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MEMORANDUM

TO: Sue O'Connell, Research Analyst, Legislative Services Division

FROM: Angie Grove, Deputy Legislative Auditor

DATE: June 3, 2008

RE: Issues relating to the interim legislative study of Emergency Medical Services requested under Senate Joint Resolution 5

The following discusses issues relating to provision of Emergency Medical Services (EMS) identified during the course of our performance audit. Discussion of these issues is based on our analysis of the balance between the public and private sectors in Montana's EMS system. The issues discussed in the following sections do not constitute audit findings, but do merit disclosure to the Children, Families, Health and Human Services Interim Committee as areas relevant to their ongoing review and consideration of EMS issues as described in Senate Joint Resolution (SJR) 5. Audit findings included in the performance audit report relate to closing gaps in services, developing system oversight mechanisms such as monitoring of medical direction and evaluation of the delivery of EMS, and strengthening management activities at the state level.

Legislature's Role in Statewide EMS Policy Considerations

Montana's EMS system has undergone significant changes over the years as public expectations and industry standards relative to service provision have grown. The state's EMS system has essentially developed as an informal network of organizations, which have traditionally relied heavily on volunteer services. Up to this point, many of the challenges facing the state's EMS system have been treated as local issues. Legislative consideration of certain system issues has been limited. Even though much of Montana's EMS system functions at the local level, there is a legitimate and long-established role for the legislature in addressing system issues and concerns. Three different factors support this assertion:

- National Highway Traffic Safety Administration (NHTSA) standards clearly establish a central role for state legislatures in addressing EMS system issues. Although NHTSA standards assign much of the responsibility to a lead agency within the executive branch, the standards also make clear that legislative consideration of EMS system needs and issues is essential.
- Statutory statements of legislative purpose or findings clearly establish a state-level interest in the development of the EMS system. These include section 50-6-101, MCA relating to establishment of an EMS program; section 50-6-201, MCA, relating to licensing the EMS workforce; and section 50-6-301, MCA, relating to EMS provider regulation.
- Passage of SJR 5 during the 2005 Legislative Session pointed to the need for renewed legislative engagement in EMS system issues.

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As the need for higher levels of service has increased, demands on public funds and volunteer services have also grown. Montana's EMS system is not in crisis, but it does face significant challenges in relation to service provision and distribution, funding support for services, and the convergence of medical and fire emergency services.

These three inter-related issues are presented for legislative consideration and summarized as follows:

- EMS as an essential public service and statutory mandates for EMS provision.
- Funding EMS provision and the sustainability of the current funding model.
- Convergence of emergency medical and emergency fire services and the role of the private sector in provision of EMS.

The issues identified revolve around debates regarding the appropriate balance between public and private sectors in the provision of services. Should communities be required to provide a basic minimum level of service? Should citizens be guaranteed access to services? How should EMS be paid for? Can the state continue to rely on volunteer services and what are the alternatives? What can be done to support the development of a private market for EMS services?

EMS as an Essential Public Service

Public expectations regarding EMS provision have changed dramatically since the days when these services were provided primarily by morticians, doctor's offices and some hospitals and clinics. EMS is the pre-hospital emergent component of Montana's public health system. EMS is now viewed as essential public emergency service and is an integral part of the state's 9-1-1 emergency response system.

Review of EMS and Fire Protection Statutes

EMS is not recognized as an essential service and is not required to be in place by law. Section 7-34-101, MCA, authorizes a county, city, or town, acting through its governing body, to establish and maintain an ambulance service. Section 7-34-102, MCA, also permits each county, city, or town to levy an annual tax on the value of all taxable property within the county, city, or town to defray the costs incurred in providing ambulance service. These statutes are generally permissive and do not require the provision or funding of EMS. This is in contrast to fire protection services. In Montana, fire protection services are recognized statutorily as essential services and citizens are statutorily guaranteed fire protection services. Section 7-33-2202, MCA, requires the county governing body directly protect land from fire in the county. Additionally, section 7-33-4101, MCA, requires the establishment of fire departments in every city and town of this state, which must be organized, managed, and controlled as outlined in law.

EMS Is Utilized as Frequently as Fire Services

Comprehensive and reliable state-level data on the numbers and types of emergency response incidents involving medical and fire services are hard to identify. There has, however, been a clear trend over recent years pointing to a decline in the number of fire-related emergency incidents across the nation. According to the Federal Emergency Management Agency (FEMA) approximately 55 percent of all incidents responded to by fire departments nationwide now involve EMS. Based on audit work, we estimate Montana's EMS providers responded to approximately 72,000 incidents in 2006. Using national FEMA fire data we can estimate on a population basis that Montana's fire departments probably responded to around 50,000 incidents in 2006, this would include all types of emergency responses (fire, EMS, rescue, civil emergencies etc.)

As an emergency service, demand for EMS response likely exceeds that for traditional fire protection services. Many of the EMS providers we interviewed during audit fieldwork pointed this out and questioned whether this justified a reassessment of the need for mandating EMS provision in statute.

What Would Be the Effects of Mandatory EMS Provision?

Mandating EMS provision in statute could treat these services on the same basis as fire protection. Some EMS providers argued this would result in more stable and predictable service provision. This, in turn, could have a beneficial effect on gaps and inconsistencies in EMS provision, where these may exist. Mandating provision of EMS in statute could have positive effects related to the ability to define service areas and ensure minimum levels of service are available. Review of EMS statutes in other states shows some states have moved towards mandated service provision, but this is by no means a consistent trend and there continue to be a wide variety of approaches to mandated levels of service.

Even given the inconsistencies in the statutory treatment of EMS and fire protection services, most communities in Montana have chosen to continue providing EMS. There may be differences in the scale and scope of EMS provision by different communities, but it is not necessarily clear that statutory mandates would have any effect on this. One potential future consideration, however, is the continuing ability of some communities to maintain volunteer-based EMS. These concerns are discussed further in the next section.

Sustainability of EMS Funding Model

The EMS provider community is extremely diverse and includes organizations with multiple sources of funding and other support. EMS providers are found in both public and private sectors, although the majority receives some form of taxpayer support (generally through county mill levies supporting ambulance service). Because of the rural nature of the state, Montana cannot support many purely private, for-profit EMS providers. Private for-profit EMS providers operate almost exclusively in the state's urban centers. However, even where EMS service is supported directly or indirectly through local taxes, providers rely on billing for services to financially support operations.

Analysis of EMS Funding

Interviews with EMS providers across the state included questions relating to funding for operations and billing practices. We also collected funding information from the Department of Public Health and Human Services (DPHHS), including data on reimbursements for EMS made through the state Medicaid program. Additional information on funding was sourced from a professional billing service working with EMS providers.

Nearly all of the EMS providers we spoke with confirmed they are currently billing for services. Billing generally involves identifying insurance coverage for a patient and submitting the necessary documentation in order to recover some or all of the costs of service. Billable rates for EMS services vary widely according to the circumstances of the provider. We used information on billable rates, billing practices and collection rates to illustrate issues relating to billing for EMS. The following table uses this data to present an illustrative example of estimated cost recovery rates based on a typical 100 EMS incidents.

Average EMS Provider – 100 Incidents				
Service Level		**Percent**	**Average Cost**	**Total Cost**
Advanced Life Support		30%	$560	$16,800
Basic Life Support		70%	$340	$23,800
Total Billable Readiness/Response Cost				**$40,600**
Adjustment for Non-Transport Incidents			30%	-$12,180
Billable Costs Adjusted for Non-Transport Incidents				**$28,420**
EMS Provider Collection Capabilities				
Insurance Type	**Percent**	**Value**	**Collection Rate**	**Collected Amount**
Medicare/Medicaid	50%	$14,210	40%	$5,684
Other Public	5%	$1,421	100%	$1,421
Private Insurance	17%	$4,831	90%	$4,348
No Insurance	28%	$7,958	75%	$5,968
Estimated Total Collections of Billable Readiness/Response Cost				**$17,421**
Estimated Collection Rate				**43%**

Source: Compiled by the Legislative Audit Division from Department of Public Health and Human Services, EMS Provider, and EMS Billing Service records

Several important points should be noted relative to the billing and cost recovery estimates shown in the table:

- The cost estimates for ALS and BLS services are based on actual billing rates provided by EMS providers included in our statewide sample. The total cost represents the estimated cost of readiness and response and does not include additional incurred and billable costs, such as mileage rates and supplies costs. Much of the cost of EMS provision is attributable to the cost of readiness, i.e. maintaining staff, vehicles, equipment and facilities in a state of constant readiness.
- The total readiness/response cost is $40,600 for 100 incidents. The first adjustment noted in the table is for nontransports. Our review of EMS billing data and provider records suggests around 30 percent of EMS incidents result in the patient not being located, treated or transported. EMS providers cannot recover the costs associated with responding to these incidents. Nontransport incidents therefore reduce the recoverable portion of costs by $12,180.
- For the remaining $28,420 of recoverable costs, EMS providers generally try to collect from insurers or other responsible parties. The table shows the proportion of incidents covered under different insurance types and the estimated recovery rates. For the largest insurance category (Medicare and Medicaid), review of DPHHS data for the Medicaid program suggests the average recovery rate will be around 40 percent. Because insurance will not always reimburse at full cost and patients with no insurance may not be able to pay at full cost, EMS providers experience a significant reduction in the actual billable cost they are able to recover.

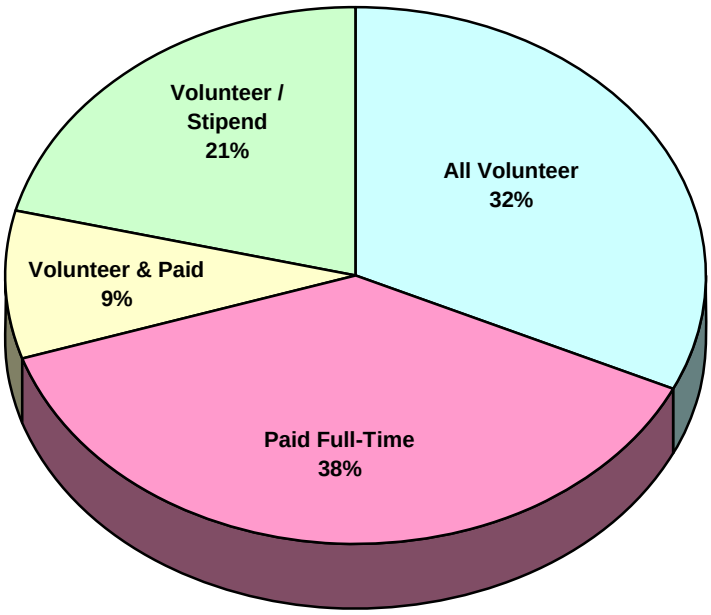
- Based on a typical 100 incidents used in this example, we can estimate that EMS providers may be able to recover only 43 percent of the full costs of readiness and response.

Many EMS Providers Rely on Public/Taxpayer Support and Volunteers

Cost recovery rates for individual EMS providers can and do vary widely depending on service areas, types of services offered, billable rates, and cost recovery efforts. However, this example does serve to illustrate a condition widely reported during our interviews with providers; in many cases EMS providers cannot recover full operational costs through billing and must rely on public/taxpayer support and, to a significant extent, value provided through volunteer services.

Public Support is Important for Successful Delivery of EMS

The financial position of many of the EMS providers we visited during audit fieldwork did not indicate imminent crisis in the system. Most services reported adequate funding was available, but the role of public support and particularly volunteer services was a significant factor in maintaining financial health. A future concern is how EMS providers will be able to adapt to trends in volunteerism. Most of the providers with volunteer staff we interviewed reported increasing problems with recruiting and retaining new volunteers for EMS. As shown in the following figure, volunteers constitute around half of the state's EMS workforce.



Source: Compiled by the Legislative Audit Division from Department of Public Health and Human Services records.

Provision of EMS services in Montana has, to some extent, already been absorbed into the local tax base in many communities. A long-term issue of concern may be how the decline in volunteerism in EMS may result in greater impacts on local tax payers. As EMS providers lose access to the value supplied by volunteers, the local tax base could be subject to increasing pressure. Actions taken now to encourage and support volunteerism in the EMS sector could, therefore, be a prudent measure that may help insulate the local tax base from more direct demands in the future.

Convergence of EMS and Fire Services

EMS provision began as a private service, even though it has always had some public purpose. Over the years EMS systems have developed and taken on more public characteristics as local governments have played a greater role in establishing and funding services. In Montana, the public nature of much of the EMS system has developed out of necessity. Small rural communities cannot support sufficient volume of EMS incidents to allow for the operation of private for-profit providers. There is a different picture in the state's urban areas. Where there are sufficient population densities, private for-profit EMS providers have established services. Private nonprofit hospital-based EMS providers also operate in some cities. These private providers share the distinction of operating without direct public funding through local governments.

Review of DPHHS licensing files and information from EMS providers shows private for-profit providers operating in many of the state's larger urban areas, including Missoula, Butte, Great Falls, Bozeman and Billings.

Fire Departments Have Growing and Likely Beneficial Presence in Rural EMS

Fire departments, particularly in rural areas, have always played a role in EMS provision. Historically, fire departments have been associated with EMS as nontransporting responders (fire department personnel would act as first responders at an emergency medical scene and stabilize the patient prior to transportation by an EMS unit). Recent data shows there are approximately 396 known fire departments in the state of Montana. Of those 396 fire departments, 80 are also licensed by the state of Montana to provide some level of EMS (either as a nontransporting unit or a transporting unit).

As discussed above, FEMA data shows over half of the incidents responded to by fire departments nationwide are EMS-related. The trend towards convergence of EMS and fire emergency services has continued as the number of structure fires has decreased. This convergence of service provision has probably benefited many rural communities where volunteer or part-volunteer fire departments or districts can co-locate EMS and fire emergency services and maximize the benefits of staff and other resources.

EMS-Fire Convergence in Urban Areas May Be Problematic

Convergence between EMS and fire emergency services is also occurring in the state's urban areas. However, in these areas there is, in some cases, an existing and viable private market for EMS services. Large urban fire departments providing patient transportation services in urban areas could deliver efficiencies and other benefits, but it is unclear whether these would outweigh the advantages of private sector EMS provision.

Increased competition from publicly-funded fire departments is adding to pressures on the state's private EMS providers. In common with other EMS units, private for-profit providers must deal with cost recovery problems, but they do so without the benefits of public funding or volunteer services to support operational deficits. In addition to these issues, some private for-profit providers now face new fees or assessments being considered by various local governments around the state. For example, one city government is currently considering establishing a provider charge for operation of EMS of up to $100,000 annually. Levied against a private provider, this type of fee could essentially negate any profit-making capability and effectively result in private providers exiting the market and EMS provision being transferred to the public sector.

Tax Base and Price Impacts of Public EMS Provision

Continuing convergence of EMS and fire emergency services in the state's urban areas raises the prospect of an increased reliance on public sector provision of EMS. The most obvious effect of this is likely to be

increased demands on the local tax base. Where private EMS providers are replaced by public sector organizations (either fire departments or other groups), it is highly likely some form of direct public financial support will be sought to support these services.

Even where EMS provision is supported by public funding, it is unclear whether this means lower prices for services. In 2004, the federal Government Accountability Office (GAO) conducted a national statistical study of EMS pricing trends. One of the significant findings in this study was average service costs were actually higher for EMS providers receiving some form of public subsidy. This study excluded data for providers that could not separately identify costs for EMS and fire services, so it is not clear how higher EMS prices in the public sector interact with potential efficiencies delivered through shared EMS/Fire service provision. However, the GAO study does highlight the potential for private EMS providers to deliver services with greater efficiency.

Conclusion

The issues identified above should not be considered exclusively as a definitive summary of challenges faced by the state's EMS system. These issues were identified through methodologies addressing audit objectives. As such, they represent issues which have a basis in audit work, rather than the full spectrum of challenges facing the state's EMS system. They should, however, be viewed as important considerations for both the ongoing deliberations of the Children, Families, Health and Human Services Interim Committee relating to SJR 5 and any future legislative actions regarding Montana's EMS system.

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