STATE OF OKLAHOMA

ENHANCED 9-1-1 (E9-1-1) ASSESSMENT AND STRATEGIC PLAN

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Oklahoma Enhanced 9-1-1 (E9-1-1) Assessment and Strategic Plan

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prepared for

Oklahoma Statewide Nine-One-One Advisory Board
Grand Gateway Economic Development Association (GGEDA)
Oklahoma Association of Regional Councils (OARC)

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Today, Oklahomans are not afforded access to life-saving *Enhanced* 9-1-1 (E9-1-1) services throughout the entire state, and legislative action is required to address the critical need to upgrade *basic* 9-1-1 systems to E9-1-1. According to survey findings regarding wireline 9-1-1 services , 17 of Oklahoma's 77 counties do not have any E9-1-1 service at all; 14 counties have E9-1-1 wireline service in some cities but not countywide; and 46 have the advanced Enhanced 9-1-1 wireline service for the entire county. According to survey findings regarding the deployment of Enhanced wireless 9-1-1 services, 55 counties have not yet deployed the most precise wireless E9-1-1 services that are available today and that provide life-saving information. Furthermore, both urban and rural demographic segments of Oklahoma should have and receive the same consideration when deploying emergency communication E9-1-1 services. To ignore these life-saving services not only directly affects Oklahomans, but also affects first responders in their ability to provide efficient emergency response.

Both 9-1-1 technology and the telecommunications industry have evolved since 9-1-1 was created 40 years ago, and a patchwork approach to statewide deployment is not effective. Today a more centralized planning and implementation approach is required in order to achieve effective statewide emergency call delivery and services. To facilitate the delivery of these critical services in Oklahoma, significant changes need to occur in the following areas:

- State Level Coordination and Oversight
- Requirement for Consistent Service Levels
- Dedicated and Permanent Funding Structures
- Systematic Planning and Completion of Statewide Addressing
- Development of a Statewide E9-1-1 Base Map to provide high-quality digital mapping of the entire state to allow Emergency Response teams to react more quickly to any type of emergency
- Implementation of an Advanced and Integrated Network
- Automatic Location Information (ALI) Accuracy Program

To illustrate the critical situation that exists within Oklahoma today, the following scenarios demonstrate why the State should act immediately to change its approach to E9-1-1 services.

Wireline E9-1-1

As indicated above, Oklahoma has 17 counties with no wireline Enhanced 9-1-1 (E9-1-1) services. "Enhanced" refers to the ability to have 9-1-1 calls routed to the proper Public Safety Answering Point (PSAP) along with the Automatic Number Identification (ANI) and the Automatic Location Information (ALI). This information is vital in an emergency call situation when a PSAP needs to either call the caller back due to call disconnection or have the ability to identify the caller's location when the individual, such as a lost child or victim of violence, does not know his or her address or is unable to communicate.

The ANI feature is delivered automatically with the call; however, in order to deploy the ALI feature, a database must be built based on a community's street location and addressing information. Many areas of the state have existed with rural route and box number. This system of addressing must be converted to actual street names and numbers, and physical addresses must be assigned to homes and businesses. Typically, a rural route conversion benchmark is to have 95% or greater completion of rural route systems in order to have an effective ALI system. Based on the findings in this report, only 75% of public safety agencies answering 9-1-1 calls currently report having completed this critical addressing function. In addition, there exists no validation of the reported information, no verification against industry accepted standards, and no assurances that quality data has been included into the ALI system. So, while this percentage with location information may appear to be high, the reality is that Oklahoma has no consistent statewide methodology to test and ensure the accuracy of the addressing. The lack of accurate location information directly affects the quality of emergency services and the ability to respond to citizens in times of need.

Wireless E9-1-1

Citizens and visitors traveling Oklahoma's major thoroughfares for business or pleasure routinely cross through many of the 55 counties that do not have wireless E9-1-1 service. Consider the plight of a family that traverses the nearly 400-mile length of Oklahoma's historic and popular Route 66, from the Missouri state line to Texas. On the trip, the family would pass through 14 Oklahoma counties, of which only six have wireless E9-1-1 service. Similar to enhanced wireline features, a fully developed wireless E9-1-1 system routes an emergency call to the appropriate PSAP, displays the call-back number of the caller (ANI), and provides the location information (ALI) through *x,y* coordinates of the caller. In the event of an accident, medical emergency, or crime, the odds are against members of that family being able to be automatically and accurately located when they dial 9-1-1 for emergency assistance.

Today, fewer than 50% of Oklahoma emergency answering centers have full E9-1-1 wireless services. The continued growth in 2006 of Oklahoma wireless subscribers to 2.3 million—a net increase of nearly 600,000 additional subscribers from 2005—demands attention. In order for public safety to effectively serve this growing telecommunications base, attention must be paid to deploying enhanced wireless E9-1-1 features.

This growth is not a new problem just for Oklahoma. Consistently across the United States, the mix of E9-1-1 call volumes has shifted so that wireless call volumes are now at least 50% of the total emergency call volume into an E9-1-1 center. This type of shift in phone users in both rural and urban areas requires serious consideration and attention to the needs of the public. The public expects public safety entities to respond to calls for assistance, and Oklahoma must be able to meet that expectation. Without serious attention to the lack of consistent E9-1-1 wireless implementation and without consideration of the continued growth of wireless telephone subscribers, Oklahomans and visitors to the state will remain at tremendous risk when they need access to emergency communication services in many areas of the state.

Summary

The Oklahoma Statewide Nine-One-One Advisory Board entered into an agreement with one of the country's leading E9-1-1 experts to assist in assessing the status of E9-1-1 in Oklahoma and develop a strategic plan that can be used as the basis for achieving statewide fully enhanced 9-1-1 services for wireline, wireless, and VoIP telecommunication services. Based on extensive research, the above examples are just a summary and high-level overview of the issues that exist today within Oklahoma when someone needs access to E9-1-1.

The attached study describes in detail the many challenges facing Oklahoma and the need for an effective and consistent E9-1-1 emergency communication system. For the un-served and under-served areas of the state, the report highlights deficiencies and inconsistencies in 9-1-1 coordination, planning, and deployment that require State leadership and involvement. In order to meet these challenges, it is requested that the Oklahoma Legislature identify funding that would support the implementation of a statewide E9-1-1 office and its staffing. This office would be charged with ensuring State oversight and statewide implementation of E9-1-1 services. With this accomplished, the attached study can be used as the foundation for improving Oklahoma E9-1-1 services.

Through implementing this report's recommendations and developing a comprehensive E9-1-1 strategic plan, the State of Oklahoma will ensure that its citizens, as well as visitors to the state, will have access to high-quality E9-1-1 comparable to the E9-1-1 service levels that are available to the majority of the country today.

Terms used in the Executive Summary and Introduction:

9-1-1 or Basic 9-1-1: When the three-digit number is dialed, a call taker/dispatcher in the local call center answers the call. The emergency and its location are communicated by voice between the caller and the call taker.

E9-1-1: Enhanced 9-1-1. An emergency telephone system that includes network switching, database, and CPE elements capable of providing Selective Routing, Selective Transfer, Fixed Transfer, ANI, and ALI.

ALI: Automatic Location Identification. A feature of E9-1-1 service that displays the name and address associated with the number of the phone used to dial 9-1-1. A database managed by a database provider.

ANI: Automatic Number Identification. A feature that displays, at the Public Safety Answering Point, the number of the phone from which the 9-1-1 call was placed.

CPE: Customer Premise Equipment. Phone or terminal equipment located on the customer's premises. This equipment may be owned or provided by the customer or the phone company.

PSAP: Public Safety Answering Point. A facility equipped and staffed to receive 9-1-1 calls. In the context of this document, PSAPs are defined as those answering points that are equipped to receive E9-1-1 calls.

TTY/TTD: Teletypewriter/Telecommunications Device for the Deaf. Text Telephony Devices to assist deaf callers

2. INTRODUCTION

The E9-1-1 services currently available to *many* Oklahomans do not yet cover *all* of Oklahoma's citizens or its land mass. The findings contained in this report, based on surveys and interviews conducted in February through April 2007, identify the need for Oklahoma to upgrade areas that lack the Enhanced or E9-1-1 service. This report also contains recommendations that would standardize operating procedures and establish an E9-1-1 Program Office, which can ensure consistent statewide E9-1-1 service for all of Oklahoma.

Today, not all Oklahomans are covered by "Enhanced 9-1-1" service (E9-1-1). E9-1-1 is a service in which calls are automatically routed to the appropriate location and the emergency call taker is automatically provided the caller's name, call-back telephone number, and location. This critical information means that callers can expect help even in cases where the caller cannot speak or hear due to age, circumstances, or disability. Based on surveys conducted in March and April 2007, statewide, only 46 of Oklahoma's 77 counties are completely covered by wireline E9-1-1 service, and 58% of Oklahoma's population is not covered by wireless E9-1-1 service. This report focuses on un-served and under-served jurisdictions where Oklahoma can improve its emergency communication system by continuing to extend E9-1-1 throughout the state.

Un-served and under-served jurisdictions of Oklahoma tend to be located in rural and sparsely populated areas, where residents may lack physical addresses used to locate callers, and where public safety agencies are often not equipped to provide or deploy the E9-1-1 services. In these areas, basic 9-1-1 calls are often delivered to a local police department or sheriff's office without the caller's name, number, and location. Because of this, emergency call takers may not be able to identify the location of a child who dials 9-1-1, a person who is confused, or someone who is incapacitated or being purposefully kept from using the telephone. In addition, emergency call takers in this type of jurisdiction are more likely not to have TDD/TTY to communicate with citizens who have hearing or speech disabilities. According to the findings of this report, approximately 82% of Oklahoma's population is covered by TDD/TTY service; 7% of the population is not covered by TDD/TTY service; and for 11% of the population, it could not be confirmed whether there is TDD/TTY service (for more information, see section 4.1 E9-1-1 and the Americans with Disabilities Act).

In the un-served and under-served areas, conditions as described above have been shown to delay or block the delivery of help to citizens in need. Without the ease of access to E9-1-1 and the deployment of efficient life-saving information technology, a call for assistance can be delayed, directly increasing emergency response times and potentially resulting in the loss of lives and property. Oklahomans living in areas not covered by E9-1-1 services, where call takers do no have the additional life-saving data available, are more likely to suffer such losses.

A primary cause for the lack of E9-1-1 service in many of these locations is directly related to the lack of adequate funding. In Oklahoma, E9-1-1 services are paid for via a local E9-1-1 surcharge placed on wireline, wireless, and VoIP telephone customers. In order to receive such funds, local jurisdictions must have enacted the E9-1-1 surcharges on each of these communication services; however survey findings indicate a variety of situations that are impacting the ability to consistently fund E9-1-1 throughout Oklahoma as identified below:

- A number of counties lack the population and the associated telephone subscriber base necessary to fund the implementation and operation of E9-1-1 services. As such, those counties have not enacted an E9-1-1 surcharge on telecommunication services since it would not raise sufficient monies to fund the system.
- Additionally, in some Oklahoma counties, the ability for a local jurisdiction to fund the ongoing operation of the system is eroding as subscribers substitute wireless service in place of their wireline telephones. In these areas the wireless E9-1-1 surcharges are not adequate, leaving the community financially vulnerable to consumers' shift from wireline to wireless telecommunication services.

- In other areas the growth of wireless customers in Oklahoma places increased demands on the E9-1-1 system, and the current $0.50 wireless E9-1-1 surcharge may be less than the corresponding wireline fee in some locations.
- In other jurisdictions, the counties may not have any wireless surcharge, causing the overall E9-1-1 funding to decrease as consumers switch to wireless service from landline service.

Consumer research indicates that the general public will continue to switch services from traditional wireline, to wireless or to new services such as Voice over Internet Protocol (VoIP). In order to properly fund E9-1-1 for all of Oklahoma, a comprehensive funding model should be established that ensures a consistent surcharge is assessed to all current and future telecommunication services with the ability to access the public switched telephone network and place an emergency call for assistance.

It is also important to point out that, aside from the basic issues of E9-1-1 deployment, the survey also identified the need for basic operational procedures to be implemented to ensure high-quality, consistent E9-1-1 operations in Oklahoma. Some examples, as described below, are the lack of addressing standards for an effective ALI system, contingency planning for emergency situations, records retention on E9-1-1 calls, call taker training, and interconnection of private branch exchange (PBX) or multi-line telephone systems (MLTS) into E9-1-1.

Many public safety agencies do not have emergency contingency plans that could aid them if their communications center became incapacitated due to a natural disaster or a telecommunications outage. The implementation of a statewide E9-1-1 planning authority can not only guide the systematic deployment of E9-1-1, but can also ensure that all communities have contingency plans in place to accommodate and recover from a service-impacting major event, whether man-made or a natural disaster.

Statewide planning can also address the need for consistencies in critical E9-1-1 operating practices, such as the consistent application of recognized addressing standards supported by organizations such as the United States Postal Service and the National Emergency Number Association (NENA). Inconsistent application of addressing standards directly impacts the quality of the automatic location identification data on the E9-1-1 call. There is also no current uniform or consistent policy requiring the recording and retention of E9-1-1 calls. Records retention is a critical aspect of an emergency communications center and should be required as part of standard operating procedures.

There is also no requirement specifying the amount of training a new call taker should receive. Proper training is imperative in order to manage the daily demands of an E9-1-1 emergency communications center. The State should assist the local areas with telecommunicator training programs that ensure emergency number professionals are assisting E9-1-1 callers and meeting the requirements of federal mandates.

In addition, there is no state requirement for the deployment of E9-1-1 service within an institution, campus, or enterprise that is operating telephone services through the use of a Multi-Line Telephone System (MLTS), sometimes referred to as a Private Branch Exchange (PBX). While technology exists today to accommodate and transmit fully enhanced 9-1-1 location information to a public safety agency, many companies and residential facilities have not moved forward with the enhancements to this type of telephone system. In those environments, if an employee or resident needed to dial 9-1-1, the precise call-back number and location information would not be delivered to the public safety agency. Today, there are examples throughout the US where this type of telecommunications service or business operating remote office locations off of an MLTS/PBX system, has provided inaccurate information to 9-1-1, ultimately causing delays in the response times in critical situations. Legislation exists throughout the country to address this limitation, and Oklahomans would be better served to require MLTS and PBX systems to provide adequate E9-1-1. (See section 4.2: *E9-1-1 and Multi-Line Telephone Systems* for state list and sample legislation.)

Finally, there is no statewide single point of responsibility for addressing the above situations and leading the effort to achieve a statewide E9-1-1 system. The creation, funding, and adequate staffing of an Oklahoma Statewide E9-1-1 Program Office are critical to the success of a statewide goal. The Program Office should assume responsibility for planning, implementing, and establishing E9-1-1 standards and best practices, which will help Oklahoma achieve comprehensive deployment and common operating procedures. Currently, there are 39 states that have established such programs and that have created, staffed, and funded an office for the statewide deployment of E9-1-1. These programs include the establishment of State E9-1-1 Administrators, and this leadership has been instrumental in helping these states to deploy successful statewide E9-1-1 programs. Oklahoma should consider duplicating this model as some of its neighboring states, including Texas and New Mexico, have established State Administrators and have achieved successful E9-1-1 deployment programs.

3. RECOMMENDATIONS MADE IN THIS REPORT

Based on the findings in this assessment, the State of Oklahoma is encouraged to implement the following legislative, policy, funding, and technical changes to the existing 9-1-1 emergency communications system.

3.1 E9-1-1 Legislation and Policy Recommendations

The State of Oklahoma will need to modify current statutes and create new polices to provide all Oklahomans with E9-1-1 service. It is recommended that the State of Oklahoma take the following actions:

- Designate a state E9-1-1 Program Manager and Office.
- Encourage un-served and under-served jurisdictions to form regional alliances of county and municipal governments in order to fund the operation of E9-1-1 systems.
- Empower county commissioners and municipal governing bodies to impose an E9-1-1 surcharge by resolution or ordinance rather than a popular vote.
- Assist local jurisdictions to comply with all federal Americans with Disabilities Act (ADA) requirements and all Federal Communications Commission (FCC) orders and service standards in the delivery of E9-1-1 service.
- Define the telecommunication services addressed in future 9-1-1 legislation (as appropriate) to include wireline, wireless, VoIP, *and* "future telecommunication technologies capable of contacting a 9-1-1 call center" so that the laws keep pace with changes in telecommunication technology.
- Continue the Oklahoma Statewide Nine-One-One Advisory Board.
- Pass legislation requiring Multi-Line Telephone Systems (MLTS) to be E9-1-1 compliant.

3.2 E9-1-1 Funding Recommendations

It is recommended that the State of Oklahoma take the following actions:

- Replenish the "Oklahoma E911 Emergency Service Fund" to provide grants to un-served and under-served jurisdictions so they can fully implement E9-1-1 service.
- Create, fund, and adequately staff a state E9-1-1 Program Manager and Office with the mission to implement and maintain state-of-the-industry" E9-1-1 services for all Oklahomans. The duties of the E9-1-1 Program Manager and Office should be:
    - To create and maintain a statewide E9-1-1 plan to implement and upgrade E9-1-1 services. The plan should encourage regional cooperation in order to reduce costs and provide high-quality service.
    - To assist local jurisdictions in generating regional funding and providing regional administration of E9-1-1 systems
    - To encourage statewide utilization of national addressing standards for use by local jurisdictions
    - To seek out and administer funds, gifts, and grants
    - To provide or facilitate E9-1-1 call-taker training
    - To establish and adopt call-taker standards and minimum training levels
    - To create standards for minimal levels of E9-1-1 Automatic Location and Identification Service
    - To staff the Statewide 9-1-1 Advisory Board

  - To communicate service standards, prioritize improvements, and establish minimum PSAP reporting requirements for the program office to assess service levels.
  - To communicate the need for every PSAP to have and periodically test a contingency plan that includes the ability to re-route E9-1-1 calls and relocate PSAP operations in the event of an emergency that impedes service.
  - To continue ongoing work with the Oklahoma Statewide Nine-One-One Advisory Board.
- Encourage local enactment of wireline, wireless, and VoIP E9-1-1 surcharges in counties where subscribers do not currently pay such surcharges, and include "future public communication technologies" in the base against which the surcharge will be paid.
- Consider alternate or supplemental E9-1-1 funding mechanisms as have been enacted in other states. (i.e., California, Texas)
- Adopt funding mechanisms that minimize the effects when subscribers substitute one telecommunication technology (such as wireless or VoIP service) for another technology (such as traditional wireline service) on total E9-1-1 surcharge remittances.
- Adopt an E9-1-1 funding formula that will keep pace over time with the cost to provide E9-1-1 services.
- Provide resources necessary for the 13 Oklahoma Highway Patrol Field Troop communication centers to be equipped and trained to receive and handle E9-1-1 calls including voice and all associated data (ANI/ALI/notes) that may be transferred from Oklahoma PSAPs.

3.3 E9-1-1 Technical Recommendations

It is recommended that the E9-1-1 Program Office work with local jurisdictions to accomplish the following technical improvements to the system:

- Implement/upgrade E9-1-1 service in Oklahoma to cover every wireline, wireless, VoIP, and future telecommunication technology subscriber/user in the state.
- Implement TDD/TTY service for the deaf and hard of hearing in every PSAP so as to fully comply with the Americans with Disabilities Act (ADA).
- Create a reporting process and implement tools for PSAPs to easily provide service level information to the E9-1-1 Program Office.
- Develop a statewide E9-1-1 base map to provide high-quality digital mapping of the entire state and assign a standard city-style address to every identifiable structure. Such mapping and correlated geographic information can serve as critical components in support of emergency response, crisis planning, disaster recovery, and risk analysis.
- Assess the potential use of the Oklahoma OneNet IP network to enable next-generation E9-1-1 services as described in this report.

3.4 Proposed E9-1-1 Strategic Plan Principles

In order to develop and execute an E9-1-1 strategic plan, it is important to understand the *principles* that will guide the plan and the *constraints* within which project stakeholders agree to operate.

Principles are high-level beliefs or tenets that form the cornerstones for any large-scale plan. Once principles are adopted, all subsequent tasks can be measured by their advancement and support of the agreed-upon principles. Principles are not subject to change, until or unless there is an overwhelming reason to do so, such as the discovery

of new information, or if the principle is no longer applicable. At that time, it would be necessary for the project's stakeholders to agree upon new principles.

It is recommended that the Oklahoma Statewide Nine-One-One Advisory Board determine and document the principles they intend to uphold and the constraints they agree to respect in fulfilling their charter. In order to have a starting point to develop this plan, the following general principles and constraints are proposed, and it is recommended that the Statewide Nine-One-One Advisory Board explicitly affirm a set of principles to give direction to a statewide E9-1-1 coordinator and to facilitate measurement of progress towards its overall goals.

- All Oklahomans should be covered by E9-1-1 services for any device capable of dialing 9-1-1 and connecting to a network from any location in the state.
- Funding for initially implementing the E9-1-1 system in areas that are un-served or under-served may be supplied, in whole or in part, from a statewide fund such as the previously established but now depleted "Oklahoma E911 Emergency Service Fund."
- Any agreement to jointly fund or consolidate E9-1-1 operations on a regional basis, and the terms and conditions under which to do so, must be self-determined by representatives of the local jurisdictions involved.
- No jurisdiction will be asked to contribute funds from existing E9-1-1 surcharge revenues to operate the E9-1-1 system outside of their agreed (or newly agreed) regional footprint.
- In recognition of the time, effort, and commitment that have been invested in creating some existing E9-1-1 alliances—such as those that operate for the Association of Central Oklahoma Governments (ACOG), the South West Oklahoma Regional 9-1-1 Association, etc.—those alliances will remain "regionalized" as part of any proposed plan (although representatives of these alliances may be asked to consider expansion).
- The State of Oklahoma does not intend to take over the E9-1-1 system as part of a proposed statewide plan.
- Oklahoma's E9-1-1 system should adhere to all applicable federal laws and regulations.

The Oklahoma Statewide Nine-One-One Advisory Board should determine what, if any, other principles should guide E9-1-1 initiatives in the state. If any one of the stated principles is not supported by the Board, it should be removed and replaced with a corresponding statement representing the Board's belief. Any proposed plan should align with a set of principles that the Board fully endorses.

3.4.1 Potential Impediments to Achieving This Plan

In a survey of 54 Oklahoma county commissioners conducted in March and April of 2007, the consultant determined that there is support for upgrading E9-1-1 service in the state. In fact, 92.5% of county commissioners surveyed said that having the best E9-1-1 service in their counties is "one of [their] top priorities" or "important." When asked, no county commissioner indicated that E9-1-1 service "is not a high priority."

However, while it is important for leaders to support high-quality E9-1-1 service, it is equally important for leaders to recognize potential obstacles to achieving a comprehensive E9-1-1 plan. The survey of county commissioners revealed the following potential impediments to implementing E9-1-1:

- "No money or concern."
- "Lack of interest by officials."
- "Hard to choose the right systems."
- "A building for the equipment."

- "Difficult to deal with the phone company issues."
- "Addressing and cell towers"
- "No impartial consultation - vendor dominated."

In addition, the following general potential obstacles were identified during the course of the assessment:

- Lack of resources
- Lack of support from the public, public safety, telecommunications providers, state regulatory agencies, legislators, and other elected officials
- Lack of standards (technical and operational)
- Funding constraints
- Territorial concerns, cross-jurisdictional issues, and the unwillingness of independent public safety agencies to relinquish control
- Lack of coordination
- Existing basic 9-1-1 technology – it is possible that some systems may not be able to be upgraded to support E9-1-1 services
- Lack of education on the issues and importance of E9-1-1

3.4.2 Rural Wireless Service Providers and E9-1-1

When some Oklahoma counties or regions enact E9-1-1 wireless surcharges and then request that all cellular companies provide E9-1-1 wireless service, some small or rural wireless service providers are disproportionately financially impacted based on the particular technology they employ to identify the location of a wireless 9-1-1 caller. There are two predominant technologies for providing wireless location information for E9-1-1: a handset-based solution (global positioning system) and a cell tower/network-based solution (triangulation). For rural cellular companies that utilize the cell tower triangulation method, deploying that technology to all sites in a large county or region represents a significant capital cost as each cell tower must be upgraded. For some of those rural cellular service providers, their sole customer base may be spread throughout that particular region and their cell tower/network infrastructure is extensive in order to cover the entire, albeit sparsely populated, footprint. Conversely, some national wireless service providers may have handset-based (GPS) technology or fewer cell towers to upgrade as they are primarily focused on serving their out-of-region mobile customers who may be traversing an interstate highway through the region. Hence, on a company-by-company basis, a small rural wireless service provider can incur a significantly greater cost per customer (spread over a smaller base) to provide E9-1-1 wireless service throughout the county.

There is no simple solution to this situation that is fair to both small rural wireless service providers and large national providers, *and* that promotes the timely implementation of high-quality E9-1-1 services to cover all cellular customers. A state E9-1-1 administrator needs to understand the factors that affect all telecommunication service providers' abilities to provide E9-1-1 services in a timely manner when requested and in accordance with state law, and should work with all parties to achieve the best outcome for Oklahoma's citizens.

3.4.3 Oklahoma Locations With Weak or No Wireless Service

Some areas of Oklahoma do not have adequate wireless service coverage, and this lack of coverage inhibits cellular phone use in the event of an emergency. Anyone who has traveled extensively through the state knows there are pockets where one's wireless calls repeatedly drop or one cannot connect to the network at all. If one cannot connect to the network, one cannot call 9-1-1. In order for the state to have comprehensive wireless E9-1-1 coverage, it will be necessary to encourage carriers' expansion of wireless service in parts of the state that do not

currently have adequate cellular phone coverage. To a lesser extent, this same lack or weakness in wireless coverage can extend to individuals in buildings as well.

A state E9-1-1 administrator should work with service providers and contractors to understand the scope and location of areas where coverage is so weak that emergency 9-1-1 calls cannot be made successfully. Although there is no simple solution, the state E9-1-1 administrator should encourage service providers to strengthen signals in areas deemed most important—transportation routes, parks and recreational areas, locations prone to severe weather, hazardous material conduits, etc. The benefit to the community would be to improve the service of first responders to emergencies by providing cellular phone communication and allowing the public safety answering points to identify the physical location of all 9-1-1 callers. This functionality would, at a minimum, aid in the location of lost hikers, campers, and snowmobilers, as well as remotely located automobile accident victims.

3.5 Recommendations for Implementing Regional PSAPs

This report qualifies and quantifies the current level of E9-1-1 service available throughout Oklahoma, compares approaches taken by other states, and recommends a plan for achieving comprehensive E9-1-1 deployment by creating regional PSAPs to serve un-served areas of Oklahoma.

3.5.1 Criteria for Determining Proposed Regional PSAPs in Oklahoma

This section describes the criteria that were applied for designating regional PSAPs to serve Oklahoma's un-served or under-served areas.

3.5.1.1 Council of Government (COG) E9-1-1 Regions

The first criterion for regionalizing PSAPs leverages and builds upon the role of the applicable Oklahoma Councils of Government (COGs) in order to utilize their expertise and infrastructure to help coordinate activities in their constituent counties and municipalities, as well as collect and administer E9-1-1 funds. Because of geographic proximity, shared regional public safety issues, and experience working together in support of other COG tasks, it is logical to initially adhere to the existing COG footprint when determining potential regional alignments for E9-1-1.

The COG will likely require a small staff to perform tasks common to the multiple PSAPs that serve the COG's population. E9-1-1 staff functions at the COG level would include overseeing the addressing and mapping of counties, purchasing and project management for the implementation or upgrade of CPE, data management, quality management, etc.

The following criteria were then applied for each COG that has un-served or under-served areas within their footprint.

3.5.1.2 Existing E9-1-1 PSAPs within the COG

The second criterion for regionalizing PSAPs (within the COG) leverages and builds upon existing E9-1-1 capable PSAPs. If a county has one or more existing E9-1-1 PSAPs, they are candidates to become a regional PSAP, either for the county or for a multi-county region within the COG.

3.5.1.3 Existing E9-1-1 PSAPs within the COG with Spare Capacity

The third criterion for regionalizing PSAPs (within the COG) identifies opportunities to provide E9-1-1 service to the consolidated region with little or no upgrade necessary to the PSAP. These are instances where the existing trunks, positions, and staffing level in the PSAP are deemed sufficient to handle the predicted level of additional 9-1-1 calls for the region. Where all other factors are equal, this is an opportunity to expand service and leverage the existing call takers, CPE, and selective routing trunks to the PSAP. The regional PSAP would still incur the added costs for trunks from the end office to the selective router, if applicable.

3.5.1.4 Radio Interoperability for Consolidated Dispatch

The final criterion to consider is the tradeoff between two operating models for the regional PSAP:

1) If the newly proposed regional PSAP has radio interoperability with its agencies (or intends to implement a solution for radio interoperability), there is an opportunity to consolidate the dispatch function with the call taker function in the designated regional PSAP. The advantage to this configuration is that all E9-1-1 capabilities would be available to both the call taker and the dispatch functions. In addition, personnel would be able to perform both functions, if that is the PSAP's mode of operation.

2) If the newly proposed region does not have radio interoperability with its agencies, the dispatch function would remain located at the existing dispatch point for the agency. In this configuration, 9-1-1 calls would be answered at the regional PSAP. The dispatch-able 9-1-1 calls, along with the ANI/ALI information and notes, would then be transferred to the remote dispatch center or secondary PSAP.

3.5.2 PSAP Regionalization Example: South West Oklahoma Regional 9-1-1 Association

The Southwest Oklahoma Regional 9-1-1 Association represents an example of how Oklahoma county and municipal governments can form an alliance to administer improved 9-1-1 services.

The following is excerpted from The South West Oklahoma Regional 9-1-1 Association web site (http://www.swor911.org/):

> The mission of the South West Oklahoma Regional 9-1-1 Association is to establish all phases of 9-1-1 services to the six counties in which we serve. Our goal is to assist the counties, and their cities and towns, in acquiring the monies, equipment, technology and training needed to implement an Enhanced 9-1-1 telephone system which can accommodate the different phases associated with landline, wireless and IP telecommunications….
>
> Each county appointed five members from its community, ranging from commissioners to business owners, to represent their perspective counties on the Southwest Oklahoma Regional 9-1-1 Association's Board of Directors. The Board of Directors determines policy for the Association. With each county working together sharing resources and ideas, a more efficient and unified 9-1-1 system can be established.

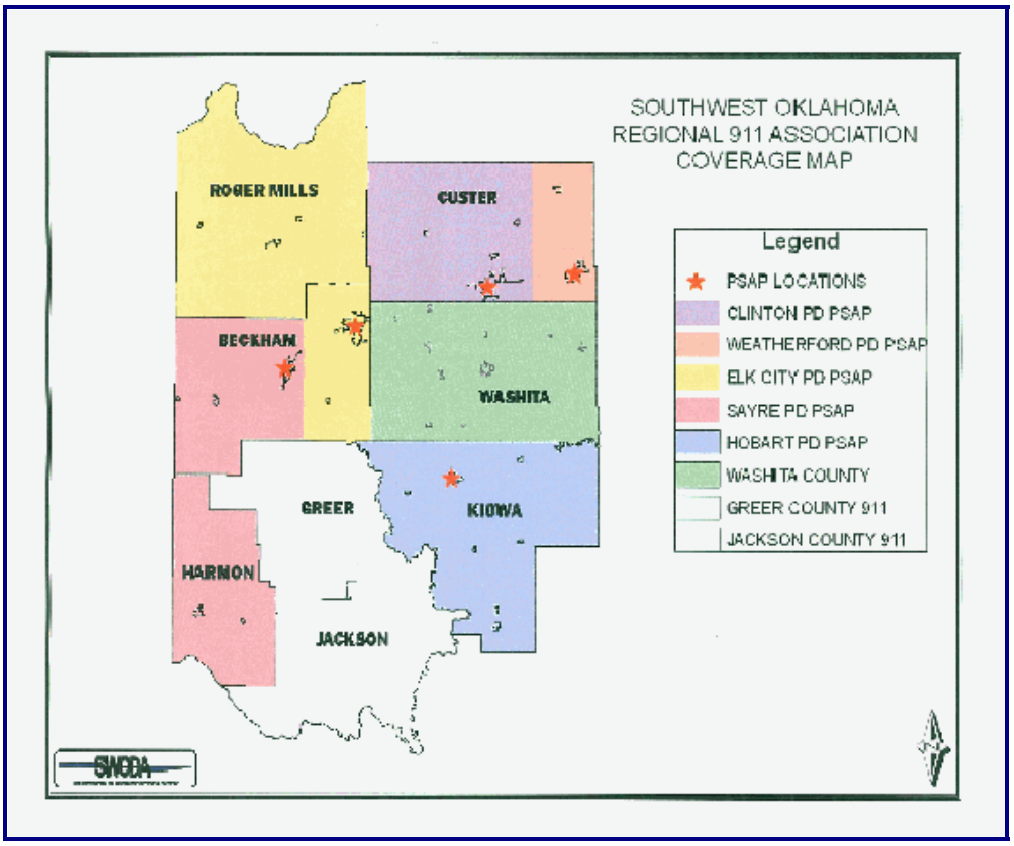

Figure 1: The Southwest Oklahoma Regional 9-1-1 Association

The following is the most recent resolution passed by The South West Oklahoma Regional 9-1-1 Association to fund the operation of the 9-1-1 system for its members.

Landline

Resolution 2006-09-21

SOUTHWEST OKLAHOMA REGIONAL 911 ASSOCIATION

A resolution of the board of directors of the Southwest Oklahoma Regional 911 Association establishing the nine-one-one emergency telephone fee rate for the calendar year 2007.

WHEREAS, the voters of Beckham, Custer, Harmon, Kiowa, Roger Mills and Washita counties have approved the acquisition and operation of an emergency telephone service, together with the levy or imposition of user fee for such service; and

WHEREAS, said approving authority, service and fee are authorized pursuant to the Nine-One-One Emergency Act, 63 O.S. Supp., 1987, Section 2811 et seq., amended.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of the Southwest Oklahoma Regional 911 Association that is does hereby establish the rate for Nine-One-One Emergency Telephone Service fee for the calendar year 2007 at fifteen percent (15%) of the recurring charges as designated by the tariff for exchange telephone service or its equivalent within said counties in accordance with said Act beginning January 1, 2007.

ADOPTED and APPROVED by the Directors of the Southwest Oklahoma Regional 911 Association this 21st day of September, 2006.

Wireless

Users of cellular telephones in Beckham, Custer, Greer, Harmon, Jackson, Kiowa, Roger Mills and Washita Counties should be assessed a nine-one-one emergency wireless telephone fee not to exceed the maximum amount required by law (currently 50 cents per month per wireless connection) for wireless connection; providing for the assessment and levying of such a fee subject to the approval of the voters of said counties.
Each county held an election regarding above mentioned resolution and all counties voted in favor of the fee.

Fees are collected, disbursed and accounted for in accordance with Oklahoma Statutes, specifically the Oklahoma Emergency Telephone Act, Title 63 § 2801-2821 and the Wireless 911 Act, Title 63 § 2841-2846.

3.5.3 Proposed Regional PSAPs

The table below lists proposed regional PSAPs for Oklahoma's un-served or under-served areas. It is proposed that the following jurisdictions create new regional PSAPs or extend coverage of existing E9-1-1 PSAPs to provide E9-1-1 service throughout the region.

Region	County	Existing E9-1-1 PSAP (if applicable)	Comment
E9-1-1 Region # 1	Texas	Guyman	Guyman should be able to support the calls of all 3 counties with its current capacity or the OHP could become the regional PSAP.
	Cimarron		
	Beaver		
E9-1-1 Region # 2	Woods	Alva	Alva (E9-1-1) should be able to support both counties with existing capacity.
	Harper		
	Alfalfa		Alfalfa County (except for Cherokee City) to regionalize
	Grant		Grant has regionalized with Woods.
E9-1-1 Region # 3	Woodward	City of Woodward (newly upgraded)	City of Woodward should be able to support all 4 counties with 2 trunks and 2 positions or the Major County Sheriff's Office could be upgraded.
	Dewey		
	Ellis		
	Major		
E9-1-1 Region # 4	Caddo	Anadarko	Anadarko Police Department or Caddo County Sheriff Department
	Blaine		
	Kingfisher		
E9-1-1 Region # 5	Craig	Vinita	Bartlesville Police Department and Vinita Police Department could use the combined telephone subscriber base of the three counties base to create an E9-1-1 region that would encompass Nowata
	Nowata		
	Washington	Bartlesville	Bartlesville Police Department and Vinita Police Department could use the combined telephone subscriber base of the three counties base to create an E9-1-1 region that would encompass Nowata
E9-1-1 Region # 6	Cotton		No current E9-1-1 PSAPs
	Love		
	Jefferson		
E9-1-1 Region # 7	Garvin	Pauls Valley	Pauls Valley Police Department could support the two counties with one additional position

Region	County	Existing E9-1-1 PSAP (if applicable)	Comment
	Murray		
E9-1-1 Region # 8	Atoka	Atoka	
	Choctaw	Hugo	Hugo Police Department could cover Choctaw County or the county could join with Atoka County's existing countywide system
E9-1-1 Region # 9	Coal		
	Pittsburg	McAlester	McAlester Police Department could support a countywide system plus Coal County with one additional seat
E9-1-1 Region # 10	Latimer	Wilburton	
	McCurtain	Idabel	City of Idabel 911 Communications Center would be able to cover the portions of Latimer and Pushmataha currently without E9-1-1 service
	Pushmataha	Antlers	

Table 1: Proposed Regional Alignment of Jurisdictions

There are no proposed E9-1-1 administrative changes for PSAPs serving the following counties.

No Change to Current E9-1-1 Administration/Region
Adair County
Beckham County
Bryan County
Canadian County
Carter County
Cherokee County
Cleveland County
Comanche County
Custer County
Delaware County
Garfield County
Grady County
Greer County

No Change to Current E9-1-1 Administration/Region
Harmon County
Haskell County
Hughes County
Jackson County
Johnston County
Kay County
Kiowa County
Le Flore County
Logan County
McClain County
Mayes County
Okfuskee County
Oklahoma County
Osage County
Ottawa County
Pawnee County
Pontotoc County
Pottawatomie County
Roger Mills County
Rogers County
Seminole County
Tillman County
Tulsa County
Wagoner County

Table 2: Counties with No Proposed Changes

It is proposed that the following counties extend their existing E9-1-1 coverage from one or more cities to cover the entire county.

Expand E9-1-1 Coverage Countywide
Creek County
Lincoln County
McIntosh County
Marshall County
Muskogee County
Noble County
Okmulgee County
Payne County
Sequoyah County
Stephens County
Washita County

Table 3: Counties with Proposed Expansion

3.5.4 Regional PSAPs Map

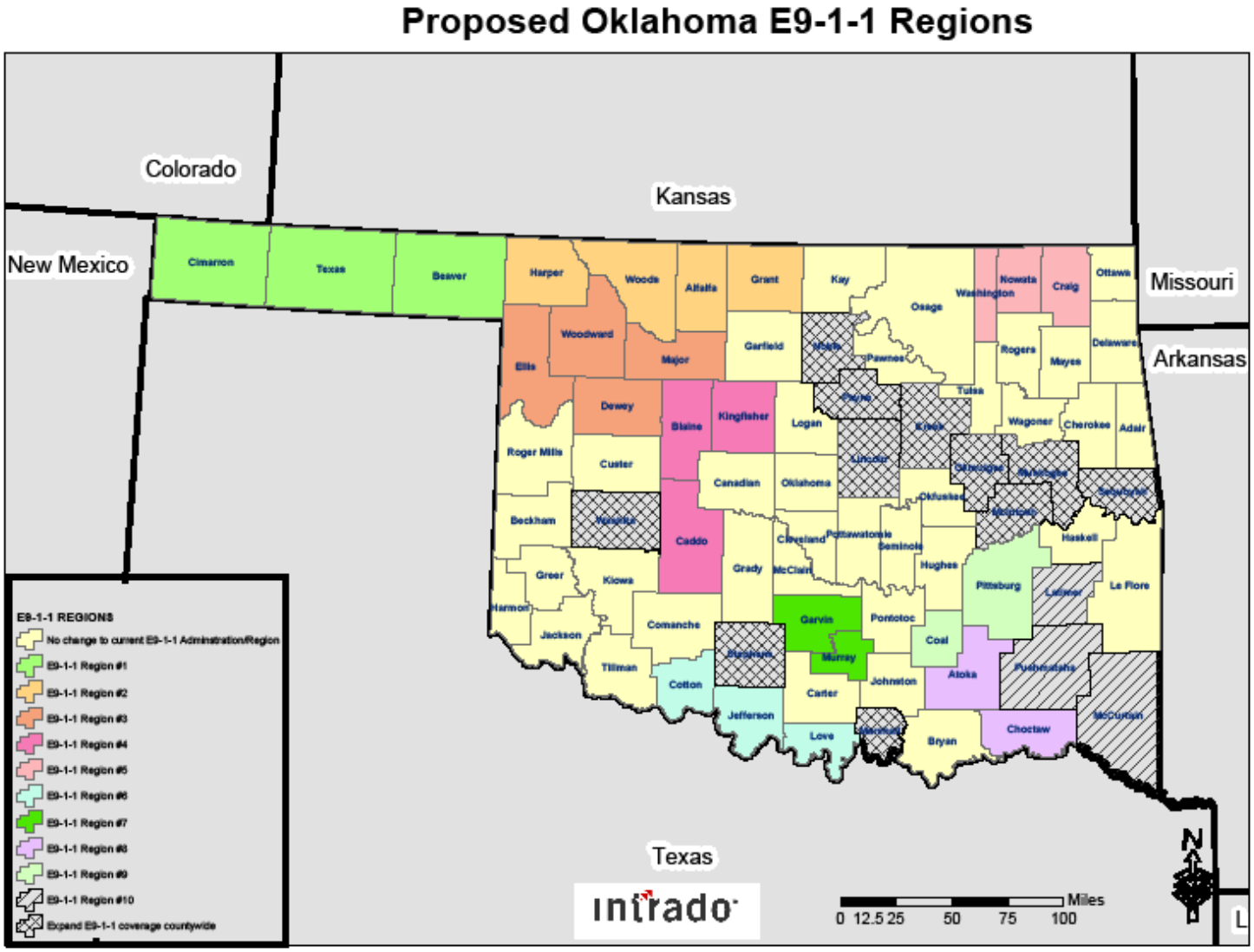

Figure 2: Proposed E9-1-1 Regional PSAPs Map

3.5.5 Oklahoma E9-1-1 Implementation/Upgrade Summary

The following table summarizes the proposed E9-1-1 implementations and upgrades for counties throughout the state of Oklahoma.

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
Northern Oklahoma Development Association (NODA)	Alfalfa	County	Cherokee	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Cherokee City Police Department	Cherokee	No Change	No Change	Implement Phase I/II
	Blaine	Blaine County Sheriff's Department	Watonga	Upgrade to E9-1-1	in process	Implement Phase I/II
		Geary Police Department	Geary	Upgrade to E9-1-1	in process	Implement Phase I/II
	Garfield	Enid Police Department	Enid	No Change	No Change	Implement Phase I/II
	Grant	*Covered by Woods County PSAP*	Alva	No Change	In process	In process with Woods
	Kay	Kay County Sheriff's Office	Newkirk	No Change	No Change	Implement Phase I/II
		Ponca City Police Department	Ponca City	No Change	No Change	Implement Phase I/II
		Blackwell Police Department	Blackwell	No Change	No Change	Implement Phase I/II
		Tonkawa Police Department	Tonkawa	No Change	No Change	Implement Phase I/II
	Kingfisher	Kingfisher County Sheriff Department	Kingfisher	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Hennessey Police Department	Hennessey	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Major	Major County Sheriff's Office	Fairview	Upgrade to E9-1-1	No Change	Implement Phase I/II
	Noble	Noble County Sheriff	Perry	Upgrade to E9-1-1	No Change	Implement Phase I/II
		Perry Police Department	Perry	No Change	No Change	Implement Phase I/II
South Western Oklahoma Development Authority (SWODA)	Beckham	Elk City Police Department	Elk City	No Change	In Progress	No Change
		Sayre Police Department	Sayre	No Change	In Progress	No Change
	Custer	Clinton Police Department	Clinton	No Change	No Change	No Change

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
		Weatherford Police Department	Weatherford	No Change	No Change	No Change
	Harmon	Hollis Police Department	Hollis	No Change	No Change	No Change
	Kiowa	Hobart Police Department	Hobart	No Change	In Progress	No Change
	Roger Mills	*Covered by Elk City PSAP*		No Change	In Progress	No Change
	Washita	Cordell Police Department	Cordell	No Change	No Change	Implement Phase I/II
	Greer	Greer County Sheriff's Department	Mangum	No Change	No Change	Implement Phase I/II
	Jackson	Altus Police Department	Altus	No Change	No Change	Implement Phase I/II
Oklahoma Economic Development Association (OEDA)	Beaver	Beaver County Sheriff's Department	Beaver	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Cimarron	Cimarron County Sheriff's Office	Boise City	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Texas	Guymon Police Department	Guymon	No Change	County	Implement Phase I/II
	Dewey	Dewey County Sheriff's Office	Taloga	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Ellis	Ellis County Sheriff's Department	Arnett	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Woodward	Woodward County Sheriff's Office	Woodward	In process	Add Address	Upgrade Phase I to Phase II
		Woodward Police Department	Woodward	Upgrade to E9-1-1	No Change	Upgrade Phase I to Phase II
	Harper	Harper County Sheriff's Office	Buffalo	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Woods	Laverne Police Department	Laverne	No Change	No Change	Implement Phase I/II
		Woods County 911	Alva	No Change	No Change	No Change
Association of Central Oklahoma Governments (ACOG)	Canadian	El Reno Police Department	El Reno	No Change	No Change	No Change
		Yukon Police Department	Yukon	No Change	No Change	No Change
		Mustang Police Department	Mustang	No Change	No Change	No Change

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
	Cleveland	Cleveland County Sheriff's Office	Norman	No Change	No Change	No Change
		Norman Police Department	Norman	No Change	No Change	No Change
		Moore Emergency Operations Center	Moore	No Change	No Change	No Change
		Noble Police Department	Noble	No Change	No Change	No Change
	Grady	Tuttle Police Department	Tuttle	No Change	No Change	No Change
	Logan	Guthrie Police Department	Guthrie	No Change	No Change	No Change
	McClain	Newcastle Police Department	Newcastle	No Change	No Change	No Change
	Oklahoma	Oklahoma County Sheriff's Office	Oklahoma City	No Change	No Change	No Change
		Midwest City Emergency Operations Center	Midwest City	No Change	No Change	No Change
		Del City Police Department	Del City	No Change	No Change	No Change
		Tinker AFB Fire Department	Tinker AFB	No Change	No Change	No Change
		The Village Police Department	The Village	No Change	No Change	No Change
		Nichols Hills Police Department	Nichols Hills	No Change	No Change	No Change
		Edmond Central Communications	Edmond	No Change	No Change	No Change
		Bethany Police Department	Bethany	No Change	No Change	No Change
		Warr Acres Police Department	Warr Acres	No Change	No Change	No Change
		City of Choctaw Police Department	Choctaw	No Change	No Change	No Change
		EMSA – Secondary		No Change	No Change	No Change
		Oklahoma City Police Department	Oklahoma City	No Change	No Change	No Change
Indian Nations Council of Governments (INCOG)	Creek	Sapulpa Police Department	Sapulpa	No Change	No Change	Phase I

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
		Mannford Police Department	Mannford	No Change	No Change	Upgrade Phase I to Phase II
		Bristow Police Department	Bristow	Upgrade to E9-1-1	No Change	Upgrade Phase I to Phase II
	Osage	Osage County Sheriff's Office	Pawhuska	No Change	No Change	Implement Phase I/II
	Tulsa	Tulsa PSRC-City and County	Tulsa	No Change	No Change	Upgrade Phase I to Phase II
		Skiatook Police Department	Tulsa	No Change	No Change	Upgrade Phase I to Phase II
		Collinsville Police Department	Tulsa	No Change No Change	No Change	Upgrade Phase I to Phase II
		Owasso Police Department			No Change	Upgrade Phase I to Phase II
		Broken Arrow Police Department	Tulsa	No Change No Change	No Change	Upgrade Phase I to Phase II
		Bixby Police Department	Tulsa		No Change	Upgrade Phase I to Phase II
		Sand Springs Police Department	Tulsa	No Change No Change	No Change	Upgrade Phase I to Phase II
		Jenks Police Department	Tulsa		No Change	Upgrade Phase I to Phase II
		Glenpool Police Department	Tulsa	No Change	No Change	Upgrade Phase I to Phase II
Association of South Central Oklahoma Governments (ASCOG)	Caddo	Caddo County Sheriff's Office	Anadarko	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Anadarko Police Department	Anadarko	No Change	No Change	Implement Phase I/II
		Carnegie Police Department	Carnegie	Upgrade to E9-1-1	N/R	Implement Phase I/II
	Comanche	Comanche County E 911	Lawton	No Change	No Change	Implement Phase I/II
		Lawton Police Department	Lawton	No Change	No Change	Implement Phase I/II
	Cotton	Cotton County Sheriff's Office	Walters	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Grady	Grady County Sheriff's Department	Chickasha	No Change	No Change	No Change

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
		Chickasha Police Department	Chickasha	No Change	No Change	No Change
	Jefferson	Jefferson County Sheriff's Office	Waurika	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	McClain	McClain County Communications Center	Purcell	No Change	No Change	No Change
	Stephens	Stephens County Communications Center	Duncan	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Duncan City Police Department	Duncan	No Change	No Change	Implement Phase I/II
		Marlow Police	Marlow	No Change	No Change	Implement Phase I/II
		Department Comanche Fire and Police	Comanche	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Tillman	Frederick Police Department	Frederick	No Change	No Change	Implement Phase I/II
Kiamichi Economic Development District of Oklahoma (KEDDO)	Choctaw	Choctaw County	Hugo	Upgrade to E9-1-1	No Change	Implement Phase I/II
		Hugo Police Department (City)	Hugo	No Change	No Change	Implement Phase I/II
	Haskell	Stigler Police Department	Stigler	No Change	No Change	Implement Phase I/II
	Latimer	Latimer County Sheriff	Wilburton	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Wilburton	Wilburton	No Change	No Change	Implement Phase I/II
	LeFlore	Le Flore County E911	Poteau	No Change	No Change	Upgrade Phase I to Phase II
		Pocola Police Department	Pocola	No Change	No Change	Upgrade Phase I to Phase II
		Poteau Police Department	Poteau	No Change	No Change	Upgrade Phase I to Phase II
	McCurtain	City of Idabel 911 Communications Center	Idabel	No Change	No Change	Implement Phase I/II
		Broken Bow Police Department	Broken Bow	Upgrade to E9-1-1	N/R	Implement Phase I/II
	Pittsburg	Pittsburg Sheriff's Office	McAlester	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		McAlester Police Department	McAlester	No Change	No Change	Implement Phase I/II

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
	Pushmataha	Pushmataha County	Antlers	partial	partial	Implement Phase I/II
		Antlers Police Department	Antlers	No Change	No Change	Implement Phase I/II
Southern Oklahoma Development Association (SODA)	Atoka	Atoka County Sheriff's Office	Atoka	No Change	No Change	Implement Phase I/II
	Bryan	Durant Police Department	Durant	No Change	partial	Implement Phase I/II
	Carter	Ardmore/Carter County 911Center	Ardmore	No Change	No Change	Implement Phase I/II
		Healdton Police Department	Healdton	No Change	No Change	Implement Phase I/II
	Coal	Coal County Sheriff's Department	Coalgate	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Garvin	Garvin County Sheriff's Office	Pauls Valley	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Pauls Valley Police Department	Pauls Valley	No Change	No Change	Implement Phase I/II
	Johnston	Johnston County Sheriff's Department	Tishomingo	No Change	No Change	No Change
	Love	Love County Sheriff Department	Marietta	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Marshall	Marshall County Sheriff's Office	Madill	No Change	N/R	Implement Phase I/II
	Murray	Sulphur Police Department	Sulphur	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Davis Police Department	Davis	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Pontotoc	Pontotoc County Ada 911 Ok	Ada	No Change	No Change	No Change
Eastern Oklahoma Development District (EODD)	Adair	Adair County E9-1-1	Stilwell	No Change*	Add Address	No Change
	Cherokee	Cherokee County 9-1-1	Tahlequah	No Change	No Change	Upgrade Phase I to Phase II
	McIntosh	Eufaula Police Department	Eufaula	No Change	No Change	Implement Phase I/II
	Muskogee	Muskogee County Jail	Muskogee	Upgrade to E9-1-1	Add Address	Implement Phase I/II
		Muskogee Police Department	Muskogee	No Change	No Change	Implement Phase I/II

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
	Okmulgee	Okmulgee County 911	Okmulgee	No Change	No Change	No Change
		Henryetta Police Department	Henryetta	No Change	No Change	No Change
	Sequoyah	Sequoyah County 911	Sallisaw	No Change	50%	Implement Phase I/II
		Muldrow Police Department	Muldrow	No Change	No Change	Implement Phase I/II
	Wagoner	Coweta Police Department	Coweta	No Change	No Change	Upgrade Phase I to Phase II
		Wagoner Police Department	Wagoner	No Change	No Change	Upgrade Phase I to Phase II
Central Oklahoma Economic Development District (COEDD)	Creek					
	Hughes	Holdenville Police Department	Holdenville	No Change	No Change	Implement Phase I/II
	Lincoln	Lincoln County Sheriff	Chandler	Upgrade to E9-1-1	N/R	Implement Phase I/II
		Chandler Police Department	Chandler	No Change	No Change	Implement Phase I/II
	Okfuskee	Okemah Police Department	Okemah	No Change	No Change	Implement Phase I/II
	Pawnee	Pawnee County Sheriff's Office	Pawnee	Partial	Add Address	Upgrade Phase I to Phase II
		Cleveland Police Department	Cleveland	No Change	No Change	
	Payne	Payne County Sheriff's Department	Stillwater	No Change	No Change	No Change
		Stillwater Police Department	Stillwater	No Change	No Change	No Change
		Cushing Police Department	Cushing	No Change	No Change	No Change
		Perkins Police Department - Iowa Tribe	Perkins	No Change	No Change	No Change
		Yale Police Department	Yale	No Change	No Change	No Change
	Pottawatomie	Pottawatomie County E911	Tecumseh	No Change	No Change	Implement Phase I/II
		Shawnee Police Department	Shawnee	No Change	No Change	Implement Phase I/II
	Seminole	Seminole County 911 Agency	Seminole	No Change	No Change	No Change

COG	County	Agency/PSAP	Location	Wireline E911 Requirement	E9-1-1 Address Requirement	Wireless E911 Requirement
Grand Gateway Economic Development Association (GGEDA)	Craig	Vinita Police Department	Vinita	No Change	No Change	Upgrade Phase I to Phase II
	Delaware	Delaware County Sheriff's Office	Jay	No Change	No Change	No Change
		Grove Police Department	Grove	No Change	No Change	No Change
	Mayes	Mayes Emergency Services Trust Authority	Pryor	No Change	No Change	No Change
	Nowata	Nowata County Sheriff's Department	Nowata	Upgrade to E9-1-1	Add Address	Implement Phase I/II
	Ottawa	Ottawa County 911	Miami	No Change	No Change	No Change
	Rogers	Rogers County Sheriff's Office	Claremore	No Change	No Change	Implement Phase I/II
		Inola Police Department	Inola	N/R	N/R	
		Claremore Police Department	Claremore	No Change	No Change	
	Washington	Bartlesville Police Department	Bartlesville	No Change	No Change	Implement Phase I/II

Table 4: E9-1-1 Implementation/Upgrade Summary

3.5.6 High-Level Tasks for Regionalizing and Implementing E9-1-1

The following are high-level project plan tasks for regionalizing and implementing E9-1-1 throughout the state of Oklahoma. A more detailed plan is included in section 14: *E9-1-1 Implementation Guide*.

3.5.6.1 PSAP Regionalization Tasks

1. Form a combined administering board by entering into an agreement between the governing bodies of each entity in accordance with the Interlocal Cooperation Act. Administering board tasks and financial responsibilities include:
    a. Funding Mechanisms (i.e., Bonds, Grants)
    b. Agency Fees and Contributions
    c. Cities and County Contributions
    d. Determine location for fallback center
    e. Determine regional PSAP accounting, employee benefits, and legal council
    f. Executive Board Development, Member nominations and appointments
    g. Development of all bi-laws and agreements
    h. Development of Inter-local Cooperative Agreement
2. Create a specific plan for regionalization using the generic plan in this report
3. Propose, enact, and initiate collection of E9-1-1 surcharges to fund operations
4. Apply for applicable grants from the Emergency Service Fund to implement E9-1-1
5. Locate new PSAP or determine consolidating service in an existing PSAP
6. Recruit director for regional PSAP(s)
    a. External search and internal assessment process
7. Develop user agency agreements
    a. Secure signature agreements from each user agency
8. Facility purchase and development
    a. Secure land, secure architect (RFPs as required)
    b. Develop facility designs and implementation of equipment into plans (RFPs as required)
    c. Construction of facility and perimeter (RFPs as required)
9. Physically address all structures in the Service Area
10. Solution Integration and Infrastructure Design
    a. Hire/contract IT Manager
    b. Analyze/procure network, call handling and CAD
    c. If appropriate, develop RFP's for new CAD/RMS and other systems
11. Data collection and verification:
    a. Collect and compile data for mapping, phone logs, recordings, SOPs, Rules and Regulations
12. Determine cutover logistics with telephone, radio vendor, logging recorder vendors, etc.
    a. Develop comprehensive "cutover plans and project timelines" with all vendors
    b. Place all network orders, installation and connectivity testing
    c. Verify connectivity from all points to the consolidation center
    d. Installation of all new equipment, phone lines, cables, network, etc.
13. Operations/Administration
    a. Advertise for Administrative position and hire
    b. Selection of medical/benefits providers
    c. Establish all protocols for employment once hired

   d. Cross train all call-takers and dispatchers on new standard operating procedures and training materials
   e. Conduct full assessment for all supervisory positions and promote accordingly
   f. Letter of intent to all new and existing employees who plan to transition
   g. Development and standardization of standard operating procedures
   h. Development of standardization of all training materials and program
   i. Development and standardization for all field units to the dispatching protocols
   j. Conduct training for all field personnel
14. Testing of all Equipment
   a. Establish connectivity and test for radios, phones, logging recorder, Information Systems, etc.
   b. Begin integration of all CAD/RMS information into new CAD/RMS systems
   c. Complete mapping integration
   d. Delivery and installation of console and office furniture
   e. Begin "staggered" cutover: smallest agency first; the largest agency last

3.5.6.2 Regional Wireline E9-1-1 Implementation Tasks (see E9-1-1 Implementation Guide for detail)

1. Establish Detailed Deployment and Communications Plan
2. Establish a Master Deployment Schedule
3. Communication with Vested Parties
4. Addressing
5. Mapping
6. CPE
7. Network
8. Database Services
9. Testing and Launch
10. Maintenance and Ongoing Support

3.5.6.3 Regional Wireless Implementation Tasks (see E9-1-1 Implementation Guide for detail)

1. Implement Required PSAP Updates
2. Develop a Project Budget
3. Issue Request for Service
4. Establish Contracts and Agreements
5. Support PSAP Data Collection
6. Wireless Solution Selection
7. Carriers Establish Connectivity
8. Call Routing
9. Data Provisioning
10. Testing and Launch
11. Maintenance and Ongoing Support

4. OTHER E9-1-1 ISSUES AND RECOMMENDATIONS

4.1 E9-1-1 and the Americans with Disabilities Act (ADA)

The Department of Justice (DOJ) Title II, Chapter 4 of the Americans with Disabilities Act (ADA), requires that all PSAPs provide direct and equal access to their services for people with disabilities who use TDD or TTY. TDD is a telecommunications device for the deaf, an electronic device for text communication via a telephone line, used when a party has hearing or speech difficulties. Other names for TDD include TTY (telephone typewriter or teletypewriter). "Direct access" means that PSAPs must directly receive TTY calls without relying on an outside relay service or third-party services. "Equal access" means that the telephone emergency services provided for TTY users are as effective as those provided for people who make voice calls. Access must be equal in terms of response time, response quality, hours of operation, and all other features offered (such as automatic number identification, automatic location identification, and automatic call distribution).

In order to provide equal access to TTY users, every call-taking position within the PSAP must have its own TTY or TTY-compatible equipment. PSAPs must have systems that enable call takers to handle TTY calls as properly, promptly, and reliably as voice calls. In addition, the ADA requires that TTY equipment must be maintained and tested at least as often as voice telephone equipment, to ensure that the equipment is operating properly.

According to the findings of this report, approximately 82% of Oklahoma's population is covered by TDD/TTY service; 7% of the population is not covered by TDD/TTY service; and for 11% of the population, it could not be confirmed whether there is TDD/TTY service.

The DOJ provides a checklist designed to identify common problems with the accessibility of a state or local government's E9-1-1 and emergency communications services. Further information regarding the ADA and associated E9-1-1 requirements can be found at on the following government sites:

- ADA Best Practices Tool Kit for State and Local Governments: http://www.ada.gov/pcatoolkit/chap4toolkit.htm#Anchor-47857
- Title II Checklist: http://www.usdoj.gov/crt/ada/pcatoolkit/chap4chklist.htm

4.2 E9-1-1 and Multi-Line Telephone Systems (MLTS)

Multi-Line Telephone Systems (MLTS), which include Private Branch Exchange (PBX) and Computerized Branch Exchange (CBX) telephone systems, usually provide only the phone number and location of the billing address to 9-1-1 centers. At many large businesses and corporations, one MLTS system provides phone service for several different buildings at different addresses, some perhaps miles away. Multi-story structures with several thousand square feet of office space on each floor with multiple suites, rooms, and cubicles also make it difficult to locate a particular telephone initiating a call. Technical solutions, including databases linking internal phone numbers (extensions) to more precise locations such as suite/apartment number and/or floor level, are available. While these solutions can provide correct addresses and locations within buildings or campus-type settings, they are not mandated or being used on a widespread basis. Therefore, a gap in the public safety delivery system exists for those individuals who dial 9-1-1 in an emergency from private businesses, government entities, and certain multi-tenant residences that utilize MLTS or PBX phone systems. Most of the populous at large which use a MLTS system are unaware of the problem associated with the use of telephone systems that do not provide totally accurate ANI/ALI information to the local PSAP for E9-1-1 assistance.

The State of Oklahoma is encouraged to align itself with the position the National Emergency Number Association (NENA) has taken in support of proposed state and federal legislation regarding MLTS. Today, there is no state

requirement for the deployment of E9-1-1 service within a company that is operating telephone services through the use of a Multi-Line Telephone System (MLTS). While technology exists today to accommodate and transmit fully enhanced 9-1-1 location information to a public safety agency, many companies and residential facilities have not moved forward with the enhancements to this type of telephone system. In those environments, if an employee or resident needed to dial 9-1-1, the precise call-back number and location information would not be delivered to the public safety agency.

The excerpt below is from the NENA publication *Legislative Agenda for the 110th Congress* (January 29, 2007):

> One of the most over-looked areas where E9-1-1 is not generally available is MLTS, including PBX systems. Many people who work for large organizations that have their phone systems set up on PBX systems do not have E9-1-1 capability. The federal government is no exception, and many federal agencies do not have E9-1-1 available to their employees.
>
> As recently as 2003 the FCC examined establishing a federal requirement concerning E9-1-1 for MLTS, but declined to implement the requirement, which left the issue to the states. A prime reason for the refusal to act was a concern that such a federal requirement was cost prohibitive to many businesses. Unfortunately, to date only a handful of states have taken action, and many of the state laws are limited at best. Just as lives were lost due to a lack of E9-1-1 for VoIP services—prompting the FCC to act—lives have been lost due to a lack of E9-1-1 for MLTS, and the FCC should reconsider promulgating E9-1-1 requirements for MLTS as well. This is particularly true today given the advancement of technology that has made MLTS E9-1-1 solutions increasingly affordable.
>
> First, Congress and the federal government should lead by example, and every federal agency should ensure that E9-1-1 is available in every federal office. The General Services Administration (GSA) should consider requiring all federal agencies to provide E9-1-1 in their facilities. Second, Congress should work with public safety, industry, and the federal government (including the FCC and the ICO[1]) to advance MLTS E9-1-1 solutions and regulations where necessary and appropriate. (National Emergency Number Association, 2007)

There are 11 states listed on the NENA website that have passed some form of legislation in reference to MLTS. There is also an example of proposed legislation local governments may utilize for possible increased funding for E9-1-1 services. The cost for upgrading end-customers' equipment and services necessary to comply with the recommended MLTS 9-1-1 regulation would be the responsibility of the enterprise, not the Oklahoma public safety agency or jurisdiction.

MLTS Reference Information and State Status of MLTS/PBX legislation:

http://www.nena.org/pages/Content.asp?CID=156&CTID=41

Technical Information Document on Model Legislation, Enhanced 9-1-1 for Multi-Line Telephone Systems:

http://www.nena.org/media/files/MLTS_ModLeg_Nov2000.pdf

[1] ICO is defined by NENA as the 9-1-1 Implementation and Coordination Office (ICO), a joint program office of the National Highway Traffic Safety Administration (NHTSA), within the Department of Transportation, and the National Telecommunications and Information Administration (NTIA), within the Department of Commerce.

4.3 E9-1-1 and the Oklahoma Highway Patrol Field Troop Communication Centers

Often, Oklahoma PSAPs must transfer emergency calls to an Oklahoma Highway Patrol Field Troop Communication Center. Currently, although the 13 Oklahoma Highway Patrol Field Troop Communication Centers can receive transferred calls, they are not equipped to receive the data (ANI / ALI / call taker notes) associated with the call. This means that they do not have access to information the E9-1-1 call-taker collected regarding the emergency, nor do they automatically receive the location of the caller or the call-back number in the event the call drops or they need to re-contact the caller. Valuable time is lost and potential errors can occur when the Oklahoma Highway Patrol must collect the caller's information all over again.

The solution is to provide the 13 Oklahoma Highway Patrol Field Troop Communication Centers with the equipment, network connectivity, and training necessary to receive and handle transferred E9-1-1 calls along with the associated call data. An additional benefit would be that, if appropriately engineered, the Oklahoma Highway Patrol Field Troop Communication Centers would be able to serve in a backup role in the event of a large-scale emergency or incapacitated PSAP.

Oklahoma Highway Patrol Field Troop	Location
Troop A	Oklahoma City
Troop B	Tulsa
Troop C	Muskogee
Troop D	McAlester
Troop E	Durant
Troop F	Ardmore
Troop G	Lawton
Troop H	Clinton
Troop I	Guymon
Troop J	Enid
Troop K	Pawnee
Troop L	Vinita
Troop M	Altus

Table 5: Oklahoma Highway Patrol Field Troop Communication Centers

Oklahoma currently has a network in place that might provide a potential foundation for a next generation system: OneNet. Since OneNet already links the Oklahoma Highway Patrol Field Troop Communication Centers, it could possibly enable the transferring of calls and data from PSAPs to the Field Troop Communication Centers as well as serve as the network backbone in a "Next Generation 9-1-1" implementation.

4.4 E9-1-1 in Relation to Department of Homeland Security Programs

Many of the goals of Department of Homeland Security (DHS) programs have a direct or indirect relationship to the current effort to provide comprehensive E9-1-1 coverage throughout Oklahoma. In some cases, DHS programs enable improved E9-1-1. Radio interoperability is such a case. In other cases, improved E9-1-1 can contribute directly to better DHS response to emergencies. In fact, the E9-1-1 system has sometimes been referred to as the "*first*, first responders," as the initial report of an emergency often comes in the form of a 9-1-1 call. Recognizing this relationship, DHS funded the creation of this *Oklahoma E9-1-1 Assessment and Strategic Plan* through a grant to the Grand Gateway Economic Development Association.

4.4.1 Radio Interoperability

DHS has been instrumental in funding the re-banding and interoperability of radio traffic in the state, providing the State of Oklahoma some $35,000,000 to date. The regionalization of PSAPs to provide E9-1-1 services to un-served areas of Oklahoma can leverage that investment in radio interoperability by providing improved dispatch capabilities and greater flexibility in the positioning and configuration of dispatch equipment and personnel. Currently, emergency call information must be conveyed from some PSAPs to the agency and location with the required radio dispatch capability. The positioning and configuration of dispatch resources can be constrained by the radio capabilities. This increases the time it takes to respond to emergencies and adds cost to the system. In the future, with radio interoperability, the E9-1-1 call taker could perform the dispatch function or be co-located with dispatchers. Radio interoperability is an important enabler of improved E9-1-1 service, enough so to consider prioritizing and scheduling E9-1-1 system upgrades in accordance with agencies' plans to implement new radio solutions.

4.4.2 Next Generation 9-1-1 (NG9-1-1)

The dependence of DHS initiatives upon the capabilities of the E9-1-1 system is a primary driver for development of a Next Generation 9-1-1 (NG9-1-1) system. In its 2005 report, *Next Generation 9-1-1: Responding to an Urgent Need for Change*, NENA's "9-1-1 Future Path Plan" positions the E9-1-1 system as a key enabler of local, state, and federal responses to large-scale emergencies:

> In addition to improving response for daily emergencies, such a model would also improve homeland security by providing a nationally coordinated emergency response system. The needs of the new system of emergency communications include:
>
> - Improved natural disaster management, including the prevention of and response to potential terrorist actions.
> - Full support of new communications and information technology for emergency services.
> - Reduce the danger of viruses capable of generating automated 9-1-1 calls and overwhelming the network.
> - Use and enhance increasingly available sources of information that are only readily available with a flexible, wide access, high bandwidth network.
> - Improved accessibility and increased compatibility to ensure all Americans have access to the emergency response system, including those with disabilities.
>
> As "local" emergency services Internet Protocol (IP) networks supporting NG 9-1-1 applications become interconnected to each other as well as federal functions/networks such as homeland security, the overall benefit to emergency communications becomes a reality. An opportunity enabled by this capability is to "leapfrog" wireless and other services to full E9-1-1/NG 9-1-1 in areas where the traditional network does not exist, at lower cost. For example, IP mesh networks can supply transport where no phone and/or traditional 9-1-1 access exists (e.g., remote rural areas and Indian tribal lands). (National Emergency Number Association, 2005)

4.4.3 Evolution to a Next Generation 9-1-1 System

This report focuses on an approach to providing all Oklahomans with the current generation of circuit-based and wireless E9-1-1 technology. However, a new generation of Internet Protocol (IP) 9-1-1 solutions is now beginning to be utilized in PSAPs throughout the United States, including some implementations in Oklahoma. As part of its consideration of future 9-1-1 services in Oklahoma, Intrado recommends that the Statewide Nine-One-One Advisory Board consider the role a Next Generation IP-based network could play in expanding and enhancing 9-1-1 services throughout the state. Just as some parts of the world "leap-frogged" circuit-based telephony and moved directly to wireless telecommunications services, some areas of Oklahoma may be able to take advantage of the next generation in 9-1-1 services without first implementing the current-generation technology. A robust NG9-1-1 system would link the public with emergency responders in any crisis situation. This can be accomplished via an appropriately planned migration to a network and systems based on IP having the inherent flexibility to cost effectively bring new technologies into the 9-1-1 system.

A well planned and integrated NG9-1-1 foundation can exponentially improve emergency response and foster more effective collaboration among a greater number of authorized users throughout the duration of a 9-1-1 response event by improving the overall functionality and interoperability of public safety and 9-1-1 communications.

NG9-1-1 can greatly enhance the capacity and flexibility of emergency call center operations. For example, a specific E9-1-1 communications center may find itself flooded with multiple inbound wireless calls concerning the same traffic accident, with the call volume spike having the net effect of inundating the 9-1-1 lines. Or the connection between an E9-1-1 selective router and a specific PSAP may be accidentally cut due to routine construction activity, effectively rendering the PSAP inoperable. Finally, a call-taker in a two-position PSAP may call in sick, and no other call takers may be available to handle even routine call volumes. All of this may occur while a call taker at a neighboring PSAP sits idle and underutilized due to consistently low call volumes. Such examples illustrate the need for emergency communication systems to not only be prepared to handle large-scale disasters, but also be equipped with the capability, flexibility, and scalability to handle routine emergencies, such as transferring 9-1-1 calls along with all data that is associated with the call.

An NG9-1-1 network would enable solutions capable of addressing the needs of large-scale emergencies, but also be designed to handle the entire spectrum of daily routine events as well as regional mid-scale emergencies. By so doing, when a catastrophic event occurs, the same standard operating procedures—employing the same systems and technologies that are utilized on a daily basis—can dictate the manner in which emergency continuity activities occur for disasters of all sizes.

4.4.4 Next Generation 9-1-1 Benefits

As the current E9-1-1 system strains to meet the demands of new technologies, the NG9-1-1 will evolve, allowing emergency calls from new IP devices, enabling access to new public safety information sources, and permitting customization to meet the needs of individual PSAPs and agencies. NG9-1-1 public safety systems will have the ability to support enhanced 9-1-1 routing, managed automatic location identification services, call handling, dispatch, expanded information, and notification services that can coexist with other IP applications on a secure and resilient network. Fully managed for all aspects of operation, administration, maintenance, and provisioning, an NG9-1-1 would enable state-wide secure communications, collaboration, data sharing, and interoperability between public safety jurisdictions and agencies. The modularity and flexibility of an NG9-1-1 would allow next generation emergency services, information access, and delivery to be integrated with other applications such as 800 MHz radio and mesh networks.

A successful NG9-1-1 network would be based on the following principles:

- Built on a secure, redundant, and diverse network infrastructure for voice, data, and radio
- Capable of expanding call management and delivery of all types of emergency calls such as wireline, wireless, VoIP, and future emergency messaging platforms
- Support for a broader set of scalable and replicable data sources such as the criminal justice data network, GIS data distribution, and other emergency information services available to the PSAP and other authorized agencies
- Provide an integrated network for emergency services, recognizing separation of core infrastructure, PSAP, and other applications
- Highly flexible and scalable design with the capability to add new emergency service providers quickly and easily without major changes

The fundamental public safety functions enabled by a NG9-1-1 network include the following:

- Configurable 9-1-1 Call Routing
- Extensible Automatic Number Identification (ANI) and Automatic Location Identification (ALI)
- Emergency caller location validation
- Intra- and inter-agency Call Handling and Dispatch information sharing and collaboration
- Call center and remote access for backup and disaster recovery situations
- Geographic information system (GIS) and mapping enabled
- Data distribution flexibility for emergency data management such as MSAG, mapping, and emergency service number boundaries
- Trunked radio interoperability

4.4.5 Leveraging Existing Oklahoma Assets for NG9-1-1: Oklahoma OneNet

Demonstrated by the list of benefits, transitioning to a Next Generation Network remedies many shortfalls in the current 9-1-1 system architecture. Implementation of an NG 9-1-1 network can be accomplished as one project or through a series of implementation stages. Oklahoma currently has a network in place that might provide a potential foundation for a next generation system: OneNet. Since OneNet already links the Oklahoma Highway Patrol Field Troop Communication Centers, it could possibly enable both the transferring of calls and data from PSAPs to the OHP Field Troop Communication Centers as well as serve as the network backbone in an NG9-1-1 implementation. The following excerpt from the OneNet web site, http://www.onenet.net/, provides more information:

[Note: OneNet represents a particular implementation of IP technology procured under a specific program and terms. The information in this report should not be construed as an endorsement of OneNet to the exclusion of other technologies potentially available from a wide variety of suppliers and potentially offering other capabilities and terms. This report does not include a thorough assessment of OneNet for Next Generation 9-1-1 or a comparison to other solutions, but recommends that such a study be performed in the future.]

- OneNet, Oklahoma's telecommunications and information network for education and government, is a Division of the Oklahoma State Regents for Higher Education operated in cooperation with the Oklahoma Office of State Finance.

- This comprehensive network is unlike any other in the country - utilizing fiber optics and wireless technologies to transmit video, voice and data throughout Oklahoma, the nation and the world. OneNet is not a state-owned utility, but rather a state lead partnership among telecommunications companies, equipment manufacturers and service providers.
- OneNet's origin began in 1992. It was at this time that voters in Oklahoma approved a statewide capital bond issue that provided $14 million for the implementation of a statewide telecommunications network. In late 1995, the State Regents approved the OneNet business plan and began implementation in 1996.
- Upon its implementation, OneNet focused on establishing the necessary hub sites throughout Oklahoma to provide the infrastructure necessary to support the high-speed telecommunications network. In addition, it moved aggressively to establish an equitable rate structure and enroll customers.
- OneNet's state-of-the-art technology and dedicated staff currently provide high-speed communications to a variety of Oklahoma entities such as: public and vocational-technical schools; colleges and universities; public libraries; local, tribal, state and federal governments; court systems; rural health care delivery systems; and programs engaged in research.
- This electronic linkage is made possible through a partnership between the State of Oklahoma and private telecommunications companies - enabling OneNet to negotiate reduced rates and utilize established, private communications networks. The result of this partnership is millions of dollars in savings to Oklahoma taxpayers as well as the rapid development of a telecommunications infrastructure that is one of the most comprehensive in the nation.

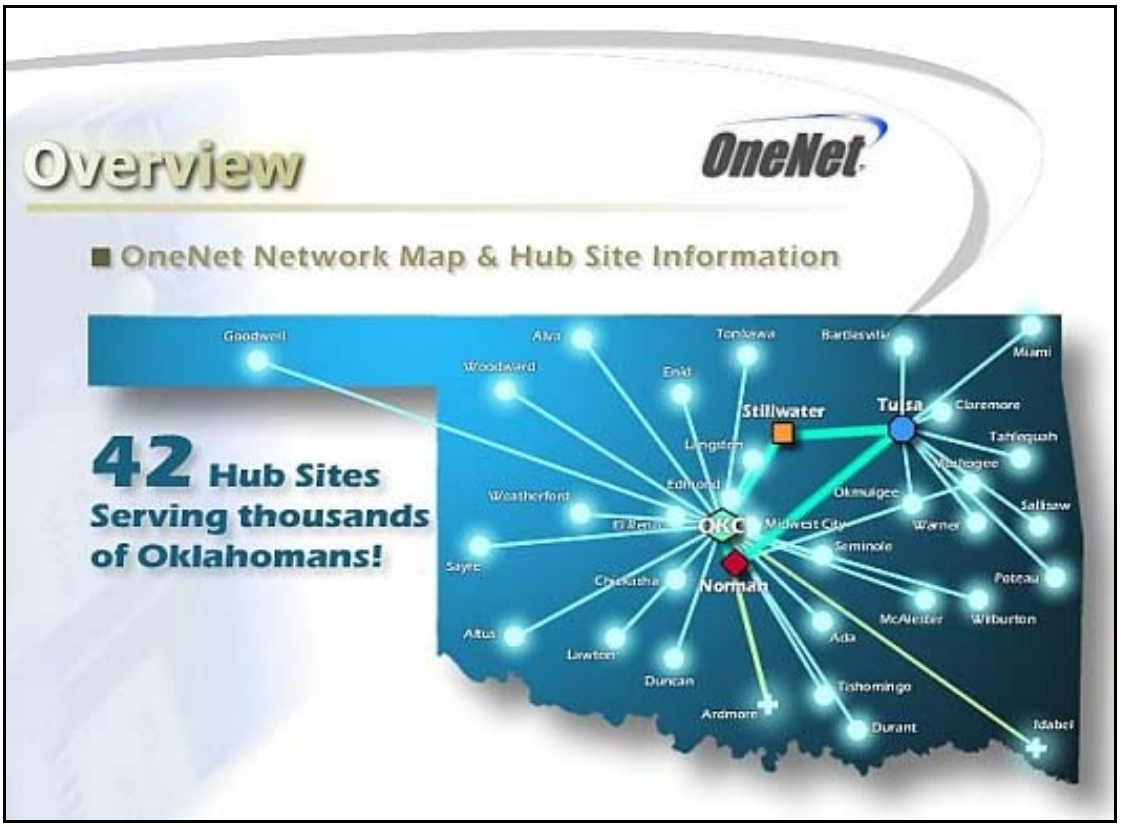

Figure 3: Oklahoma OneNet Network

Although the current network exists, other factors will need to be considered and evaluated in planning the implementation of a next generation network solution. These factors include the following:

- Assessment of current IP network resources and configuration
- Assessment of commonly use IP public safety applications owned and used by state and federal government entities
- Assessment of CPE hardware and software to determine compatibility with IP-based network
- Assessment of ALI database resources and connectivity to determine compatibility with an IP-based network
- Assessment of selective router facility resources and compatibility with an IP-based network
- Assessment of radio resources and necessary upgrades to accommodate integration with IP-based network

Once current operations are assessed and defined, a network design would be developed based on the elements needed to gradually transition Oklahoma PSAPs to a next-generation architecture.

4.5 E9-1-1 in Relation to The Rural Fire Defense Fund

The Rural Fire Defense program represents an example of an effective statewide program that is analogous to the proposed Statewide E9-1-1 Program Office in respect to its being a partnership between state and local government entities designed to promote the protection of life and property in rural areas of Oklahoma.

Title 35 - Oklahoma Department of Agriculture, Food, and Forestry; Chapter 20 – Forestry; Subchapter 3 - Rural Fire Protection Program Fund Act provides the state contribution used to fund the Rural Fire Defense Program, a state/local/federal partnership for fire protection. The act created three programs of financial assistance, matching grants, and equipment revolving funds to improve fire protection provided by Oklahoma's rural fire departments.

http://www.oar.state.ok.us/oar/codedoc02.nsf/All/405D97099BB1E2D586257318001 27A6C?OpenDocument

The Rural Fire Defense program allocates state funds, provides matching grants, and secures and directs Federal resources to rural areas of the state to make it possible for those communities to have adequate fire protection. The Rural Fire Defense program works with the Forestry Division to administer the following programs:
Source: ODAFF

Program	Description	Total Funding for FY 1994 – 2004
50/50 (federal/local matching grant) Volunteer Fire Assistance (VFA)	There are 870 certified volunteer fire departments in Oklahoma. The 50/50 (federal/local) VFA grants provide funding to local associations for purchasing fire-related equipment or training.	$1,042,682.
Operational Grants for Local Fire Departments	The operational grants, first funded in FY-1990, provide funds for expenses of local fire-fighting associations. The grants help cities, towns, fire districts and rural fire departments pay for insurance, protective clothing, and equipment. The grants are 100% state funded.	$17,400,000
80/20 (state/local matching grant) Capital Grants	First funded in FY-1992, the 80/20 grants (state/local funding) provide equipment and building needs for	$22,097,984

Program	Description	Total Funding for FY 1994 – 2004
	rural fire departments. Approximately 80 fire departments received grants this fiscal year.	
Operational Funding for Rural-fire Coordinators (substate planning districts)	Rural-fire coordinators in 11 substate-planning districts assist rural fire departments. Coordinators: • provide technical assistance; • place the federal excess property; • ensure audit compliance; • evaluate grant applications; • monitor progress of grant projects; • assist with training and testing equipment; and • administer the hydrant program.	$7,721,000
Federal Excess Equipment Program	The forestry division secures federal excess property from military bases in a 20-state area for the state's wildfire firefighters and the rural fire departments. The United States Department of Agriculture (USDA) Forest Service loans the used equipment to rural fire departments. The forestry division funds 100% of the FY-2005 Executive Budget administration and operational costs of the program.	$69,004,316
Equipment Funding for Local Fire Departments	Since FY-1990, Forestry Services purchases items in bulk for resale, at cost, to local fire departments. This revolving fund was created with $100,000 in FY-1990.	$1,380,000
Total		$118,645,982.00

Table 6: The Rural Fire Defense Fund

5. OKLAHOMA E9-1-1 POLICY ASSESSMENT

5.1 Current E9-1-1 Funding Legislation Summary

In 1979, Title 63, Section 2801, known as the *Oklahoma Emergency Telephone Act*, became law. This law enabled every public agency or public safety agency to establish a "basic or sophisticated system" using the number 9-1-1. In 1986 the law was amended to add Section 2812, which was known as the Nine-One-One Emergency Number Act, which established 9-1-1 as the primary emergency telephone number in the state and encouraged local governments to develop and improve emergency communications procedures and facilities in order to expedite the responses of public safety agencies.

The law was subsequently amended and terms were further defined in Sections 2813 – 2815 with important ramifications for the current effort to fully implement E9-1-1 throughout the state. Those sections first allowed for a governing body, through city ordinance or county resolution, to impose an emergency telephone fee to provide for the operation of an emergency telephone service. The law also codified means for creating an alliance of governments to administer a regional 9-1-1 system. It defined "governing body" as "the board of county commissioners of a county, the city council or other governing body of a municipality, or a combination of such boards, councils or other municipal governing bodies, which shall have an administering board as provided in subsection G of Section 2815 of this title. Any such combined administering board shall be formed and shall enter into an agreement between the governing body of each entity in accordance with the Interlocal Cooperation Act." The law goes on to require the ordinance or resolution to be submitted to the voters within one year of its passage, and allows for the imposition of a fee in the amount of 5% of the tariff in the first year and no greater than 15% of the tariff rate in the second year and for each year thereafter.

The Nine-One-One Wireless Emergency Number Act was enacted November 1, 2000. It allowed for county commissioners to submit a resolution to the voters of their county asking to impose a $0.50 service fee per wireless connection based on a subscriber's place of primary use, to be used for the operation of emergency wireless telephone service.

The surcharges are deposited into a special wireless E9-1-1 account established by the sub-state planning district. The sub-state planning district is directed to distribute the monies to each county that has approved the surcharge, has established wireless E9-1-1 service, or has sent a written request for the installation, maintenance, and operation of wireless E9-1-1 service to a wireless service provider.

The sub-state planning districts are:

- Association of Central Oklahoma Governments (ACOG)
- Association of South Central Oklahoma Governments (ASCOG)
- Central Oklahoma Economic Development District (COEDD)
- Eastern Oklahoma Development District (EODD)
- Grand Gateway Economic Development Association (GGEDA)
- Indian Nations Council of Governments (INCOG)
- Kiamichi Economic Development District of Oklahoma (KEDDO)
- Northern Oklahoma Development Association (NODA)
- Oklahoma Economic Development Association (OEDA)
- Southern Oklahoma Development Association (SODA)
- South Western Oklahoma Development Authority (SWODA)

In 2005 the law was amended again to create a Statewide Nine-One-One Advisory Board, established to oversee the development and operation of emergency 9-1-1 systems throughout the state. In 2005 the legislature was unable to fund the critical duties of this Board and its statutory obligation, thereby limiting its ability to effect significant change in the state of Oklahoma. The recommendation contained in this report, once adopted, will enable the Board to sufficiently serve the citizens of Oklahoma and ensure that they have full E9-1-1 service.

In 2006, added to Title 63 were sections 2851, 2852, and 2853, titled the *Nine-One-One Voice over Internet Protocol (VoIP) Emergency Services Act.* This section allows for a governing body to establish a resolution or ordinance to impose an emergency service fee in the amount of $0.50 per month for each VoIP service user. “Governing body” in this case refers to the board of county commissioners of a county, the city council or other governing body of a municipality, or a combination of such boards, councils, or other municipal governing bodies. This fee is to be used for the operation of E9-1-1 services for calls received from VoIP service users.

5.1.1 Prepaid Wireless Fee Remittance

Prepaid mobile telecommunications service is paid for in advance, which enables the origination of calls using an access number, authorization code, or both (whether manually or electronically dialed) if the remaining amount of units of the prepaid mobile telecommunications service is known by the service provider on a continuous basis. The (prepaid) term does not include the advance purchase of mobile telecommunications service if the purchase is based on a service contract between the service provider and customer, or if the service arrangement requires the customer to make periodic payments to maintain the mobile telecommunications service for a predetermined period of time.

The Oklahoma State Legislature enrolled H.B. 806 on June 4, 2007, an act relating to revenue and taxation that amends SECTION 3. AMENDATORY 63 O.S. 2001, Section 2843.1, as last amended by Section 2, Chapter 303, O.S.L. 2005 (63 O.S. Supp. 2006, Section 2843.1). This bill requires that prepaid wireless services collect the wireless surcharge from subscribers and remit the established $0.50 Oklahoma wireless surcharge. Specifically, the act states:

> Every billed service user shall be liable for any emergency wireless telephone fee imposed pursuant to this section until it has been paid to the wireless service provider. As of the effective date of this section, each prepaid wireless service provider shall remit the emergency wireless telephone fee for its prepaid wireless customers in accordance with either of the following methods:
>
> 1. For each active prepaid wireless customer whose account balance is equal to or greater than the amount of the fee, the provider shall deduct and remit the fee; and
>
> 2. If it is not technically feasible for the prepaid wireless service provider to deduct the emergency wireless telephone fee from an active account, the prepaid wireless service provider shall pay the fee for each active prepaid account and seek reimbursement using whatever means are available to the provider.

Oklahoma has successfully resolved this issue ensuring that all Oklahoma wireless telephone users with the ability to access E9-1-1 emergency services also contribute to the support of E9-1-1 services and solutions. As of June 2007, Oklahoma is among approximately 26 states that have the authority to collect E9-1-1 surcharges on prepaid wireless services.

5.2 Other Potential Funding Mechanisms

In addition to the current surcharge structure that pays for the deployment and operations of E9-1-1 services, the following sources may assist in funding E9-1-1 improvements in Oklahoma. In order for the State of Oklahoma to accept federal 9-1-1 program funds, a State E9-1-1 Program Office will need to be established, as recommended in this report, and will need to have the authority to accept gifts and grants.

5.2.1 Department of Homeland Security and the ENHANCE 911 Act of 2004

There are several areas of Homeland Security funding where multiple public safety agencies can jointly request appropriated funds. These funds potentially may be used for the upgrade of PSAP capabilities in the area of E9-1-1 services, as well as for data management and sharing.

The US Congress legislated the *ENHANCE 911 Act of 2004,* also titled *Ensuring Needed Help Arrives Near Callers Employing 911 Act of 2004*, and appropriated $250,000,000 per year. After several years during which no monies were appropriated, the President signed into law the *Implementing Recommendations of the 9/11 Commission Act of 2007* (HR 1) on August 3, 2007. This important legislation advances 9-1-1 and emergency communications in several ways:

- Makes $43.5 million available for PSAP grants authorized by the ENHANCE 911 Act of 2004 after 180-day rulemaking to determine criteria to receive grants (Title XXIII, page 278)
- Authorizes $950 million per year for fiscal years 2008 – 2012 for a State Homeland Security Grant Program (Title I, Sec. 2004, pages 13 – 14) and makes clear that such funds can be utilized for "supporting Public Safety Answering Points" (Title I, Sec. 2008, page 18)
- Authorizes nearly $3.5 billion in Emergency Management Performance Grants, which can be used for the construction of Emergency Operations Centers (Title II, pages 29 – 30)
- Establishes an Interoperable Emergency Communications Grant Program and authorizes $1.6 billion in grant funding for fiscal years 2009 – 2012 (Title III, pages 31 – 34)

The text of the entire act can be found at:
http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h1enr.txt.pdf

5.2.2 Public Safety Foundation of America

The mission of the Public Safety Foundation of America (PSFA), as stated on its web site, is "to engender cooperation among public and private groups to provide financial and technical support to the public safety communications community." The PSFA, a 501(c)(3) charitable organization established in January 2002 by the Association of Public-Safety Communications Officials International (APCO), provides funding and technical support to PSAPs and local emergency response officials.

The PSFA is funded by a variety of sources, including donations from corporations, APCO members and staff, and the Wireless E-911: PSAP Readiness Fund, a non-profit organization established by Nextel Communications to support the timely implementation of wireless enhanced 9-1-1.

The PSFA Advisory Committee that has administered the grants includes the following member organizations:

- Association of Public-Safety Communications Officials International
- International Association of Chiefs of Police
- International Association of Fire Chiefs
- National Association of Counties
- National Association of State EMS Directors
- National Emergency Number Association
- National Governors' Association
- National League of Cities

Please see http://www.psfa.us for deadlines as well as the PSFA grant application process.

6. CURRENT OKLAHOMA E9-1-1 SURCHARGES

6.1 Current Oklahoma E9-1-1 Wireline Surcharges

The following table summarizes the wireline E9-1-1 surcharge fees in effect throughout Oklahoma as of April 2007. The wireline surcharge is applied against the monthly tariff base rate for basic telephone service.

N/R indicates "no survey response" or "no record" (a blank entry on the survey).

Oklahoma E9-1-1 Wireline Surcharges				
County	Jurisdiction	E9-1-1 Wireline Monthly Surcharge per Access Line	Wireline Pass / Fail	Wireline Initiative Date
Adair	County	5%	Pass	3/25/1996
Alfalfa	County	None	--	--
	City of Cherokee	5%	Pass	N/R
Atoka	County	5%	Pass	--
Beaver	County	None	--	--
Beckham	County	15%	Pass	2001
Blaine	County	None	--	--
Bryan	County	5%	Pass	1/2/2000
Caddo	County	5%	Pass	N/R
	City of Anadarko	3%	Pass	N/R
Canadian	County	3 - 5%	Pass	3/14/2000
	City of Calumet	5%	Pass	N/R
	City of El Reno	5%	Pass	N/R
	City of Geary	5%	Pass	N/R
	City of Mustang	3%	Pass	N/R
	City of Okarche	5%	Pass	N/R
	City of Piedmont	3%	Pass	N/R
	Union City	5%	Pass	
	City of Yukon	3%	Pass	N/R
Carter	County	10%	Pass	8/7/2000
	City of Ardmore	5%	Pass	6/1998
Cherokee	County	5%	Pass	11/8/1994
Choctaw	County	5%	Pass	1/1/2000
Cimarron	County	None	--	--

Oklahoma E9-1-1 Wireline Surcharges				
County	Jurisdiction	E9-1-1 Wireline Monthly Surcharge per Access Line	Wireline Pass / Fail	Wireline Initiative Date
Cleveland	County	3%	Pass	5/1/1998
	Etowah	3%	Pass	5/1/1998
	Lexington	3%	Pass	5/1/1998
	Moore	3%	Pass	5/1/1998
	Noble	3%	Pass	5/1/1998
	Norman	3%	Pass	5/1/1998
	Slaughterville	3%	Pass	5/1/1998
Coal	County	None	--	--
Comanche	County	5%	Pass	8/23/1994
Cotton	County	None	--	--
Craig	County	8 - 9%	Pass	12/13/2005
Creek	County	5%	Pass	1992
Custer	County	15%	Pass	2001
Delaware	County	8%	Pass	8/25/1998
Dewey	County	None	--	--
Ellis	County	None	--	--
Garfield	County	10%	Pass	2001
Garvin	County	15%	Pass	2/13/2007
Grady	County	10%	Pass	9/14/1999
	City of Tuttle	3%	Pass	N/R
Grant	County	15%	Pass	11/7/2006
Greer	County	15%	Pass	2/10/1998
	Granite	15%	Pass	2/10/1998
	Mangum	15%	Pass	4/2004
Harmon	County	15%	Pass	2001
Harper	County	15%	Pass	N/R
Haskell	County	12.50%	Pass	11/3/1998
Hughes	County	5%	Pass	8/23/1994
Jackson	County	7%	Pass	1996
Jefferson	County	None	--	--

Oklahoma E9-1-1 Wireline Surcharges				
County	Jurisdiction	E9-1-1 Wireline Monthly Surcharge per Access Line	Wireline Pass / Fail	Wireline Initiative Date
Johnston	County	15%	Pass	11/7/2006
Kay	County	15%	Pass	5/13/2003
	Ponca City	10%	Pass	2003
	City of Tonkawa	10%	Pass	2003
	City of Blackwell	10%	Pass	2003
Kingfisher	County	15%	Pass	11/2006
Kiowa	County	15%	Pass	2001
Latimer	County	15%	Pass	2005
	Wilburton	15%	Pass	2004
LeFlore	County	15%	Pass	1999
	City of Poteau	5%	Pass	1988
	City of Pocola	3%	Pass	1989
Lincoln	County	12%	Pass	N/R
	City of Chandler	3%	Pass	3/2005
Logan	County	3 - 5%	Pass	12/13/2005
	Cashion	5%	Pass	N/R
	Cedar Valley	3%	Pass	N/R
	Cimarron City	5%	Pass	N/R
	Coyle	5%	Pass	N/R
	Crescent	5%	Pass	N/R
	Guthrie	3%	Pass	N/R
	Langston	5%	Pass	N/R
	Lovell	5%	Pass	N/R
	Marshall	5%	Pass	N/R
	Meridian	5%	Pass	N/R
	Mulhall	5%	Pass	N/R
	Orlando	5%	Pass	N/R
Love	County	None	--	--
Major	County	None	--	--
Marshall	County	3%	Pass	N/R

Oklahoma E9-1-1 Wireline Surcharges				
County	Jurisdiction	E9-1-1 Wireline Monthly Surcharge per Access Line	Wireline Pass / Fail	Wireline Initiative Date
	Cities of Madill + Kingston	3%	Pass	8/1990
Mayes	County	8%	Pass	2005
	City of Pryor	5%	Pass	2005
McClain	County	5%	Pass	5/9/2000
	City of Newcastle	3%	Pass	N/R
McCurtain	County	None	Fail	2004
	City of Idabel	3%	Pass	N/R
McIntosh	County	None	Fail	9/13/2005
	City of Eufaula	5%	Pass	N/R
Murray	County	12%	Pass	N/R
Muskogee	County	None	--	--
	City & Ft Gibson	5%	Pass	1989
Noble	County	None	--	--
	City of Perry	5%	Pass	1991
Nowata	County	None	--	--
Okfuskee	County	8%	Pass	8/1/2000
Oklahoma	County	3%	Pass	N/R
	Arcadia	3%	Pass	N/R
	Bethany	3%	Pass	N/R
	Choctaw	3%	Pass	N/R
	Del City	3%	Pass	N/R
	Edmond	3%	Pass	N/R
	Forest Park	3%	Pass	N/R
	Harrah	3%	Pass	N/R
	Jones City	3%	Pass	N/R
	Lake Aluma	3%	Pass	N/R
	Luther	3%	Pass	N/R
	Midwest City	3%	Pass	N/R
	Nichols Hills	3%	Pass	N/R
	Nicoma Park	3%	Pass	N/R

Oklahoma E9-1-1 Wireline Surcharges				
County	Jurisdiction	E9-1-1 Wireline Monthly Surcharge per Access Line	Wireline Pass / Fail	Wireline Initiative Date
	Oklahoma City	3%	Pass	1988
	Smith Village	3%	Pass	N/R
	Spencer	3%	Pass	N/R
	Tinker AFB	3%	Pass	N/R
	The Village	3%	Pass	N/R
	Valley Brook	3%	Pass	N/R
	Warr Acres	3%	Pass	N/R
	Woodlawn Park	3%	Pass	N/R
Okmulgee	County	10%	Pass	9/1998
	City of Henryetta	5%	Pass	N/R
Osage	County	5%	Pass	10/2005
Ottawa	County	5%	Pass	11/6/1990
Pawnee	County	10%	Pass	2006
Payne	County	7%	Pass	4/2/2002
Pittsburg	County	15%	Pass	11/2006
Pontotoc	County	15%	Pass	8/1/2000
Pottawatomie	County	10%	Pass	11/2006
	City of Tecumseh	10%	Pass	1997
	City of Shawnee	3%	Pass	1985
Pushmataha	County	3%	Pass	4/1991
	City of Antlers	5%	Pass	N/R
Roger Mills	County	15%	Pass	2001
Rogers	County	15%	Pass	1989
Seminole	County	15%	Pass	11/4/2004
Sequoyah	County	15%	Pass	6/27/2005
Stephens	County	None	--	--
	City of Duncan	5%	Pass	11/8/1994
Texas	County	5%	Pass	3/10/1992
Tillman	County	15%	Pass	11/1/2005
Tulsa	County	5%	Pass	1988

Oklahoma E9-1-1 Wireline Surcharges				
County	Jurisdiction	E9-1-1 Wireline Monthly Surcharge per Access Line	Wireline Pass / Fail	Wireline Initiative Date
Wagoner	County	5%	Pass	N/R
Washington	County	5%	Pass	1/1/1997
Washita	County	15%	Pass	2004
Woods	County	15%	Pass	11/1/2003
Woodward	County	15%	Pass	4/1/2006

Table 7: Oklahoma E9-1-1 Wireline Surcharges

6.1.1 Summary of Oklahoma Counties with Wireline E9-1-1 Surcharges

	Counties with Wireline E9-1-1 Surcharges Enacted Countywide	Counties Without Wireline E9-1-1 Surcharges Enacted Countywide
Counties	59	18
Percentage	77%	23%

Table 8: Summary of Oklahoma Counties with Wireline E9-1-1 Surcharges Enacted

6.1.2 Oklahoma Wireline E9-1-1 Surcharges Map

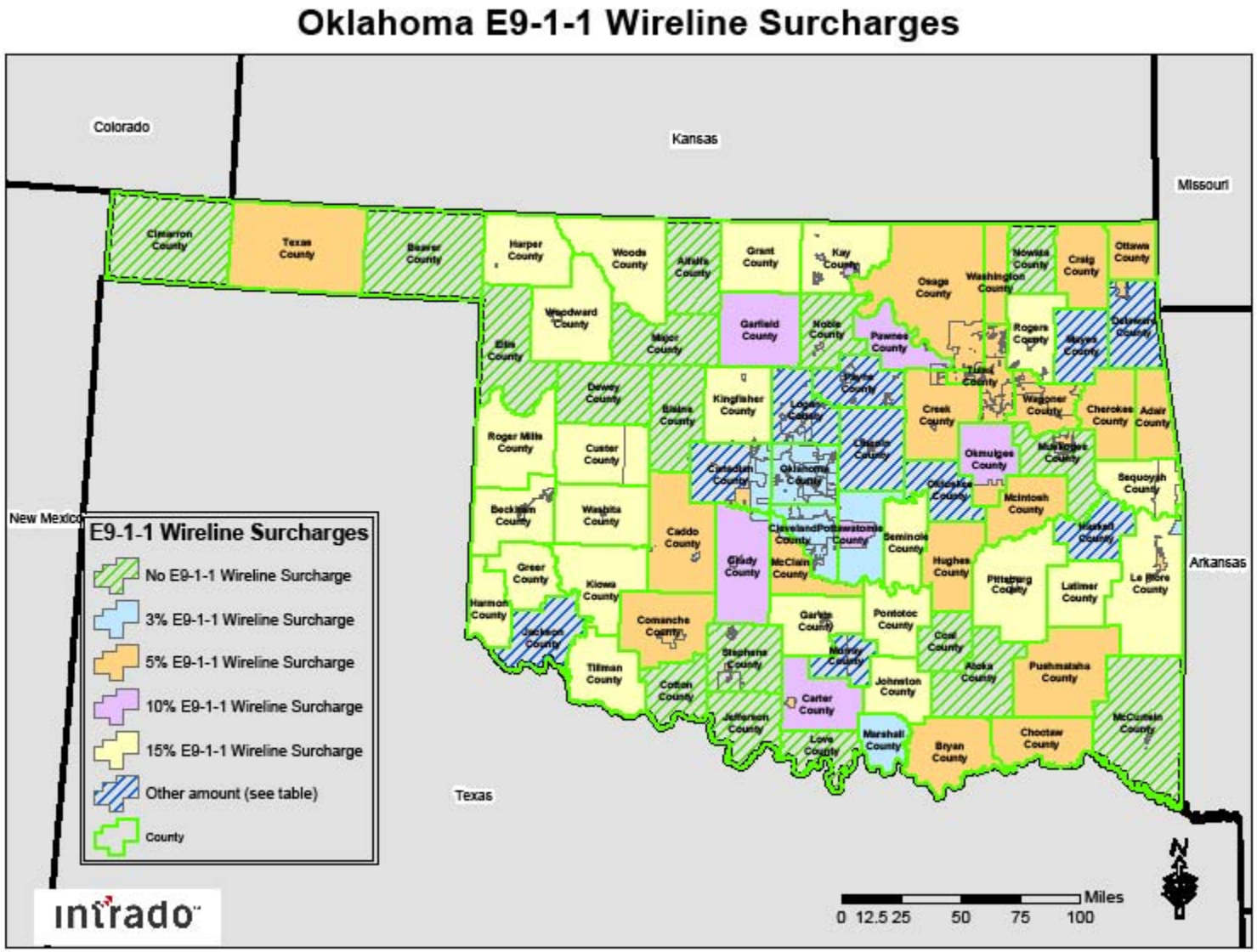

Figure 4: E9-1-1 Wireline Surcharges Map

6.2 Current Oklahoma E9-1-1 Wireless Surcharges

The following table summarizes the wireless E9-1-1 surcharge fees in effect throughout Oklahoma as of April 2007. The wireless surcharge is a flat fee of $0.50 per month per wireless phone number and is remitted based on the customer's primary location of use.

Oklahoma E9-1-1 Wireless Surcharges				
County	Jurisdiction	E9-1-1 Wireless Monthly Surcharge Status	Wireless Pass / Fail	Wireless Initiative date
Adair	County	No	--	--
Alfalfa	County	No	--	--
Atoka	County	No	--	--
Beaver	County	No	--	--
Beckham	County	Yes	Pass	2005
Blaine	County	No	--	--
Bryan	County	No	--	--
Caddo	County	No	--	--
Canadian	County	Yes	Pass	12/13/2005
Carter	County	Yes	Pass	4/2007
Cherokee	County	Yes	Pass	12/13/2005
Choctaw	County	Yes	Pass	11/7/2006
Cimarron	County	No	--	--
Cleveland	County	Yes	Pass	12/13/2005
Coal	County	No	--	--
Comanche	County	Yes	Pass	12/13/2005
Cotton	County	No	--	--
Craig	County	Yes	Pass	12/13/2005
Creek	County	Yes	Pass	4/3/2007
Custer	County	Yes	Pass	2005
Delaware	County	Yes	Pass	12/13/2005
Dewey	County	No	--	--
Ellis	County	No	--	--
Garfield	County	Yes	Pass	12/1/2006
Garvin	County	Yes	Pass	2/13/2007
Grady	County	Yes	Pass	12/13/2005

Oklahoma E9-1-1 Wireless Surcharges				
County	Jurisdiction	E9-1-1 Wireless Monthly Surcharge Status	Wireless Pass / Fail	Wireless Initiative date
Grant	County	Yes	Pass	11/7/2006
Greer	County	Yes	Pass	7/25/2006
Harmon	County	Yes	Pass	2005
Harper	County	No	--	--
Haskell	County	No	--	--
Hughes	County	No	--	--
Jackson	County	Yes	Pass	11/2006
Jefferson	County	No	--	--
Johnston	County	Yes	Pass	8/27/2002
Kay	County	Yes	Pass	5/13/2003
Kingfisher	County	Yes	Pass	11/2006
Kiowa	County	Yes	Pass	2005
Latimer	County	Yes	Pass	2004
LeFlore	County	No	Failed Twice	--
Lincoln	County	Yes	Pass	N/R
Logan	County	Yes	Pass	12/13/2005
Love	County	No	--	--
Major	County	No	--	--
Marshall	County	No	--	--
Mayes	County	Yes	Pass	11/1/2006
McClain	County	Yes	Pass	12/13/2005
McCurtain	County	No	--	--
McIntosh	County	No	Fail	2005
Murray	County	Yes	Pass	2007
Muskogee	County	No	--	--
Noble	County	No	--	--
Nowata	County	No	--	--
Okfuskee	County	No	--	--
Oklahoma	County	Yes	Pass	12/13/2005
Okmulgee	County	Yes	Pass	9/1998

Oklahoma E9-1-1 Wireless Surcharges				
County	Jurisdiction	E9-1-1 Wireless Monthly Surcharge Status	Wireless Pass / Fail	Wireless Initiative date
Osage	County	Yes	Pass	12/13/2005
Ottawa	County	Yes	Pass	3/7/2006
Pawnee	County	Yes	Pass	2006
Payne	County	Yes	Pass	4/2/2002
Pittsburg	County	Yes	Pass	11/2006
Pontotoc	County	Yes	Pass	12/13/2005
Pottawatomie	County	Yes	Pass	11/2006
Pushmataha	County	No	--	--
Roger Mills	County	Yes	Pass	2005
Rogers	County	Yes	Pass	2/2005
Seminole	County	Yes	Pass	11/4/2004
Sequoyah	County	Yes	Pass	12/13/2005
Stephens	County	No	--	--
Texas	County	No	--	--
Tillman	County	Yes	Pass	7/1/2006
Tulsa	County	Yes	Pass	12/13/2005
Wagoner	County	Yes	Pass	3/1/2006
Washington	County	Yes	Pass	12/13/2005
Washita	County	Yes	Pass	2004
Woods	County	Yes	Pass	11/1/2003
Woodward	County	Yes	Pass	4/1/2006

Table 9: Oklahoma E9-1-1 Wireless Surcharges

6.2.1 Summary of Oklahoma Counties with Wireless E9-1-1 Surcharges

	Counties with Wireless E9-1-1 Surcharges Enacted	Counties With No Wireless E9-1-1 Surcharges Enacted
Counties	48	29
Percentage	62%	38%

Table 10: Summary of Oklahoma Counties with Wireless E9-1-1 Surcharges Enacted

6.2.2 Oklahoma Wireless E9-1-1 Surcharges Map

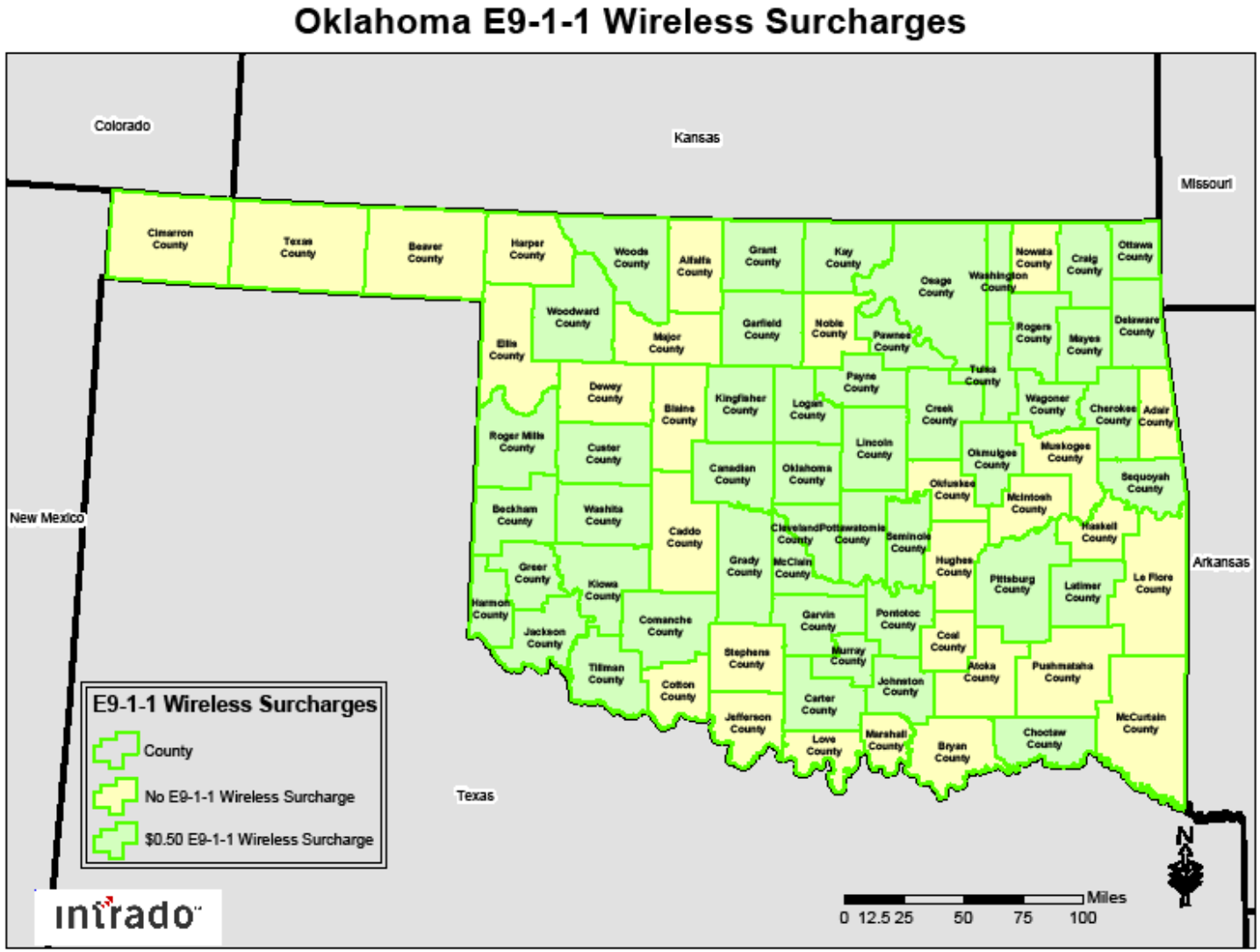

Figure 5: E9-1-1 Wireless Surcharges Map

6.3 Current Oklahoma E9-1-1 VoIP Surcharges

The following table summarizes the E9-1-1 VoIP surcharge fees currently in effect in Oklahoma. The VoIP surcharge is a flat fee of $0.50 per month.

Oklahoma E9-1-1 VoIP Surcharges			
County	Jurisdiction	E9-1-1 VoIP Monthly Surcharge Status	VoIP Initiative Date
Adair	County	No	--
Alfalfa	County	No	--
Atoka	County	No	--
Beaver	County	No	--
Beckham	County	No	--
Blaine	County	No	--
Bryan	County	No	--
Caddo	County	No	--
Canadian	County	No	--
	El Reno	Yes	2007
	Mustang	Yes	2007
	Okarche	Yes	2007
	Piedmont	Yes	2007
	Union City	Yes	2007
	Yukon	Yes	2007
Carter	County	No	--
Cherokee	County	No	--
Choctaw	County	No	--
Cimarron	County	No	--
Cleveland	County	Yes	2007
	Lexington	Yes	2007
	Moore	Yes	2007
	Noble	Yes	2007
	Norman	Yes	2007
	Slaughterville	Yes	2007
Coal	County	No	--
Comanche	County	No	--
Cotton	County	No	--

Oklahoma E9-1-1 VoIP Surcharges			
County	Jurisdiction	E9-1-1 VoIP Monthly Surcharge Status	VoIP Initiative Date
Craig	County	No	--
Creek	County	No	--
Custer	County	No	--
Delaware	County	No	--
Dewey	County	No	--
Ellis	County	No	--
Garfield	County	No	--
Garvin	County	No	--
Grady	County	No	--
	Tuttle	Yes	2007
Grant	County	No	--
Greer	County	No	--
Harmon	County	No	--
Harper	County	No	--
Haskell	County	No	--
Hughes	County	No	--
Jackson	County	No	--
Jefferson	County	No	--
Johnston	County	No	--
Kay	County	No	--
Kingfisher	County	No	--
Kiowa	County	No	--
Latimer	County	No	--
LeFlore	County	No	--
Lincoln	County	No	--
Logan	County	Yes	2007
	Cedar Valley	Yes	2007
	Cimarron City	Yes	2007
	Guthrie	Yes	2007
	Mulhall	Yes	2007
Love	County	No	--

Oklahoma E9-1-1 VoIP Surcharges			
County	Jurisdiction	E9-1-1 VoIP Monthly Surcharge Status	VoIP Initiative Date
Major	County	No	--
Marshall	County	No	--
Mayes	County	Passed by resolution; not implemented yet	--
McClain	County	No	--
	Newcastle	Yes	2007
McCurtain	County	No	--
McIntosh	County	No	--
Murray	County	No	--
Muskogee	County	No	--
Noble	County	No	--
Nowata	County	No	--
Okfuskee	County	No	--
Oklahoma	County	Yes	2007
	Arcadia	Yes	2007
	Bethany	Yes	2007
	Choctaw	Yes	2007
	Del City	Yes	2007
	Edmond	Yes	2007
	Forest Park	Yes	2007
	Harrah	Yes	2007
	Jones City	Yes	2007
	Luther	Yes	2007
	Midwest City	Yes	2007
	Nichols Hills	Yes	2007
	Nicoma Park	Yes	2007
	Spencer	Yes	2007
	The Village	Yes	2007
	Valley Brook	Yes	2007
	Warr Acres	Yes	2007
	Woodlawn Park	Yes	2007
Okmulgee	County	No	--

Oklahoma E9-1-1 VoIP Surcharges			
County	Jurisdiction	E9-1-1 VoIP Monthly Surcharge Status	VoIP Initiative Date
Osage	County	No	--
Ottawa	County	No	--
Pawnee	County	No	--
Payne	County	No	--
Pittsburg	County	No	--
Pontotoc	County	No	--
Pottawatomie	County	No	--
Pushmataha	County	No	--
Roger Mills	County	No	--
Rogers	County	No	--
Seminole	County	No	--
Sequoyah	County	No	--
Stephens	County	No	--
Texas	County	No	--
Tillman	County	No	--
Tulsa	County	Yes	12/2005
	City of Tulsa	Yes	12/2005
Wagoner	County	No	--
Washington	County	No	--
Washita	County	No	--
Woods	County	No	--
Woodward	County	No	--

Table 11: Oklahoma E9-1-1 VoIP Surcharges

6.3.1 Oklahoma VoIP E9-1-1 Surcharges Map

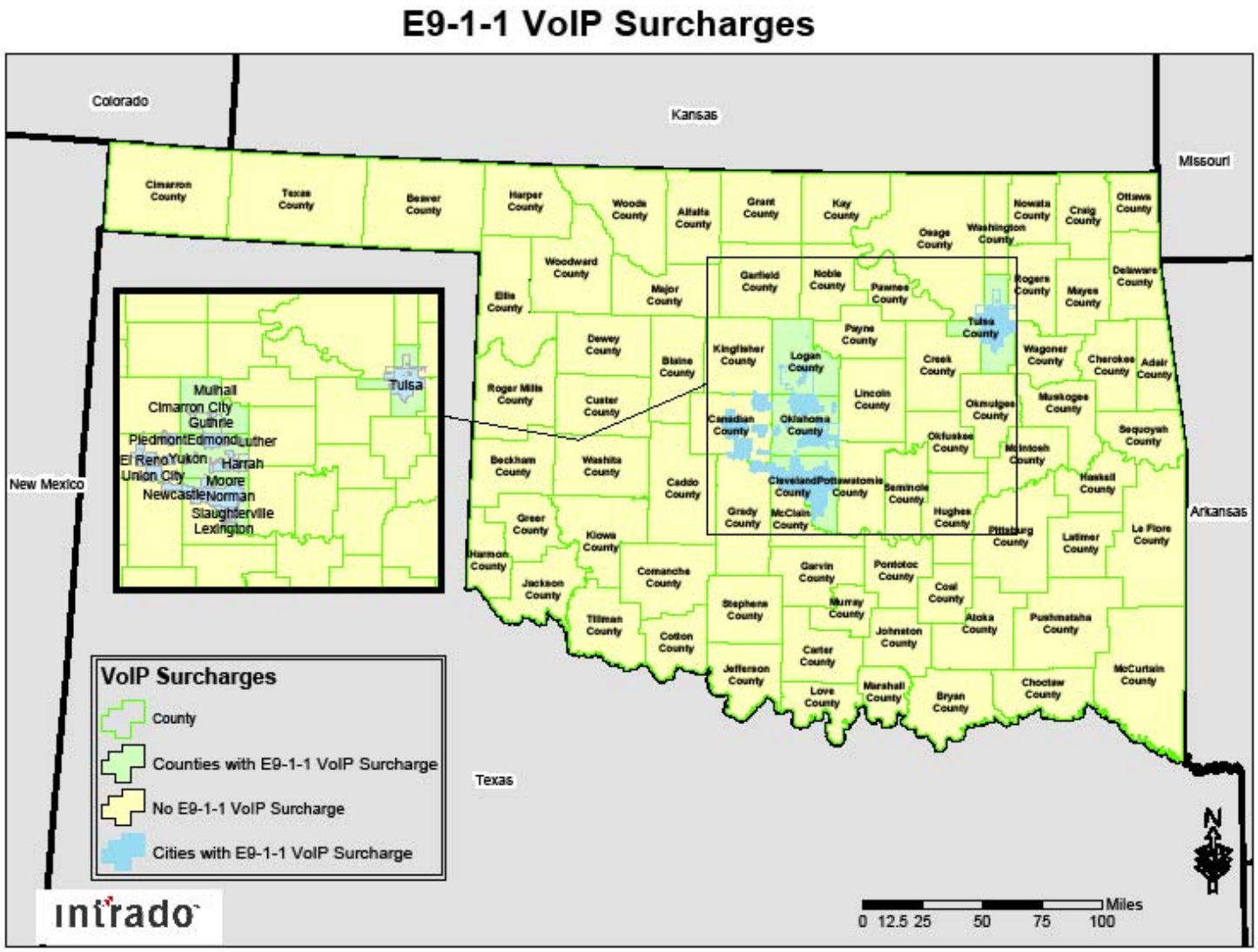

Figure 6: VoIP E9-1-1 Surcharges Map

6.4 Overview of E9-1-1 Surcharges in Other States

6.4.1 E9-1-1 Surcharges Nationally

The table below provides a summary of E9-1-1 state surcharges as of June 12, 2007.

State	E9-1-1 Wireline Monthly Surcharge per Access Line	E9-1-1 Wireless Monthly Surcharge per Subscriber	E9-1-1 VoIP Monthly Surcharge per Subscriber
Alabama	Varies by county	$0.70	Varies per Wireline Structure
Alaska	Up to $2.00	Up to $2.00	N / A
Arizona	$0.28	$0.28	$0.20
Arkansas	5% or 12% of tariff rate for basic service	$0.40	$0.50
California	.65% of intrastate toll	.65% of intrastate toll	N / A
Colorado	$0.45 to $1.25	$0.45 to $1.25	N / A
Connecticut	$0.37	$0.37	$0.37
Delaware	$0.60	$0.60	N / A
Florida	$0.50	$0.50	$0.50
Georgia	Up to $1.50	Up to $1.50	Up to $1.50
Hawaii	$0.27	$0.66	N / A
Idaho	Up to $1.00	Up to $1.00	$1.00
Illinois	Up to $1.25	Up to $0.75	Varies per Wireline Structure
Indiana	3% to 5% of monthly access charge	$0.50	N / A
Iowa	Up to $1.00 plus another $1.00 for 24 months	$0.65	Varies per Wireline Structure
Kansas	Up to $0.75	$0.50	$0.25
Kentucky	$0.25	$0.70	N / A
Louisiana	5% of tariff rate for basic service	$0.85	Varies per Wireline Structure
Maine	$0.50	$0.50	N / A
Maryland	$1.00	$1.00	$1.00
Massachusetts	$0.85	$0.30	N / A
Michigan	Varies by county	$0.29	N / A
Minnesota	$0.65	$0.65	$0.65
Mississippi	$0.85 to $2.05	$1.00	N / A
Missouri	15% of tariff rate for basic service or $0.75	None	N / A
Montana	$0.25	$0.50	N / A
Nebraska	$0.50 or higher under certain conditions	Up to $0.75	$0.75
Nevada	$0.25 or tax base	$0.25 or tax base	N / A
New Hampshire	$0.42	$0.42	N / A
New Jersey	$0.90	$0.90	N / A

State	E9-1-1 Wireline Monthly Surcharge per Access Line	E9-1-1 Wireless Monthly Surcharge per Subscriber	E9-1-1 VoIP Monthly Surcharge per Subscriber
New Mexico	$0.25 plus $0.26	$0.51	N / A
New York	$0.35 or $1.00	$1.20-$1.50	N / A
North Carolina	Varies by county	$0.70	N / A
North Dakota	$1.00	$1.00	N / A
Ohio	Property tax and/or fee up to $0.50	$0.32	N / A
Oklahoma	Varies up to 15% of tariff rates	$0.50	$0.50
Oregon	$0.75	$0.75	$0.75
Pennsylvania	$1.00 to $1.50	$1.00	N / A
Rhode Island	$1.00	$1.26	$0.47
South Carolina	$0.50 to $1.50	$0.61	N / A
South Dakota	$0.75	$0.75	N / A
Tennessee	Up to $1.50 on residential & up to $2.00 for business	Up to $2.00 but set at $1.00	$1.00
Texas	$0.50 plus it varies by HRC & ECD*	$0.50	$0.50
Utah	$0.61 local fee plus $0.13 state fee	$0.61 local fee plus $0.13 state fee	$0.61
Vermont	USF*	USF*	N / A
Virginia	up to $3.00	$0.75	$0.75
Washington	$0.20 state & $0.50 county	$0.20 state & $0.50 county	N / A
West Virginia	Varies by county	$3.00	Varies per Wireline Structure
Wisconsin	Varies by county	$0.92	N / A
Wyoming	$0.75	$0.75	N / A

Table 12: State E9-1-1 Surcharges Summary

* HRC – Home Rule Cities

* ECD – Emergency Communications District

* USF – Universal Service Fund/Fee

6.4.2 Wireline E9-1-1 Surcharges Nationally

The map below illustrates Wireline E9-1-1 surcharges across the United States.

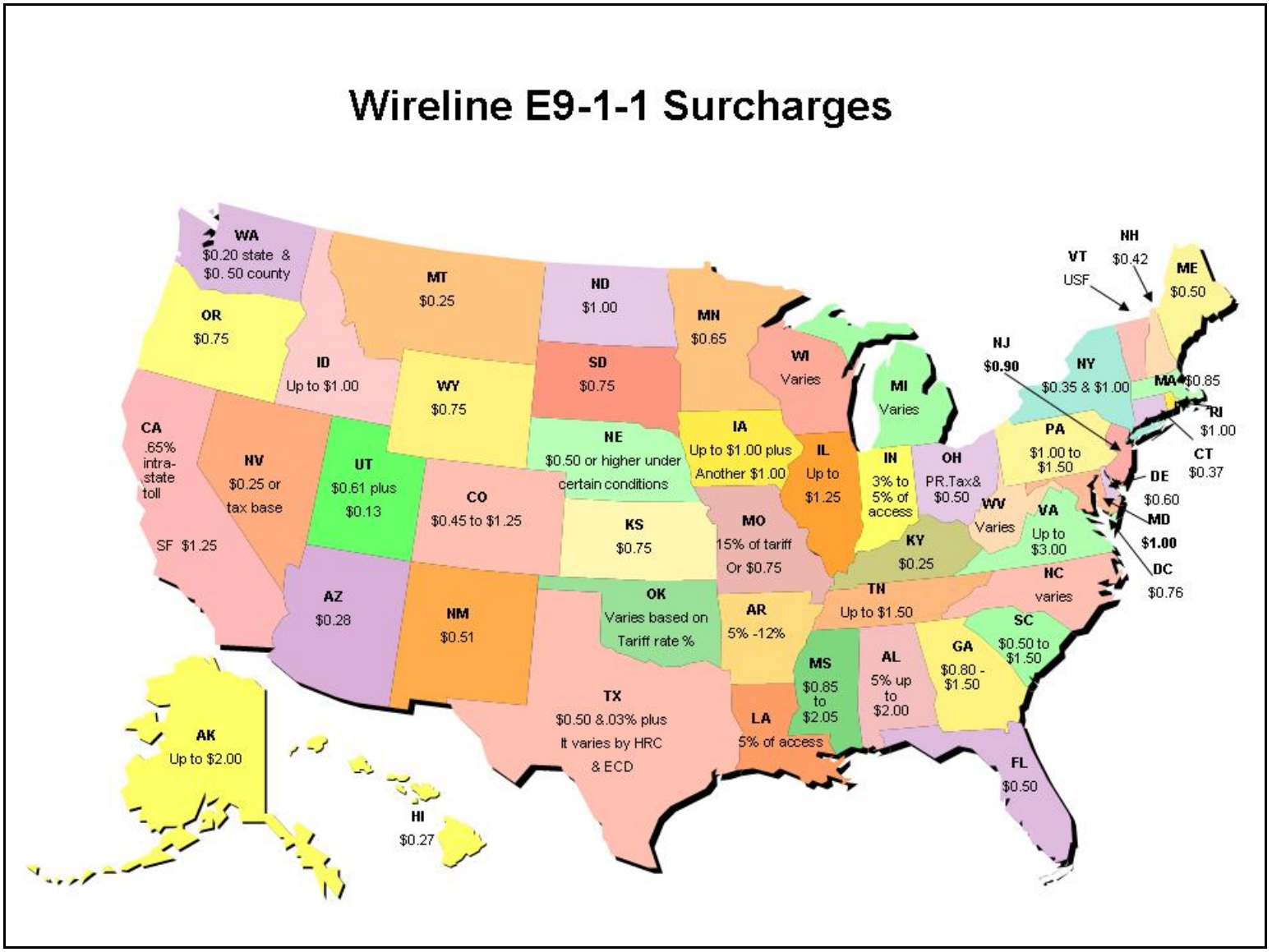

Figure 7: Wireline E9-1-1 Surcharges

6.4.3 Wireless E9-1-1 Surcharges Nationally

The map below illustrates Wireless E9-1-1 surcharges across the United States.

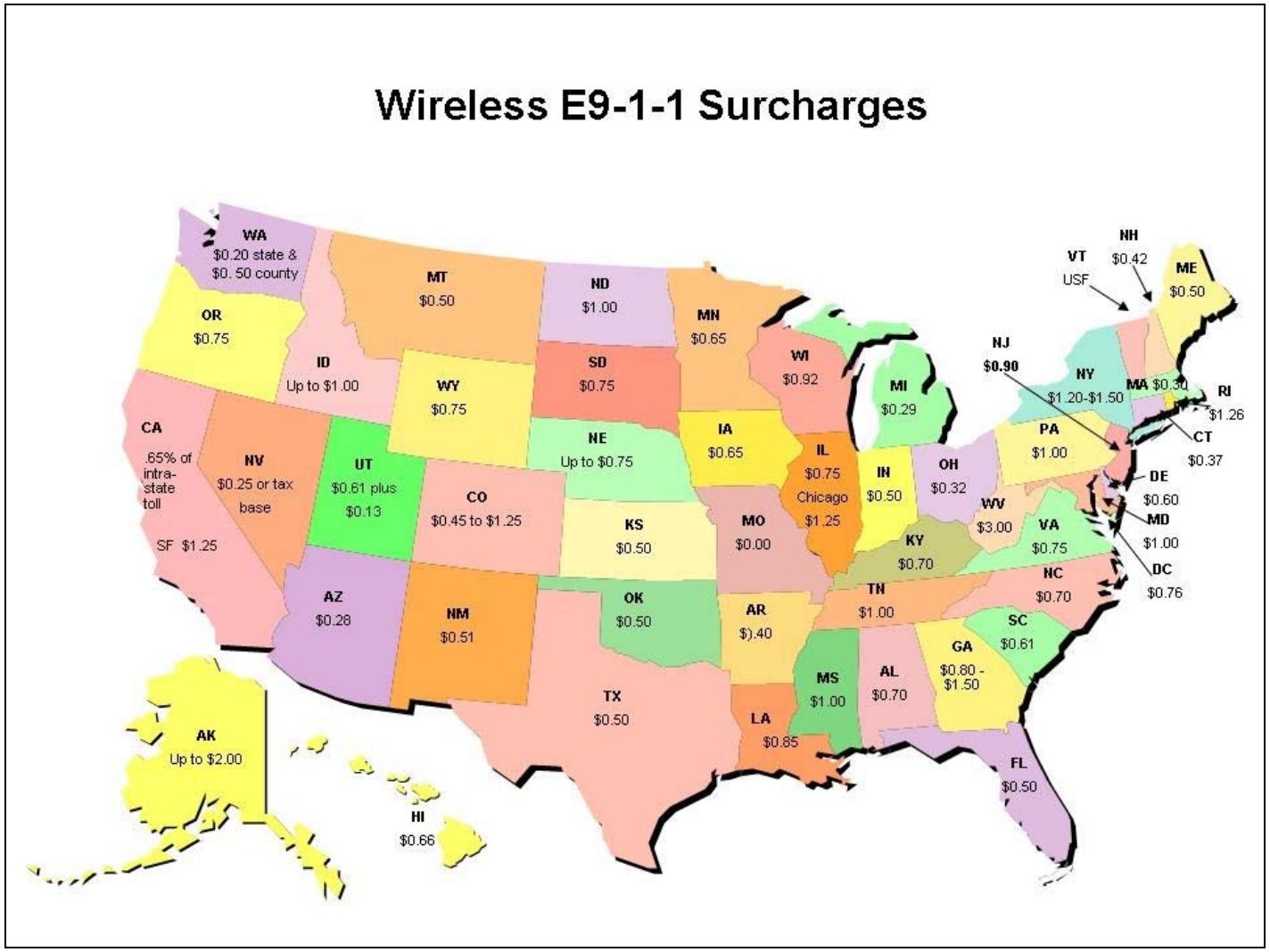

Figure 8: Wireless E9-1-1 Surcharges

6.4.4 VoIP E9-1-1 Surcharges Nationally

The map below illustrates VoIP E9-1-1 surcharges across the United States.

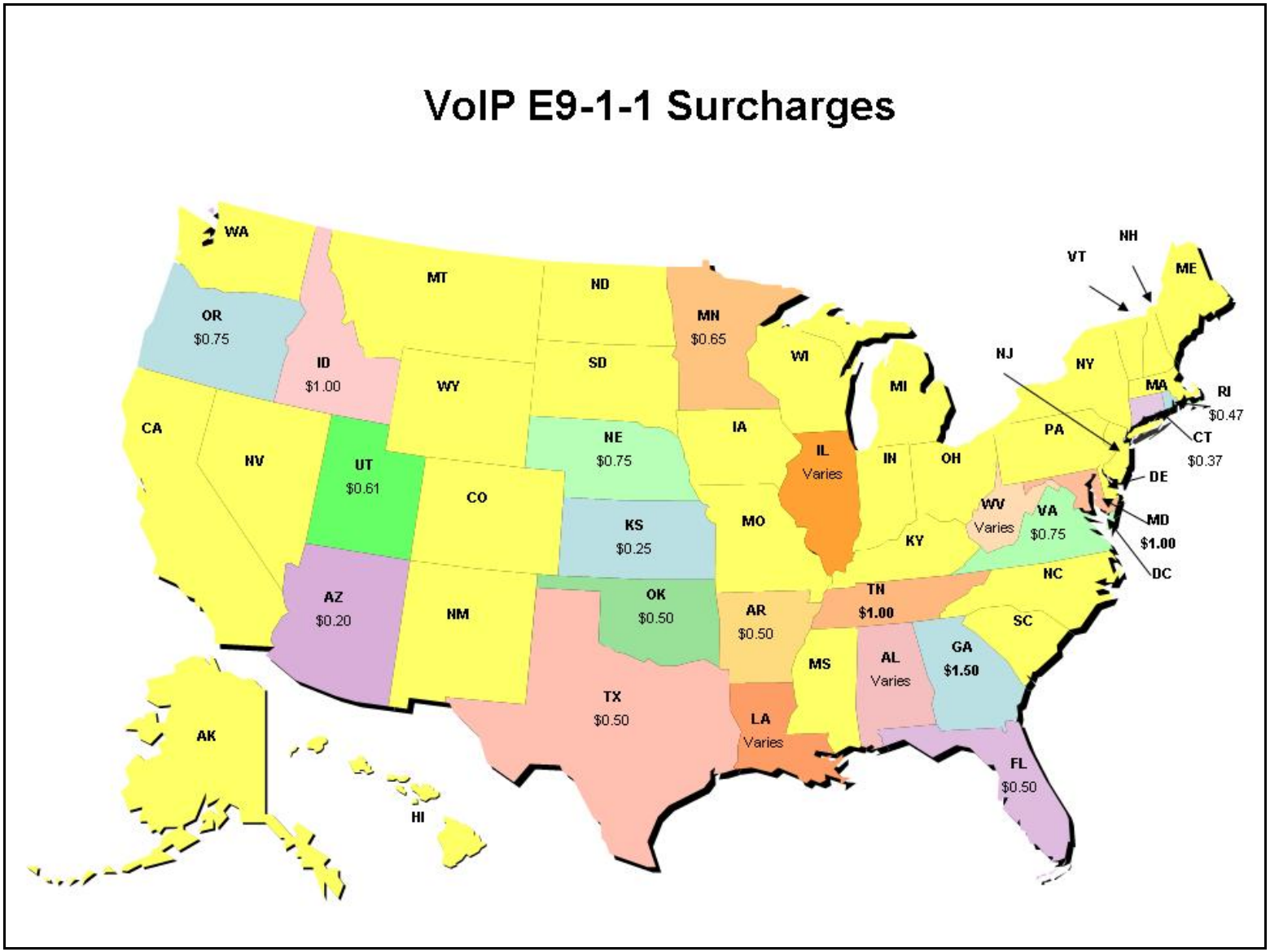

Figure 9: VoIP E9-1-1 Surcharges

6.5 States That Have E9-1-1 Administrators

The following states have established an E9-1-1 Program Office and a State E9-1-1 Administrator.

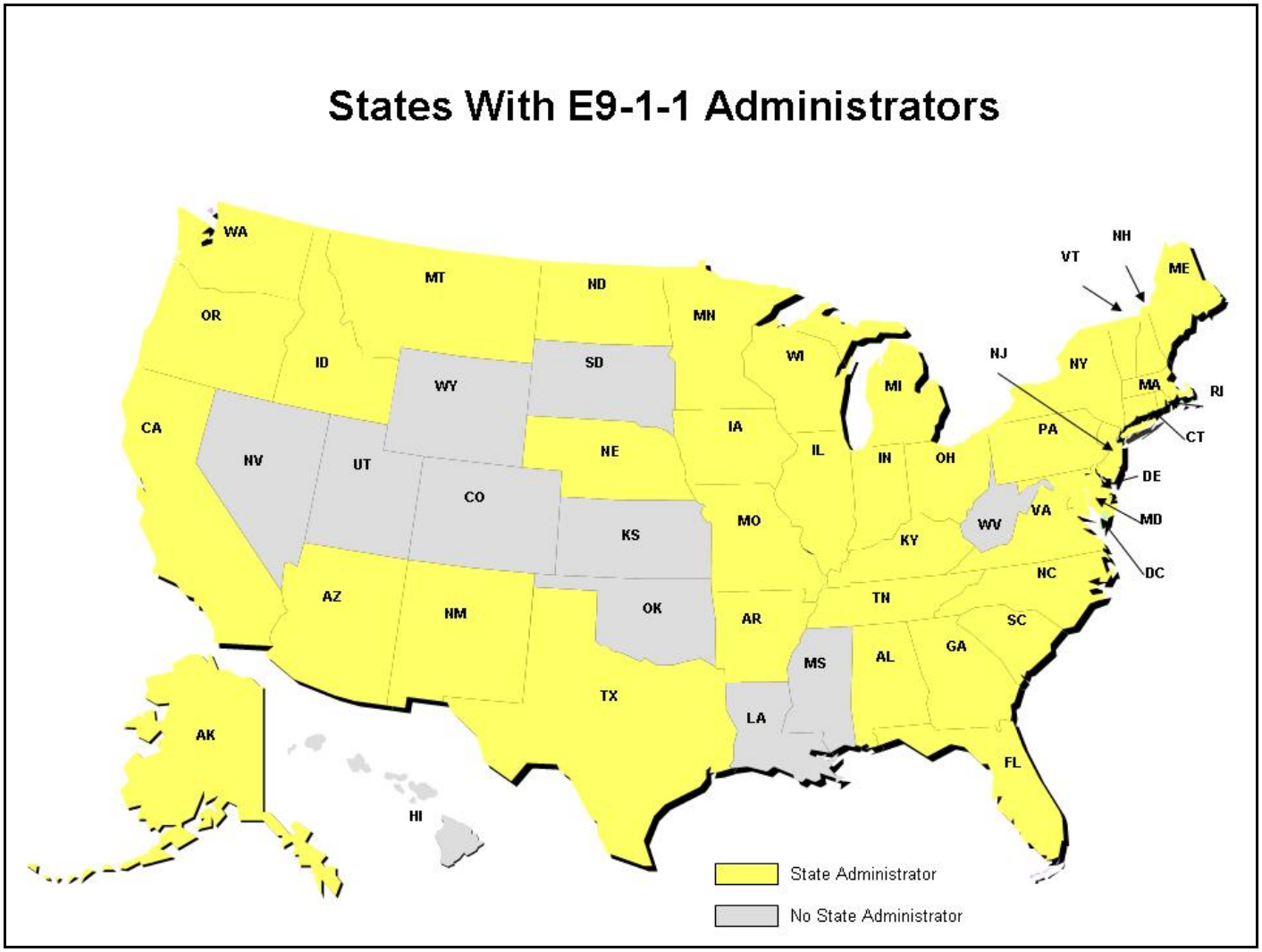

Figure 10: States with E9-1-1 Administrators