Consultant Report

Mendocino County
California

EMS Assessment

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FITCH & ASSOCIATES

2901 Williamsburg Terrace
Suite G, PO Box 170
Platte City, MO 64079
(816) 431-2600
www.fitchassoc.com

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Attachments:

A) Regional LEMSA Document
B) Mendocino Workbook Final

Executive Summary

Spring 2009, Mendocino County contacted Fitch & Associates (*Fitch*) requesting assistance in the evaluation of the County's Emergency Medical Services (EMS) system. The County commissioned this study to determine the baseline of EMS services and evaluate options for improving the effectiveness and efficiency of its EMS system.

The Mendocino County EMS system is operated for the benefit of the community under the auspices of the California Health and Safety Code Div 2.5 and California Code of Regulations Title 22. Administratively, the County has delegated its EMS oversight to a Local Emergency Medical Services Agency known as Coastal Valleys EMS Agency (CVEMSA).

Three Counties participate in CVEMSA: Napa, Sonoma, and Mendocino. Under the guidelines issued by the State EMS Agency, dated June 2001, CVEMSA qualifies as a Regional Local Emergency Medical Services Agency allowing for additional state grant dollars to help fund infrastructure and administration.

Key findings of the study and recommendations include:

- The community needs to understand what type of system they currently have and choose the level of response and care they want and are willing to fund.
- System stakeholders and providers are concerned about their organization's ability to continue to provide services at the current level.
- Mendocino County must recognize the value and resources that each provider is providing to the system. Failure to support the providers' efforts will ultimately result in the EMS system performance problems.
- Medical Priority Dispatch and associated pre-arrival instructions should be implemented and required countywide.
- CVEMSA must establish formal agreements for first responding and transport agencies to provide services outside of their primary response district.
- Additional funding mechanisms need to be established such as CSA 3 to enhance both first responder and transport provider's capabilities to deliver additional services.
- The County should consider funding local first responders to achieve the new Advanced EMT service level.
- A clear disconnect between training requirements and each provider's ability to economically obtain the classes exists and must be resolved.

- Conflicts between provider agencies often go unresolved and can lead to poor patient outcomes. This must be addressed and resolved.
- System reporting is limited to reports required by the state.
- The pre-hospital response system is highly reliant on the use of helicopters; that could prove problematic in the future.

Methodology

Mendocino County retained Fitch & Associates to conduct a comprehensive review of the EMS system. A key informational objective included benchmarking known system data against national benchmarks. An additional informational objective was to consider the feasibility of alternative conceptual strategies, including enhancing the current operation and determining opportunities for expanded public/private ambulance partnerships in the County.

During the Fall of 2009, the Consultants provided multiple agencies with an in-depth self-assessment document. The different provider organization assembled reports, files, and correspondence pursuant to that request.

During the late Fall and Winter of 2010, the Consultants conducted multiple site visits, as well as individual meetings, with most agencies throughout the County. During the on-site assessment, observations of communications, operations, and administrative processes were undertaken and interviews with over 30 stakeholders were conducted. These included representatives of County, local public safety officials (principally fire and 911 communications staff), the Medical Director, the ambulance providers, other clinical leaders, and the County EMS Coordinator. Interviews with, and observations of, ambulance staff and both communications and support services employees, were conducted.

Collection of data proved to be difficult due to the multitude of providers and level of data collection. Requests for data began as early as September 2009 and continued until the final data was received from Ukiah Ambulance on May 28, 2010, despite many follow up requests from both the Consultants and CVEMSA personnel. The inability to obtain information in a timely fashion has dramatically affected the delivery timelines and accuracy of the findings.

Due to the dynamic changes in the State of California and Mendocino County, several updates have taken place to insure the most recent report and direction for both the County Board of Supervisors as well as the EMS system. As recent as December 2010 updated information was being compiled and integrated into the report.

The Consultants wish to take this opportunity to thank the members of Coast Valley EMS, Mendocino County, the medical community, and the providers in the County. Many hours were spent in producing, compiling, and analyzing the hundreds of pages of information gathered to conduct this study. We would also like to remind the reader that CVEMSA is limited by the same issues of funding and resources' as are the providers throughout the county.

Introduction

Mendocino County

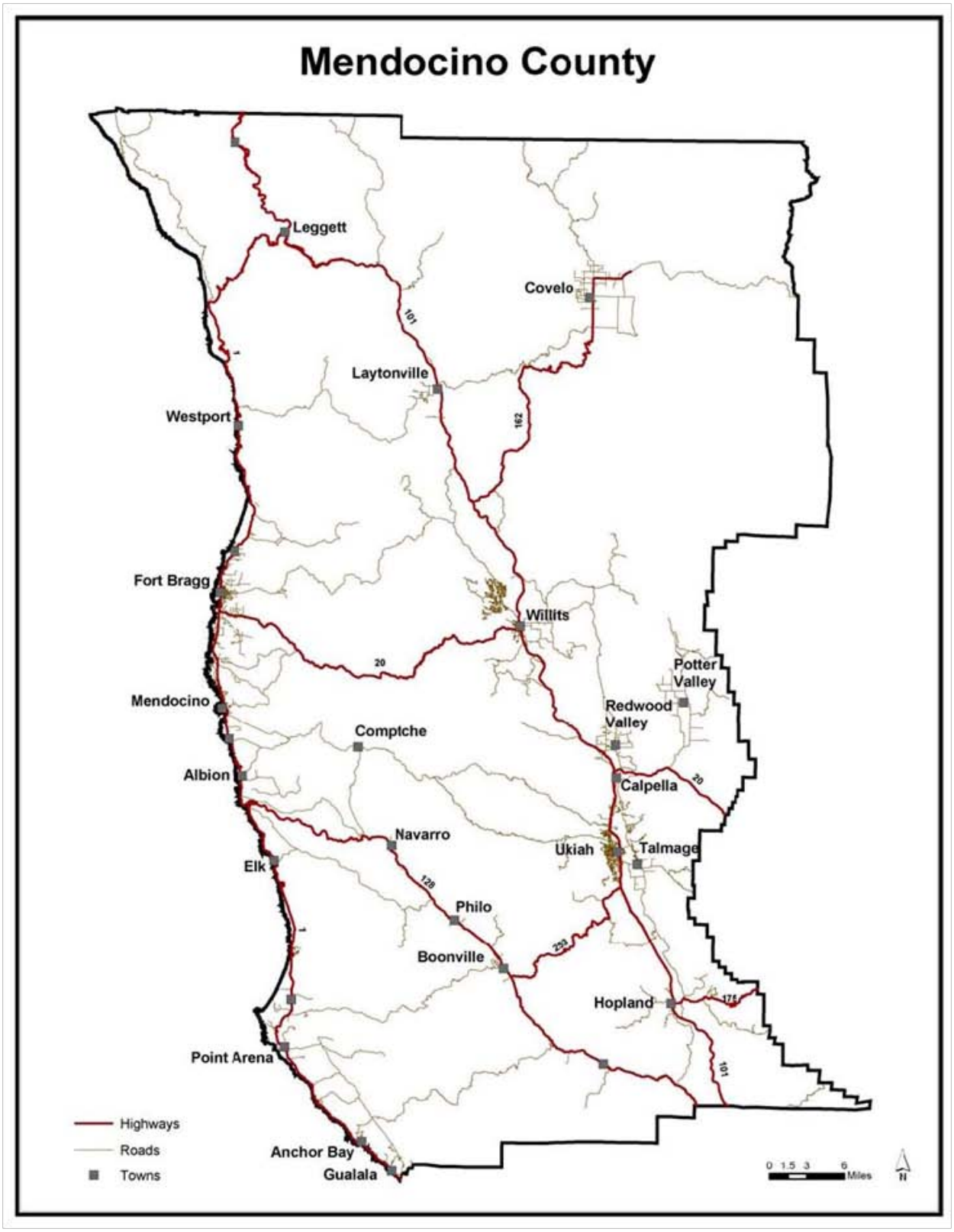
Mendocino County has an estimated population of 86,221 persons residing in 3,509 square miles. The region can be described as mostly rural and wilderness with the exception of the Cities of Ukiah, Willits, and Fort Bragg. The County has approximately 38,988 single-family homes of which a little over half (61.3%) are owner occupied.

The County was one of the state's original Counties in 1850 and due to low population did not have a separate government until 1859. Sonoma County provided administrative oversight for Mendocino County from 1850 - 1859. Prior to 1994, local EMS Agency services were provided through a contract with North Coast Regional EMS Agency which was cancelled and duties assumed by Mendocino County Public Health. In 1994, Mendocino County contracted with CVEMSA to provide local EMS agency services.

Determining the exact number of requests and transports is difficult due to the lack of a single database for collection of information. Estimates of transport providers and first responders reveal over 9,300 requests for service each year, transporting approximately 78.4% or more than 7,300 ambulance patients (5000 emergency, 1000 non-emergency and 1300 Helicopter). Helicopters are a key responder and are requested more than 1,300 times each year with a transport rate of only approximately 37%[1]. Nationwide changes with respect to medical helicopter rules and regulation will have a dramatic impact on the availability and use of these assets.

[1] CalFire Data 2008/09

Figure 1. Service Area Orientation



Medical Facilities

Mendocino County is served by three hospitals.

- Mendocino Coast District Hospital located in the City of Fort Bragg,
- Howard Memorial Hospital located in the City of Willits, and
- Ukiah Valley Medical Center located in the City of Ukiah.

Trauma Centers designated for critically injured patients are located outside Mendocino County with the closest locations at:

- Santa Rosa Memorial Hospital, Sonoma County –Level II,
- Queen of the Valley Hospital, Napa County –Level III, and
- Ukiah Valley Medical Center, Ukiah County-Level IV.

With total square miles of 3905 in the county and a rural mountain range that splits the county in half, both fire and EMS providers are challenged to deliver timely fire protection and emergency medical services. Citizens and visitors of the County often are unaware of these issues and expect a similar response to what they are accustom to in the City of Ukiah or the City of Napa. The fact is this could not be further from the realty faced by providers each day. Requesting additional support or resources from one part of the county to assist in another part requires responders to navigate a slow, winding road and it is often quicker to respond a greater distance north and south than to cross the mountain range.

An additional challenge is the amount of distance between population centers. It is not uncommon for first responders to travel 20-30 minutes to arrive at the scene of a medical emergency. The response of an Advanced Life Support (ALS) unit in the rural and wilderness areas can easily exceed one hour. The heavy utilization of helicopters in the county has assisted to maintain some level of response, however, in light of the changes in the air industry, the county would be best served to develop a plan that utilizes helicopters as a supplemental resources to an emergency response as opposed to the current practice of using helicopters a the primary responder.

Another compounding problem in the system is; if the primary responding provider is unavailable due to any number of issues, the resulting delays can be dramatic. An example of this is if Ukiah Ambulance is required to respond into the Anderson Valley, Ukiah Fire Department provides back-up response to the areas outside of the City. This domino effect requires that Ukiah Fire call in additional off-duty staff at an overtime rate to supplement the

system. The City is, in effect, subsidizing the system to maintain reasonable response standards. As budgets become more challenged, this may present a system problem that will need to be addressed.

The response system has little to no redundant capabilities that can be deployed in the event of a major issue or occurrence. In many cases, a single response can cause a cascade of move-ups or require a response out-of-district for several agencies. The resulting "hole" requires Providers, such as the City of Ukiah Fire Department, to call in additional off-duty personnel to cover their primary response area.

During certain periods of the year, the community experiences a dramatic influx of migrant workers from all over North America for "trimming season." This is the practice of preparing marijuana plants for sales in both legitimate medical use and illegal street use. These individuals typically do not have health insurance or an ability to pay for services. This fact is all too clear when evaluating the payer mix for ambulance providers in the county. Some providers report as high as 32% Medi-Cal transports and 37% private pay or no insurance. The community's inability to capture revenues to offset expenses associated with cash crop workers and the general demographics represented in the County presents additional challenges to the system.

Fire season has an enormous impact on the availability of first responders in the County. During fire season (Memorial Day – October), CalFire will staff many rural/wilderness areas with full-time engine companies that will provide first responder services. The off-season can result in the elimination of most, if not all, of the CalFire response resources and dramatically increase response times to critically injured or sick patients. This reduction in resources causes the remaining first response agencies to regularly provide services out of their primary response area.

An example of this is in Covelo. In the summer, multiple agencies are available, such as CalFire and the US Forest Service, however, in the non-fire season, only Covelo Fire Department is available to respond. Covelo Fire operates a Basic Life Support (BLS) ambulance and in the event the patient requires Advanced Life Support (ALS) intervention, limited options are available. The first is the use of Helicopter assets, if available; the second is to request the services of Laytonville Ambulance (operated by Laytonville Fire Department) which is an ALS ambulance service.

Should Laytonville be required to respond, the next available ALS ambulance is located in Willits, which would then be required to cover over a 1,000 square miles of response area.

Based upon the recent budget from the State of California, this may be even further reduced as the state attempts to shift the burden of providing fire protection to residence in these areas from local government. The County would be best served to develop a year round plan that is not dependent upon fire season. Emergency Medical Services are needed 24 hours per day, 7 days a week, not just during fire season.

The Mendocino County EMS System Legal Foundation

Mendocino County is part of a three county regional EMS system named Coastal Valleys Emergency Medical Services Agency (CVEMSA). The rationale behind becoming a regional EMS agency is to gain access to increased resources through partnership, maximize efficiencies, eliminate redundancies, improved coordination with regional partners, and access grant funding from the State of California for assistance in the administration of the EMS system. Mendocino County has designated CVEMSA as its local EMS agency for all EMS administration.

Approximately 10 years ago, Sonoma and Mendocino Counties requested Napa to join them to form a Regional Local Emergency Medical Services Agency (LEMSA). At the time, in the State of California, the rules for Regional LEMSA structure and funding were not fully implemented and still being developed. In 2001, the State released the Regional Local EMSA rules and guidelines for seeking and receiving state grant money.

CVEMSA functions as the LEMSA for Mendocino County. This requires CVEMSA to provide administrative oversight and support in the following EMS system components[2]

1. Manpower and training
2. Communications
3. Transportation
4. Assessment of hospitals and critical care centers
5. System organization and management
6. Data collection and evaluation
7. Public information and education
8. Disaster response

An annual EMS Plan is required to be submitted to the State EMS Authority with quarterly updates outlining the goals and accomplishments of the regional EMS agency and the work accomplished or issues encountered for each of the eight components.

[2] State of California Regional EMS attachment A

In Attachment A, we have provided the State of California *FUNDING OF REGIONAL EMS AGENCIES WITH STATE GENERAL FUNDS* document for reference.

The Optimal EMS System

An optimal EMS system is best designed from the patient's perspective. Patients should expect that the service would be engaged in illness and injury prevention, health education, and early symptom recognition, in addition to responding to emergency and transportation requests. The EMS system should provide a rapid and appropriate response when a caller dials 911 and routinely provide medical instructions until help arrives. Medical First Responders should be able to deliver rapid defibrillation, arriving within four to six minutes with 90% reliability in urban areas.

The arrival of a transport capable Advanced Life Support (ALS) ambulance should occur within 10 to 12 minutes on life-threatening emergencies in urban areas, 15 to 20 minutes in suburban areas and 25 to 30 minutes in rural areas with 90% reliability. Non-life threatening emergencies should receive a consistent response, but may be longer than the life-threatening responses.

Patients should be transported to a hospital that can treat their specific condition. The EMS system should be externally and independently monitored with participants held accountable for their responsibilities. Finally, the system should deliver good value for the resources invested.

The performance of the Mendocino County EMS system is profiled against optimal system standards in the following section.

EMS Operations Review

This review focuses on how the EMS system in Mendocino County performs against certain benchmarks using the framework for the optimal EMS System. In addition, comments are provided relative to the organizational structure and leadership of the system.

There is no single source for industry standards of practice. State EMS regulations reflect minimum performance requirements. Other commonly accepted "standards" are drawn from a variety of sources including: *10 EMS Standards* currently used to evaluate state EMS systems and the *EMS Agenda for the Future* developed by the US Department of Transportation; the *Community Guide to Ensure High Performance Emergency Ambulance Service* published by the American Ambulance Association (AAA)*;* and the standards developed by the National Academy of Emergency Dispatch(NAED), the Commission on the Accreditation of Ambulance Services (CAAS), and the National Fire Protection Association (NFPA).

Specific benchmarks and the service's performance in each of the following categories are described:

- 911/Communications
- Medical First Response
- Medical Transportation
- Medical Accountability
- Customer and Community Accountability
- Prevention and Community Education
- Organizational Structure and Leadership
- Ensuring Optimal System Value

The results of the service's performance against the benchmarks are profiled in the following sections.

911/Medical Communications

Communications Benchmarks

- Public access through a single phone number preferably enhanced 911.
- Single PSAP exists for the system.
- Effective connection between PSAP and dispatch points, with minimal handoffs required for callers.
- Certified personnel provide pre-arrival instructions and priority Emergency Medical Dispatching (EMD). This function is medically supervised.
- Data collection, which allows for key service elements to be analyzed.
- Technology supports interface between 911, dispatching, and administrative processes.
- Radio linkages between dispatch, field units, and medical facilities provide adequate coverage and facilitate communications.

Observations & Findings

The Medical Priority Dispatch System (MPDS) is a medically approved, unified system used to dispatch appropriate aid to medical emergencies, including systematized caller interrogation and pre-arrival instructions. MPDS allows dispatch personal to prioritize the call and the corresponding response by identifying the acuity levels of each event. Prioritization of call types under the MPDS protocols allows the system participants to better understand the dynamics at work in the system and to more appropriately allocate resources to each call. By focusing on procedures and processes, Howard Forest Emergency Communications Center (HFECC) has improved its utilization of MPDS from 15.5% on all calls in 2006 vs. 65.5% in 2009. During this same period of time, the call volume has increased at HFECC by 5.5%[3]

Table 1. Response Determinant

Alpha	Non-Life Threatening	Basic Life Support	Non Emergency
Bravo	Possibly Life Threatening	Basic Life Support	Emergency
Charlie	Life Threatening	Advanced Life Support	Emergency
Delta	Serious Life Threat	Advanced Life Support	Emergency
Echo	Life Status Questionable	Closest Available (Multiple Resources Sent)	Emergency

In Mendocino County, Bravo related responses are the most common with 28.53% of all responses in the service area. Alpha responses are the second most common and make up an additional 26.33% of responses. The life threatening Echo calls account for only 1.36% of all calls.

[3] CalFire Data 2007-2009

Public Access

Public access to emergency medical services is provided via an enhanced 911 (E-911) system. Public Safety Answering Points (PSAP) or 911 centers initially receive requests for service, which are located in several different locations throughout the County.

The 911 Centers initially receive all requests for service and depending upon the location of the center, the call is dispatched (City of Ukiah) or transferred to the appropriate secondary PSAP (Howard Forest Emergency Communications Center-HFECC) for triage of the call and pre-arrival instruction. In all cases, the dispatch console is equipped with a monitor that will automatically display the name and address of the person calling 911.

Emergency Medical Dispatch (EMD) procedures recommended by the National Academies of Emergency Dispatch (NAED) were reported to be utilized in both dispatch centers. It was also noted that Ukiah Police and Fire (Ukiah) dispatch will be transitioning to a computer-based system called Aqua and Pro-QA in the next several months, but both are currently utilizing version 12 of the Medical Priority Dispatch System (MPDS) cards, a manual system.

An issue noted in the Ukiah dispatch center relates to the use of MPDS call taking skills. During periods of high demand in the center, MPDS is frequently not utilized due to the time required of the dispatch staff to remain on the line with the caller. At times, the center has only one dispatcher on duty, making MPDS extremely difficult. The City of Ukiah Fire Department did not see this as a problem as they respond on all calls regardless of the nature.

The Aqua and Pro-QA programs will assist the Ukiah dispatch center; integrate the call processing with MPDS, and increase the number of callers receiving MPDS protocols and pre-arrival instruction. The center should be monitored to determine if the processes improve once the programs are installed.

The key rationale for using MPDS is to correctly prioritize 911 calls by consistent use of medical protocols. Some types of calls require dispatch personnel to stay on the line and provide pre-arrival first aid instructions to bystanders. These calls should be routinely monitored through a Q.I. process that is supervised by the system Medical Director.

The communication centers are staffed 24 hours per day, seven days per week. When emergency calls are received, the dispatchers will use the Computer Aided Dispatch (CAD) system, which is designed to contemporaneously capture data entry and time stamp (in minutes and seconds) each component of the assignment.

Additional Medical Communications Findings

As with any communications system, the fewer transfers of information result in better and more accurate information. The current system requires a caller to speak to a 911-call taker (dispatcher), and then repeat themselves to another specially trained call taker (dispatcher) in all areas of the County, except Ukiah and Fort Brag. This process can add valuable seconds or minutes to any life-threatening emergency and increases the opportunities for errors.

Call data is located in several different locations and not easily combined into a single database for evaluation and review. A single repository of all call data would be beneficial to both responders and system leaders in the evaluation of needed resources.

A long term solution should be considered by the County to provide Emergency Medical Dispatch in a single center that is staffed to provide pre-arrival instruction and proper prioritization to all callers at any given hour. With the State of California proposed focus and budget change for CalFire, the current dispatch center may be at risk and not considered core mission in the non-fire season. Exploration of Dispatch options to include a single, countywide center must be explored to enable the County to control this vital link in the EMS system.

Recommendations

1. Consider consolidation of EMS dispatch or having a backup plan to provide for EMD call taking and dispatch of ambulances should one of the centers be unable to provide this service at any time.
2. Migrate from flip-cards to computer-based EMD processing.
3. Aqua and ProQA should be implemented as soon as possible to insure the correct utilization of resources (adoption of the Priority Dispatch ***ProQA™*** system and AQUA quality assurance system) in the 911 centers. (See: www.medicalpriority.com/main.html)
4. Develop a plan to make certain that the EMD center(s) achieves NAED “Accredited Center of Excellence” status.
5. Ensure that 95% of those requiring pre-arrival instructions receive them in accordance with nationally recognized standards.
6. Only dispatch Fire units on responses, per EMD protocol, as agreed to by the medical community after prioritization of the call. Sending extra assets increases liability and reduces capacity for simultaneous calls.
7. Implement a single repository for all call data.

Medical First Response

Medical First Response Benchmarks

- First Responders are part of an integrated response system and medically supervised by a single system Medical Director.
- Defined response time standards exist for First Responders.
- First response agencies report fractile response times.
- Automatic External Defibrillator (AED) capabilities on first line apparatus.
- Smooth transition of care is achieved.

Observations & Findings

Medical first response services are provided by 21 different agencies throughout the County. Depending upon the location and time of year, the services provided vary greatly. In the City of Ukiah, a response by an ALS First responder is likely, but the remaining areas of the County primarily have access to BLS first responders.

Typically, each apparatus responds to medical calls with at least one EMT. Fire apparatus in the City of Ukiah may have a Paramedic as part of the crew and ALS equipment to allow for the provision of advanced skills by First Responders.

Response times for First Responders are neither measured nor monitored on a regular basis. NFPA 1710 Guidelines indicate First Responders should arrive within six minutes with 90% reliability in urban environments.[4] This would include the City of Ukiah and Fort Bragg.

NFPA 1720[5] requires the Authority Having Jurisdiction (AHJ) establish and measure response time standards. This simply requires the County to establish acceptable response time standards for first responders and transport providers to arrive at the scene of an emergency. These times can be different by area of the jurisdiction.

Due to long response times of transporting agencies, the role of the first responding agencies is critical. Assistance and financial aid is required for these agencies to obtain the new Advanced EMT level of certification. This would allow for advanced airway management and necessary ALS skills to maintain critical patients during long response times of transporting units, without the full cost of Paramedic level service.

[4] NFPA 1710 actually benchmarks travel time at four minutes plus one-minute alarm/dispatch and one-minute turnout time for a total of six minutes.
[5] NFPA 1720 is used for non-career departments.

A key finding in the research is the extremely large are of the County that does not have any primary coverage for first response and must rely on the availability and willingness of nearby agencies to respond. This becomes increasingly problematic in the off peak fire season and corresponding reduction of CalFire personnel.

The State of California has enabling legislation for fire services as related to cities, counties, and districts. Each political sub-division (i.e. City, District, and Town) determines the proper resources to accomplish the public safety mission. The legislation allows these political sub-divisions to have fire agencies, but does not require these agencies to respond, other than what is designated by the jurisdiction. If a jurisdiction chooses to respond outside of the primary political sub-division, concerns of tax payers in the jurisdiction subsidizing residents outside the jurisdiction.

A large section of Mendocino County is not included in a political sub-division and is at risk for under response or no response at all. The County has made provisions for ambulance response to the entire County but lacks the same level of coordination for first response. Should first responder agencies choose not to respond or are unable to respond, serious consequences could result to citizens needing medical care.

On the other hand, legislation requires the County to establish and provide oversight of the EMS system and submit an annual plan of action for EMS standards including response, training, and patient transport destination. First Responders provide the foundation for patient care in most EMS systems across America. Failure to support and provide structure for first responders has a dramatic impact on patient outcomes and survivability.

Mendocino County has the ability to implement and use funds from County Service Area 3 (unincorporated areas of the County) to offset cost of providing public safety. First Responding agencies that are required to provide services outside of their jurisdiction should be compensated to insure a timely response to emergency calls.

These funds will allow the County to manage the first response system with formal agreements to include provisions that require an agency to respond to non-jurisdictional areas of the County. Failure to proactively address this issue will result in preventable events that can cause unnecessary injury or death to members of the public. These agreements should include performance standards and compensation for the services provided.

Recommendations

8. Implement County Service Area 3 to offset the expenses incurred by agencies responding outside of their primary political sub-division.
   Response times are captured and should be evaluated and reported.
9. First Responder response times, as part of the patient care continuum, should be reported from call receipt until "wheels" stop on a fractile basis.
10. A fractile response time with 90% reliability should be considered. Using proper triage of 911 calls to ensure that First Responders only respond on the more critical calls should assist in improvement towards this standard.
11. Assist First Responders to become Advanced EMT providers.
12. Formal agreements must be negotiated with all first response agencies in the county.
13. The Medical Director's responsibilities should assure an appropriate degree of oversight to the entire continuum of patient care, including Dispatch, First Response, Transport, and all other aspects of EMS in the system.

Medical Transportation

Medical Transportation Benchmarks

- Defined response time standards exist.
- Agencies report fractile response times.
- Units meet staffing and equipment requirements.
- Resources are efficiently and effectively deployed.
- There is a smooth integration of first response, air, ground, and hospital services.
- Develop and maintain coordinated disaster plans.

Observations and Findings

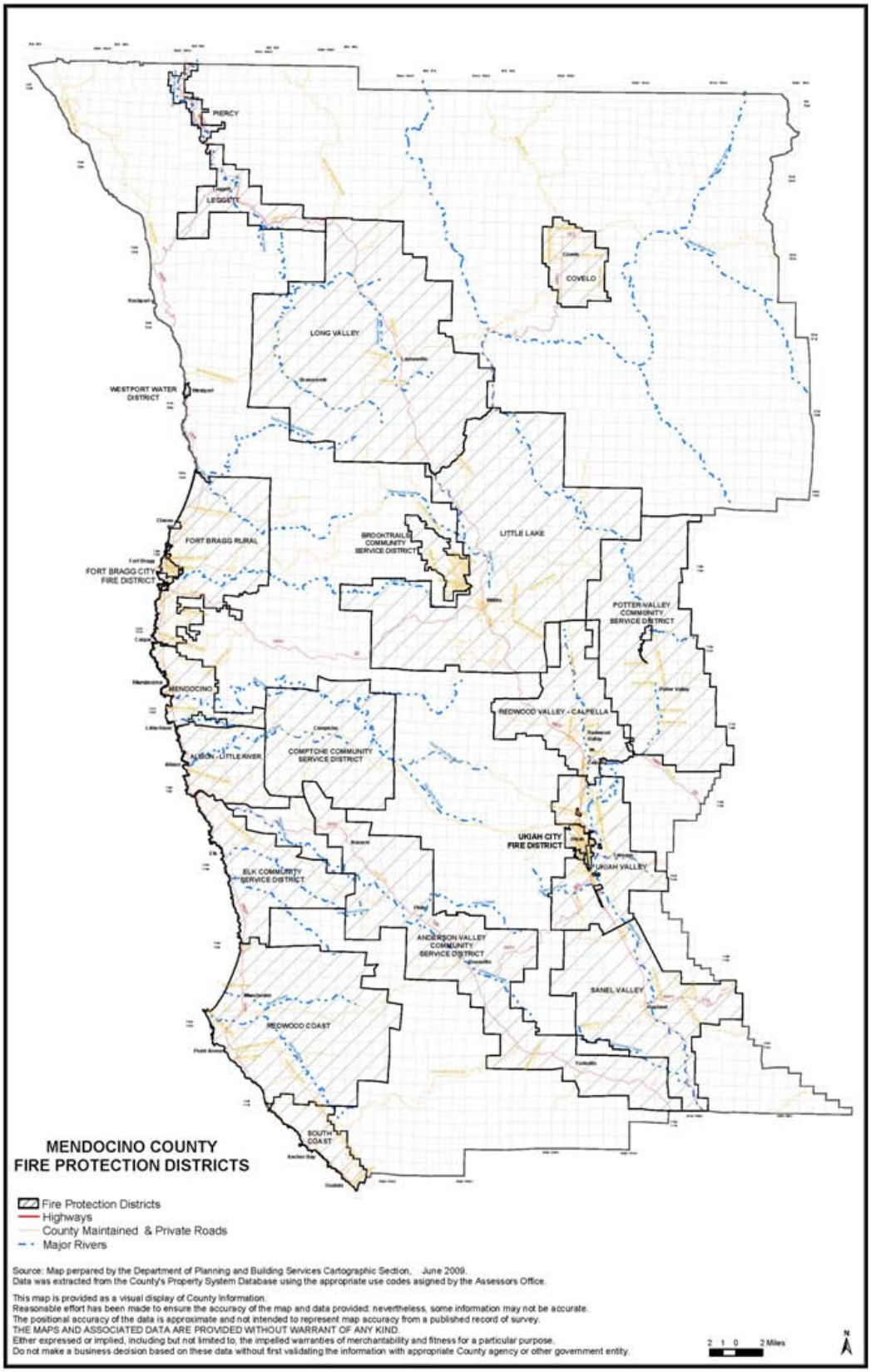
Ambulance Response Time Performance

Response times are considered an important benchmark of an EMS system's performance. In sophisticated EMS systems, response times are measured on a fractile basis with 90% reliability. The most commonly recognized benchmark is to place an ALS transport capable ambulance on the scene of life-threatening emergencies (e.g., calls categorized under MPDS as Echo and Delta) within a defined period of time. The actual response time performance targets are based on multiple factors including: call density and population, geographic coverage area, call volume, community demographics, and the available resources. Response time standards for life-threatening emergencies range from 10 to 12 minutes in urban areas, within 15 to 20 minutes in suburban areas, and within 25 to 30 minutes in very rural areas. For non-life-

threatening emergencies (e.g. MPDS as Charlie and Bravo), a typical urban response time is 15 to 20 minutes.

Mendocino County providers transport to almost 5,000 patients per year. The estimated number of emergency requests is approximately 6,300. Approximately 1,000 non-emergency transports between healthcare facilities also occur in the County. Each ambulance provider responds to emergency request based upon a level of effort and not designated performance standards since there are no contractual performance standards required. The response zones are represented in Figure 2.

Figure 2. Mendocino County Response Zones

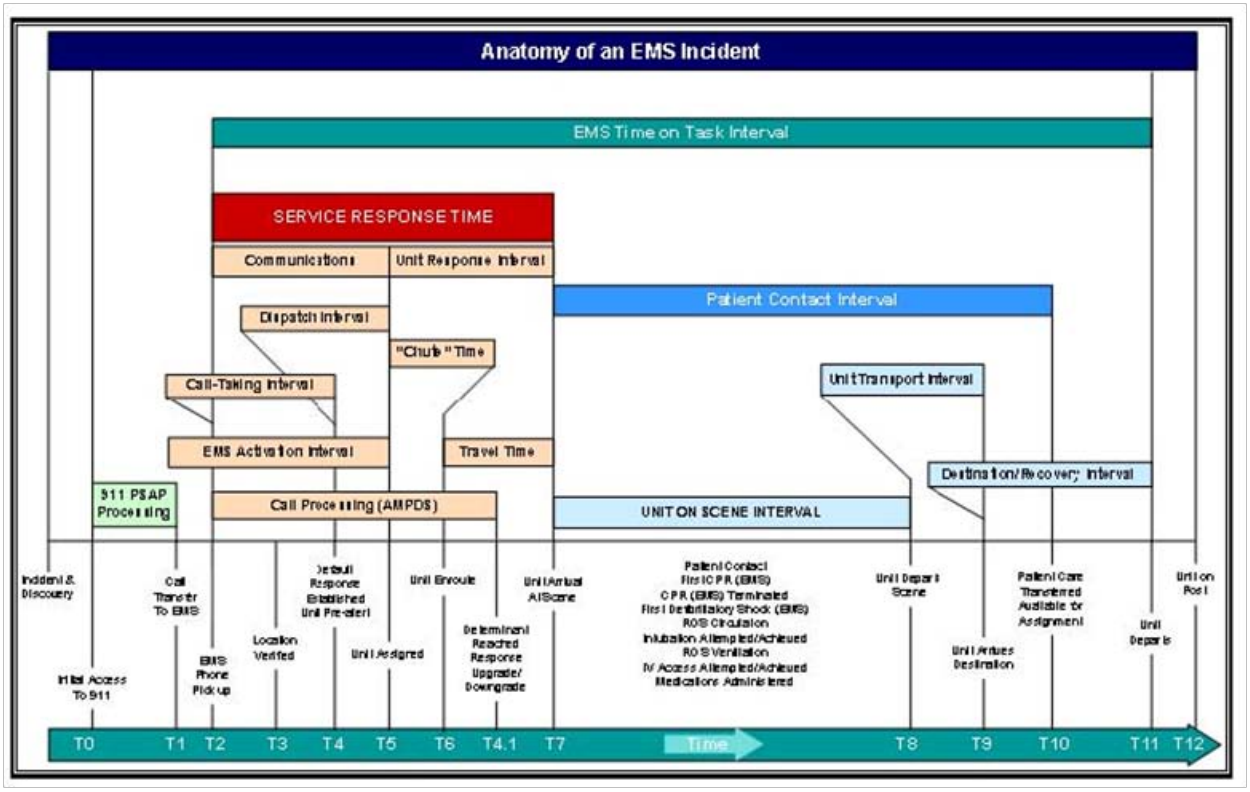


Response times are documented but not compared or analyzed as no performance standard is required of providers. The County's ability to measure if the system is meeting the needs of the community is impossible due to the lack of response standards. Failure to establish and benchmark the reliability of the system dramatically impacts the ability to improve both response times and system reliability.

Response time reporting including standards is a community standard throughout the State of California and the Nation. Both Napa and Sonoma Counties track and report response times for all EMS ambulance services.

In Figure 3, below, you will find an easy reference to the components of an EMS incident. It provides both the overall picture, as well as each subcomponents of a response.

Figure 3. Anatomy of an EMS Incident



Medical Necessity

In the City of Ukiah, the 911 Call taking procedures often do not include preliminary determinations of medical necessity for response. In many cases, the Fire Department is already responding or on-the-scene prior to determination of an actual need. Determining the right resource to send ensures matching of resources to demand. An example is sending the

only available first responder unit to a non-life critical emergency and having a second call for a life critical emergency. This can result in a prolonged response time for the second call where the patient is more likely to need life-saving assistance. Assets must be dispatched to appropriate level responses.

Staffing and Deployment

Ambulances are staffed in a variety of configurations throughout the County. In many cases, a BLS ambulance is simultaneously dispatched with an ALS ambulance. In other situations, a BLS unit will arrive on-the-scene and request an ALS ambulance to respond should it be determined one is required. This process is both inconsistent and can result in a delay of care to patients that are more critical.

The County must develop dispatch and response standards of both ALS and BLS ambulances based upon patient care best practices and protocols designed should be designed to maximize the beneficial patient outcomes. Deploying ambulances based upon political boundaries or borders defeats countywide systems and can violate the basic community standards of care subjecting the providers and EMS community to unnecessary risk.

Currently, deployment decisions are made on a provider by provider basis without regard to the other providers in the system. This is not the intent of the State legislation to provide a systems approach to EMS. It also allows each provider to game the system and provide the services based upon what is best for them, not the system.

The County must provide a system-wide plan of dispatch and response to emergency medical requests for the entire County. This plan should include a system wide first response program that insures the closest first responding unit is dispatched to an emergency incident. The next step is to get ALS responding to all incidents. This can be accomplished by Paramedics on Engine Companies and BLS ambulance transport units or BLS Engine Companies with ALS Ambulances. Responding ALS to each medical emergency based upon MPDS has become a community standard.

Next to insure reliability, each system provider must agree to service standards that meet the overall goal of achieving response time and patient care standards. This will require a more active approach in system design and monitoring. Oversight and performance reporting will show areas for improvement and assist in providing resources to particular areas of the County.

Auto/Mutual Aid

Some areas of the County utilize auto-aid from adjoining counties, others from within the County. The practice of auto-aid dispatches the closest ambulance to the scene of a medical emergency, regardless of the geo-political boundary. Mutual aid is also provided and received as part of the local agreements in place between Mendocino County and other surrounding counties.

Helicopters

Mendocino County is highly reliant on helicopter response and transport. These services provide both first response and transport throughout the County. In many cases, the helicopter is the first arriving medical asset to the call. These vital services are often the difference between timely transport and treatment versus poor patient outcomes.

Two primary providers (CALSTAR & REACH) respond to more than 1,300 calls each year with the Sonoma County Sherriff's "Henry 1" ship transporting fewer than five patients per year. CALSTAR responds to approximately 60.5% of the calls and REACH is dispatched on the remaining 39.5% of the responses. Each service transports a patient on approximately 37% of the responses.

Most system across the Nation use medical air transportation as an adjunct to existing ground assets. The rational for this is the fact that air transportation is less reliable and dependent upon favorable flight conditions. Building or maintaining an EMS system with a high reliance on air transport is risky given today's concern of safety and potential changes to Federal regulation. Utilization of Helicopters to supplement the system is a more realistic approach.

Based upon this conclusion, it would be prudent for the County to evaluate the impact of reduced or no availability of helicopter services. While the future of this industry is uncertain, it is clear any substantial reduction in the availability to the County will have a dramatic negative impact to patients in the County and the care they receive.

Recommendations

14. Acceptable ambulance response time must be established.
15. Response times should be measured and reliable to the 90th percentile. Any report that is below this requirement should be evaluated and a plan of correction developed.
16. Criteria should be established that would define the process of what is to occur if the plan of correction is not successful.
17. The system wide deployment must be managed and monitored.

18. Patient care protocols should be modified to insure the appropriate dispatching of ALS transport ambulances.
19. An operational system plan for ambulance move and cover must be developed with all system stakeholders. This plan must include “what if” scenarios that demonstrate worst-case situations of depletion of ambulances.
20. Evaluate the impact of a reduction in availability of Helicopter resources.

Medical Accountability

Medical Accountability Benchmarks

- Single point of physician medical direction for entire system.
- Written agreement (job description) for medical direction exists.
- Specialized Medical Director training/certification.
- Physician is involved in establishing local care standards that reflect current national standards of practice.
- Proactive, interactive, and retroactive medical direction is facilitated by the activities of the Medical Director.
- PCR data transparency facilitates Medical Director review.
- Clinical education, effectiveness, and efficiency.

Observations and Findings

Dr. Mark Luoto serves as the Medical Director for the entire CVEMSA service area and is a working physician at the Ukiah Medical Center. Dr. Luoto appears to be well respected and knowledgeable in the EMS environment. Mendocino County is fortunate to have local access to Dr. Luoto as a local Physician in the Emergency Room in Ukiah. Dr. Luoto receives support and assistance from many of the staff at the Sonoma office of CVEMSA.

Interview after interview described a perceived lack of accountability for system problems or errors. ALS providers reported adequate access to CVEMSA and feel that Dr. Luoto is progressive and keeping the system current.

Feedback concerning CVEMSA was mixed. Most BLS providers felt somewhat disconnected from EMS oversight. ALS providers appear more in tuned with the system, but are not aware of long-term plans, directions, or system performances.

Training and continuing education was raised as a major hurdle for most First Responders in the County. Difficult access to training, due to the location of most classes, was repeated at almost

every meeting among the stakeholders. It is not uncommon for a provider to travel several hours to obtain continuing education. Many times the required courses are located in Sonoma County and require in excess of four hours of drive time each way for some agencies to attend.

The County must aggressively address this hardship for providers in the system. Many of the providers are volunteers and cannot maintain the additional training requirements required by both the State of California and CVEMSA. The County should fund and implement a solution that brings the training to the departments. An added benefit of providing local education is twofold; first, it keeps the responders in the service area and second is to familiarize CVEMSA to the County.

Local education will become paramount to implementing an Advanced EMT program in the County. Some providers are willing to increase skill levels, yet others do not have the time to maintain existing standards and due to the travel required have opted not to pursue any increased certification level.

Recommendations

21. Provide training locally.
22. Provide clinical feedback in a progressive manner that involves the Medical Director.
23. Develop system-wide quality improvement processes.
24. Medical accountability must be incorporated into all agencies.
25. Assist providers to become Advanced EMT

Customer and Community Accountability

Customer/Community Accountability Benchmarks

- Legislative authorities to provide service and written service agreements are in place.
- Units and crews have a professional appearance.
- Formal mechanisms exist to address patient and community concerns.
- Independent measurement and reporting of system performance are utilized.
- Internal customer issues are routinely addressed.

Observations and Findings

Under Title 22, Code of Regulations of the State of California, **the County has an obligation to ensure the provision of EMS including First Response**. In Mendocino County, this obligation has been delegated to CVEMSA. While it appears that the medical aspects of providing EMS

services are being fulfilled, the operational oversight and response system requires extensive attention.

A formal process to alert CVEMSA of system and patient care issues is documented; it was the opinion of some of the system stakeholders that it lacks accountability. They describe serious issues that are reported only to result in a lack of perceived follow-up or remediation/oversight. Measurement of outcome data for patient care and non-patient care functions must be shared with system providers. Failure to provide this information leaves providers feeling "if you don't hear, it must be ok" as compared to a formal feedback system to measuring how they are performing.

CVEMSA must develop a feedback and communication system to both inform and educate providers within the County. Web-site information is valuable, but cannot be the only avenue for communications and feedback. Regular training sessions would facilitate updates and information for all providers. Informational updates from regularly scheduled meetings should be distributed to all providers in the county.

The lack of coordination of the non-medical aspects of the County is concerning and must be addressed. Each of the response agencies in the County is required to supplement service areas that are not their primary response area to provide stopgap services to the citizens of the County. This is unrealistic given the current economic climate that exists in the state and the local jurisdictions, resulting in fewer available resources.

Additionally, providers expressed concerns of being out of district on a response and the potential that a request in their district would be delayed or handled by another provider. The time to address these issues is before problems occur. Too often, we address these types of issues in the heat of the battle when providers are at the breaking point.

Recommendations

26. The County must develop a detailed strategy and implementation plan to ensure that the EMS system has the operational flexibility and necessary resources to achieve its mission.
27. The EMS agency must be responsible for coordinating and monitoring the system, not only its medical performance, but operational performance, including First Responders and the ambulance services.
28. Publish monthly reports for First Responder, as well as the ambulance service's fractile response times to all system participants and units of local government.

29. On a regular basis, measure and report system services and provider key performance areas, such as STEMI times or cardiac return of circulation scores.
30. Expand EMS system-service quality-improvement plan and evaluate annually.

Prevention and Community Education

Prevention and Community Education Benchmarks

- System personnel provide positive role models.
- Programs are targeted to "at risk" populations.
- Formal and effective programs with defined goals exist.
- Targeted objectives are measured and met.

Observations and Findings

There are significant opportunities for the first responders and ambulance providers to become more tightly linked with the broader community through educational programs, directly and through allied organizations such as the Red Cross and American Heart Association.

Services typically offer a wide variety of public education activities as a mechanism to maintain community connectivity. These programs range from on-demand car seat inspections to free home injury prevention inspections for families with toddlers or seniors. Junior Paramedic programs and Mass CPR training events are meaningful ways that organizations can engage the community. They can be designed and implemented with little investment and are limited only by the creativity of the services' leadership.

Each provider expressed offering programs similar to these, however, system-wide education and focus was not found. The community needs to understand what type of a system they currently have and choose the level of response and care they want and are willing to fund.

Recommendations

31. Develop a program and identify resources to improve community awareness of the EMS system and its capabilities.
32. Identify and support priority projects for community health improvement, utilizing the first responders and ambulance services as a primary connection.
33. Develop and promote a higher profile for the Mendocino County EMS system with posting key service facts and response time information.
34. Prepare and distribute an annual report to elected officials and community stakeholders describing the accomplishments and needs of the system.

Organizational Structure and Leadership

Organizational Structure and Leadership Benchmarks

- A lead agency is identified and coordinates system activities.
- Organizational governance, structure, and relationships are well defined.
- Human resources are developed and otherwise valued.
- Business planning and measurement processes are defined and utilized.
- Operational and clinical data guides the decision process.
- A structured performance/Quality Improvement (Q.I.) system exists, addressing administrative, as well as clinical issues.

Observations and Findings

The EMS system has a defined lead agency in the CVEMSA. The Mendocino Emergency Medical Care Committee (MEMCC), which includes Police, Fire, Ambulance, Hospital, and local health officials, is facilitated by CVEMSA and meets on a quarterly basis. This venue should provide the opportunity to discuss system issues and create action plans to improve the EMS system. The opportunities offered by these regular meetings are not fully realized in that the meeting focuses on medical issues, but operational issues, such as response times, coverage strategies, funding, and future objectives to be accomplished for the EMS system are typically not addressed.

The resulting void for non-medical issues was expressed by many provider agencies. CVEMSA provides policy and administrative functions associated with patient care and transport destinations. The front end or response segments of calls are provider driven without the benefit of system-wide coordination and input

The County should consider designating (or creating a position) an individual with support from the stakeholders to address non-medical, operational issues in Mendocino County. The Quality Improvement Committee would be a good venue to provide guidance and support to these efforts. An annual plan would be one of the tangible outcomes of this process. The process should also include the ongoing coordination of the entire system. This would include the providers, communications centers, as well as, the hospital involvement in EMS.

The plan would include baseline measurement of all response times and initiatives to improve performance. This plan would address back-up and response requirements such as ALS or BLS

determination. Coordination of mutual-aid or auto-aid would be included and fully explored to provide redundancy in the system.

Quality Improvement Processes

EMS organizations find that sustaining high quality service is a difficult task. EMS leaders are encouraged to integrate continuous Quality Improvement (QI) practices into their EMS operations and administrative practices to the extent that those practices become an essential and seamless part of normal EMS routines.

The County should require development of an annual Quality Improvement Plan. CVEMSA has developed a QI plan with outside assistance from Fitch & Associates. The QI goals stress the approach, methodology, critical success factors, and indicators are clearly defined in the plan. Indicators should be monitored until improvement has occurred and the threshold or benchmark achieved in a timely manner. Responsibility and accountability for the QI plan is clearly defined. The Medical Director is also actively involved in implementing the plan and receives monthly reports. The plan should be reviewed and updated on an annual basis.

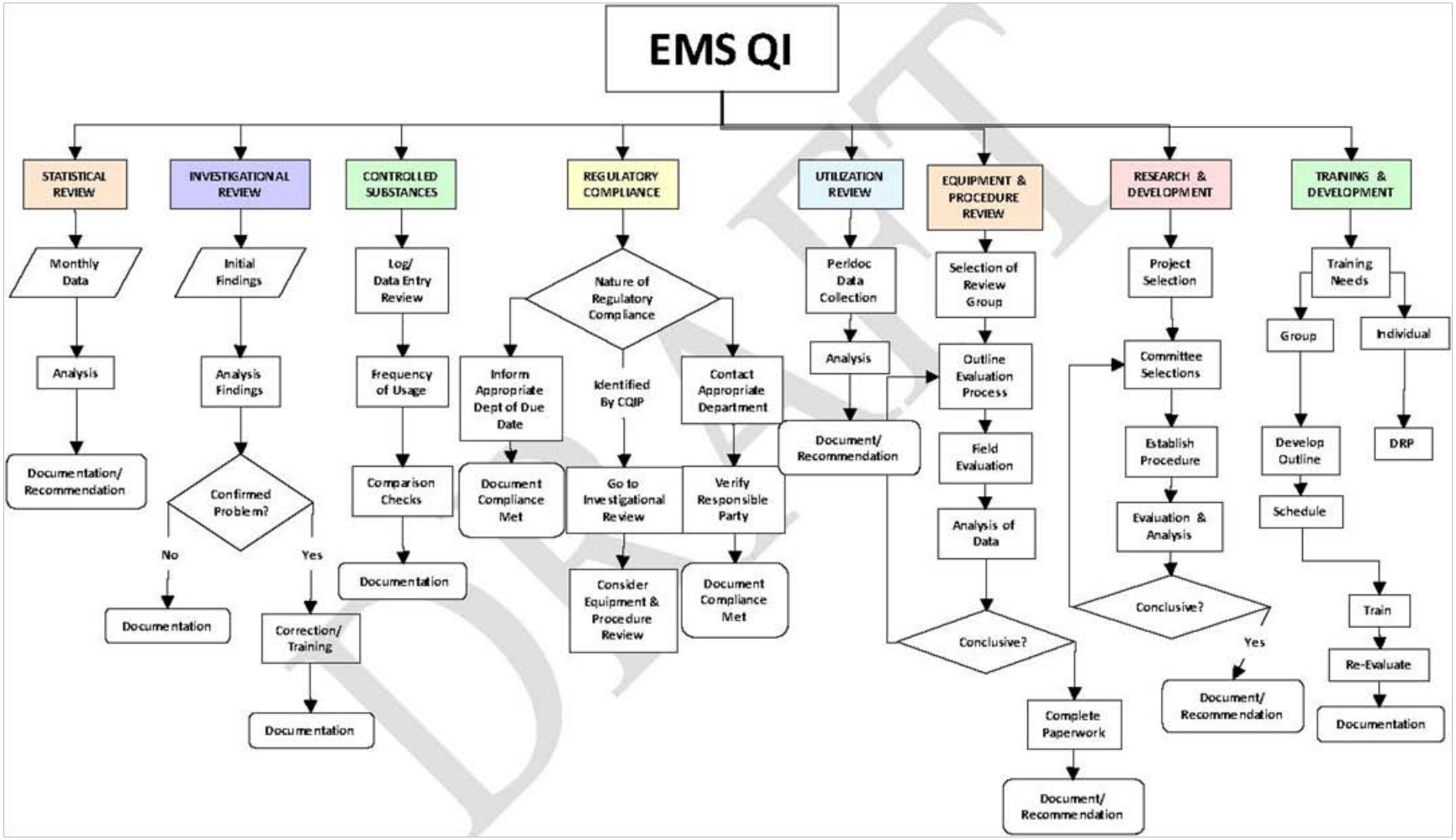
The QI plan should include statistical indicators to be monitored monthly, including:

- Fractile Response Times
- UhU Productivity
- Call Load
- Scene Times
- Customer Satisfaction
- Vehicle Maintenance
- Deviation from Medical Protocols
- High Risk Procedures
- Regulatory Compliance
- Others the services or hospitals deem necessary

Utilization review should be monitored for appropriateness of transport. The Medical Director should be involved in this ongoing review to determine which patients would and would not require transport into the hospital.

Other QI monitors, such as refusal forms compliance, vehicle readiness, skills maintenance, billing compliance, and utilization review should be monitored until improvement has occurred, the benchmark achieved, and an evaluation of the implemented changes is completed in a specified time frame. Monitoring various patient outcomes and customer satisfaction should be included in the QI plan.

Figure 4. Illustrates Proposed Retrospective QI Process



Recommendations

35. Designate a QI committee or external Advisory Board responsible for monitoring system performance for all components of the EMS system, not just medical protocols.
36. Develop a detailed implementation plan with specific timelines for service enhancements.
37. Implement a physician supervised and CVEMSA administered QI process involving communications, first response, medical transportation, and administrative components of the system.

Ensuring Optimal System Value

Ensuring Optimal System Value Benchmarks

- Clinical and customer satisfaction outcomes are enhanced by the EMS system.
- Unit Hour Utilization (UhU) is measured and hours are deployed in a manner to achieve efficiency and effectiveness.
- Cost per unit hour and transport document good value.
- Financial systems accurately reflect system revenues and both direct and indirect costs.
- Revenues are collected professionally and in compliance with federal regulations.
- Local tax subsidies are minimized.

Observations and Findings

Quality processes that support the determination of the efficacy of treatment modalities are becoming increasingly common in EMS. It is difficult to accomplish outcome measurement given the high number of other variables in the "chain of survival" that impact the patient's ultimate outcome. However, in the interim, process measures and outcomes for target conditions are typically utilized. The providers of service are unaware of the results from the collection of data and outcomes, such as cardiac arrest and Level 1 trauma activations. Other supportive indicators, including pain relief and customer satisfaction, are not routinely known within the ambulance service.

Revenues and Collection Processes

Each provider is billing and collecting on a case-by-case basis. The County should regularly require providers to submit this information to a central database. The rational in doing this is to fully understand the economics in the system. Setting base rates must include this understanding to ensure the safeguarding of community dollars.

Currently, the County has seven ALS transport providers (four in County, three outside) and two BLS transport providers. With the exception of the City of Ukiah, no two providers are in the same geographical area. Each of these providers charges a different rate for services. It is suggested that the County approve rates for the residents of the County based upon service area not provider. Patients transported by Ukiah Fire Department typically receive a lower billed rate than patients transported by Ukiah Ambulance due to tax subsidy from the City.

Subsidies

Mendocino County currently does not financially subsidize any providers. It is reported that, in the past, the County/CVEMSA provided a one-time, single year payment in consideration of services provided. In the limited review of the transport revenues, it is estimated that less than six million dollars was recovered for all providers in the County. Costs to staff a Paramedic Ambulance 24 hours per day/7 days per week can easily exceed $500,000 per ambulance. The fragmentation of the ambulance transportation system further dilutes the agency's ability to provide services.

The County should consider the establishment of a specialized taxing district for EMS. This would allow funds for system enhancements on a per-parcel or percentage of value basis. This would allow the County to establish performance standards based upon patient needs and not based upon a provider's ability to provide.

Recommendations

38. Develop a process to expand outcome-oriented information and/or that accurately portrays the importance of the impact of EMS services for patients.
39. Consider implications and conduct a detailed revenue analysis of net yield of charges. Understanding the system revenues is vital to the County.
40. Standardize charges by geographical area.
41. Evaluate additional avenues of revenue to support the system.
42. A system-wide score card should be developed to regularly measure key performance indicators of the system.

Conclusion:

Mendocino County's EMS system is comprised of multiple providers responding to emergency medical events. The system is challenged by long distances, low population density, below average payer reimbursement and limited resources. It functions due to the dedication and commitment of the existing providers. Serious patient care issues are being avoided due to this "whatever it takes" to care for the patients approach exhibited by the providers.

The County would be well served in establishing a funding mechanism such as a district or additional fee's to support the EMS infrastructure. The consultants understand funding is difficult due to the current economic situation in our country and certainly Mendocino County. At a minimum, the County must give its residents an opportunity to choose the type and level of response they are willing to fund.

CVEMSA must provide the direction and planning for the system and address issues in a consistent and well-defined manner. Lack of such structure has resulted in the EMS system being fragmented and uncoordinated. The recommendations included in this report are designed to increase the focused planning and coordinating activities occurring within Mendocino County. The recommendations are also focused on maximizing the benefit derived from the limited resources available and to provide a stronger safety net for the residents and visitors of Mendocino County.

Summary of Recommendations

911/Medical Communications

1. Consider consolidation of EMS dispatch or having a backup plan to provide for EMD call taking and dispatch of ambulances should one of the centers be unable to provide this service at any time.
2. Migrate from flip-cards to computer-based EMD processing.
3. Aqua and ProQA should be implemented as soon as possible to insure the correct utilization of resources (adoption of the Priority Dispatch ***ProQA™*** system and AQUA quality assurance system) in the 911 centers. (See: www.medicalpriority.com/main.html)
4. Develop a plan to make certain that the EMD center(s) achieves NAED "Accredited Center of Excellence" status.
5. Ensure that 95% of those requiring pre-arrival instructions receive them in accordance with nationally recognized standards.
6. Only dispatch Fire units on responses, per EMD protocol, as agreed to by the medical community after prioritization of the call. Sending extra assets increases liability and reduces capacity for simultaneous calls.
7. Implement a single repository for all call data.

Medical First Response

8. Implement County Service Area 3 to offset the expenses incurred by agencies responding outside of their primary political sub-division.
   Response times are captured and should be evaluated and reported.
9. First Responder response times, as part of the patient care continuum, should be reported from call receipt until "wheels" stop on a fractile basis.
10. A fractile response time with 90% reliability should be considered. Using proper triage of 911 calls to ensure that First Responders only respond on the more critical calls should assist in improvement towards this standard.
11. Assist First Responders to become Advanced EMT providers.
12. Formal agreements must be negotiated with all first response agencies in the county.
13. The Medical Director's responsibilities should assure an appropriate degree of oversight to the entire continuum of patient care, including Dispatch, First Response, Transport and all other aspects of EMS in the system.

Medical Transportation

14. Acceptable ambulance response time must be established.
15. Response times should be measured and reliable to the 90th percentile. Any report that is below this requirement should be evaluated and a plan of correction developed.
16. Criteria should be established that would define the process of what is to occur if the plan of correction is not successful.
17. The system wide deployment must be managed and monitored.
18. Patient care protocols should be modified to insure the appropriate dispatching of ALS transport ambulances.
19. An operational system plan for ambulance move and cover must be developed with all system stakeholders. This plan must include "what if" scenarios that demonstrate worst-case situations of depletion of ambulances.
20. Evaluate the impact of a reduction in availability of Helicopter resources.

Medical Accountability

21. Provide training locally.
22. Provide clinical feedback in a progressive manner that involves the Medical Director.
23. Develop system-wide quality improvement processes.
24. Medical accountability must be incorporated into all agencies.
25. Assist providers to become Advanced EMT

Customer and Community Accountability

26. The County must develop a detailed strategy and implementation plan to ensure that the EMS system has the operational flexibility and necessary resources to achieve its mission.
27. The EMS agency must be responsible for coordinating and monitoring the system, not only its medical performance, but operational performance, including First Responders and the ambulance services.
28. Publish monthly reports for First Responder, as well as the ambulance service's fractile response times to all system participants and units of local government.
29. On a regular basis, measure and report system services and provider key performance areas, such as STEMI times or cardiac return of circulation scores.
30. Expand EMS system-service quality-improvement plan and evaluate annually.

Prevention and Community Education

31. Develop a program and identify resources to improve community awareness of the EMS system and its capabilities.
32. Identify and support priority projects for community health improvement, utilizing the first responders and ambulance services as a primary connection.
33. Develop and promote a higher profile for the Mendocino County EMS system with posting key service facts and response time information.
34. Prepare and distribute an annual report to elected officials and community stakeholders describing the accomplishments and needs of the system.

Organizational Structure and Leadership

35. Designate a QI committee or external Advisory Board responsible for monitoring system performance for all components of the EMS system, not just medical protocols.
36. Develop a detailed implementation plan with specific timelines for service enhancements.
37. Implement a physician supervised and CVEMSA administered QI process involving communications, first response, medical transportation, and administrative components of the system.

Ensuring Optimal System Value

38. Develop a process to expand outcome-oriented information and/or that accurately portrays the importance of the impact of EMS services for patients.
39. Consider implications and conduct a detailed revenue analysis of net yield of charges. Understanding the system revenues is vital to the County.
40. Standardize charges by geographical area.
41. Evaluate additional avenues of revenue to support the system.
42. A system-wide score card should be developed to regularly measure key performance indicators of the system.

Attachment A

Regional LEMSA Document

EMSA POLICY FOR FUNDING

REGIONAL EMS AGENCIES

WITH STATE GENERAL FUND

JUNE 2001
EMSA #104

FUNDING OF REGIONAL EMS AGENCIES WITH STATE GENERAL FUNDS

Prepared by:

Carol MacRae
Contracts Administrator
California EMS Authority

Jeffrey Gidley, Chief
EMS Funding and
Administrative Division
California EMS Authority

?

Gray Davis
Governor

Grantland Johnson
Secretary
California Health and Human Services Agency

Richard E. Watson
Interim Director
California EMS Authority

June 2001

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Chapter 1
Purpose and **G**eneral **F**unding **P**olicies

1.1 Purpose of Policy Document

This document has been prepared to inform regional EMS agencies receiving State General Funds of the funding criteria and eligibility requirements used to distribute those funds, and to assist the regional agency applicants with the preparation of the application for State General Funds allocated by the Emergency Medical Services Authority (EMS Authority). In addition to providing guidance in the preparation of the application, this document also sets forth the contract management and reporting policies regional EMS agencies are required to follow as a condition for receiving State General Funds.

1.2 EMS System Development Importance

A coordinated statewide EMS system provides day-to-day emergency medical care and forms the basis for any disaster medical response. The appropriate and timely provision of emergency medical care is an overall benefit to society. Without this care, unnecessary morbidity and mortality will occur which, in addition to increased human suffering, results in increased health care costs and loss of public revenue. Although delivering emergency and acute critical care is the most expensive of all medical services, promotion of a coordinated system for this care results in optimal utilization and allocation of health care resources and overall decreased health care expenditures.

The EMS Authority was established in 1980 (Division 2.5 of the Health and Safety Code) with a general mandate to develop a statewide system of coordinated emergency medical services. This EMS system should:

- be easily accessible and available to all persons needing emergency care;
- include a comprehensive range of services;
- provide high quality care;
- have an efficient and cost-effective management structure;
- provide public education and information;
- have adequate personnel training programs;
- be responsive to local needs; and
- provide for coordination of medical mutual aid at local, regional, state, and federal levels in the event of a disaster.

1.3 Funding of Local EMS Systems

Section 1797.200 of Division 2.5 of the Health and Safety Code permits each county to develop an emergency medical services program. Each county developing an EMS program must designate a local EMS agency which shall be the county health department, an agency established and operated by the county, an entity with which the county contracts for the purposes of EMS administration, or a joint powers agency. In general, funding of local EMS agencies is the responsibility of the county establishing an EMS program.

Because many counties, especially those with large rural areas and smaller populations, have limited financial resources and county borders often do not coincide with natural patient catchment areas and the health care resources needed for optimal EMS systems, the EMS Authority believes that the use of regional EMS systems is an efficient and effective model for much of California. In order to encourage the efficiencies of regionalization, the EMS Authority provides State General Fund monies to established regional EMS agencies that meet specific criteria.

Funding from the State General Fund local assistance program is available only to developed multi-county EMS systems that have completed the PHHS Block Grant development. The funding may only be used to maintain the EMS system and continue essential minimum program activities, and to improve the EMS system. This program is available only when funds are allocated for this purpose in the annual State Budget.

1.4 Benefits of Regionalization

The potential benefits derived from centralizing the administration of common EMS functions at the regional level include:

- reducing administrative and program costs;
- standardizing system coordination of emergency response and patient flow;
- focusing of regional EMS concerns;
- providing a more effective impact at the state level; and
- matching administrative boundaries with natural systems.

Multi-county systems of care provide a population base large enough that definitive care facilities are contained within the system area and thus, comprehensive patient referral flow patterns are not hindered by county lines. This is particularly important for rural areas. Major benefits are best achieved when there is centralization of administration, medical control, and data evaluation, as well as facilities' assessment and designation of critical care centers.

1.5 Statutory Authority

Statutory authority for funding multi-county EMS agencies is found in Section 1797.108 of the Health and Safety Code. This section states, in part, that " . . . the Authority may provide special funding to multi-county EMS agencies which serve rural areas with extensive tourism, as determined by the Authority, to reduce the burden on the rural EMS agency of providing the increased emergency medical services required due to that tourism."

The following budget language accompanies the state local assistance appropriation:

1.6 The EMS Authority shall use the following guidelines in administering state funded contracts to regional EMS agencies:

- ? Funding eligibility shall be limited to rural multi-county regions that demonstrate a heavy use of the EMS system by nonresidents.
- ? Regional EMS agencies shall provide matching funds of at least $1 for each dollar of state funds received.
- ? State funding shall be used to provide only essential minimum services necessary to operate the system, as defined by the Authority.
- ? No region shall receive both federal and state funds in the same fiscal year for the same purpose.
- ? Each multi-county system shall be eligible to receive up to one-half of the total cost of a minimal system for that area, as defined by the Authority.
- ? Multi-county systems with a population of 300,000 or less shall receive the full amount for which they are eligible if they provide a cash match of $0.41 per capita or more.

1.7 Requirement to Comply with Applicable Statute, Regulations, and Guidelines.

Funding eligibility for regional EMS agencies under the State General Fund is contingent upon the regional EMS agency following all applicable state and federal statutes, regulations, and guidelines including but not limited to the following:

1. Each regional EMS agency requesting funding must have on file with the EMS Authority a current board approved regional EMS plan that address all of the components of an EMS system as defined in Section 1797.103 of the Health and Safety Code.

2. Each regional EMS agency that has implemented a trauma care system must have submitted a trauma care system plan to the EMS Authority in compliance with Section 1797.257 of the Health and Safety Code.

3. Each regional EMS agency that has implemented a Public Safety Defibrillation program must have on file with the EMS Authority a current annual report, in compliance with Section 100021 (c) (8) (A)(B) of the First Aid Standards for Public Safety Personnel, California Code of Regulations (Title 22).

4. Each regional EMS agency that receives State General Fund support monies must be regularly providing to the EMS Authority, data that conforms with the EMS Authority's California EMS Data Systems Standards and the California State Uniform Prehospital Data Set.

5. Each regional EMS agency must be providing coordination of local medical and hospital disaster preparedness and response activities in cooperation with the EMS Authority and other local, state, and federal entities, in compliance with Section 1797.151 of the Health and Safety Code.

Funding will be withheld by the EMS Authority if regional EMS agencies do not comply with these requirements.

1.8 Requirements for Delegation of Functions

To be eligible to receive state general funds, a multi-county agency must be designated as the regional EMS agency responsible for all the Division 2.5 functions listed on the following page:

SECTION	TOPIC
1797.202	Medical Director Appointment
1797.204	Planning, Implementing and Evaluating the EMS System
1797.206	Implementation of ALS/LALS systems. Monitoring Training Programs
1797.208	Training Program Approval
1797.210	Certification of Personnel
1797.212	Establish Certification Fees
1797.214	Additional Training/Qualifications
1797.218	Authorizing ALS/LALS Programs
1797.220	Medical Control Policies and Procedures
1797.221	Trial Studies
1797.250	Development and Submission of EMS System Plan
1797.252	Coordinate and Facilitate EMS System Development
1797.254	Development and Submittal of EMS Plan
1797.256	Review of EMS Grants
1797.257 & 1797.258	Submittal of Trauma Plan
1798.	Medical Control
1798.2	Base Hospital Policies and Procedures
1798.3	Alternative Base Stations
1798.100	Designation of Base Hospitals/Alternative Bases
1798.101	Rural Base Hospitals and Receiving Facilities
1798.105	Approval of Alternative Base Station
1798.162 - .166	Regional Trauma Systems
1798.170	Triage and Transfer Protocols
1798.172	Transfer Agreement Guidelines and Standards
1798.200	Certificate Review Process
1798.201	Local EMS Agency evaluation and recommendation for disciplinary action against an EMT-P
1798.202	Suspension of an EMT-P License
1798.205	Violations of Transfer Guidelines, Protocols or Agreements
1798.209	The Local EMS Agency may revoke, suspend, or place on probation the approval of a training program

1.9 Other Factors

In addition to meeting the essential eligibility criteria, the following factors will be evaluated:

- ? Composition of local funding match, i.e., cash vs. direct in kind;
- ? degree to which cash match by member counties exceeds user fees or one-time grants;
- ? involvement of providers in local match;
- ? organizational/administrative structure and fiscal management;
- ? the appropriateness of the agency budget and evidence of system efficiency and effectiveness; and,
- ? history of successful performance under previous contracts.

1.10 Regional Agency Definition

A regional agency is defined as three (3) or more counties.

1.11 New Regional Agencies

New multi-county agencies can receive a share of the available monies only if adequate funds for a new region have been allocated in the State Budget. If new funds were not required to add new multi-county systems, existing programs would be negatively impacted by the redirection of funds. Therefore, before new agencies may receive general fund support, a process to allocate additional funds to the budget must be undertaken during the final year of eligibility for Federal Block Grant development support.

1.12 Changes in County Membership of a Region

A region adding a new county will not receive SGF support for the new county for up to one year, as determined by the EMS Authority based on the impact on other regions. A region that is adding a county must update its EMS Plan to incorporate the new county before it will be eligible for additional SGF support for that county. The plan should explain how the change will affect services to the county and the region.

In cases where a county changes regions, there will be a transition period for both the receiving and the losing regional agencies. The agency losing the county shall be credited with the county in the current funding formula for up to one year. The agency gaining the county shall not be credited with the new county for the first year of funding.

A region that has lost a county and is receiving transitional funding at its previous eligibility level must, by the end of one year, update its EMS Plan to reflect the loss of the county. The plan should explain how the change will affect services to the remaining counties in the region.

Should an existing agency's county membership be reduced to less than (3) counties, they will no longer be eligible for State General Funding with the following exception; in the event a county's membership is reduced to two (2), they may be eligible to receive up to one year of transitional funding in accordance with the current funding formula.

Anytime that a multi-county agency is approached by a member county of another EMS region to discuss moving their affiliation, the director of the EMS agency shall advise the director of the member county's current EMS agency.

It is suggested that all regional agencies ensure that there is a clause in their contracts with the counties that require a county that wishes to drop out of a region to give notice by **June 1 in the SFY**, in order to opt out for the next one year cycle.

1.13 Allocation Methodology

The EMS Authority determines the base allocations for the regions consistent with total available funding, respective agency workloads as determined by population and number of counties, other criteria, and historical considerations. The base allocations are intended to ensure that the minimum required activities can be accomplished in proportion to local needs.

The funds are allocated utilizing the following formula:

1. Each multi-county agency receives a base constant of 3.0. (This is based on the average staffing levels from EMS staffing surveys for a single county with a population of 500,000 to 1,000,000). Each multi-county agency with a population of 300,000 or less receives a base constant of 2.5.

2. An additional .20 is added to the base for each 100,000 people served by the region. (The maximum population credit for any single county is 500,000).

3. For each county within the system .60 is added to the agency's calculation.

Once these calculations are completed for each of the multi-county agencies, they are totaled. Each agency's total is then divided by the sum total for all multi-county agencies. The individual percentage is then applied to the total amount of general funds available. The result is the level of funding each agency may receive based on a dollar for dollar match, unless the multi-county agency has special dispensation through budget language that does

not require them to match dollar for dollar. If population and/or number of counties changes, the base allocation will be adjusted.

If one or more counties within a multi-county system are not in compliance with the eligibility/delegation requirements, the ineligible counties and their populations will be excluded from the formula calculations and financial contributions from those counties will not be counted as match. If funds remain available due to agencies not being eligible for their full allocation, the additional funds will be distributed to the remaining eligible agencies based on the allocation formula.

The Authority will annually notify each multi-county agency in writing of its proposed funding for the coming fiscal year. Actual funding levels are subject to change based upon the final dollars allocated in the annual Budget Act.

1.14 Local Match Requirements

The language in the annual Budget Act requires that recipients of State General Fund local assistance dollars match "dollar for dollar" the annual amount received. Only **cash** and **direct in-kind** local support will be accepted as match for receipt of state local assistance allocations. In addition, no agency may receive more state money than they are able to match with local cash or direct in-kind support from the member counties. Multi-county agencies with a population of 300,000 or less shall receive the full amount for which they are eligible if they provide a cash match of $0.41 per capita or more.

Fees received by the local EMS agency for activities that duplicate state functions for which fees are collected will not be allowed as cash match.

The following are the only **direct in-kind** contributions which will be allowed as match for receipt of state general funds.

- Directly related support functions, i.e., staff services, provided by an individual or group outside the agency to fulfill a function assigned to the agency.
- Related salaries and benefits of outside staff assigned to and under the control of the agency.
- The donation of supplies, space, or equipment to the multi-county EMS agency.

1.15 Funding Restrictions

State general funds are provided to assist multi-county agencies in meeting the requirements imposed upon them by the delegation of state law and regulations. The funds are not intended to provide direct patient services or to supplant local activities.

The Legislature has been specific in this regard. Budget language restricts the use of state general funds to "essential minimum services necessary to operate the system, as defined by the Authority." Minimum services are defined in sections of Division 2.5 of the Health and Safety Code, the Authority's regulations related to these sections, and by the minimum standards in the *EMS Systems Standards and Guidelines* that includes the eight (8) system components identified in Section 1797.103 of the Health & Safety Code.

Chapter 2
Application **P**reparation and **P**rocess

2.1 Application Process

In order to receive the State General Fund assistance, each multi-county agency must submit a State General Fund application to the Authority by June 30th of each year. All applications must include the following items in the order presented below.

1. Objectives
2. Budget Categories
3. Program Funding
4. Budget Detail/Narrative
5. Personnel Detail
1. Organizational Chart

2.2 Objectives

Each application must include the list of objectives as shown in **Attachment A**.

2.3 Budget

Each application must include a separate section titled "Budget". The proposed budget must show by line-item the proposed costs and resources needed for the operation of the regional agency. A copy of the budget forms, including the Budget Categories **(Attachment B)**, Program Funding **(Attachment C),** Budget Detail/Narrative **(Attachment D)**, and Personnel Detail **(Attachment E)** are included as attachments in the Policy Manual.

2.4 Organizational Chart

Each application must include an organizational chart of LEMSA staff and must identify by title, name, FTE, and qualifications, all staff who either are paid using the State General Fund or are included in the local in-kind match.

2.5 Submission of Application

One original application must be forwarded to the EMS Authority. **Please do not bind, or three hole punch the application**, as various sections of the application will be incorporated into the contract.

2.6 Contract Approval Process

Upon approval of the application, the Contracts Manager at the EMS Authority will prepare the contract. The contract, along with four copies, will be sent to the regional agency for its review and approval (all five contracts require original signatures). Stamped replicas of signatures are not acceptable as original signatures. When the contracts have been signed, they are to be returned to the EMS Authority for signature. The Authority is not permitted to sign the contracts until the State Budget Act is signed.

Chapter 3
Allowable **C**osts

3.1 General

This chapter sets forth basic principles for determining allowable costs. The application of these principles is based on the following premises:

(a) Regional agencies are responsible for efficient and effective administration of the system through the application of sound management practices; and,

(b) Expenditures are consistent with objectives identified in the Contract.

Only those budgeted costs identified in the contract that appear in the contractor's accounting records and are supported by proper source documentation are eligible for reimbursement.

State general funds are provided on a reimbursement basis after the expense has been incurred and upon submission of a reimbursement claim.

Costs incurred under one state contract shall not be shifted to another state contract.

3.2 Eligibility Requirements

To be eligible for reimbursement under the State General Fund, costs must meet the following criteria:

(a) Be **necessary and reasonable** for proper and efficient administration of essential EMS system requirements.

(b) Be permissible under state and local laws and regulations and conform to any limitations or exclusions set forth in these principles.

(c) Not be allocable to, or included as a cost of, any other state or federally financed program.

(d) Be reduced by any “applicable credits”, such as purchase discounts, rebates, allowances, overpayments, or erroneous charges.

(e) Not result in a profit or other increment to the applicant agency.

(f) Be incurred on or after the effective date of the contract and on or before the last day of the contract termination date.

3.3 Administrative/Indirect Costs

Each regional agency receiving State General Fund assistance will be allowed to claim a maximum of 10% Administrative/Indirect Cost. Administrative/Indirect Cost will be 10% of the total direct costs. Each regional agency claiming 10% Administrative/ Indirect Costs **must list all items included in the Administrative/Indirect Cost line item**.

3.4 Typical Allowable Costs

This section contains an alphabetical list of typical costs that are generally eligible for reimbursement. This list is not meant to be all inclusive. **All allowable costs must be directly related to achieving the objectives in the contract and must be explained in the budget detail/narrative**. Specific information concerning allowable costs may be obtained by contacting the Contracts Manager at the EMS Authority.

Accounting

The cost of establishing and maintaining accounting systems required for the management of a contract is allowable. The cost of preparing payroll and maintaining necessary related wage records is allowable.

Costs for the recruitment, examination, certification, classification, training, establishment of pay standards, and related activities for the contract is allowable.

Advertising

Advertising costs are allowable for recruitment of personnel required for the contract, solicitation of bids for the procurement of services required, or for other purposes specifically provided for in the contract agreement.

Budgeting

Costs incurred for the development, preparation, presentation, and execution of the application budget are allowable.

Communications

Communications costs incurred for telephone calls, mail, messenger service, and similar expenses are allowable.

Employee Benefits

Employee benefits in the form of regular compensation paid to employees during periods of authorized absences from the job such as vacations, sick leave, court leave, military leave, and similar absences are allowable provided they are pursuant to an approved leave system. Employee benefits in the form of employer's contributions to social security, life and health insurance plans, unemployment insurance coverage, workmen's compensation insurance, pension plans, severance pay, and the like are also allowable. The total employee benefits may not exceed 32% of salaries.

Example:	Retirement	11.65%
	Health	7.65%
	workers Comp.	2.74%
	OASDI	6.20%
	Dental	1.02%
	Life Insurance	2.74%
		32.00%

Employee Salaries

Employee salaries for services rendered during the period of performance under the contract agreement are allowable provided that the cost for individual employees is reasonable for the services rendered. Identify the monthly, weekly, or hourly rates, and personnel classifications. **Reminder:** The costs to be paid by State General Fund Regional Agency funds for portions of a specific position, when added to costs for portions of the same position to be paid by federal block grant special project funds or included in the local match may not exceed 100% of the total cost of the position.

Equipment

Equipment is defined as **one item costing $5,000 or more**. Only the cost of equipment necessary to administer the regional system is allowable. All equipment meeting this definition and purchased with the State General Fund monies must be reported to the EMS Authority.

The contractor will maintain an inventory record for each piece of non-expendable equipment purchased with funds provided under the terms of the contract. The inventory record of each piece of such equipment shall include the date acquired, total cost, serial number, model identification (on purchased equipment), and any other information or description necessary to identify said equipment.

Note: All equipment purchased with funds received through this contract will become the property of the State of California and must be tracked and accounted for.

Legal Expenses

Legal expenses required in the administration of the region are allowable. Legal expenses for the prosecution of claims against the applicant agency, the state, or the Federal Government are not allowable.

Maintenance and Repairs

The costs for utilities, insurance, security, janitorial services, elevator service, upkeep of grounds, necessary maintenance, normal repairs are allowable to the extent that they: **(1) keep property (including Federal property, unless otherwise provided for) in an efficient operating condition, (2) are not otherwise included in rental or other charges of space.**

Materials and Supplies

The cost of necessary materials and supplies is allowable. Purchases should be charged at their actual cost after deducting all cash discounts, trade discounts, rebates, and allowances received. Withdrawals from general stores or stockrooms should be charged at cost under any recognized method of pricing, consistently applied.

Items of equipment with an acquisition cost of less than $5,000 are considered to be supplies for billing purposes and are allowable. **However, all computer components, and other durable items such as copy machines, furniture, etc., purchased with funds received through this contract will become the property of the State of California and will need to be tracked and accounted for.** Such items **may not** be transferred for use by another department of local government or be disposed of without written approval of the EMS Authority.

Memberships, Subscriptions, and Professional Activities

The cost of membership in civic, business, technical and professional organizations is allowable provided: (1) the benefit from the membership is directly related to the administration of the regional agency; (2) the expenditure is for agency membership; (3) the cost of the membership is reasonably related to the value of the services or benefits received; (4) the expenditure is not for membership in an organization that devotes a substantial

part of its activities to influence legislation, and (5) the expenditure is identified in the budget.

The costs of meeting and conference rooms are allowable only when directly related to the administration of the regional agency and the expenditure is identified in the budget.

The costs of books and subscriptions to business, professional and technical periodicals are allowable when they are directly related to the administration of the regional agency.

Motor Pools

The cost for the provision of a **county** automobile for use directly for the administration of the regional agency by the applicant agency at a mileage or fixed rate, including vehicle maintenance inspection and repair service, is allowable.

Printing and Reproduction

The costs of necessary printing and reproduction services obtained directly for the benefit of the regional agency, including forms, reports, manuals, and similar informational literature, are allowable.

Professional Services (Consultants)

The costs for professional services rendered by individuals or organizations not a part of the applicant agency are allowable when reasonable in relation to the services rendered. **All consultant services contracts over $2,500 must have advance approval by the EMS Authority.** All expenses incurred by the consultant shall be included in the Contractual Line Item and shall not be made a part of any other line item in any of the budget pages.

Space (Rental)

Rental reimbursement items should specify the unit rate, such as the rate per square foot. The cost of space in privately or publicly owned buildings used specifically for the benefit of the contract is allowable subject to the following conditions: 1) the total cost of space whether in a privately or publicly owned building, may not exceed the rental cost of comparable space and facilities in a privately owned building in the same locality; 2) the cost of space procured for the contract may not be charged for periods of non-occupancy; 3) maintenance and operation - the cost

of utilities, insurance, security, janitorial services, elevator service, upkeep of grounds and normal repairs are allowable to the
extent they are not otherwise included in rental or other charges for space; and 4) costs incurred for rearrangement and alteration of facilities are not allowable.

Training

The cost of in-service training provided for employee development that directly benefits the regional agency is allowable.

Travel

Travel costs are allowable for transportation, lodging, subsistence, and related items incurred by agency employees who are traveling on official business directly related to the administration of the regional agency. Transportation expenses consist of the charges for commercial carrier fares; private car mileage allowances; overnight and day parking; bridge and road tolls; necessary bus or taxi fares; and all other charges essential to the transport from and to the individual's headquarters.

Reimbursement may be requested for actual transportation expenses by public carrier in connection with services rendered for the contract and actual transportation costs for a personal car at the rate of $ .31 per mile **or less** for travel expenses incurred for the contract, while away from the individual's headquarters. Claims for transportation by scheduled airlines are allowed at the lowest fare available in conformity with the regular published tariffs for scheduled airlines in effect on the date of origination of the flight. Parking, toll bridge expenses, etc., are permissible if in conformance with **Department of Personnel Administration (DPA) regulations.**

NOTE: Only those travel expenses specified in the Contract budget are reimbursable to the Contractor.

In computing the allowance for travel , the following maximum reimbursement will be allowed in any 24 hour period or fractional part thereof:

Lodging $0.00 without receipt
Lodging $84.00 with receipt + tax **($110 with receipt per night plus tax for the counties of Alameda, San Francisco, San Mateo, Santa Clara and Central and Western Los Angeles) Central and Western Los Angeles includes downtown Los Angeles, Inglewood, L.A. International Airport, Playa del Rey, Venice, Santa Monica, Brentwood, West L.A., Westwood Village, Culver city, Beverly Hills, Century City, West Hollywood, and Hollywood.**

Staff may be reimbursed for **their ACTUAL EXPENSES** for breakfast, lunch, dinner, and incidentals for each 24 hours of travel as follows:
Breakfast up to $6.00
Lunch up to $10.00
Dinner up to $18.00
Incidentals up to $6.00

An incidental allowance of up to $6.00 may be claimed for each 24 hour period. No per diem expenses are allowed at any location within 50 miles of the individual's headquarters as determined by normal commute distance. Meals are subject to the following:
If trip was:

Less than 24 hours

Breakfast:
May be claimed if traveler left at or before 6:00 a.m. and returned at or after 9:00 a.m.

Lunch:
Lunch may NOT be claimed for travel of less than 24 hours.

Dinner:
May be claimed if traveler left at or before 4:00 p.m. and returned at or after 7:00 p.m.

Incidentals may not be claimed on a trip of less than 24 hours.

More than 24 hours

Breakfast:
May be claimed if traveler left at or before 6:00 a.m. and returned at or after 8:00 a.m.

Lunch:
May be claimed if traveler left at or before 11:00 a.m. and returned at or after 2:00 p.m.

Dinner:
May be claimed if traveler left at or before 5:00 p.m. and returned at or after 7:00 p.m.

Any meals provided for in the registration fee of a conference or in the price of the airline ticket are not separately reimbursable.

Out-of-state Travel

Out-of-state travel requires **prior approval** by the EMS Authority. A written justification and request for prior approval of out-of-state travel must be received at the EMS Authority at least 30 working days before the first day of the trip.

3.5 Unallowable Costs

The following are costs that are not eligible for reimbursement under the State General Fund. This is not meant to be an all-inclusive list. Specific information concerning these or other allowable costs may be obtained by contacting the Contracts Manager at the EMS Authority.

Accounting

The cost of maintaining central accounting records required for overall state or local government purposes, such as appropriation and fund accounts by the treasurer, controller, or similar officials is considered to be a general expense of government, and is not allowable except to the extent, if any, that acceptance of the contract directly increases their administration of the regional EMS agencies.

Alcoholic beverages

Costs of alcoholic beverages are not allowable.

Audits (General)

Expenses for general audits that a local agency or county is required to perform that are not related directly to the administration of the regional agency are not allowable.

Bad debts

Losses arising from uncollectible accounts and other claims, and related costs are not allowable.

Contingencies

Contributions to a contingency reserve or any similar provision, excluding insurance costs for unforseen events are not allowable.

Contributions and donations

Contributions and donations, including cash, property, and services, by governmental units to others, regardless of the recipient, are not allowable.

Entertainment

Costs for entertainment, including amusement, diversion, and social activities and any costs directly associated with such costs (such as tickets to shows or sports events, meals, lodging, rentals, transportation, and gratuities) are not allowable.

Fines and penalties

Costs resulting from violations of, or failure to comply with federal, state, and local laws and regulations are not allowable.

Food and Beverages

Costs of food and beverages for meetings are not allowable.

Fund raising and investment management costs

Costs for organized fund raising, including financial campaigns, solicitation of gifts and bequests, and similar expenses incurred to raise capital or obtain contributions are not allowable.

Costs for investment counsel and staff and similar expenses incurred to enhance income from investments are not allowable.

General Government Expense

The salaries and expenses of the office of the Governor or the chief executive of a political subdivision are not allowable.

Honoraria

Honoraria for guest speakers are not allowable.

Interest

Costs incurred for interest on borrowed capital or the use of a governmental unit's own funds, however represented, are not allowable.

Legislative Expense

Salaries and other expenses of State legislatures or similar local governmental bodies such as county supervisors, city council, school boards, etc., are not allowable.

Staffing Costs

State General Fund monies may not be used to support any staff position, or the portion thereof, that is identified as a local match for those funds.

Chapter 4
Implementation and **C**ontrol of **A**pproved **C**ontracts

4.1 Effective Date

The Standard Agreement will show an effective date of the contract. Claims for reimbursement may be made only for funds expended subsequent to that date. No reimbursement will be provided for expenses incurred prior to the effective date or beyond the contract period.

4.2 Contract Amendments

Regional EMS agencies may make minor adjustments in the budget without prior authorizations, however, the amount of total adjustments cannot exceed $2,000 for the period of the contract and the total budget authorized cannot be exceeded.

If the regional EMS agency wishes to make a budget revision that exceeds $2,000, the regional EMS agency must submit a written request with an explanation of the need, and submit all revised pages effective by the revision(s) that specifically identifies all the line item(s) changes. The EMS Authority must approve such revisions in writing prior to their implementation. Contract amendments for any changes to the objectives must also be approved in advance. Regional agencies requesting amendments to their contract(s) must submit all revised pages with a justification to the EMS Authority 30 days prior to the effective date of the change(s).

NOTE: Under no circumstance will the contract be amended after the contract termination date.

4.3 EMS Authority Responsibility

The EMS Authority has the responsibility and authority to review and evaluate the activities paid for under each contract as deemed necessary. Such review and evaluation will be made for the purpose of assisting the applicant agency to understand and comply with the requirements and to gain maximum benefits from the funds expended.

The EMS Authority's Systems Analyst and the Contracts Manager both have the responsibility of recommending to the Director of the EMS Authority the cancellation of any contract that is not being implemented in accordance with applicable state laws or pursuant to the terms of the signed Standard Agreement.

Any questions regarding the contract, including but not limited to; Budget Revisions, Invoices, Contract Advance Payments, and Reports, shall be directed to the attention of the Contracts Manager for the State EMS Authority.

4.4 Withholding, Termination and/or Denial of General Funds

The EMS Authority may terminate any contract prior to the contract termination date if the policies established in this document or pursuant to the terms of the signed contract are not being followed. A contract may be terminated at any time for breach and the EMS Authority may also terminate unilaterally and without cause upon thirty (30) working days written notice to the Contractor. Payment for allowable costs up to the date of termination will be subject to negotiation. The contract may be canceled at any time by either party, by giving thirty (30) days advance written notice to the other party.

A regional EMS agency may appeal a decision by the EMS Authority to terminate a contract. The regional EMS agency must file with the EMS Authority, 1930 9th Street, Sacramento, CA 95814 a full and complete written statement specifying the grounds for the appeal within thirty (30) days of notification to terminate. The Director will review all information submitted with regards to the appeal and render a written decision regarding the appeal within thirty (30) working days. The decision of the Director of EMSA shall be final.

4.5 Termination Requested by the Contractor

Upon written request of the contractor and prior review by the EMS Authority, a contract may be terminated without prejudice when the agency finds it is unable to continue for justified reasons beyond its control. In such circumstances, the maximum reimbursement of claimed costs to the date of termination is limited to the negotiated amount determined to be allowable by a review of the expenditure records.

4.6 Close out of Contracts

Approximately 30 days prior to the end of the contract with the regional agencies, EMSA's Contracts Manager will mail a notice to the Regional Administrator. This constitutes a reminder of the final date of the contract and the due date of the final report and final claim.

4.7 Funding Availability

If during the term of the contract award, state funds become reduced or eliminated, EMSA may immediately terminate or reduce the contract award upon written notice to the regional EMS administrator.

Chapter 5
Fiscal **R**equirements

5.1 General

It is the regional EMS agency's responsibility to ensure that all costs of the contract are entered into the agency's accounting system, and that procedures are established and source documents developed that will reliably account for the funds expended.

The applicant agency is required to maintain detailed source documents covering all costs charged to the contract. These documents provide the source of entries into the accounting records and support costs reported on each reimbursement claim presented to the EMS Authority.

The applicant agency is required to adhere to established standards and requirements governing the utilization and disposition of property (equipment) acquired wholly or in part by general funds. Regional agencies may use their own property management procedures as long as the provisions of the property management section of this document are also adhered to.

All contract transactions are subject to audit. Failure to comply with the audit provisions of this section may result in audit exceptions and subsequent recovery of funds. (See Audit Requirements)

5.2 Accounting Records

Any accounting system may be used as long as it conforms to generally accepted accounting principles (GAAP). In general, this means that the existing accounting system of a political subdivision or LEMSA may be used.

It is preferable that the contract expenditures are recorded directly in special contract accounts, but they may be recorded in regular accounts provided an audit trail exists. A complete list of expenditures must be maintained to facilitate an audit of contract expenditures and preparation of claims for reimbursement.

Special job numbers or work activity codes should be established to segregate and record labor costs if an agency employee is paid from more than one funding source.

5.3 Acceptable Source Documents

Personnel Costs

(a) Payrolls must be on file for salary information. Labor charged to the contract **must** be supported by individual daily time cards or payroll period time sheets.

(b) In some instances, working hours are recorded by exception; i.e., only vacation, sick leave, jury duty, etc., hours are recorded. In such cases, special additional documentation or worksheets shall be kept to support time chargeable to the contract.

(c) Contract work time must be certified for each individual by a supervisor. Such work time certifications should be promptly forwarded to the accounting or payroll unit to determine labor cost chargeable to the contract and subsequently entered into agency accounting records.

(d) All time sheets (whether exception or actual time) must be signed by the employee and certified by the employee's supervisor.

(e) Employee benefits must be supported by formally established and approved pay rates, reflecting personnel policies and procedures of the funded entity or generally accepted practices within budgetary allotments.

Travel Expenses

(a) Travel expenses must be supported by reimbursement voucher for each individual traveling on the contract. When the contract budget includes travel outside the State of California, the contract director/administrator must notify the EMS Authority in writing and obtain approval **in advance** for each trip.

(b) Expenses for transportation in agency-owned vehicles must be supported by records showing where, when, and by whom used and miles involved. Cost records must show how the mileage rate or other unit costs were developed. Car rentals from public or private agencies must be supported by proper invoices.

Professional Service Costs (Consultants)

(a) Expenses for labor or services provided by private firms, individuals or other agencies must be supported by an approved and properly executed contractual agreement or interagency agreement. Such agreements must indicate the term, scope and anticipated product or outcome if applicable and identify the monthly, weekly, or hourly rate of all consultants to be incurred under the contract.

(b) Reimbursement must be supported by itemized invoices in accordance with the terms and budget of the contract.

(c) All items of expense for consultants (including travel, etc.) are to be included in the contractual line item.

Equipment

An inventory of all office furnishings and equipment purchased with general funds must be maintained in the LEMSA's files. **All equipment purchased with funds received through a contract shall become the property of the State of California.**

(Equipment is defined as an item costing $5,000.00 or more.)

Other Direct Costs

All other direct costs must be supported by purchase orders or other original documents signed by the proper authority. Receipt of such items must be supported by properly signed and dated delivery slips or invoices.

Cost of all items and services obtained from existing county supplies for use by the regional agency must be supported by local request, letter, memorandum or other original document signed by proper authority.

A rental or lease agreement must be maintained in the contract files for all items or facilities obtained and paid for in this manner. Proper billings for usage must also be on file.

Operational costs for a building used solely by the regional agency may be reimbursed on the basis of actual costs of utilities, maintenance, repairs and other applicable costs. Partial usage requires that such costs be computed on the basis of square footage. Documentation must be available to support the computation.

Source Document Retention Period

The applicant agency must retain all contract source documents and make them available for State and Federal audit for a period of three years following date of the final reimbursement of regional agency expenditures. If audit findings have not been resolved, records shall be retained until the audit findings are resolved.

Property Management

The applicant agency is accountable for all tangible property during the term of the contract and for all non expendable property throughout its useful life.

The applicant agency must ensure that adequate controls are provided to safeguard property in its possession and that any such property loss or theft is promptly reported to the EMS Authority.

Property must be maintained in good working condition and may not be conveyed, sold or transferred without approval of the EMS Authority.

The agency must maintain updated inventory and location records which will include all property purchased during the funding period.

Intellectual Property Rights

EMSA shall jointly own all rights, title and interest in and to any software, source code, documentation, and any other products developed and created by the contractor and subcontractor(s) utilizing State General Fund monies from the date such software, source code, documentation, and other products are conceived, created or fixed in a tangible medium, as part of a contract.

Data developed under this contract shall become the joint property of EMSA and the regional EMS agency.

During and after the term of the Contract, contractor and subcontractor(s) will not use, disclose or otherwise permit any person or entity access to any of the Confidential Information and Materials. Contractor and subcontractor(s) understand that contractor and subcontractor(s) are not allowed to sell, license or otherwise exploit any products or services (including software in any form) which embody in whole or in part any Confidential Information and Materials.

Upon termination of the Contract for any reason whatsoever, contractor (LEMSA) and subcontractor(s) will deliver to EMSA all tangible materials pertaining to the contract including but not limited to, any documentation (manuals, tutorials, or system administration documents), records, listings, notes, data, sketches, drawings, memoranda, models, accounts, reference materials, samples, machine-readable media, source code, passwords, or electronic files needed to access software or code, and equipment which in any way relate to the contract. Contractor and subcontractor(s) agree not to retain any copies of any of the above materials.

Chapter 6
Audit **R**equirements

6.1 Audit Requirements

It is the responsibility of the regional agency to ensure that acceptable documentation is maintained and made available to support all the regional agency charges. Internal reviews should be conducted periodically to ensure compliance with contract provisions and budget and to determine that all claims for reimbursement are properly supported.

Fiscal monitoring consists of the following:

- Maintenance of proper records of the regional agency costs.
- Up-to-date recording of claimed expenses into the accounting system so that such expenses can be traced to the original records.
- Awareness of all applicable laws, rules and regulations governing contracts with the EMS Authority.
- Maintenance of an adequate property control system.

Each regional assistance contract shall have an annual financial audit conducted by an independent or county auditor. The final audit shall determine that:

- All costs incurred have been in accordance with the Standard Agreement and pertinent State guidelines.
- Proper accounting records have been maintained for the administration of the regional agency and source documents have been filed.
- All reimbursements have been proper and reflect actual and allowable costs.
- Physical inventory has been taken.
- Provisions have been made to retain source documents supporting costs incurred for at least three (3) years after the applicant agency has received final payment or until any audit exceptions are resolved.

6.2 Audit Schedules

Audits of contract records may be conducted by State auditors as circumstances warrant. Additional audits may be conducted at the option of the State government. It is the responsibility of the regional agency to arrange, conduct and report a satisfactory final audit.

6.3 Distribution of Audit Reports

Final Audit reports will be distributed as follows:
Original - State Controller's Office
Copy - EMS Authority-Contracts Manager

6.4 EMS Authority Monitoring and Site Visits

EMS Authority staff will monitor the regional agency records and program performance on a quarterly basis. The EMS Authority, at its discretion, will conduct periodic site visits to review administrative documentation and products produced under contracts to regional EMS agencies. These visits will be aimed at assisting the regional EMS agencies in administering their programs and contract(s). Critical discrepancies discovered during a site visit may be addressed by requiring the regional EMS agency to develop a corrective action plan to be submitted to the EMS Authority for review and approval. Past performance will be an important evaluation criteria used in reviewing future applications for funding.

EMS Authority staff will annually select one regional agency for an in depth review by the EMS Authority staff. EMS Authority staff may also review any regional agency with which the EMS Authority has a concern regarding the appropriateness of expenditures or other issues.

Chapter 7
Progress **R**eports

7.1 General

The Quarterly Progress Reports, and the Annual Report must be submitted to the EMS Authority on a timely basis in accordance with the provisions of this section.

7.2 Quarterly Progress Reports

Quarterly Progress Reports are required to provide the applicant agency and the EMS Authority with an evaluation of the progress that is being made towards meeting the system components. The report should be a summary of the activities that have taken place during the specific quarter. **An original and one copy of each** Quarterly Progress Report shall be sent to the EMS Authority. Each report **must contain the contract title, EMS Authority contract number and identify the quarter covered by the report.**

Per Division 2.5 Section 1797.108 of the Health & Safety Code, Quarterly Progress Reports shall be forwarded each fiscal year to the Contracts Manager at the EMS Authority by October 15, January 15, and April 15. Claims for reimbursement will only be paid if Quarterly Progress Reports have been submitted and approved.

7.3 Quarterly Progress Report Format

Quarterly progress reports will describe the status of each of the eight system components **(See sample Attachment F)**. Status information will include at a minimum the following:

- What work has been accomplished on each of the eight system components for each quarter?
- Were there any issues encountered in this quarter and if so, what steps were taken to address each issue?

7.4 Annual Report

Unlike the quarterly progress reports, which report progress at the task level, the annual report should consist of a narrative which addresses the State General Fund accomplishments as a whole. The report must cover, but is not limited to, the goals, accomplishments, and problems of the regional agency as it relates to each of the eight

system components. The Annual Report is required to be submitted to the EMS Authority not later than sixty (60) days following the end date of the contract.

The EMS system is comprised of the following eight system components:

1. Manpower and training
2. Communications
3. Transportation
4. Assessment of hospitals and critical care centers
5. System organization and management
6. Data collection and evaluation
7. Public information and education
8. Disaster response

Chapter 8
Preparation of **R**eimbursement **C**laims

8.1 Invoice Requirements

All invoices for reimbursement of contract expenditures should be prepared under the direction of the agency accountant directly from costs recorded in the accounting system. This will ensure proper accounting for reimbursements when received by the agency.

Agency invoices for reimbursement must be in the format prescribed by the EMS Authority and provide all information requested, including, but not necessarily limited to:

- The agency name and address.
- The EMS Authority contract number for which reimbursement is being claimed.
- The exact period for which reimbursement is being requested.
- Show by fund source (state and matching funds) and budget category for the exact expenditures, as debited to the agency's accounting system, during the period for which reimbursement is being requested.
- Contain the following statement: "I certify that this claim is in all respects true, correct, supportable by available documentation and in compliance with all terms, conditions, laws, and regulations governing its payment."
- A signature block and original signature in ink of an authorized representative of the regional agency.

A sample invoice in the required format is attached **(See Attachment F)**. Invoices should reflect state and local contract amount. The invoice must show the total state and local contract budget, all state and local funds expended during the reporting period, all state and local expenditures to date, and the remaining balance of the contract for state and local funds.

Claims must be submitted at least quarterly (within sixty (60) days of the end of each quarter). Due to the limited time in which State General Fund monies must be encumbered and paid, failure to submit a claim within the sixty (60) days may result in termination of the contract and reallocation of the General funds to another regional EMS agency.

Final invoices must be submitted no later than sixty (60) days after the end date of the contract.

Claims received in proper order are usually "scheduled" with the **State Controller's Office** within fifteen (15) days of their receipt by the EMS Authority. During peak processing periods of the month (e.g., around the first and fifteenth), processing time in the State Controller's Office may take longer. Agencies are advised to submit their invoices at non-peak processing times to ensure a timely reimbursement.

8.2 Advance Payment

Pursuant to Health and Safety Code Section 1797.110, and upon request of the contractor, the state **may** pay in advance up to twenty-five percent (25%) of the total annual contract amount awarded.

Any regional EMS agency requesting a twenty-five (25%) advance will be required to certify that the regional EMS agency does not have the funds to proceed with the contract without the advance. Any regional EMS agency receiving an advance will be required to submit claims on a quarterly or monthly basis and be required to list all items for which the 25% advance is expended.

Ten percent (10%) of the contract total **may** be held until the contract is completed, all reports are submitted and, all products have been delivered and approved by the EMS Authority.

Chapter 9
Contract **E**valuations

9.1 Contract Evaluations

Beginning with the SFY 2000/01, the EMS Authority began formally evaluating the success of contracts completed during the prior SFY. An evaluation will be completed and filed for each regional agency. The System's Analyst will consult with the regional EMS agency during the evaluation. A summary of the evaluation results will be given to the regional EMS agency.

ATTACHMENT A

A regional agency that does not have delegated authority in a particular area will not be obligated to report on that measurable objective.

Regional EMS Agency Objectives

SYSTEM ORGANIZATION AND MANAGEMENT

Objective: To develop and maintain an effective management system to meet the emergency medical needs and expectations of the total population served.

Definition: The organization and management responsibilities of the regional EMS agency, at a minimum, include: staff development, training and management; allocating and maintaining office space, office equipment, supplies; budgeting and financial oversight; executing and maintaining contracts with member counties, service providers, consultants and contractual staff; assessing and improving quality of services provided, allocation and administration of special project grants; etc.

Workload Indicator(s):
1) Total static population served (Determined by DOF estimates)
2) Total annual tourism population

Performance Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

MANPOWER AND TRAINING

Objective: To ensure personnel functioning within the EMS system are properly trained, licensed/certified/authorized and/or accredited to safely provide medical care to the public.

Definition: The Manpower and Training responsibilities of the regional EMS agency, at a minimum, include: ongoing assessment of need for local training programs, authorization and approval of training programs and curriculum for all certification levels, provide training programs and classes as needed, provide ongoing certification/authorization/accreditation of personnel approval of local scope of practice for all certification levels, development and maintenance of treatment protocols for all certification levels, maintain communication link with QI program to assess performance of field personnel, conduct investigations and take action

against certification when indicated, provide personnel recognition programs for exemplary service; etc.

Workload Indicators:

1) Total number of certified/authorized/accredited personnel
2) Total number of personnel completing training courses within the system during the reporting year
3) Total number of training programs

Performance Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

COMMUNICATIONS

Objective: To develop and maintain an effective communications system that meets the needs of the EMS system.

Definition: The communications responsibilities of the regional EMS agency, at a minimum, include: on-going assessment of communications status and needs, assure appropriate maintenance of communications system integrity, approval of ambulance dispatch centers (as needed), provision of acceptable procedures and communications for the purpose of dispatch and on-line medical control.

Workload Indicators:

1) Total number of PSAP
2) Total number of calls
3) Total requests for EMS response
4) Total number of ambulance dispatched

Performance Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

TRANSPORTATION

Objective: To develop and maintain an effective EMS response and ambulance transportation system that meets the needs of the population served.

Definition: The response and transportation responsibilities of the regional EMS agency, at a minimum, include: designation of EMS responders including first responders,

ambulance providers, EMS helicopter providers, and rescue providers, enforce local ordinances, establish policies and procedures to the system for the transportation of patients to trauma centers and/or specialty care hospitals as needed, implement and maintain contracts with providers, provide direction and coordination for EMS resources during time of hospital overcrowding or closures, creation of exclusive operating areas as needed, inspection of ambulance, and development of performance standards as needed.

Workload Indicators:

1) Total ambulance response vehicles
2) Total first responder agencies
3) Total patients transported
4) Total patients treated and released
5) Total dry runs

Performance Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

ASSESSMENT OF HOSPITALS & CRITICAL CARE CENTERS

Objective: Establish and/or identify appropriate facilities to provide for the standards and care required by a dynamic EMS patient care delivery system.

Definition: The facilities and critical care responsibilities of the regional EMS agency, at a minimum, include: designation of base hospital(s) for on-line medical control and direction, identification of ambulance receiving centers including hospitals and alternative receiving facilities, identify and designate as needed trauma centers and other specialty care facilities, periodic assessment of trauma system and plan as needed, coordination of trauma patients to appropriate trauma center(s) or approved receiving hospitals, periodic assessment of hospital emergency departments and pediatric critical care centers, and complete hospital closure impact reports.

Workload Indicators:

1) Total base hospital contacts
2) Total trauma cases
3) Total pediatric cases
4) Total patients received

Performance

Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

DATA COLLECTION AND EVALUATION

Objective: To provide for appropriate system evaluation through the use of quality data collection and other methods to improve system performance and evaluation.

Definition: The data collection and system evaluation responsibilities of the regional EMS agency, at a minimum, include: review of reportable incidents, review of prehospital care reports including AED reports, processing and investigation of quality assurance/improvement incident reports, identification of acceptable standards of patient care and quality indicators, assist in research of data, develop procedures to evaluate system and personnel performance.

Workload Indicators:
1) Total patient care reports generated

Performance Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

PUBLIC INFORMATION AND EDUCATION

Objective: To ensure that the population within the jurisdiction of the regional EMS agency has access to information and public education courses as it relates to emergency medical services.

Definition: The public information and education responsibilities of the regional EMS agency, at a minimum, include: information and/or access to CPR and first aid courses taught within the EMS system, involvement in public service announcements involving prevention or EMS related issues, availability of information to assist the population in catastrophic events, participation in public speaking events, and represent EMS agency during news events and incidents.

Workload Indicators:
1) Total public information and education courses in region

Performance Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

DISASTER RESPONSE

Objective: To ensure the preparedness and response of the regions EMS system in the event of a disaster or catastrophic event within the region or in a neighboring jurisdiction.

Definition: The disaster medical response system responsibilities of the EMS region, at a minimum, include: participation in disaster planning and drills as needed, identification of disaster preparedness needs, coordination with the operational area disaster medical/health coordinator, coordination with the regional disaster medical/health coordinator system, development of policies and procedures for EMS personnel in response to a multi-casualty or disaster incident, facilitate mutual aid agreements, ensure the training of incident command and Standardized Emergency Management System (SEMS) to all EMS personnel.

Workload Indicators:

1) Total number of Disaster/MCI Responses (response with 5 or more victims)
2) Total disaster drills

Performance Evaluation: Periodic assessments of Regional EMS Agency's performance by the State EMS Authority.

ATTACHMENT B

STATE GENERAL FUND

BUDGET CATEGORIES

BUDGET CATEGORIES	STATE GENERAL FUND	LOCAL FUNDS	TOTAL
Personnel			
Fringe Benefits			
Accounting			
Budgeting			
Communications			
Equipment			
Legal Expense			
Maintenance & Repairs			
Materials & Supplies			
Memberships, Subscriptions			
Motor Pools			
Printing & Reproduction			
Professional Services (Consultants)			
Space			
Training			
Travel In-State Out-of-State			
Total Direct Costs			
Administrative/Indirect 10% of Total Direct Costs			
TOTAL COSTS			
TOTALS			

Attachment C

PROGRAM FUNDING

PROGRAM FUNDING	STATE GENERAL FUNDS	LOCAL FUNDS	TOTAL
State General Fund	200,000		200,000
Member County A		50,000	50,000
Member County B		50,000	50,000
Member County C		50,000	50,000
Other local funds		50,000	50,000
TOTALS	200,000	200,000	400,000

ATTACHMENT D

Budget Detail/Narrative

The budget detail/narrative have been combined to eliminated duplication efforts.
The budget detail/narrative needs to be in the order listed below.

Explain how each budget item will be used to fulfill the contract objectives or the eight system components in the EMS Plan.

Personnel:

Discuss the roles and responsibilities of each position funded under the contract. Identify the name of the person, their classification, and monthly, weekly, or hourly rates. Listed below are possible samples of personnel costs:

Name	Program Coordinator, 1.0 FTE	40 hours @ $25.42 = $52,873.60
Name	Office Assistant (1,040 hours)	$7.33 hour @ 1,040 hours = $7,623.20

Fringe Benefits:

Example:	Retirement	11.65%
	Health	7.65%
	workers Comp.	2.74%
	OASDI	6.20%
	Dental	1.02%
	Life Insurance	2.74%
		32.00%

Itemize individual components that make up the benefits category (e.g., retirement, health plan, workers Comp., OASDI, dental). The total fringe benefits may not exceed 32% of salaries.

Accounting:

The cost of establishing and maintaining accounting systems, preparing payroll and maintaining necessary related wage records. **Explain how the accounting costs were calculated.**

Administrative/Indirect Cost:

Each regional agency receiving State General Fund assistance will be allowed to claim a maximum of 10% Administrative/Indirect Cost. Administrative/Indirect Cost will be 10% of the Total Direct Costs. Each regional agency claiming 10% administrative/Indirect Costs will be required to **list all items included in the 10% Administrative/Indirect Cost line item.**

Advertising:

The costs for recruitment of personnel required for the contract, solicitation of bids for the procurement of services and for any other purpose specifically provided for in the grant. **Explain how the advertising costs were calculated.**

Budget:

The costs for the development, preparation, presentation, and execution of the contract budget. **Explain how the budget costs were calculated.**

Communications:

The costs for telephone calls, mail, messenger service, and similar expenses. **Itemize and explain how the communication costs were calculated.**

Equipment:

Itemize the equipment to be purchased under the contract, including a discussion of how the equipment will be used to fulfill the contract objectives or eight system components in the EMS Plan. Equipment is defined as an item costing $5,000 or more.

Legal Expense:

The costs **required** in the administration of the contract. Identify the rate per hour and number of hours needed for the contract.

Maintenance and Repairs:

Itemize the maintenance and repairs to be used under this contract and explain how these costs were calculated.

Materials and Supplies:

Itemize all materials and supplies to be purchased under this contract. All purchases should be charged after deducting all cash discounts, trade discounts, rebates, and allowances received. Explain how these items were calculated.

Memberships, Subscriptions, and Professional activities:

The costs of meetings and conferences when directly related to the administration of the regional agency. The costs of books and subscriptions to business, professional and technical periodicals when they are directly related to the administration of the regional agency. Itemize the memberships, subscriptions, and professional activities to be purchased under this contract.

Motor Pools:

Itemized the costs of the provision of a **county** automobile for use directly for the project, include the date, time of departure and return, number of miles at .31/mi, vehicle maintenance inspection, and repair service.

Printing & Reproduction:

Itemize the costs of printing and reproduction services when directly related to the contract. Explain how the costs were calculated.

Professional Services (Consultants):

Identify the monthly, weekly, or hourly rate of all consultants to be incurred under the contract and explain the role of each consultant to be funded under the contract. Identify all expenses incurred by the consultant (i.e., travel, lodging, per diem).

Space (Rental):

Explain how the costs of space in privately or publicly owned buildings used specifically for the benefit of the contract were calculated. Rental reimbursement items shall specify unit rate, such as the rate per square foot.

Training:

Identify the cost of in-service training that is to be provided for employee development that directly benefits the contract.

Travel:

Itemize what travel will take place under the contract, including number of people, destinations, and purposes of travel in terms of fulfilling the contract objectives or the eight system components in the EMS Plan.

Attachment E (Sample Form)

STATE GENERAL FUND
Personnel Detail

Personnel Classification	**Staff Person**	**State Funded**		**Locally Funded**		**Total % of Time** Local & State
		% of Time	Pay Rate	% of Time	Pay Rate	
Executive Director						
Pre-hospital Coordinator						
QA/Education Coordinator						
Secretary						
etc.						

ATTACHMENT G

Regional EMS Agency
Address
City, State, Zip

Progress Report
July 1, XXXX - September 30, XXXX

Contract #EMS-XXXX

October 15, XXXX

Quarterly goals and accomplishments

The EMS System is comprised of eight system components. This quarterly report outlines the goals and accomplishments of the regional EMS agency. List the work accomplished and any issues encountered during this quarter for each of the following eight components:

1. **Manpower and training**
2. **Communications**
3. **Transportation**
4. **Assessment of hospitals and critical care centers**
5. **System organization and management**
6. **Data collection and evaluation**
7. **Public information and education**
8. **Disaster response**

Attachment B

Mendocino Workbook Final

Attachment B

Project 1: Evaluate and make recommendations on EMS system delivery models

Activity	
Meeting with system stakeholders	
	EMS providers meetings
	First Responder meeting
	EMS office meetings
Facility Tours	Provider, Dispatch, Agency
	911 Center and PSAP
	Identify how the Technologies contribute to Improved Performance
Comparison of system / Models	Identification of similar systems
	Comparison of models
Analysis and Reporting	Benchmark results of data
	Final results for report

Attachment B

Project 2: Evaluate and make recommendations on data system development

Activity	
Patient Care Information	
	Identify Sampling Methodology
	Information Documented--Random Sample
	Use Comparable City Comparison
	Develop Data Review Plan
Establish Dispatch Performance Indicators	
	Priority Dispatch Performance Indicators
	Deployment Performance Indicators
	Response Time Performance Indicators
Develop relevant performance standards	
	Conduct literature and clinical position paper review
	Review process in sophisticated international centers
	Interview users of dispatch centers
	Draft Relevant Performance Standards
Compare Call taking modes	
	Review Current Work Processes and Work Flow
	Describe Modified Work Process and Flow
Calculate non-staffing resource requirements	
	Identify hardware requirements
	Specify software requirements
	Calculate training costs

Attachment B

Project 3: Assess training and education needs

Activity	
Determine baseline standards	
	Interview providers
	Agency program
	proximal counties training
Identification of Gap	
	Review current state and county requirements
	document gaps in compliance
	Identify additional desired programs
	Determine availability of programs not provided
Quantify one-time and recurring expenses	
Draft findings	
Total	
	Total Consultant Hours

Attachment B

Project 4: Evaluate and make recommendations on financial issues

Activity	
Baseline system funding	
	Identification of current system funding
	Estimate current system billing revenues
	Document current needs not funded
Development of future funding	
	Identification of future system funding
	Estimate future system billing revenues
	Produce draft issues report
Provider Costs	
	Current provider costs
	Future provider costs no change
	Future provider costs with changes
	Draft Preliminary Report
Compare Results with Available Resources	
	Model Impact of Increased Resources
	Model Impact of Alternative Performance Goals
Outline Implementation Requirements	
Draft Report	

Project 5: Evaluate and make recommendations on response time standards

Activity
Identify & Quantify current response times
Provider current response times
Contractual commitment for each provider
Identification of issues
Evaluation of reporting tools
Evaluation of Agency Compliance process
Benchmark standards to other systems
Alternative models

Project 6: Provide strategies to develop system-wide Emergency Medical Dispatching (EMD)

Activity
Review of P.S.A.P's
Review of each EMS dispatch point
Document process
Provide call flow diagram
Apply NaEMD standards to current model
Recommendations
Issues report with recommendations

Project 7: Evaluate and make recommendations on EMS Quality Management (QM)

Activity
Prepare and Deliver Detailed Work Plan
Internal Status current state report
Interim Report on Status of Projects
Stakeholder Interpretation/Briefing
Draft report
Final Report

Project 8: Ensure consistency, efficacy and fairness among contractors

Activity	
Evaluation of current providers	
	Establish baseline performance by provider
	Evaluation of contract by provider
Consistency	
	Develop comparison report
	Recommendation of changes

Project 9: Evaluate and make recommendations on the relationship of the contractors with fire agencies

Activity	
Interviews with first responders/providers	
	Conduct group meetings with first responders by area
	Interviews with providers
Reporting	
	Issues with relationship
	Recommendation for improvement of transparency