

SB 37 HD# / Jason Husby.

SOUTH DAKOTA



STATE OF SOUTH DAKOTA PSAP EFFICIENCY STUDY

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Prepared by



Executive Summary

South Dakota's Public Safety Answering Points (PSAPs) are critical to ensuring timely and effective emergency responses across the state's diverse geographic and demographic landscape. This study, commissioned by the South Dakota 911 Coordination Board and conducted by 911 Authority, LLC, evaluates the feasibility, benefits, and challenges of consolidating PSAP operations. Using a robust, data-driven methodology incorporating qualitative and quantitative analysis, the study explores opportunities to optimize service delivery, address operational inefficiencies, and improve resource utilization.

Key Findings

1. Performance and Potential for Consolidation:

- PSAPs with lower call volumes and higher costs per 911 call exhibit lower efficiencies in the Key Performance Indicator (KPI), as they often face financial and staffing challenges.
- Centers with strong staffing stability and efficient operations may act as regional hubs, supporting PSAPs through shared resources or overflow call handling.
- Despite operational variability, all South Dakota PSAPs meet or exceed national call-answer standards, showcasing a solid baseline of service delivery.

2. Operational Challenges:

- Staffing shortages exist in urban and rural PSAPs, with vacancy rates as high as 42.86%. These gaps strain operations, notably smaller PSAPs with limited resources.
- Technological disparities, including inconsistent CAD and radio system interoperability, hinder seamless multi-jurisdictional coordination.
- Financial constraints and facility limitations remain barriers to comprehensive consolidation efforts.

3. Stakeholder Perspectives:

- Stakeholders highlight concerns over the potential loss of local control and geographic knowledge in consolidated models.
- There is widespread support for leveraging South Dakota's robust Next Generation 911 (NG911) and State Radio Communications System (SRC) infrastructure to improve interoperability and reduce redundancy.
- Recruitment and retention challenges were consistently identified as critical issues requiring targeted intervention.

Recommendations (Comprehensive list in Section 6)

The report outlines a range of actionable recommendations aimed at improving South Dakota's 911 system through strategic consolidation, workforce development, and enhanced technological integration:

- **Consolidation:**

- **Physical:** Incentivize low-performing PSAPs for regional consolidation, supported by phased implementation and state-level funding.
- **Technological:** Incentivize PSAPs to consolidate into a single technology solution (i.e., CAD) to reduce overall costs and promote interoperability.
- **Co-Location:** Promote the co-location of PSAPs within shared facilities to optimize resource utilization, reduce operational costs, and foster greater collaboration among agencies. This approach allows PSAPs to maintain operational independence while benefiting from shared infrastructure, streamlined communication, and enhanced interoperability.

Note: PSAPs with substantial operational efficiencies should be considered strong candidates for the consolidation point of other PSAPs.

- **Technological Integration:** Implement statewide CAD-to-CAD systems and ensure all PSAPs integrate with the SRC core to enhance communication and reduce operational barriers. Prioritize funding for consolidated PSAPs to establish direct connections to the SRC radio core, eliminating radio interference and expanding their ability to serve geographically distant jurisdictions.
- **Workforce Development:** Introduce targeted state-funded recruitment and retention grants and develop telecommunicator certification programs in partnership with educational institutions.
- **Operational Improvements:** Expand NG911 capabilities, formalize mutual aid agreements, and establish regional telecommunicator pools to manage staffing gaps and fluctuating demand.

Conclusion

South Dakota's PSAP network demonstrates commendable service delivery but faces operational and financial inefficiencies that consolidation and targeted investments can address. By implementing the recommendations outlined in this report, the state can create a resilient, efficient, and future-ready emergency communication system. Achieving these objectives will require collaboration among the 911 Coordination Board, local stakeholders, and public safety agencies to balance statewide goals with community needs.

technologies, including AI and remote dispatching, to transform PSAP operations. South Dakota's NG911 infrastructure was frequently mentioned as a critical asset, enabling advanced call routing and redundancy. Stakeholders expressed optimism that leveraging this existing infrastructure could address some operational challenges associated with consolidation.

5.6 Infrastructure and Funding

Facility limitations and funding concerns were identified as significant barriers to consolidation. Some PSAPs indicated a need for new or expanded facilities to accommodate increased demand or regionalized operations. Additionally, stakeholders expressed uncertainty about how consolidation would affect funding structures, with some fearing that local tax burdens could increase. **The financial burden of transitioning to unified systems and upgrading infrastructure was highlighted as a key concern requiring careful planning and state-level support.**

5.7 Future Outlook

Looking ahead, stakeholders identified both challenges and opportunities for South Dakota's PSAPs. **Rural centers expressed concerns about maintaining operations in areas with declining populations and limited funding sources.** At the same time, several PSAPs are planning expansions or technological upgrades to meet future demands. **Larger PSAPs indicated readiness to absorb neighboring jurisdictions, provided they receive adequate resources and support.** These responses underscore the importance of balancing local needs with statewide goals to ensure a sustainable, efficient emergency response system.

6. Recommendations

This section provides actionable recommendations derived from the analysis of South Dakota's PSAP performance, stakeholder feedback, and the three primary types of consolidation: physical consolidation, technological consolidation, and co-location. Additional recommendations focus on state-level programs, funding mechanisms, and operational strategies to enhance the state's 911 system.

Physical Consolidation

1. **Targeted Assistance for Consolidated PSAPs:** Consider providing assistance to challenged consolidated PSAPs that target the specific area(s) of need.
2. **Targeted Consolidation of Low-Performing PSAPs:** Incentivize consolidation of PSAPs in the 75th percentile with persistent challenges such as low call volumes, high costs per 911 call, and staffing shortages. This would create regional hubs capable of pooling resources and reducing operational redundancies.
3. **Build on Successful Consolidations:** For PSAPs that are already multi-jurisdictional, continued support in staff development, flexible staffing models, and integrated training can refine processes and further solidify their role as regional hubs.

4. **Incremental Consolidation Model:** Pilot a consolidation project with a phased approach, starting with a smaller regional consolidation to demonstrate benefits and refine processes before statewide implementation.

Technological Consolidation

5. **Statewide CAD-to-CAD Initiative:** Implement a CAD-to-CAD initiative that first prioritizes PSAPs in the middle range that wouldn't benefit from physical consolidation.
6. **Standardized Technology Platforms:** Implement shared technology solutions, such as integrated CAD systems and mapping solutions, to improve coordination, reduce costs associated with maintaining separate systems, enable standardized training, and allow for more frequent cross-utilization of staff.
7. **Advanced Analytics and AI Integration:** Explore using standardized AI and predictive analytics tools to enhance call routing, improve resource allocation, and support real-time decision-making.
8. **Implement a Statewide Migration Plan to SRC:** A migration plan to bring all PSAPs onto the SRC network through targeted funding, grants, or technical assistance.
9. **Consolidated PSAPs Connection to SRC Core:** Provide funding for consolidated PSAPs to establish direct connections to the SRC core to eliminate interference and expand capacity to serve distant jurisdictions.

Co-Location

10. **Shared Facilities for Resource Optimization:** Encourage PSAPs in the middle range to co-locate in shared facilities while maintaining operational independence, reducing facility costs, and fostering collaboration. This could be interchanged with or in addition to recommendation 5.
11. **Interagency Training and Collaboration:** Use Large PSAPs, consolidated regional PSAPs, or co-located centers to host joint training sessions and foster a culture of collaboration across agencies, improving interoperability and consistency.

Workforce Development

12. **Recruitment and Retention Grants:** Provide state-funded grants to PSAPs facing high vacancy rates but are otherwise efficient in supporting recruitment campaigns, recruitment tools, wellness programs, and other retention initiatives.
13. **Recruitment Pipeline Development:** Partner with high schools and community colleges to create certification programs and career pathways for telecommunicators, addressing long-term staffing shortages.
14. **Professional Development Programs:** Offer statewide training and career advancement opportunities to retain experienced staff and improve telecommunicator performance. For example, PSAP leader, technical specialist, and financial specialist tracks.

Funding and Program Support

15. **Consolidation Funding Program:** Develop a funding grant program that allows smaller jurisdictions to participate in consolidation or technology upgrades without undue financial strain.
16. **Transition Cost Support:** Provide financial assistance to cover costs associated with technology upgrades, facility modifications, and administrative transitions for PSAPs undergoing consolidation or co-location.
17. **Performance-Based Incentives:** Introduce performance-based funding incentives for PSAPs that meet or exceed statewide efficiency and service quality benchmarks.

Operational and Strategic Planning

18. **Formalized Mutual Aid Agreements:** Assist PSAPs in strengthening interagency coordination through formalized agreements that outline roles, responsibilities, and procedures for cross-jurisdictional incidents.
19. **Leverage Existing NG911 Capabilities:** Expand the use of NG911 infrastructure to improve redundancy and enhance routing capabilities during emergencies or high-call-volume periods.
20. **Stakeholder Engagement Initiatives:** Regularly engage local leaders, PSAP administrators, and other stakeholders to align recommendations with community needs and build consensus for implementation.

Innovative Approaches

21. **Regional Telecommunicator Pools:** Establish regional pools of telecommunicators to manage fluctuations in call volume and staff shortages across multiple jurisdictions. This would be ideal when implemented in conjunction with recommendation 6.
22. **Data-Driven Decision-Making:** Use advanced analytics to continuously evaluate PSAP performance, identify opportunities for improvement, and adapt strategies as needed.

Conclusion

This study highlights the importance of leveraging data-driven approaches to optimize the operation of PSAPs in South Dakota. Through comprehensive analysis and stakeholder engagement, the study highlights the potential of consolidation, enhanced technology, and strategic resource allocation to address operational inefficiencies, staffing challenges, and funding constraints.

The recommendations offer a balanced approach, addressing immediate needs and long-term goals. Proposals for physical and technological consolidation, workforce development initiatives, and innovative funding mechanisms reflect the diverse operational realities across PSAPs. These strategies aim to strengthen the statewide 911 system while maintaining local autonomy and ensuring all communities receive high-quality emergency services.

The findings emphasize that successful implementation will require collaboration among the 911 Coordination Board, PSAP administrators, and local stakeholders. The state can create a more resilient, efficient, and responsive 911 system by aligning shared goals with community needs and leveraging South Dakota's robust NG911 infrastructure.