnston
Bill	Keene
Rudy	Keith
Ron	Kendrick
Ann	Kesley
Bryan	Kimberlin
Tim	Kimble
Theresa	Kingsley
Nicholas	Klimenko
Bob	Knox
Jodi	Kuhn
Charles	Lane
Matt	Lawler
Cheryl	Lawson
June	Lefke
Bobby	Lester
George	Lindbech
Art	Lipscomb
Rob	Logan
Delilah	Long
Debby	Loveless
R.V.	Marrow

Carolyn	Marsh
Nancy	Martin
William	Mays
Gary	McCarthy
Mac	McCauley
Eddie	McClellan
R.D.	McClure
Susan	McHenry
Steve	McNeer
Jeff	Meyer,
Mary Beth	Michos
Kimberly	Mitchell
Mike	Mohler
Dennis	Molnar
Clarence	Monday
Lori	Moore-Merrel
Richard	Morris
Kristina	Morris
Carol	Morrow
Mark	Moss
Mike	Mowrey
Bobby	Napier
Greg	Neiman
Tom	Nevetral
Jim	Nogle
Garland	Nuchols
Larry	Oliver
Rusty	Osborne
Jerry	Overton
Wayne	Peer
Winnie	Pennington
Tim	Perkins
Marsha	Pescitani
Heather	Phillips
Michael	Player
Pat	Pope
Steve	Porter
Lynda	Price
Chris	Price
Ken	Pullen
Connie	Purvis
Dan	Racette
Morris	Reece
Norman	Rexrode
Jo	Richmond
Gary	Roakes

Robert	Robertson
Joe	Robertson
S. Rutherford	Rose
Jose	Salazar
Christy	Saldana
Will	Sandage
Jaime	Sanderson
Linda	Sayles
Mike	Schlemmer
Mike	Semp
Paul	Sharpe
W.G.	Shelton
Warren	Short
Beth	Singer
Maxie	Skeen
Tina	Skinner
Fred	Sloan
William	Smith
Jimmy	Snodgrass
J.E.	Snyder
Ron	Stickley
Holly	Sturdevant
Junior	Thompson
David	Tobin
Suzanne	Tolson
Randy	Toohey
Sara	Tranum
Ray	Tricarico
Neal	Turner
Ellen	Vest
Joni	Wade
Steve	Wade
Jim	Wagner
Karen	Wagner
Laura	Walker
Francis	Watson
Marsha	Weatherwax
Kent	Weber
Charles	Werner
Kathy	White
Tom	Williams
Jane	Wills
Don	Wilson
Anthony	Wilson
Ann	Wilson
Scott	Winston

Greg	Woods
Billy	Yeatman
Allen	Yee
Larry	York

Appendix B Interview Questions

Interview Questions for Virginia OEMS Regional Council Study

Interviewee: **Location:** **Date:**

A. For State and Regional EMS Staff

1. What is your position and what are your responsibilities?

2. Tell me a bit about the services you personally provide and your typical day.

3. How much and what type of interaction do you have with EMS providers/agencies?

4. How much and what type of interaction do you have with the (OEMS/regional EMS offices; ask as appropriate to state or regional position)?

5. How would you characterize the relationship between OEMS and the regional office(s)? (asked as appropriate to regional or state staff interviewed).

B. For all interviewed

1. In what capacity(ies) do your participate in the EMS system?

2. How would you characterize the relationship between OEMS and the regional office(s)? (Skip if answered A.5, unless answering in different capacity….record this capacity, if so).

3. How effective is the regional council system in representing local EMS interests in regional EMS system development?

4. How effective is the regional EMS system in providing support services for EMS providers and agencies and the public served?

5. What are the 2 or 3 needed services/functions that regional councils provide well and the 2 or 3 services/functions that they do not provide well?

6. Would regional service/functions be better provided by regional offices staffed by OEMS personnel?

7. Would regional service/functions be better provided by consolidating regions, creating more regions, and/or reconfiguring regional boundaries?

8. If “yes” to any of B.7, how should regional boundaries be determined?

Appendix C Advantages/Disadvantages of Current Regional Council System (from 2006 EMS Regions Open Forum)

Table 9

Table 9 Advantages of Current Regional Council Structure		
# Responses	Advantage	Comment
18	Offer flexibility to meet unique and varying needs of constituents (7)	Responsiveness
13	Allow for local government involvement, cooperation and consensus building (9)	
11	Provide flexibility to EMS System – acting as contractors for specific projects or regional initiatives (4)	
7	Provide for "grass root" support for EMS (5)	
6	Councils engender "trust" with Agencies	
3	Allows ability to obtain local funding for shared regional projects (3)	
2	Promote consistency in protocols (3)	
1	Councils are not-for-profit entities and allow for gifts in kind and partnering with organizations like United Way	
	Low administrative costs	

Table 10

Table 10 Disadvantages of Current Regional Council Structure		
# Responses	Disadvantage	Comment
15	Lack of standardizations around policies and procedures (3)	Board Structure does not allow
14	Inconsistent program and services offerings (6)	Board Structure does not allow
14	Limits in funding (4)	
13	State contract funding process issues: annual not multi-year, inequitable across regions (6)	
12	Regional Councils are understaffed (5)	
10	Existing boundaries of Council service areas not in line with other public safety agencies services areas and do not recognize flow of patients etc.(2)	

Disadvantages of Current Regional Council Structure Continued		
# Responses	Disadvantage	Comment
8	Lack of visibility of OEMS within state government, inability to partner with other public safety departments as well as the physical location of OEMS, impact the overall effectiveness of the Regional Councils (7)	
8	Mandates handed down from State without providing additional funding and staffing (2)	Boundary Issues within region
7	No regulatory authority (3)	Disparity in Accounting; Salaries
	Not sufficient coordination and cooperation between Councils and OEMS	
	Lack of accountability and needless duplication of Council administrative services	
	Lack of competitive benefits packages of Council staff	
	Less than objective decision making by Councils relying on local financial support	
	Smaller Councils lack resources to provide improved services	
	Inconsistent management experience, direction and leaders by Executive Directors and Board of Directors	
	A majority of Councils rather than obtaining matching local funds depend on State for the majority of their operational expenses.	
	OEMS understaffed	
	Councils lack recognition	
	Pre-hospital care is not mandated	
	Shared Resources between councils	
	EMS System does not understand what councils do - Marketing	
	Less than objective decision making due to reliance on local funding	
	Prehospital care not mandated	
	Inconsistencies in standards of patient care Protocols	
	Disparity in Boar involvement	
	No authority to fulfill contract requirements	
	Consistency of Plans	
	Multiple ways of doing things	

Disadvantages of Current Regional Council Structure Continued		
# Responses	Disadvantage	Comment
	Opportunity for 'kingdoms' to be built that are self-serving rather than serving the needs of EMS constituents and patients Lack of coordination on critical EMS preparedness planning, between regions and throughout the Commonwealth.	

Appendix D Notes on Miscellaneous Required Considerations

The following notes accompany text in the body of the report to specifically address concerns in the request for proposals.

Review of relationships of Regional EMS Council staff to EMS agencies served, associated agencies like hospitals and medical centers, local authorities, local governing bodies, etc.

The survey conducted does not provide a ringing endorsement of the councils in this regard. The survey questions included a variety of variants aimed at assessing satisfaction and found general "approval ratings" to be in the 50 to 60% range on the whole (see discussion of Questions 6 through 10), and lower for many specific aspects of performance (see discussion of Questions 20 through 27). The overall impression given by the survey is of a regional structure that does not leave a strong impression on respondents, with significant numbers saying that they have "no opinion" on or "don't know" how their councils function in many respects. Indications of satisfaction with council services and how they are planned generally do not constitute a majority and are often out-numbered by indications of a lack of familiarity or impression. There are no striking levels of frank dissatisfaction with the councils as a whole. There is, however, a striking variation of perception of individual councils from well known and perceived, to known and less well perceived, to poorly known and/or creating little impression.

The Interview process provided more support of the councils as fairly strong providers of services with the exceptions noted previously.

Review of Regional EMS Council staff relationship to Regional EMS Council Board of Directors.

From interviews, there is a sense that some regional boards are hand-picked by executive directors, some are truly representative, and others are mixes in between. Politics in some boards causes stagnation, creates a revolving door for staff, or allows staff too much leeway in business operations. The interview process left us with the impression that most regional councils/boards and staff seem to work well together.

Review of Regional EMS Council Boards of Directors and their roles, responsibilities, and function within the organization.

Regional council/board members interviewed seemed to have a reasonable idea of what is expected of them as such. There have been episodes in recent years in some regions that evidence inattention of the council/board to adequate oversight. There is room for improvement with better board orientations in some regions.

Review of general statewide consistencies in Regional EMS Council delivery of programs, review of proposed performance/program standards and designation guidelines, and funding.

This is utterly inconsistent in most regards which is not to say that good jobs are not being done. From the interview process and review of documents it is evident that there is a lack of consistency in:

- Strategic, mass casualty, trauma, and performance improvement planning.
- Program service reporting.
- Financial reporting.
- Staff roles and responsibilities, job descriptions and approaches to service delivery (again, this does not mean that good jobs are not being done or that different approaches in different locales are not appropriate).
- RSAF technical assistance, review and quality of applications.
- Consolidated testing service interpretation, which is a theoretically standardized program.
- Local funding from localities.
- Utilization of OEMS funding for specific positions (e.g. field coordinators in the past when such fund purposes were identified).
- Utilization of funding from outside sources (see table on page 64 for 2004 "non-State" funding – this was even more pronounced in 2006).

Identification of the advantages/disadvantages of the current structure of Regional EMS Councils, versus an alternative structure of field offices in performing the tasks and functions designated in the Code of Virginia.

Appendix C contains a list of advantages and disadvantages of the current council structure developed in a 2006 EMS regions open forum held in the Commonwealth. It echoes the advantages and disadvantages that have been argued for at least the past 15 years according to literature reviewed, surveys, and interviews.

The primary advantages of the current system are the ability of the independent regions to leverage state funding to raise significant additional funding to support regional services, the ability of the regional programs to operate creatively, efficiently and effectively outside of the state bureaucracy, the flexibility to offer incentives to attract qualified staff, and the ability of the regional staff to be responsive to local and regional system needs. The disadvantages of the current system include the inconsistency of services provided, reporting and accountability methods, and the generally fragmented systems down to the

patient's side that result. Another disadvantage is the increased attention to contract management that is necessitated by the inconsistencies and lapses described above.