Approved: <u>March 8, 2010</u>

Date

MINUTES OF THE SENATE UTILITIES COMMITTEE

The meeting was called to order by Chairman Pat Apple at 1:30 p.m. on February 24, 2010, in Room 548-S of the Capitol.

All members were present except Senator Emler, excused

Committee staff present:

Kristen Kellems, Office of the Revisor of Statutes Matt Sterling, Office of the Revisor of Statutes Raney Gilliland, Kansas Legislative Research Department Cindy Lash, Kansas Legislative Research Department Ann McMorris, Committee Assistant Jeannine Wallace, Sen. Apple's Office Assistant

Conferees appearing before the Committee: None

Others attending: See

See attached list.

Information distributed to the committee:

Comanche County Wireless E9-1-1 Assessment (Attachment 1)

Approval of Minutes

Moved by Senator Bruce, seconded by Senator Lee, the minutes of the meetings of the Senate Utilities Committee on February 11, 15, 16 and 17, 2010 be approved. Motion carried.

Chair opened for continued committee discussion on

House Substitute for Substitute for SB 48 - Emergency telephone service, fees, charges, collection and distribution

Chair announced that amendments to **House Substitute for Substitute for SB 48** would be considered at the March 1, 2010 meeting of the Senate Utilities Committee.

He continued discussion and any further clarification on the various components of **House Substitute for Substitute for SB 48**. Senator Masterson reported on his findings on prepaid wireless cards sold by retailers. Senator Francisco and Senator Masterson were requested to write amendments which would offer two options.

Senator Brownlee referred to the information provided by AT&T and the industry to the committee at the February 23, 2010 meeting. AT&T portion covered collection of 911 fees on prepaid wireless at the point of sale. The three page section by the industry covered collection of 911 fees on prepaid wireless - various methods were explained.

Other components considered were definitions, grant funding, and 911 coordinator.

The next meeting is scheduled for February 25, 2010.

The meeting was adjourned at 2:05 p.m.

Respectfully submitted

Ann McMorris Committee Assistant

Attachment -1



SENATE UTILITIES COMMITTEE GUEST LIST FEBRUARY 24, 2010

NAME	REPRESENTING
John Idoux	CenturyLink
Shal Alex	KRITE
TOMPAY	KCC
Walter Way	Tahusan County
Tim Gartrops	DIFT
Vuca Haas	Der office
SEN MILLER	CARITE C STOMPLEGIES
Cony Mohr	Loc
Corex Johns	Connect Kansas
Trave Cox	Sedgwick County
Leigh Keck	Hein Lawfirm
Cleen Jennish	Cox
Dan Murray	Federico Couculty
Northan Eberline	LKM O
Dinatisk	VERIZON WIRELESS
ED KNAPP	KAP/KPOA) KSA
NelsoN Krueger	Syre West

Comanche County Wireless E9-1-1 Assessment

Executive Summary

Over the past five years, GeoComm staff has supported and assisted many counties within Kansas on understanding and effectively deploying wireless E9-1-1. As an addendum to the existing contract the Kansas Association of Counties (KAC) and League of Kansas Municipalities (LKM), GeoComm led an effort to review the current PSAP operations of Comanche County. Comanche County is one of the remaining Kansas Counties that has not deployed Phase II, Enhanced 9-1-1 (E9-1-1) services. This review and assessment includes the technical and operational preparedness to accept, process, and manage wireless E9-1-1 calls. GeoComm will also provide recommendations to assist the county in becoming Phase II compliant.

Specifically, GeoComm will provide Comanche County, KAC, and LKM a Final Report, which includes a summary of:

- Current Wireless 9-1-1 Deployment Status
- PSAP Issues
- Current and Planned Technology
- Additional Resources and/or Assistance Needed to Deploy Phase II within the County
- Recommended Next Steps

The project began with the collection of data and supporting information from the Kansas State Audit Report, AT&T 9-1-1 Services, Kimball Mapping, National Association of Counties (NaCo), KAC, and LKM staff. In addition, telephone conversations with the PSAP Supervisor, Glennda Burt, and Comanche County Sheriff, Michael McMoran, provided specific PSAP information and general overview of the present situation. The initial on-site meeting and observation occurred December 8-10. This executive summary includes only a preliminary overview of the status and finding. GeoComm offers additional observations and recommendations in the complete Final Report.

Overview of Current Status

The Comanche County Sheriff's Office maintains the only PSAP within the 790 square mile county, which has a population of 1,958 according to the 2008 US Census Bureau Report (NaCO). This population estimate creates an average of 2.5 persons per square mile. The county PSAP has supported enhanced wireline service for over eight years.

Senate Utilities Committee February 24, 2010 Attachments 1-1





Upon observation, discussions with PSAP staff, and review of data, GeoComm determined that the current telephony and mapping capability is inadequate to effectively display the estimated wireless Phase II location data associated with 9-1-1 emergency calls. At present, the wireless calls received by the PSAP via the two providers (Alltel/Verizon, United) are limited to wireless Phase I and routed based upon the two cell antenna locations reported as in the county.

Comanche County reports in 2008 that nearly 30 percent of all 9-1-1 calls were wireless; however, the actual wireless percentage may be greater based upon a sample of call volume by class of service for a one week period requested by GeoComm.

PSAP Issues

The PSAP is a single position environment, which routinely handles walk in traffic at the Comanche County Law Enforcement Center. The communication service area and equipment is neither separated nor secured from the rest of the building activity.

The history of improvements to the 9-1-1 capability in Comanche County has been fragmented by personnel changes, incomplete recordkeeping, and frequent changes of assigned responsibility among county staff. According to PSAP Staff, the original base mapping product reportedly has never displayed the wireline address points correctly. During the on site visit, Comanche County Staff could describe the action of predecessors regarding to what extent or how often the base map has been updated since the original installation.

Technology in Place

Comanche County has the necessary hardware and software as well as 9-1-1 trunks in place to support the current TeleControl, Inc. (TCl) 9-1-1 telephony system that interfaces with an ALI-Pro mapping component. This equipment is however at least nine years old and is scheduled to be replaced in May/June of 2010. The Sheriff's Office is aware that TeleControl, Inc. was purchased by another provider of like services several years ago, contributing to valid concerns about the equipment and availability of maintenance services.

The replacement with updated equipment is funded by a wireless grant from the state. In conversation with AT&T, the 9-1-1 System Service Provider for Comanche County, GeoComm was able to determine that no changes to the current "trunk" configuration" is anticipated as part of the equipment upgrade.

Additional Resources and/or Assistance Needed to Deploy Phase II

Every effort should be made to maximize the value of the new equipment as well as the mapping and master street address guide (MSAG) recently completed by the contracted mapping service provider.





The county should be planning to commit adequate management efforts, personnel, and financial resources to maintain both the new equipment and data, through the pending installation period and well into the future. The oversight of the installation schedule, specific coordination of activity and final acceptance standards should become the responsibility of an individual, internal or external to the county, may be a prudent choice for the county.

Funding and management of all the required, preliminary activity to achieve wireless Phase II service should become a priority. Further, all the costs associated with this effort, including the long-term related, routine maintenance must be identified and resolved. Potential alternative models of governance and funding are offered in the Final Report.

PSAP staff training is required, to assure that all PSAP staff has the fundamental understanding of how wireless 9-1-1 actually works as well as the variables that may impact the value of estimated location data delivered to the PSAP. This level of training would normally include initial training as well as recurring inservice updates, which should be defined and provided on a regular schedule. Appropriate education of first responders as well as the public as to the dynamics of wireless E9-1-1 should also be developed and delivered on a schedule associated with the installation of the new equipment, testing, and actual initial presentation of wireless Phase II calls at the PSAP.

Comanche County has the opportunity to develop a coordinated, cooperative, and collaborative approach to providing and managing a new level of emergency services and should not further delay effective action to complete this effort.





Final Report

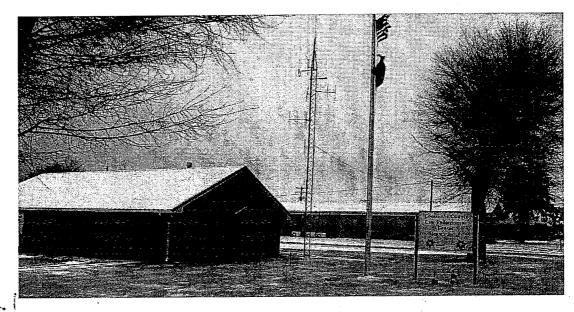
Provided within this report is a review of the activities and findings for the Comanche County E9-1-1 Wireless Assessment. Information within the report includes:

- Current Wireless 9-1-1 Deployment Status
- **PSAP** Issues
- County's Current and Planned Technology
- Additional Resources and/or Assistance Needed to Deploy Phase II within the County
- Recommended Next Steps for Comanche County, KAC, and LKM

Current Status - Comanche County PSAP and Wireless E9-1-1 Services

As stated within the executive summary, the Comanche County Sheriff's Office maintains the only PSAP within the 790 square mile county, for an estimated population of 1,958 residents according to the 2008 US Census Bureau report. The multiple law enforcement, fire/rescue, and emergency medical services throughout the county are dispatched by the county PSAP. In addition, the appropriate emergency communication support functions for emergency management, state agencies, as well as adjoining counties are generally defined and performed by PSAP Staff. The county also is currently working towards further improvements that will enhance radio interoperability. The PSAP functionality is physically located within the Comanche County Law Enforcement Center, which operates under the supervision of the County Sheriff.

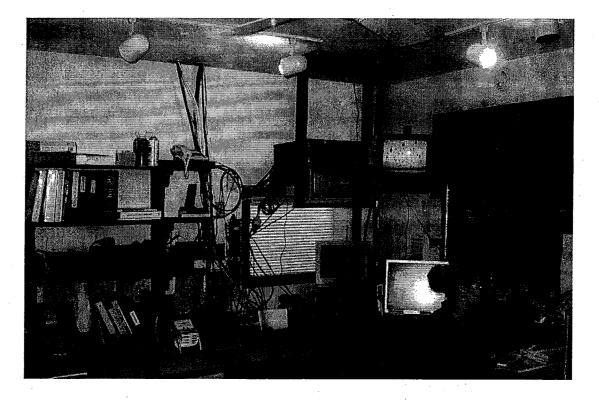












Comanche County has supported enhanced wireline 9-1-1 service for over eight years; however, the current base mapping product fails to adequately display wireline E9-1-1 address points in a manner, which clearly displays the address of the caller. The current telephony and mapping capability is also inadequate as it does not effectively display a MSAG valid address of current cell towers, which should be used to identify on the map product, the approximate "area" within which the Phase I caller is located.

In 2008, the county reported about 30 percent of all 9-1-1 calls were wireless, however, the actual wireless percentage may be greater based on an unscientific sample reviewed during the on-site visit. Overall 9-1-1 call volume is low in this county, as reported by PSAP Staff.

GeoComm recognizes that the total call volume has no bearing on 9-1-1 call criticality; every caller seeking to access emergency services through 9-1-1 should receive prompt, effective, and professional service.

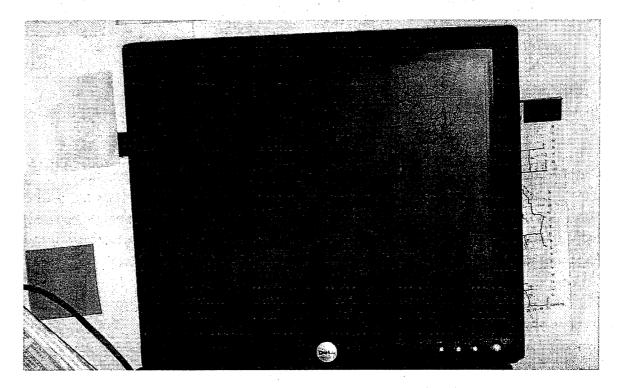




As of the December on-site meeting, the PSAP was receiving wireless 9-1-1 calls with a Class of Service (COS) of Wireless (WRLS). The WRLS designation is defined by the Emergency Services Interconnection Forum (ESIF), a subset of the Alliance for Telecommunication Industry Solutions (ATIS), as meaning the wireless call was received at a Phase I only deployed site.

The location of the cell tower and often appropriate antenna sector information may be provided. However, no other caller location determination data is made available. The Wireless Phase I or WPHI COS designates that the cell tower location is provided, the call back number of the 9-I-I caller and if properly defined, the general area that the 9-I-I caller is most likely within at the time of the call. The WPH 2 COS designates in addition to the cell tower location and call back number, an estimated location of the 9-I-I caller, using longitude and latitude coordinates.





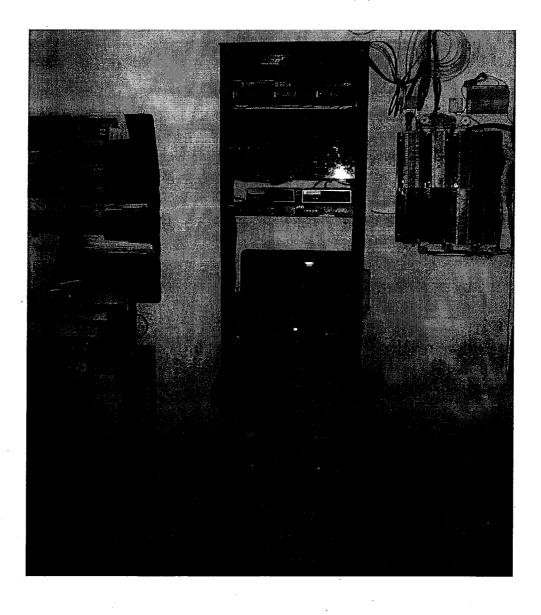
During the on-site visit, GeoComm observed the 9-1-1 mission-critical equipment (defined as the hardware/software and network connections) which supports the 9-1-1 access and call processing within Comanche County has been installed at the PSAP work area of the County Law Enforcement Center. This common practice is not recommended. The equipment and connection points should be protected from any source of contact, which could cause a failure of 9-1-1 service.



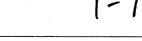


In addition, there are specific wiring standards, environmental hazards issues, and inadvertent damage. GeoComm recommends that these risks be resolved by reasonable efforts to provide additional security for the equipment. Additional specific recommendations can be found within the current National Fire Protection Association standards (NFPA 1221) as well as APCO standard (APCO-ANSI-102-1-2008), which should be reviewed by the county.

Current Mission-Critical E9-1-1 Equipment







Comanche County has obtained four grants through the Kansas Wireless Enhanced 9-1-1 Board. These grant awards, totaling \$224,500, have reportedly supported technology, development of GIS data, mapping, addressing, and related services. (Wireless Enhanced 9-1-1—2008 Annual Report and Conversation with Comanche County Sheriff and PSAP Staff)

To date, the actual successful completion of a Phase II wireless E9-I-I call, which is plotted on a base map, using the estimated location of the caller, has eluded the county PSAP. The most recent award of a reported \$160,000 for the 9-I-I equipment replacement/upgrade as well as the revised effort to improve the mapping product and MSAG, when supported by effective wireless E9-I-I management, adequate funding and staff training should bring Comanche County into service capability parity with other Kansas counties.

PSAP Issues

The Comanche County PSAP seeks to provide fully enhanced wireline and wireless 9-1-1 service to residents and visitors. GeoComm supports that goal by focusing this assessment on the readiness of the PSAP to effectively manage wireless E9-1-1 calls. In this capacity, there are preliminary steps that need to be taken. Along with these steps, there must be sustainable management efforts post deployment in order to provide most benefit to residents and visitors of the county and public safety personnel.

The absence of any designated staff person to manage the pending new equipment installation creates the risk of additional confusion, lack of coordination, and potential problems when fact-based decisions are necessary.

The current wireless or "cell" towers that exist in Comanche County need to be properly addressed and assigned a MSAG valid address, with appropriate prefix/suffix to designate "faces" of any sector specific antenna configuration(s). The current practice of "routing" wireless E9-1-1 calls based on what antenna or sector antenna configuration existing at a tower site received the initial call, should be reviewed within Comanche County to assure that the highest percentage possible of wireless E9-1-1 calls that should be delivered to the county PSAP are directed routed. Comanche County should also discuss wireless deployment with adjoining counties in an effort to assure that the best routing decisions for towers along county borders to receive a wireless 9-1-1 call from another county. The routing decision between the counties should specifically seek to reduce the need for call transfers between PSAPs in times of an emergency.

There are American Standards Institute adopted standards (APCO ANS 1.103.1-2008) for both improving wireless deployment and the necessary, continuing management of such services over time. Comanche County arrives at the edge of Phase II deployment at a time when the "lessons learned" from many other Kahsas PSAPs as well as throughout the nation are available to provide prescribed actions supported by





clear explanation and documentation. It would be reasonable for Comanche County to review these standards as they prepare for their actual Phase II deployment.

The Comanche County PSAP staff work 12-hour shifts (0800-2000 and 2000-0800). This schedule does cause challenges for preliminary and regular in-service training. Wireless E9-1-1 requires additional skill sets than those used for wireline E9-1-1 call processing. The county will need to first develop an effective training program, support its presentation and/or participation by staff, and maintain its currency and relevance over time with adequate documentation.

GeoComm determined that as many as ten counties, (Clark, Seward, Ford, Edwards Pratt, Barber, Harper, Kingman, Reno, and Sumner), adjacent to or in close proximity, have the same "system" that is to be installed at Comanche County. The county should support and provide staff the opportunity to visit designated PSAPs to observe how the equipment actually works, review operational procedures for wireless E9-1-1 call processing, and assess the impact upon Comanche County of such class of calls.

Additional Resources and/or Assistance Needed to Deploy and Maintain Phase II

The 2009 base map created for Comanche County will supplant the existing base map at the PSAP. This new base map may serve multiple purposes that should not present a problem for any of the users. At present, the County Appraiser and PSAP are the primary users. However, the utility of base maps is well known, and it is not uncommon for many uses of such a map to coexist without any disruption of any specific utilization methodology. The basic and essential maintenance criterion for all such maps remains the same.

Comanche County should clearly define the processes, required documentation, and timelines for all actions, by all parties having a user role related to the base map. Required documentation should include the processes for new roads and/or road names, new addresses, changes of addresses (numbering and/or naming convention), subsequent additional pre-directionals or suffixes, and new and sub-parcel designations, etc. Data entry of such information must conform to at a minimum, existing NENA standards and formats to achieve adequate data integrity and integration.

The continuing maintenance of the Comanche County MSAG, while likely to be a contractual relationship between the county and the 9-1-1 database provider, needs to be fully understood by all the parties. This agreement will require prompt action, as defined, by the county for verification, error resolution, and general review for accuracy. The role of each potential participant in all of these actions should be defined and supported by clear descriptive language, including standard forms and documentation.



GeoCon

An independent mapping/MSAG provider should be retained to assist with quality assurance and/or processes as defined by the county within any contractual relationship. The map should become an essential tool in all of the departments which now or will be using it within Comanche County.

GeoComm has frequently cited the ongoing map maintenance issues as a particularly common source of degraded wireless Enhanced 9-1-1 Services and reported specifically that finding to the Kansas Wireless Enhanced 9-1-1 Advisory Board at its meeting within the State Capitol Building well over two years ago. GeoComm continues to find the lack of understanding for the complexity and criticality of effective base map management to be an issue for many counties across the state including Comanche County.

Technology in Place

Comanche County has contracted with 9-1-1 System Service Provider AT&T to install new 9-1-1 equipment during May/June 2010. GeoComm is confident that such action provides the capacity to resolve current technology issues at the PSAP. It should be noted that during this equipment upgrade, the PSAP will have significant responsibility to assure the installation occurs on time and is complete. In addition, the PSAP Supervisor and Staff should exercise their right to assure they receive adequate equipment familiarization, obtain emergency and routine service information and understood as well as document the processes. The county or its designee should also assure that all systems and sub-systems are compatible and fully operational (based on actual E9-1-1 test calls) before acceptance is finalized.

The equipment installation may further require coordination and cooperation by the base map provider, who should be available at a minimum by conference call during the installation process at designated points as defined by the Sheriff and/or PSAP Supervisor.

Funding Issues

GeoComm recommends that Comanche County fully define the costs associated with the management and maintenance of the new 9-1-1 equipment, base map maintenance, staff training, public, and emergency service user information, designation of a wireless 9-1-1 Coordinator, and all other related costs as soon as possible. The next county budget cycle preparations will begin shortly after the installation is finalized and the county PSAP has had some practical experience with the technology, support services and operational aspects of the new service.

The State of Kansas had identified Comanche County as a one of the counties that may not have adequate revenue from current 9-1-1 funds to maintain their system. The actual implementation of wireless Phase II is in close time proximity to the pending revised allocation of such funds, approved by the legislature, which creates some of the concern for future system maintenance.



1-10



GeoComm recognizes the concern and urges the county to first determine their best estimate of actual costs and then determine a revised funding plan for 9-1-1 services, as needed. (Legislative Division of Post Audit, 08PA16 DECEMBER 2008)

It is common for 9-1-1 services to require supplemental funding from general revenue accounts within the Authority Having Jurisdiction (AHJ). The issue that most commonly arises is what "formula" for making such allocations meets the test of adequacy and fairness within the current county organizational structure and overall revenue potential.

One example of cost sharing within Comanche County could include the ongoing map maintenance expenses. Today, the base map has valuable applications for at least the following county departments: Sheriff and 9-1-1, all fire/rescue services, emergency management, appraiser, land management, and economic development.

As the map matures and additional applications are defined, such as school districts, health departments, and highway maintenance, which are common in other areas, the interest in other map related services will further expand. The initial decision to share the costs of the base map now will create a reasonable basis for assessing other users in the future.

Governance Issues

GeoComm recognizes that 9-1-1 services are provided by the Sheriff's Office and found the Sheriff and the PSAP staff to be willing to continue to improve service delivery throughout the county. The overall need to provide adequate public safety and related governmental services can be enhanced by expanding the general oversight of the 9-1-1 operational environment. The county should consider the creation of a public safety services committee, which can include and encourage participation by all the identified map users to monitor and assist in supporting countywide the proper and timely maintenance of the base map for all of current and future uses.

The public safety services committee can also provide the county commission with broad based support for any necessary funding modifications, serve as a resource for the PSAPs public and responder education role, assess future map utilization and fees, as well as provide liaison with adjoining counties as necessary. This concept supports expansion of user interest, public understanding, potential new map use cases, adequate cooperation with adjoining counties for effective resource management, and demonstrates the recognition and commitment of Comanche County to achieve and maintain a high level of public access to emergency services.





Next Steps

GeoComm acknowledges that the actual implementation date for the equipment upgrade is the May/June 2010 timeframe; this allows adequate time to properly consider the issues and properly prepare for this important new service level.

In this section of the Final Report and utilizing documentation and onsite observation details, GeoComm recommends preliminary and continuing actions, policy decisions, and development of procedural safeguards to maintain the Comanche County PSAP as fully deployed for wireless Phase II E9-I-I.

- I. GeoComm recommends Comanche County notify all wireless services providers of implementation plans. Several years ago, the county made a formal FCC (Federal Communications Commission) request for Phase II wireless service. Most recently, the Comanche County Sheriff and PSAP staff is again making written contact the active wireless service providers (WSP) selling products and services within the county. The purpose of this much less formal correspondence is to alert the WSP that a revised and renewed effort is in place and seeks to confirm that the WSP is now or will be wireless Phase II capable at the tower sites within Comanche County by mid 2010. GeoComm notes to the county that there is some risk, hopefully slight, that since the interruption of previous efforts may be perceived as a lack of readiness by the PSAP post request and could cause provisions for meeting the normal timeframe for implementation and could be delayed. (Federal Communications Commission, Wireless Rules § 20.18)
- 2. GeoComm recommends that Comanche County should work with the county appraiser, under the authority of the county commission to clearly define the authority, roles, responsibilities, processes, and documentation necessary to assure that the base map is fully utilized for all of its intended purposes. The base map cannot be allowed to suffer from lack of well defined maintenance; this is a long-term commitment to achieve competency of the data represented by the tool.
- 3. GeoComm recommends that Comanche County should work with the county appraiser, under the authority of the county commission to clearly define the authority, roles, responsibilities, processes, and documentation necessary to assure that the base map is fully utilized for all of its intended purposes. The base map cannot be allowed to suffer from lack of well defined maintenance; this is a long-term commitment to achieve competency of the data represented by the tool.
- 4. GeoComm recommends that Comanche County should work with the county appraiser, under the authority of the county commission to clearly define the authority, roles, responsibilities, processes, and documentation necessary to assure that all addressing is completed, consistent with current ordinances, standards, and compatibility requirements of the MSAG and 9-1-1 equipment.





- 5. GeoComm recommends the cell towers within Comanche County should be addressed properly; a MSAG valid address should be assigned (consistent with earlier comments) and included in the Comanche County MSAG.
- 6. GeoComm recommends that the cell towers within Comanche County should have the current routing plans reviewed to verify accuracy as soon as they are made available. The cell towers in adjoining counties including the Oklahoma, Counties of Woods, and Harper should be reviewed during the pre-installation period.
- 7. GeoComm recommends that Comanche County should develop adequate public education materials relying upon the numerous sources available today (FCC Consumer Pages, APCO Project LOCATE documents, as well as 9-1-1 industry information).
- GeoComm recommends that Comanche County should design and implement a general information session to be presented to Comanche County executives and first responders within all public safety disciplines, to manage expectations about actual system performance.
- 9. GeoComm recommends that Comanche County should support the development of a PSAP staff training agenda, with adequate, competent resources to assure that every staff person truly understands the variables, which influence wireless E9-1-1 Phase II service. GeoComm has provided these initial resources to the county:
 - Kansas Wireless 9-1-1 Deployment Handbook
 - ESIF/ATIS issue on Class of Service
 - APCO Project LOCATE Report Location Data Delivered to PSAPs
 - APCO ANS Standard 1.103.1-2008
 - GeoComm Training Materials for Wireless Management and Map Maintenance
 - Public Service Announcement (PSA) on video ref Wireless 9-1-1
 - PSAP Level Performance Testing Wireless 9-1-1
- 10. GeoComm recommends that in cooperation with the 9-1-1 system service provider, Comanche County should seek to have the current and new MSAG data reviewed to determine if any errors, deletions, additions are necessary before the actual "live, load of such data"; this effort will require coordination and cooperation among the parties.
- 11. GeoComm recommends that as the implementation date gets closer, a more current version of the base map should be made available for review and inspection by PSAP staff. Clearly defined review processes should be utilized to determine completeness and accuracy of map data which is





fundamental to the effective use of the x,y coordinates (as required by the FCC) provided with wireless Phase II calls.

- 12. GeoComm recommends that Comanche County accept that the expansion of wireless telephones to access emergency services via 9-1-1 is not merely an alternate public option. The county should recognize that this technology is provided through a multiple partner relationship, and unlike the sole source model of wireline services, absolutely requires continuous management and maintenance efforts. The lack of understanding of the importance of this single concept has created considerable problems for PSAPs across the country.
- 13. GeoComm also recommends that Comanche County should, if already not completed, review the efforts to provide additional broadband access to rural portions of the United States. The program has been well funded through the Federal Broadband Technology Opportunity Program, as described at www.ntia.doc.gov/broadbandgrants.

Upon completion and presentation of this report, GeoComm has no authority to provide additional support to Comanche County. The county should be considering how to best utilize local resources and as necessary, external contacts to assure the accomplishment of the "Next Steps" as well as the final installation and demonstration of full working capability of the new equipment.







References

PSAP Service Capability Criteria Rating Scale

APCO/NENA ANS 1.102.1-2008

The PSAP Survivability Workgroup, a joint effort between APCO International and NENA, developed the content of this ANS. The Standards Development Committee facilitated the standard through the APCO ANS process and it was approved by ANSI on November 3, 2008.

Brief Description

This standard is intended to assist Public Safety Answering Point (PSAP) Managers and their governing authorities to identify their current level of service capability. An assessment tool is provided to objectively assess capabilities of the PSAP against models representing different levels of preparedness, survivability, and sustainability amidst a wide range of natural and man-made events.

Wireless 9-1-1 Deployment and Management Effective Practices Guide

APCO ANS 1.103.1-2008

APCO International's Project LOCATE (Locate Our Citizens At Times of Emergencies) developed the content of the Wireless 9-1-1 Deployment and Effective Practices Guide. The Standards Development Committee facilitated the guide through the APCO ANS process and the guide was approved by ANSI on July 31, 2008.

Brief Description

These Effective Practices (EPs) are designed to increase the PSAP Managers' understanding of the technology application and the ability to better manage wireless calls, as well as public and responder expectations. Subject matter experts and wireless service providers discussed the testing results, trends, anomalies, and analyzed the actual performance, resulting in the jointly developed EPs. This guide includes rationale and provides background for each EP, outlines the recommended practice and provides resources to assist the PSAP Manager

Federal Communications Commission, Wireless Rules § 20.18

(3) Tolling of six-month period. Where a wireless carrier has served a written request for documentation on the PSAP within 15 days of receiving the PSAPs request for Phase I or Phase II Enhanced 9-1-1 service, and the PSAP fails to respond to such request within 15 days of such service, the six-month period for carrier implementation specified in paragraphs (d), (f), and (g) of this section will be tolled until the PSAP provides the carrier with such documentation.





Emergency Services Interconnection Forum (ESIF) Wireless E9-1-1 Phase II Readiness Package[©] January 29, 2003

Kansas Wireless Deployment Checklist, Revised 6/2008

Kansas Wireless Report, 2008

State of Kansas – Wireless Grant Fund Performance Audit Report Legislative Division of Post Audit 08PA16 December 2008

NPFA 1221 - Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems Current Edition: 2010



