# OFFICE OF THE COUNTY ADMINISTRATOR



### **COUNTY OF SONOMA**

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August 26, 2005

Honorable Robert Boyd, Presiding Judge Sonoma County Superior Court 600 Administration Drive Santa Rosa, CA 95403

Re: Required Responses to the 2004-2005 Grand Jury Final Report

Dear Judge Boyd:

Pursuant to Penal Code sections 933 and 933.5, the Department of Emergency Services, the County Sheriff, the County Dispatch Manager, the Information Services Department, the General Services Department, and the Department of Transportation and Public Works are jointly responding to the Grand Jury Final Report on "A Disaster Waiting to Happen" included on pages 21 through 37 of the bound report.

Sincerely,

Vern Losh **Bob Deis** 

County Administrator **Emergency Services** 

William Cogbil Steve Bell

Sonoma County Sheriff Sonoma County Dispatch

Mark Walsh **David Kronberg** 

**General Services Information Services Department** 

David Knight Transportation and Public Works

# JOINT RESPONSE TO THE 2004-2005 GRAND JURY REPORT A Disaster Waiting to Happen

## FINDINGS – Pages 25-27

F2 SEMS is designed to standardize emergency responses, and immediate recovery processes, not mid or long-term recovery processes.

Response: Disagree with the finding. SEMS covers emergency responses, and all recovery processes. Utilizing SEMS, the Planning Section of the Emergency Operations Center (EOC) Recovery Unit forecasts and identifies all long-term recovery issues. Additionally, the Department of Emergency Services (DES) utilizes two recovery plans entitled: "Sonoma County/Operational Area Recovery Operations Handbook" and the "Sonoma County/Operational Area Local Assistance Center Handbook". Both of these documents have been utilized with floods and landslides. For example, the recovery period following the 1998 landslides and debris flows went well into three years. SEMS was utilized the entire time.

F3 Written plans and checklists are not consistent among county, cities, agencies, and departments, and in some cases are non-existent.

Response: Partially disagree with the finding. The County, cities, agencies and departments all have different emergency response capabilities and resources to bring to the table. All entities coordinate their efforts through participation in the Sonoma County/Operational Area Emergency Coordinators Forum and Emergency Council. In addition, the cities exercise their EOCs and participate in various levels of countywide emergency management training. As long as the city complies with SEMS it may choose to utilized the County's Emergency Operation Plan (EOP) as their own. With budget constraints and turnover of staff and key personnel, it can be difficult for the smaller cities to keep their emergency management program current. Should a city decide to utilize the County's Emergency Operations Plan (EOP) as their own plan, it will not pose a problem or reflect negatively on that agency. The County has excellent working relationships with all of our Operational Area partners. Being a true Operational Area means working together - the County and the cities, supporting each other, as one. We believe the County and its operational partners operate on this principle. The County will continue to work with the cities and other agencies to insure cooperation and consistency in preparing for emergencies.

The Emergency Operations Plan is designed as a reference document outlining any governmental agency's response to a disaster. It does not provide for specific detail of response to any particular disaster. Checklists are meant to be guidelines to assist personnel in fulfilling their responsibilities, not detailed instructions on how to do the job.

F4 Where plans and checklists do exist, they are not always stored in multiple safe places for guaranteed access in the event of a disaster. The most common place is "the office,"

notwithstanding that a disaster does not limit itself to regular work hours, and office building may not be accessible!

Response: Disagree with the finding. County documents including plans and checklists are primarily stored digitally, with Information Systems Department (ISD) having backup capability. The EOC network server is an independent server that resides in the EOC, and is designed to function independently from other County servers in the event of a disaster at the main ISD. Additional hard copies are stored at off site locations, and located in the vehicles and homes of key County staff. Fire responders carry Field Operation Guides (FOG) manuals in their vehicles, which include Incident Command Systems (ICS) checklists. Hard copies of all EOC Op Area plans and checklists are stored at the EOC, including city and some State and Federal plans

F5 Recovery processes, especially long power and water outages, are not consistently broken down by time periods, e.g. first 2 hours, first 24 hours, first 3 days, first 3 months.

<u>Response: Partially agree with the finding.</u> The County recovery processes, as described in the County EOC procedures, do not use time periods as a measure of the recovery process. Action planning procedures break tasks into operational periods (usually 24 hour). Pre-established time definitions for outages, or for any other disasters are not practiced within the emergency management community.

F6 The county radio system schematic shows sufficient built-in redundancy to withstand an interruption, unless specific "switch-able" radio towers are out of action (there is a study to extend the redundancy).

<u>Response: Agree with the finding.</u> The County's radio system was designed using best practices and has sufficient redundancy. In addition, upon impairment of part of the radio system, it is possible to broadcast radio signals directly from individual radio sites.

For auxiliary communication services, DES manages a volunteer group of 130 licensed amateur radio operators specifically to address emergency communication needs of any type Operational Area wide. These dedicated volunteers are communication experts and will be able to utilize any available radio resources to get messages through. They are organized by geographical area throughout the county designed to operate independently or as a group. They practice this by conducting two weekly communication checks (nets) on different frequencies. Training is conducted several times a year to keep skills current and consistent. The county either houses, or supplies and maintains, several amateur radio repeaters to allow for countywide coverage.

F7 The county telephone system and 9-1-1 phone line system schematic shows sufficient redundancy built in to withstand any interruption, short of a complete loss

<u>Response</u>: Agree with the finding. The finding describes a desirable characteristic of a telephone system. The County's preference is to not publicly disclose the physical

location of critical communication infrastructure, unless doing so is absolutely necessary to ensure public safety.

F8 There is general agreement with the county fuel supplier that provides for priority fuel supplies for generators in the event of prolonged losses of power. While it is not guaranteed, there is an assumption that "government" will get the highest priority. Even so, among most departments and agencies, there is complacency about the total availability of generators and fuel supplies. This leads to assumptions that the generators themselves would survive the disaster, or that there would be a sufficient amount and duration of power for all purposes and all county buildings.

<u>Response</u>: <u>Disagree with the finding</u>. There is no complacency in the management of the system of emergency generators serving County facilities.

Regarding diesel fuel for generators, the County has access to multiple fuel sources to which it can turn in the event of an emergency. The County contracts with Falcon for diesel fuel and Redwood Coast for gasoline, although diesel can be obtained from this source as well. Each contract provides for priority of delivery to the County in case of emergency. In addition, the County contracts with Wright Express for remote fueling of vehicles. Wright has numerous locations that could be accessed in event of an emergency. So there are multiple approaches to obtain necessary fuel for emergency generators should the time arise when they need to be operated on an extended basis. The County's ability to receive priority is more than an assumption.

Regarding emergency generators, beside the routine maintenance of these vital assets, the County budgeted \$100,000 toward evaluation of the County's inventory of emergency generators in the 2004-05 Fiscal Year and will be accomplished in 2005-06. This project was described as a "Countywide evaluation and condition assessment of emergency generators and UPS systems." This review is intended to examine condition and service level provided for the entire stock of generators managed and maintained by the General Services Department.

The County has, for years, had emergency generators that power the critical functions of government such as the Sheriff's Building including dispatch for law enforcement, fire and emergency medical services, and 9-1-1 call taking; County Emergency Operations Center and other critical mobile and fixed equipment and facilities. While it is not financially feasible or necessary to have every building fully backed up, power outages that the County routinely experiences provide justification for backing up the critical facilities that has been accomplished to date.

Generators are installed according to the codes that are current at the time. A recent inspection of generators at the County Administration Center determined that only one generator did not meet the code in effect today and it will be corrected shortly.

Occasional outages that result in activation of the emergency generators remind operating departments of their capabilities. We do not believe that operating departments are under any false assumptions regarding generator capability.

The County also has access to both purchase and lease supplemental generators on an as needed basis through the Purchasing Division.

F9 All county employees are listed as disaster recovery resources, as indeed are members of the grand jury, but there is no clear plan on how they will report in for duty, or how they will be used.

<u>Response: Partially disagree with the finding.</u> County employees are Disaster Service Workers. Every new full-time County employee receives SEMS training including an introduction to the Emergency Operations Plan at New Employee Orientation. Their specific role, and who and where they report to is determined by their supervisor.

Grand Jury members are not full time County employees and do not fall under the Disaster Service Worker criteria.

Significant efforts have been made to incorporate county employees into EOC staff. Human Resources has created a database specifically to track employee training and any experience in disaster response. Over 300 County employees were utilized as Public Information Hotline Calltakers during the 1998 floods/landslides and debris flow.

F10 The city plans are not consistent in scope and detail. The City of Santa Rosa has a well-structured but dated plan. Cotati's plan is literally a copy of the county plan, Cloverdale is still using the 1989 two-volume doorstopper plan that existed before the adoption of SEMS, and Healdsburg's plan is dated 1987. See Exhibit D for a table comparing the format and date of the county and city plans.

### Response: See comments at F3.

F11 Of the plans that exist, almost all of them have dates prior to the events of September 11, 2001.

Response: Partially agree with the finding. Before September 11, 2001, County and city staff was already addressing the threat of terrorism. The County/Operational Area Emergency Operations Plan (EOP) was extensively re-written in November 2000. We reviewed the plan post September 11, and found that there were no revisions required, since we had already addressed terrorism and weapons of mass destruction (WMD). However, the following plans were written for the County/Operational Area (which includes the cities) and/or updated since September 11, 2001:

- Sonoma County/Operational Area Threat Condition Severe (Red), March 2003
- Sonoma County Operational Area Response Plan for WMD events (Operational draft) January 2004

- Sonoma County Response Plan for Bio Terrorism and Other Public Health Emergencies, December 2004
- Sonoma County/Operational Area Emergency Public Information Plan, April 2004
- Sonoma County's Maximizing Volunteers as a Resource During Disasters, March 2004
- Sonoma County/Operational Area Russian River Response Plan, updated November 2004
- Sonoma County Oil Spill Contingency Plan, updated in September 2003
- Sonoma County Hazardous Materials Area Plan, updated August 2004
- Sonoma County/Operational Area Emergency Operations Center, Operations Manual, updated March 2004
- Sonoma County/Operational Area Emergency Communications Trailer Handbook, December 2001
- Sonoma County/Operational Area Auxiliary Communications Service (ACS) Plan, August 2002
- Sonoma County/Operational Area ACS Standard Operating Procedures, December 2002

F-12 There are no consistent plans to inform the public ahead of time of what information will be available at the time of a disaster, nor is there a consistent plan to make use of media, or the City Watch system in the event of a disaster.

Response: Disagree with the finding. The finding assumes that the county should anticipate and plan for dissemination of public information concerning all types of disaster before they occur. Some preplanned responses to the public can be incorrect, vague, and have the opposite effect of providing accurate and timely notice causing confusion and misinformation. However, the County does have templates for public notification on disaster scenarios in the Emergency Public Information Plan that can be adapted to the specific conditions. The Sheriff's Department has a dedicated press information officer who, in coordination with the EOC's Public Information Officer can play a role in extracting vital information from the SEMS Operations Section Chief for dissemination to the public via all local media channels. In times of disaster, the EOC has and will supply the public with up to date information and instructions. Additionally, Emergency Services, Public Health, and the Sheriff's Department have numerous published pamphlets available by request and disseminated in other sources providing valuable public education in advance of various types of disaster. Also annually, along with the State, Emergency Services sponsors a Disaster Preparedness Week with a presentation to the Board of Supervisors.

City Watch will play an important role as messages can be crafted to fit a particular event and target emergency notification by telephone, as applicable. City Watch is tested regularly. It is currently used on a regular basis and serves as an important staff notification tool and stands ready to be used in the event of disaster.

F13 There is agreement dated 1997, between the cities and the county, promising help from the county for the construction of, training in, and testing of city-based disaster plans. This assistance is not provided, nor sought on a continually consistent basis, despite the payment of \$2,000 annual fee by the cities.

Response: Disagree with the finding. The Joint Powers Agreement (JPA) between the cities and the County was designed to integrate the entities into a true Operational Area, and to provide coordination and information flow between the cities, state and federal levels. The JPA agreement states that the County will advise and assist in the development of plans, monitoring the federal and state program requirements, provide technical assistance in obtaining federal funds, provide emergency management related public information and literature, assist with exercises, and arrange for available state and federal training to city employees. Numerous trainings and exercises have been conducted to individual cities and through Op Area wide training. In addition to the JPA, is the Operational Area agreement that ensures an intermediate level of organization, cooperation, and planning between public entities within Sonoma County boundaries, and designates the Department of Emergency Services as the lead agency. It was never the intent of these agreements for the Department of Emergency Services to write the city plans or to direct their emergency management efforts. The cities responsibility is to appoint a liaison to participate in emergency management matters, which they all do. The Department of Emergency Services will contact each city to review their plans and provide advice as requested.

F-14 There are no consistent disaster response checklists for law enforcement and public safety personnel, the two major agencies involved in every disaster. While law enforcement acknowledges SEMS, it relies on its normal critical incident skills to sustain its disaster response efficacy. There is too much reliance on a disaster being just another critical incident, basically "all in a days work." As a result, there are no written policies and/or procedures that describe the responsibilities of the Sheriff's Department as part of the County Emergency Operations Plan.

Response: Disagree with the finding. Sheriff's Department personnel work regularly under the incident command system while dealing with a variety of critical incidents. In doing so, the responsibilities of the operations section in the SEMS model are routinely practiced. Each year Sheriff's Department personnel work together with public health and other public safety agencies through training in tabletop and actual event exercises. The Sonoma County Law Enforcement Chiefs' Association, the Sonoma County Fire Chiefs' Association, Public Health, and EMS have developed, trained, and exercised a Weapons of Mass Destruction Operational Response Plan. Several times a year, the Sheriff's Department plays a crucial lead role in Unified Command at the large events at Infineon Raceway, coordinating with public and private agencies, local, state and federal first responders.

Pamphlets have been developed and provided to all County law enforcement personnel to guide them through their response to suspicious materials.

The Emergency Operations Plan outlines the responsibilities of the Operations Section Chief, a position that is staffed by the Sonoma County Sheriff's Department Patrol Captain or designee. These responsibilities include, but are not limited to, directing Area/County local resources and coordinating mutual aid resources. The Operations Section is also responsible for coordinating with Area/County field incident commanders. Checklists specific to the Operations Section positions and their responsibilities are available in the EOC.

F-15 The County Mobile Communications Vehicle, funded by Homeland Security, is parked within 200 feet of the County Dispatch Center for which it is the backup.

Response: Partially disagree with the finding. The Mobile Communications Vehicle is parked within 200 feet of the County Dispatch Center. It is not the primary back up to the dispatch center, although it could be used with lesser capability as a back up for disaster. The City of Santa Rosa Dispatch Center is the primary back up to our dispatch center and calls for service and emergency operations can be handled by Santa Rosa dispatch personnel with the flick of a switch. In fact, both agencies have had the occasion to successfully transfer emergency operations one to the other as a result of malfunctioning equipment. We are currently in the process of negotiating space at the Sonoma County Airport for storage of the Mobile Communications Vehicle.

F-16 The Sonoma County Law Enforcement Consortium (SLEC) system comprises Computer Aided Dispatch (CAD), Records Management System (RMS) and Mobile Data Computer (MDC). All of the Sonoma County law enforcement agencies, except Healdsburg and Sebastopol, use SLEC for dispatching, tracking, and communicating with mobile units. The SLEC computer system is housed in one county building with no back up if the building is destroyed.

Response: Disagree with the finding. There is a backup system, and it is not in the same building. The telephone, dispatcher and radio systems used before the CAD was implemented work, and act as the backup to the CAD system. The CAD "assists" the dispatch process, and is not the sole method used for dispatching.

F17 There is little in county and city plans to indicate how long term losses of infrastructure will be managed, e.g. roads, freeways, and bridges.

Response: Disagree with the finding. Emergency planning mechanisms are in place to manage this situation. Control of traffic movements throughout Sonoma County is a cooperative effort of multi-agencies. The immediate lead agency in determining closure and forced detour is the California Highway Patrol. The California Highway Patrol is the responsible agency on all state highways and all county roads. The Departments of Transportation, both Caltrans and the County of Sonoma, perform a support role to clear debris, create temporary detour ways, if needed, erect barrier rail, and erect signage, including portable message boards and fixed-route detour signs.

In the event of a major event such as an earthquake, Departments of Transportation, both Caltrans and Sonoma County, engineering staff will be assigned tasks through the Office of Emergency Services' Emergency Operations Center (EOC) for closure work and for engineering inspection of highway structures for damage to further protect the public from non-obvious hazards. County transit and airport operations also support evacuation and supply functions.

In the event that a mainline structure needs closure, requiring a traffic detour through a city street, then cooperative efforts will be required by the affected city police department or departments. City public works personnel will request traffic control at city intersections of the city as well as signage.

In addition to the EOC coordination during a declared emergency, all of the cooperative agencies continually communicate through normal channels--cell phones or with vehicle-to-vehicle radio ties into Sheriff Dispatch, if necessary.

The time required to correct long-term infrastructure damage will depend on the amount and extent of damage and resources available. Both FEMA, FHWA, and state emergency funds are usually available for both immediate response and long-term repairs. At the beginning of an emergency, temporary measures such as detours or temporary replacement bridges and other management strategies are implemented directly by state/County crews or standing contractors.

### **RECOMMENDATIONS - Pages 28-30**

R1. The County Department of Emergency Services, working with each city in the county should:

• Assist in producing updated disaster plans, based on SEMS, consistent in content, in use and style of checklists.

Response: This recommendation has been partially implemented. The Grand Jury report states that city plans are not consistent in scope and detail. The cities are all different from each other, and from the County. Their individual plans will not always be consistent in content and style – nor need to be, as the cities resource and response capabilities vary. Some of the cities do not have the necessary resources available in their jurisdiction to respond to a disaster. The most critical issue for the cities plan is that it reflects that they utilize SEMS and to contact the County should they need additional resources.

The Department of Emergency Services has an ongoing close relationship with the cities. The plans that are published by the Department are designed to support the entire Operational Area (which includes the cities and the districts). Nevertheless, if a city chooses to develop their own emergency plan, the Department will provide them with a "boiler-plate" disaster plan to use. They may also use plans from other cities or counties that better suit their unique characteristics. On numerous occasions the Emergency

Services Department validated these plans through joint exercises. As described herein, the Department of Emergency Services will contact each city to review their plans and provide advice as requested.

• *Make clear how the revised city plans relate to the county plan.* 

Response: This recommendation will not be implemented. All of the cities in Sonoma County utilize SEMS, despite the age of some of the plans. In utilizing SEMS, the reporting structure is from the local level (city) up to the Operational Area (county) level. In doing so, there is a clear reporting structure as to how the cities plans relate to the County's plan.

The role of the Department of Emergency Services in relation to the cities is not one to mandate specific actions. It is to provide them with the necessary emergency management support, and act as a "point of contact" or liaison to the state and federal levels. The cities are allowed to maintain their autonomy for emergency response within their jurisdictional boundaries.

• Propose new communication methods and media outreach strategies aimed at providing the public with information on what plans and procedures are designed and in place to manage major disasters.

Response: The recommendation has been implemented. A plan for disaster communication methods already exists entitled Sonoma County/Operational Area Emergency Public Information Plan, published in April 2004. This plan specifically addresses guidelines of policy to use when disseminating information to the media and public during times of emergencies, including the City Watch and the Community Alert Network telephone notification systems. Prior to this plan, the County EOC provided the Public Information Officers a room from which they could work, and a Public Information Hotline Calltaker area to receive calls from the public during emergencies. There is a published phone number for the County Public Information Hotline available to the public.

The County takes pride in its close relationship with the various media (television, radio, and print) providers. When appropriate, interviews and/or press releases are provided to the media. The County hosts an "Emergency Bulletin" button on their website, which provides important information to the public in the event of a disaster. During the September 2004 Geysers Fire, this button was linked to relevant fire incident information. On a routine basis, the Department of Emergency Services conducts guest appearances on local television and radio to provide disaster related information to the public.

The Department of Emergency Services has worked very closely with the Department of Health Services on the Sonoma County Response Plan for Bio Terrorism and Other Public Health Emergencies, published in December 2004. The chapter on Risk Communications and Public Information deals with media outreach strategies and notifying the public. We have validated the plan, with numerous workshops, exercises,

and trainings. Over 100,000 Pocket Guides to Emergency Preparedness have been made available to the public and distributed to the various cites and agencies throughout the County.

• Provide employee guidelines on storing disaster recovery documentation away from the work place, for example, at home, in an employee's car.

Response: The recommendation has been implemented. The Department of Emergency Services has copies of disaster recovery documentation stored in off site locations should an event occur, as well as numerous copies at the EOC. Key EOC staffs also keep their necessary documentation (copies of plans and checklists) available to them. As County operations become more digitally based, continuity of operations planning becomes more critical for continuing County services. In addition to ISD normal network backup, Department of Emergency Services staff frequently back up all computerized files onto DVDs and store those off site. If the County's computer system was to fail, staff's laptop computers can be easily accessed. Our dependence on technology has necessitated having our employees take documentation home. In recent disasters it has been proven that interim or new computer networks can be quickly setup and data recovery can restore critical operations within a few hours.

R-4 *The Sonoma County Sheriff should:* 

• Clarify and document, by year-end 2005, the common procedure for invoking the City Watch alert system.

<u>Response: The recommendation has been implemented.</u> The Sonoma County Sheriff's Department has a policy regarding the City Watch program procedurally outlining the use of this software program.

• Institute, by year end 2005, a periodic public test of the system, similar to the periodic testing of the TV and radio emergency alert system

Response: The recommendation has been implemented. Current testing is ongoing through Sheriff's Department specialty unit notifications. Emergency Services also periodically tests the system, including a public notification of an exercise to the residents in the Larkfield/Wikiup areas in September 2002 and more recently in support of the "Every 15 Minutes" campaign at Cardinal Newman and Windsor High Schools. The system was also used in June 2005 to call out over 400 members of the Medical Reserve Corps for participation in a full scale dispensing site exercise.

• Relocate the County Mobile Communications Vehicle to be at least 5 miles from the Dispatch Center/Sheriff's Office. This should be done by October 2005.

<u>Response: The recommendation will be implemented in the future.</u> The Sheriff's Office is currently negotiating space at the Airport to house the vehicle. The relocation should be completed by October 2005.

• Provide, by October 2005, a written procedure detailing how county law enforcement expects to meet its commitment as a primary resource agency to EOC in the event of a major disaster.

Response: The recommendation has been implemented. Per the Sonoma County/Operational Area Emergency Operations Plan, Sonoma County Sheriff's Department personnel act as the Operations Section Chief and the duties and responsibilities ascribed to that position are outlined in the plan.

R6 The County Dispatch Center manager, working with radio, telephone and data processing management in the Information Systems Department, and with major vendors, should by October 2005:

• Provide a detailed design showing how all forms of critical communications are duplicated, backed up and/or capable of re-routing, in the event of a disaster.

Response: This recommendation has been implemented. Below is detail on several critical communication systems.

### 9-1-1 Public Safety Answering Point (PSAP)

The Sheriff's Dispatch Bureau (SDB) is a primary PSAP responsible for answering landline 9-1-1 calls from the unincorporated areas of Sonoma County, the Town of Windsor, and the City of Sonoma. Eleven independent workstations within the Bureau are capable of handling incoming calls. No duplicate system exists at this time. System redundancy relies on approved alternate routing systems located throughout the state and SBC networking options. The Sheriff's system serves as the alternate site for each primary PSAP within Sonoma County. Santa Rosa Police Department (SRPD) is the primary support site for the SDB system. Flipping a switch at the Santa Rosa's dispatch facility will activate the transfer of 9-1-1 calls from the SDB to Santa Rosa. In the event SRPD's facility is incapable of supporting SDB calls, SBC (phone system contractor) could re-route calls to a more appropriate location, based on conditions and circumstances. The SDB would arrange a workable, interactive communication loop for coordinating activity.

### SBC / Phone Console Contractor

SBC has a 24/7 staffed, monitoring center called the Network Operations Center (NOC). It monitors 9-1-1 trunks throughout the SBC networked areas in California. The NOC has the capability to assess outages and re-route 9-1-1 trunks through a network matrix.

There is a second method of manually switching 9-1-1 calls to another Public Safety Answering Point. Sonoma Sheriff's two (2) 9-1-1 trunks via the Vallejo tandem, two (2) 9-1-1 trunks out of the Lakeport tandem, and seven (7) 9-1-1 trunks out of Santa Rosa's tandem can be re-routed to Santa Rosa Police (as noted above). The manual switch for each tandem is located at the Santa Rosa Police Department's dispatch center.

Below is a program design illustrating the redundant network paths for 9-1-1 calls, and Alternate Answer routing should the primary network paths fail.

# Alternate Answer Scan Point Teardern Offfice AA Switch PSAP Agent PSAP Agen

# Computer Aided Dispatch (CAD)

Utilized by dispatch personnel to routinely collect data, create events, monitor activities, store both unit and event information, interact with field personnel and message between user groups. An initial option to partial system loss involves contacting other consortium agencies to determine their status and potentially relocate to that facility. Should the entire system fail, staff members capture data manually, writing information on cards and forms.

By October 2005, the County of Sonoma Information Systems Department will describe how the major communications elements, such as telephones, radios and computers, are deployed to communicate information. It is not efficient to duplicate, back up, and/or reroute each element of public safety communications. Some of the necessary tools provide duplication, such as telephone and radio, and computer and radio. A one-to-one duplication of each element is expensive, and takes away resources that may otherwise be made available for emergency response.

• Explore the use of simple mathematical queuing models to show how quickly the County Dispatch Center telephone set-up becomes overloaded in the event of a major disaster.

Response: The recommendation has been implemented. The 9-1-1 network and system design is in compliance with National Emergency Number Association (NENA) standards. Standards reference PSAP system design, traffic engineering, and network trunking factors with no less than a P.01 grade of service. The probability (P), expressed as a decimal fraction, of a telephone call being blocked. P.01 is the grade of service reflecting the probability that one call out of one hundred during an average busy hour could be blocked.

• Identify the remedial equipment and procedural changes that alleviate overload problems determined by the overload analysis.

Response: The recommendation has been implemented. The County EOC Emergency Public Information Hotline Calltakers will help take the workload of the Dispatch Center during disasters. Non-emergency calls from the public seeking disaster conditions can be forwarded to the Hotline Calltakers for assistance.

Other remedial options are considered based on technical and operational assessment, along with resource availability for both complete and partial system loss. In addition, other potential remedial options are described in the Department of Emergency Services plan, in the EOC, off-site locations inside and outside of County jurisdiction. In addition, practical triage and prioritization measures assist in managing excessive activity and levels of service.

R7 The Director of County Information Services, working with the Sonoma County Law Enforcement Consortium (SCLEC) should:

• Propose, by October 2005, a plan to provide immediate backup to the Sonoma County Law Enforcement Computer System, presently a single point of failure.

Response: The recommendation will not be implemented because it is based on incorrect information. The Computer Aided Dispatch System (CAD), is not intended to be the sole dispatch tool, and, therefore, is not a "single point of failure." Should the CAD system not work, public safety professionals will use less computer services and more radio services until the computer system is working properly. This has been the routine for more than two years, upon inception of the CAD system. The CAD system is a tool to assist in supplying information to make law enforcement communications more efficient; it is not a sole means of dispatching public safety personnel during an emergency.

The Records Management System (RMS), is regularly backed up onto media that is stored off-site that can be used for system recovery. The RMS system is a tool to assist with report writing and investigation of previous crimes. Should RMS not be immediately available, public safety professionals can still write reports using pen and paper. Investigations will still occur using less computer services and more radio and telephone services until the computer system is working properly. This has been the routine for more than two years, upon inception of the RMS system.

The Sonoma County Law Enforcement Consortium (SCLEC) partners meet each year to approve the annual budget for the jointly run programs, which includes CAD. The decision on whether and to what extent to make additional investment in the computer system is done with knowledge that an immediate redundancy is not now provided.

The testing process for the CAD system is conducted, in part at least, in a separate building. The test facility includes servers that would be reconfigured and deployed to run CAD within one or two days.

R8 The County Director of General Services should:

• Produce by year-end 2005, a detailed document showing the location, earthquake preparedness and fuel capacity of all the generators in the county and cities expect to commission in the event of a major disaster. The document should include communication with the Board of Supervisors, the County Administrative Officer, and all departments and agencies; as to the amount of power they can reasonably expect to have following a disaster.

Response: The recommendation will be partially implemented in the future. The review of county government emergency generators managed by the General Services Department will be completed by June 30, 2006. This report will include all of the items suggested by the Grand Jury as well as other recommendations to optimize and assure reliability of these important resources. The report will be presented to the Board of Supervisors and the County Administrator.

The General Services Director has no responsibility, authority, or information regarding emergency generators on city facilities. Therefore, it is recommended that the Grand Jury address any concerns they may have directly with those entities.

R9 The County Director of Transportation and Public Works should:

• Produce, by year-end 2005, a document outlining the realistic alternatives in the event that major sections of North/South and East/West roadways are disrupted.

Response: This recommendation will not be implemented because the current emergency operation provides a coordinated response system should a transportation disruption develop. The local county- and city-maintained road systems are secondary to the state highway system that offers the primary inter-county and intrastate linkages. Caltrans and the county/cities work cooperatively when an emergency develops. The functional areas of cooperative endeavor include:

- 1. EOC plans and directs temporary traffic diversions to avoid damaged areas or questionable, possibly hazardous sites.
- 2. Problem identification--Engineering evaluations are immediately undertaken to determine damage and pending, often hidden hazards.
- 3. EOC reevaluates alternative travel ways that best respond to changing conditions or provide more stable traffic flows following the first blush of an emergency.
- 4. Responsible agencies (i.e., state, county, city, or combination) formulate repair strategy plan, including engineering fix, cost, schedule, and funding.
- 5. Maintain temporary detours.

### 6. Design and construct a permanent fix.

Many alternative routes or other strategies such as portable bridges, construction of temporary new roads, or traffic controls are formulated at the EOC where GIS mapping and other databases exist. The response will depend on how widespread the emergency is from a geographic standpoint. Fewer alternatives may be available during a widespread emergency. For example, collapse of numerous bridges could force more use of airports or possibly water travel. Determining alternatives and choosing a course of action is a major activity coordinated by the EOC through a multi-agency and multiple-expertise undertaking. The time it takes to provide or reestablish public services can vary, but is managed and reported through the media in a coordinated EOC operation.