

The Mission of the 911 Coordinating Council is to serve Kansas PSAPs by implementing a coordinated, sustainable and comprehensive NG911 service that responds anytime, anywhere, from any device in order to realize the full potential for 9-1-1 to provide public access to emergency services.

# Audit of the Kansas 911 System Executive Summary

On Behalf of the Legislative Division  
of Post Audit

**Brevitz Consulting Services and  
Inspired Technologies**

---

## Executive Summary

This Audit Report is the first audit to cover time periods following deployment of the Kansas NG911 platform. The Audit Report contains analysis of key elements of NG911 implementation in the State of Kansas. This analysis covers current NG911 services and Emergency Services Internet Protocol (IP) Networks (ESInet<sup>1</sup>) capabilities informed by trends and analysis of NG911 deployment generally. **The State of Kansas is clearly a national leader in NG911 deployment.**

We performed state comparisons of fees and allowable expenditures in this report to provide a sense of where Kansas stands among the states. However, comparisons should be used with caution as technology, governance, and funding are unique to each state's geographic makeup, size, population, and many other variables. The Kansas statewide hosted platform is leading edge and is one of the most comprehensive solutions in the NG911 industry. As an industry leader finding states for comparable analyst is difficult.

Recommendations in the report seek to improve an already robust platform in its continued evolution to NG911. Technical recommendations in this report are an effort to improve system redundancy and follow overall system performance throughout the state. Recommendations regarding governance and Council staff seek to improve resource levels for day to day operations and for future NG911 initiatives, while funding analysis is used to support an appropriate fee range based on states in comparable size, PSAP count, and allowable fee expenditure.

Accurate and robust Geographic Information Systems (GIS) data is essential for NG911. Kansas is very fortunate to have the State of Kansas GIS Data Access & Support Center (DASC) at the University of Kansas. The strategic partnership created between the Coordinating Council and DASC has been instrumental in the success of the Kansas NG911 GIS Initiative. DASC support has also been crucial for development and maintenance of the web portal application used by the Local Collection Point Administrator – Non-Profit Solutions (NSI) of Emporia Kansas – for a variety of functions in support of the Council and its operations. This Audit Report is also the first to cover time periods (2017) in which NSI has served as LCPA for the Council.

---

<sup>1</sup> An ESInet is a securely managed IP network that is shared by public safety agencies for emergency services communications

K.S.A. 12-5377(c) requires an assessment of the status of NG911 implementation in Kansas. To date 92 of Kansas's 117 PSAPs have elected to join the statewide NG911 platform. Remaining PSAPs participate in the similar services offered through the Mid-America Regional Council (MARC, serving the Kansas City metro area) or have not yet made a decision. We surveyed those two groups of PSAPs separately and achieved a very high response rate, which is greatly appreciated as a contribution to this Report. NG911 implementation is occurring as planned under the procurement of the statewide call handling solution for the 92 electing PSAPs, and for the PSAPs participating in the MARC solution. As should be expected with implementation of technology at this scale on a statewide basis there have been "bumps in the road" but issues have been resolved cooperatively. The implementation plan is less clear for the PSAPs which have not yet elected into the statewide call handling solution or the MARC solution as survey responses did not provide much insight.

K.S.A. 12-5377(c)(1) requires a determination of whether the moneys received by the PSAPs under the 911 Act are being used appropriately. Our review of the expenditure and invoice detail confirmed that the expenditure reports of the PSAPs are accurate and confirmed the work of the Operations Committee to ensure 911 fee moneys are used only for allowable uses under the Act. The largest concern we see from our expenditure review is ensuring only allowable costs for integrated software packages are paid for with 911 monies. We recommend that the Council implement a practice for expenditure reporting for these integrated software solutions which requires submission of invoice detail for that type of expenditure and further indication that allocations have been performed (if required) so that the reported software expenditure is only for the CAD module and not for other modules which are unallowable expenditures under the Act.

The Legislative Division of Post Audit sought a determination in this audit regarding appropriate staffing levels for maintaining and operating the statewide call handling system. We conclude that the work and the dedication of the Council members, its staff and its committee chairs to define and deploy the NG911 state platform is truly exceptional and stands out nationally. However, the staff workload is too much for present staffing levels. It is apparent additional field level support staff is needed to handle the number of PSAPs and volume of initiatives that are being deployed from the state level. We recommend a second NG911 Liaison and a GIS Specialist as additions to the Council staff. Also, further support and development of the Council's communications and stakeholder relations is needed. We recommend addition of a Communications Director.

K.S.A. 12-5377(d)(1) requires an examination of the budget and expenditures of the Council. We find that the Council has stayed well within its 2.5% cap in budgeting. Our examination of the line entries to cash and Accounts Payable accounts in the Detailed Trial Balance revealed no expenditures that were inappropriate or otherwise not related to the business of the Coordinating Council. We find from our examination that the moneys expended by the Council are being used pursuant to the Act, and we find no expenditures that are not appropriate under the Act.

K.S.A. 12-5377(c)(2) requires a determination whether the amount of moneys collected pursuant to the Act is adequate. We reviewed projections from the Council's business case spreadsheet tool which provided estimation and evaluation of projected annual revenue and expenses for the 911 System, for the 2018 – 2023 time period. We evaluated a) continuation of the present operations without change to current fee levels and without implementation of further "i3" NG911 capabilities (the "base case"); and b) continuation of the present operations assuming increased fee levels under scenarios with and without implementation of further "i3" NG911 capabilities. **The Base Case projection shows that existing reserves will be exhausted by 2020 and the NG911 System will be unable to cover its operating and contractual costs beyond that time.** Costs and requirements of the NG911 platform are now known and the Legislature can use this Audit Report to consider increasing the fees to finish NG911 deployment on a sustainable basis. **The Business Case analysis supports increasing the per subscriber account fee from \$0.60 to \$1.05 with a comparable increase to the fee on prepaid wireless sales.** The scenario we believe may achieve the best balance increases the minimum funding for PSAPs to \$60,000 annually, allocates \$0.83 of the \$1.05 fee to the PSAPs to fund that minimum commitment, while \$0.22 would be set aside for the funding of i3 enhancements and contingencies, for sustainment of the statewide NG911 system and standardized functionality upgrades to that system. The increased fee will allow the Council to increase the minimum distribution to PSAPs from \$50,000 to \$60,000, which is a material amount for the more rural Kansas PSAPs. More importantly it will place the Kansas 911 System on a sustainable basis where operating and contractual costs can be met while implementing NG911 as intended under the Act and providing for a minimum level of funds for sustainability. This fee level is projected to result in a 6% average Deployment and Sustainment Fund level over the projection period.

The Coordinating Council and the LCPA would gain greater assurance that all telecommunications service providers operating in Kansas are paying appropriate fees to support the NG911 State

platform by using other available telecommunications contributor lists to compare to the present list of service providers paying 911 fees in Kansas. We recommend that the LCPA work with the Kansas Corporation Commission staff to review and compare the present list of service providers paying 911 fees to the list of service providers paying KUSF payments as well as the FCC Form 499 filer database of service providers operating in Kansas. This would permit identification of service providers that may be operating in Kansas but are not reporting or remitting 911 fees and allow contact of these service providers to inform them of the need to report and remit fees as appropriate. The LCPA should undertake this process regularly (annually or semi-annually).

The Legislative Division of Post Audit sought a determination of the adequacy of deployment and sustainment funding for the call handling platform deployment including what is “an appropriate amount of deployment and sustainment funding to ensure that new feature functionality can be added to the statewide system as standards develop.” We found that 911 fee levels should be increased to permit the Council to fund further call handling platform deployments consistent with the Council’s business case analyses discussed above, i.e., an increase in the fee to \$1.05, allocation of \$0.83 of that to fund PSAP expenditures including an increase to the minimum distribution to \$60,000, and allocation of \$0.22 to the Deployment and Sustainment Fund. This will strike an appropriate balance between recognizing fees are public funding sources, and funding operating sustainability for the NG911 platform evolution to provide for public safety under the Act.

We also made additional findings and recommendations regarding network redundancy and diverse routing, contract management and Service Level Agreements, trouble ticket triage notifications, communication and stakeholder outreach, non-vendor supported hardware and software, and cybersecurity planning.