



Fire Communications

Needs Assessment for Stanislaus County

Completed by Chad Homme

Presented to Regional Fire Authority

June 7, 2007

The Survey Process...

In preparation to determine the specific communications needs within Stanislaus County, a Communications Needs Survey was conducted. The goal of the survey was to identify common needs and common goals of the various agencies within Stanislaus County. Of the agencies within Stanislaus County, 13 of the 18 were available during the survey process.

The following agencies were surveyed in the process:

- Burbank Paradise Fire District
- City of Ceres
- Denair Fire Protection District
- Keyes Fire District
- City of Modesto
- Mountain View Fire Protection District
- City of Oakdale
- Oakdale Rural Fire Protection District
- Salida Fire District
- Stanislaus Consolidated Fire District
- Turlock Rural Fire District
- Westport Fire District
- Woodland Avenue Fire District

The Survey...

The surveys that were completed consisted of ten common questions. The questions that were surveyed among the agencies were:

1. Who is currently handling your department's communications needs?
2. What communications needs do you foresee within your department?
3. Who programs your radio equipment?
4. Who services your radio equipment (service contract)? Would you be interested in a Countywide Radio Maintenance Agreement on a time and materials basis?
5. Do you have MDC's? If not, are you interested in obtaining MDC's? If so, what timeframe?
6. Are you familiar with Fire Frequency Sharing? Do you have concerns?
7. Who will be your department's contact for Fire Frequency Sharing?
8. Who will be your department's contact for run cards and CAD?
9. Do you use a RMS program and if so, which one?
10. What type of connection do you have between your department and SR-911?
Any station to station connectivity?

The Survey Results...

Who is currently handling your department's communications needs?

Of the thirteen agencies that were surveyed, every agency, with the exception of one, is handling initial communications needs internally. The only agency that is outsourcing all communications needs is doing so due to a lack of having pager programmers and the capability to program the various radio systems that are in use by that department.

What communications needs do you foresee within your department?

Of the agencies surveyed, there were various responses to communications needs. The needs that were given were: MDC's, support and assistance for the Fire Frequency Sharing implementation (radio programming and training), pager programming assistance, connectivity to remote stations and to SR-911, better radio coverage, and lastly, assistance with P25 digital-capable radio equipment purchases.

Who programs your radio equipment?

Of the agencies surveyed, every agency with the exception of one, program their radios internally. The one agency that is outsourcing radio programming is sending them to Ray's Radio to be programmed.

Who services your radio equipment (service contract)? Would you be interested in a Countywide Radio Maintenance Agreement on a time and materials basis?

Throughout Stanislaus County there are various companies being used to service radio equipment. The current companies being used are Ray's Radio, Delta Wireless, 10-4 Communications, Silverado Avionics, and Columbia Communications. When asked about a Countywide Radio Maintenance Agreement, 12 of the 13 agencies indicated an interest. The one that did not express an interest is currently in an existing city-wide radio maintenance agreement.

Do you have MDC's? If not, are you interested in obtaining MDC's? If so, what timeframe?

Of the agencies that were surveyed, four agencies within Stanislaus County have MDC's. Of the remaining nine agencies, all are interested in obtaining MDC's. The prohibitive factors that were identified by all agencies were cost and cellular connectivity coverage. None of the agencies had a timeframe for purchase as funds are not secured for this purchase.

Are you familiar with Fire Frequency Sharing? Do you have concerns?

Of the agencies that were surveyed, only one agency was not aware of the upcoming Fire Frequency Sharing. Of the other agencies, all agencies were very supportive of the

project. The only concern identified was that one dispatch channel may not be enough and two departments have requested that dispatches be repeated at dispatch time.

Who will your department's contact be for Fire Frequency Sharing?

All of the departments that were contacted have company officers that are serving as the contact for Fire Frequency Sharing.

Who will be your department's contact for run cards and CAD?

All of the departments that were contacted have company officers that are serving as the contact for run cards and CAD. In many of the smaller agencies the Fire Chief is the contact. In some of the larger agencies this is being handled by Administrative Captains, etc.

Do you use a RMS program and if so, which one?

Of the agencies surveyed, three use the NFIRS RMS program, five use the Bio-Key RMS program, four use the Firehouse RMS program, and lastly, there are two agencies that are not using a RMS program.

What type of connection do you have between your department and SR-911? Any connectivity station to station?

Of the departments surveyed, four have dial-up as their primary means for connecting to the internet. The remainder of the agencies have high speed internet ranging from Clearwire to cable internet, DSL, and several T1 lines. Connections back to SR-911 range from dial-up to ISDN to T1 lines as well.

Communications Plan...

MDC's

MDC's were identified by three of the agencies as a need. The reason prohibiting the implementation of MDC computers at these agencies is cost (both initial and recurring). The Communications Coordinator has advised these agencies that once the new CAD system is implemented there will be a new licensing model so they may want to hold off purchasing MDC's until the new CAD system is up and operational. At that time, at least re-evaluating the possibility of implementing MDC's at these agencies should be revisited.

MDC Connectivity Issues

Of the agencies that have MDC's, most of them have indicated that coverage with the existing provider is less than desirable in many areas within the county. Currently, there is a Request for Proposal (RFP) for a communications coverage study. This study will include test coverage for radio communications and pagers, as well as cellular coverage that is used with the MDC computers. The MDC connectivity issues will be an action item at the MDC Users Group. Overall, users of the MDC appear to be very satisfied with how the MDC's perform and how they work as a tool for the fire service.

Improved Radio Coverage

Several of the agencies have indicated that radio coverage in several areas of the county is intermittent. Areas that have been identified are in the east side of the county as well as the Diablo Grande area on the west side. These areas have been identified in the communications group and will be discussed at the Communications Advisory Group meeting. The coverage study that will be performed in the county should identify many of the areas in the county that have poor service and allow us to look into possibilities for improving the service.

Radio and Pager Programming

Several of the agencies within the county have indicated that they are sending out pagers and radios to be programmed. Thru the Regional Communications Coordinator, assistance can be provided to these agencies to program radios and pagers. If the software to program the radios is not available, then it may become necessary to continue to send the equipment out to be programmed. Currently, the Communications Coordinator has the software to program most of the Kenwood, Motorola, and Bendix King radios that are in use throughout the county.

Radio Service

Of the agencies surveyed throughout the county, it was determined that there were several different service companies being used to work on the radio equipment

throughout Stanislaus County. Users were asked if they would be interested in a countywide radio maintenance agreement. Every agency except one expressed an interest in a countywide radio maintenance agreement (and that agency is in a mandatory city contract). It was explained that there is currently a RFP in process to obtain a Countywide Radio Maintenance Agreement. This agreement will be on a time and materials basis. This would not be a mandatory contract for agencies; however, the goal of such a contract would be to ensure parts availability, service levels, and a competitive price. If repairs can be performed at less of a cost, agencies can choose whether to use the contract or go thru an outside vendor.

Fire Frequency Sharing

Of all the agencies surveyed within Stanislaus County, support for the upcoming Fire Frequency Sharing, scheduled to be implemented November 7, 2007, has been unanimous. The concerns expressed include an implementation plan, programming radios, and user training. All of these concerns will be addressed in the Communications Advisory Group meetings. It has been explained to all agencies that the implementation plan will cover training on usage (train the trainer) as well as programming assistance to agencies to get radio frequency lists reconfigured to support the Fire Frequency Sharing. At the Communications Advisory Group meetings, agencies will be provided with a suggested portable radio program load as well as a suggested mobile radio programming group.

RMS Support

During the course of the survey, it was determined that there are currently three RMS programs being used within Stanislaus County. The packages currently being used are Firehouse, Bio-Key, and the NFIRS program. There are also several agencies within the county that are currently not using any RMS package. Of the agencies not using an RMS package, all have a computer, and at a minimum, dial-up internet access. The recommendation has been made for the agencies that are currently not using the NFIRS program (<http://nfirs.fema.gov/>) to go online and begin reporting incidents thru application. For the agencies using Firehouse, support is being provided by the Communications Coordinator. Currently the support extends to the Firehouse and NFIRS program and not to Bio-Key. Existing support contracts thru Bio-Key should provide needed technical assistance.

Regional RMS System

One of the surveyed items was used to determine if there is an interest in a regional approach to a RMS system. Every agency surveyed has expressed an interest in a regional RMS approach. The benefits to a regional system are many. Several of the benefits to a regional RMS system are:

- Centralized, uniform reporting.
- Centralized Investigation and Prevention data tracking. This would ensure that all of the data is in a centralized repository and give Investigations and Prevention

the capability to have a mobile component, enabling them to take the information with them into the field.

- Lower cost to implement and maintain than implementing a RMS system at each agency. By implementing a centralized RMS system, the need for a server at agencies would be reduced to one or two servers to support a countywide system.
- Lower support costs. Support costs for a centralized RMS system would be less than maintaining individual support agreements for all of the agencies separate RMS systems.
- CAD to RMS Interface. In order for CAD to pre-populate the various RMS systems throughout the county, a high-speed connection between the CAD system and the RMS system will need to exist. Currently, there are only a few agencies within Stanislaus County that have direct connections to SR-911. The other agencies use dial-up technology to dial into SR-911 to get call information. A typical install is a T1 line, direct to SR-911, which can become very costly (\$400+ per month, depending on the distance from SR-911). By going to a centralized RMS system, there would only be one CAD to RMS interface, which would exist at SR-911 where the regional RMS system would be installed.
- Internet, web-based solution. This would ensure that end users have the full functionality of the RMS package and would be able to operate on a dial-up connection. This would ensure that everyone's existing connections would work and upgrading to higher speed connections (dsl, cable internet, wireless internet) would work as well with the system.
- Reduced cost. Currently, various links exist between agencies and SR-911 ranging from dial-up and ISDN lines to T-1 lines. If a centralized RMS system was installed, many of these connections to SR-911 would no longer be necessary (unless stations are using the connectivity for rip and run features).

CAD Implementation

Currently, the contract between Stanislaus County and a CAD vendor is in the negotiating stages. Various interfaces are currently being discussed and requirements for the new system are being determined. From the county standpoint, the Communications Coordinator is representing the fire agencies within the county. As of current, implementation and cutover to the new CAD system will take place in early 2009. If anyone has questions, concerns, or wants to discuss the CAD implementation in relation to the fire service, please contact the Communications Coordinator.

Station Connectivity

During the surveys, it was determined that there is currently a wide range of connectivity being used throughout Stanislaus County. These connections range from dial-up to cable internet, dsl, wireless internet, and several other options. Every agency that has dial-up connectivity has expressed an interest in obtaining a high speed solution for their agency. The Communications Coordinator is working with these agencies to identify affordable high speed solutions for their connectivity needs ranging from wireless internet solutions, cable internet, dsl internet, to cellular internet.

Conclusion...

The Regional Communications Coordinator is here to serve you! If you have any communications needs, questions, or would like to discuss, feel free to contact the Communications Coordinator.

The www.salidafire.com web site has a Communications section. Check for periodic updates, Power Point presentations, and various other items of interest to the communications community. If there is something you would like to see published or have questions about, please don't hesitate to contact the Communications Coordinator. Chances are you aren't the only one that has the question!