TEXAS DEPARTMENT OF PUBLIC SAFETY

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August 31, 2024

Dear Member of the Texas Legislature:

The Texas Department of Public Safety, in cooperation with the Texas Interoperable Communications Coalition and other key local, state, and tribal stakeholders, is pleased to report progress toward public safety communications interoperability in Texas. In accordance with Texas Government Code Sections 421.098 and 421.096, on behalf of the Office of the Governor, the Annual Report on Interoperable Communications is provided for your review and information at https://www.dps.texas.gov/iod/interop/docs/interoprpt.pdf

Accomplishments noted in the 2024 Legislative Report include:

- One (1) remaining COG has reported that less than 25% of their agencies are P25-compliant.
- Completed three (3) RICP Workshops
- Annual TxICC Conference
- Distributed nineteen (19) TxICC newsletters and cybersecurity notices to state and local stakeholders

Twenty (20) of the twenty-four (24) COGs, one (1) of the three (3) Tribes, and the combined State Agencies completed a Focus Group survey in 2023, which provided greater clarity and details regarding public safety communications needs and accomplishments within each region during the 2023 reporting period.

With continued cuts in grant funding for these purposes, there will be an impact on public safety communications interoperability for state, local, and tribal responders across Texas. Available state and federal grant funding has again decreased in 2023.

Should you have questions or require additional information, please contact us.

Respectfully submitted,

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Steven C. McCraw Colonel / Director

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2024 Report on Interoperable Communications to the Texas Legislature as required by:

Texas Government Code 421.096

Texas Government Code 421.098

EXECUTIVE SUMMARY

Per Government Code 421.098, the Office of the Governor shall provide an annual report to the Legislature on the status of interoperable communications in Texas. The citizens of Texas rely on and expect emergency responders to arrive quickly at a scene and be ready to help them during a daily incident or emergency. Texans are fortunate to have an impressive force of over 5,300 emergency response agencies that respond daily to emergencies and life-threatening incidents throughout Texas. Public safety communications systems provide emergency responders¹ across Texas and the nation to perform their mission-critical duties – saving the lives and property of Texans. Decades of focused funding have greatly improved the state of interoperability in Texas; however, some areas still have inadequate and unreliable systems.

The 2024 Legislative Report highlights the planning, effectiveness, funding, accomplishments, and challenges of interoperable communications activities completed in Texas during 2023, reported by the Texas Statewide Interoperability Coordinator's Office at the Texas Department of Public Safety, state agencies, regional Councils of Governments, and Tribal Nations through the annual Focus Group survey reports.

Comprehensively, in 2023, the counties in Texas reported an increase in the Level of Interoperability from 3.76 to 3.78. The SWIC Office continued to develop educational materials to aid counties and agencies in better assessing their interoperability level, which led to some counties evaluating their capabilities more accurately.

¹ The term' emergency responders' refers to persons from the broad public safety and first responder community, including but not limited to law enforcement, fire, emergency medical services, emergency management, transportation, public works, and hospitals.

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Statewide Communications Interoperability Plan (SCIP)

The Statewide Communications Interoperability Plan (SCIP) is a tool developed by the U.S. Department of Homeland Security (DHS). It is used nationwide to assist the public safety community by identifying goals and initiatives to improve public safety communications with input from local, state, tribal, and federal stakeholders. The SCIP document started in 2007 as a requirement in the DHS grant process and has continued as a best practice.

The Texas Statewide Interoperability Coordinator (SWIC), in consultation with the Texas Interoperable Communications Coalition (TxICC), works jointly on public safety communications interoperability planning and policy. The TxICC is specifically constituted to examine communication issues across Texas and identify cohesive solutions to address them through the SCIP. The TxICC established a SCIP Executive Council (SEC) consisting of one delegate from each Council of Governments (COG) region, the three Tribal Nations, and one State Agency representative to serve as the official delegates of the TxICC.

TxICC representatives use the SCIP to help their respective communities improve public safety communications. The SCIP prioritizes resources, strengthens governance, and educates and informs local, Tribal, and State elected officials and stakeholders of the importance of public safety communications and the need to continue funding it.

On a routine basis, the Texas SWIC Office conducts a workshop to review existing goals and initiatives, develop new initiatives, and set priorities for the following year. The TxICC holds its annual conference to review and vote on proposed updates to the SCIP and discuss other public safety communications issues and updates.

The current version of the SCIP is located on the Texas Department of Public Safety website.

https://www.dps.texas.gov/IOD/interop/docs/texasSCIP.pdf

Regional Interoperability Communications Plans

In 2011, the TxICC initiated Regional Interoperability

Communications Plans (RICP) to document public safety communications needs, create a technical implementation and migration plan, and identify the associated costs to meet those unique needs within each COG. Each COG/Tribe maintains and

reviews the plans regularly. Through their annual Regional Focus Group Workshop, COGs and

Communications is the fundamental capability within disciplines and jurisdictions that practitioners need to perform the most routine and basic elements of their job functions.

Agencies must be operable, meaning they must have sufficient wireless communications to meet their everyday internal and emergency communication requirements before they place value on being interoperable, i.e., able to work with other agencies.

Communications interoperability is the ability of public safety agencies (police, fire, EMS) and service agencies (public works, transportation, hospitals, etc.) to talk within and across agencies and jurisdictions via radio and associated communications systems, exchanging voice, data and/or video with one another on demand, in real-time, when needed, and when authorized.

It is essential that public safety has the intra-agency operability it needs, and that it builds its systems toward interoperability.

> Source: Target Capabilities List, www.DHS.gov, 29

Tribes bring together public safety responders to discuss and document progress on their RICPs and the SCIP, as well as priorities, accomplishments, challenges, and needs.

The SWIC Office partners with the U.S. Department of Homeland Security to hold workshops to review and update RICPs. Since 2017, twenty COGs and all three Tribes have conducted workshops to update their regional plans. The remaining COGs are scheduled to be completed by CY25.

The Current Status of Voice Communications Interoperability in Texas

The Texas Statewide Communications Interoperability Maturity Model is based on the SAFECOM Interoperability Continuum.² The model outlines the evolution from the lowest level to the highest level of communications interoperability. In Appendix A, the map of Texas highlights the status of each county regarding their self-reported level of interoperability in the "Voice Technology" lane of the model. As the map indicates, in 2023, Texas is reporting a level of 3.78 (Mid-Range) on the Voice Communications lane of the Maturity Model. This level is an increase in maturity from 3.76 reported in the Fiscal Year 2023 Report on Interoperable Communications. The SWIC Office continued to develop educational materials to aid counties and agencies in better assessing their interoperability level, which led to some counties evaluating their capabilities more accurately. The most common level of interoperability in Texas is Level 3, with a growing number of counties and agencies wanting to join regional radio systems as Statewide Emergency Radio Infrastructure (SERI) grants accommodate the construction of new towers and upgraded radios.

Texas Statewide Communications Interoperability Maturity Model Color Codes:	
Level One (least interoperable)	
Level Two 6 Counties	
Level Three141 Counties	
Level Four 6 Counties	
Level Five (most interoperable)100 Counties	
Total:254 Counties	
Average Statewide Interoperability Level: 3.78	

²https://www.cisa.gov/publication/interoperability Through collaboration with emergency responders and elected officials across all levels of government, SAFECOM works to improve emergency response providers' inter-jurisdictional and interdisciplinary emergency communications interoperability across local, regional, tribal, state, territorial, international borders, and with federal government entities.

Expenditures Toward Interoperability

The Office of the Governor's Homeland Security Grants Division allocated Texas jurisdictions State Homeland Security grant funding of \$6,528,945.59 in 2023 to fund projects and equipment for interoperable emergency communications. This funding is a decrease of \$261,951.37 from the previous year. Projects range from constructing towers and updating microwave equipment to purchasing radio equipment and accessories.

The Office of the Governor's Homeland Security Grants Division also allocated Texas jurisdictions Justice Assistance Grants (JAG) funding of \$507,151.30 in 2023 to spend on radios, accessories, and receiver/transmitting communications equipment. This funding is a decrease of \$150,000.48 from the previous year. JAG grants also provide funding for emergency communications equipment.

The Office of the Governor's Homeland Security Grant Division did not award a Statewide Emergency Radio Infrastructure (SERI) grant in 2023. The decades-long trend of decreased grant funding continued in the amounts awarded in 2023, where Texas agencies realized a total grant funding decrease of over \$411,000 from the previous year. Lack of funding for equipment lifecycle replacements and maintenance leads to decreased capabilities over time.

Grant purchases for communication equipment are forwarded to the SWIC Office for review to ensure alignment with SCIP goals and initiatives.

Accomplishments Toward Interoperability

Representatives from the Texas emergency response community have worked together as the Texas Interoperable Communications Coalition (TxICC) to overcome the identified communications challenges since 2007. The TxICC is the State interoperability governance body responsible for planning and overseeing emergency communications interoperability throughout Texas. Below are some achievements reported through the TxICC, TxDPS, and across the state in 2023.

TxICC / Statewide Accomplishments

The SWIC Office conducted various stakeholder engagements and activities:

- Processed 59 TSICP Memorandums of Understanding (MOUs) defining interoperable communications protocols
- Approved 132 grant-funded communications equipment requests
- 1 State Agency Communications meeting
- Completed 14 Texas Solar Eclipse Planning Workshops
- Completed 3 RICP Workshops
- Annual TxICC Conference
- Distributed 19 TxICC newsletters and cybersecurity notices

State Agencies improved their communications capabilities:

- DPS: Added three new Communications Platforms, began replacing five new towers in West and South Texas
- TXDOT: Added new trunked sites in South Texas, constructed new towers in North and East Texas
- TDCJ: Added new towers at the Lopez and Cole units
- TFS: Added three new tower sites

TxDPS Response Operations Deployments for 2023

Completed twelve deployments supporting TxDPS Task Force and Special Operations:

- Texas Motor Speedway NASCAR 3/3 4/3/2023 Fort Worth
- Final Four NCAA Basketball 3/31 4/4/2023 Houston
- Aircraft Exercise 9 Mile 4/10 4/18/2023 Sanderson
- Larry Joe Taylor Fest 4/24 5/1/2023 Stephenville
- Uvalde THP Support 5/22 5/26/2023 Uvalde
- NDOW Exercise 5/23 5/25/2023 Corpus Christi
- TDEM Conference 5/30 6/2/2023 Fort Worth
 Inflatable Tent deployment 8/10 8/18/2023 Florence
- SOW support Eclipse 10/12 10/15/2023 Uvalde
- Chili fest 10/20 10/23/2023 Snook
- Red River Training/Exercise 10/21 10/27/2023 Thackerville, OK
- CCTA Exercise 10/23 10/27/2023 Statewide

Communications Training Courses offered by TxDPS and DHS/ECD in 2023

- Four (4) Communications Unit Leader classes (16, 7, 12, and 6 attendees each)
- Four (4) Communications Technician classes (15, 10, 13, and 7 attendees each)
- One (1) Auxiliary Communications class (13 attendees)

State-Credentialed Communications Personnel

- Texas has 331 State Credentialed Communications Unit personnel
- Texas has 67 State Credentialed Communications Unit instructors

Communications Exercises coordinated with TxDPS in 2023

Communications Exercises (COMMEX) provide experiential learning based on disaster and critical incident scenarios.

- Lower Rio Grande Valley Development Council (LRGVDC) Tabletop Exercise and training with state and local agencies
- Natural Disaster Operational Workgroup (NDOW) COMMEX Training in Corpus Christi radio and data communications training with state and local agencies
- 2023 Annular Solar Eclipse at Uvalde, Texas radio and data communications support training with state and local agencies
- Central States Exercise, Red River Boot Camp Exercise at Thackerville, OK radio and data communications training with numerous state and local agencies

Strategic Advisory Groups (SAGs)

SAGs members are representatives from the TxICC and groups are established to achieve the goals and initiatives outlined in the SCIP. Selected accomplishments from each of the SAGs are summarized below:

Texas Statewide Interoperability Channel Plan (TSICP) SAG

The TSICP SAG completed an update to the TSICP and was adopted by the Texas Interoperable Communications Coalition in July 2023.

Regional Accomplishments

COGs and Tribes reported the accomplishments and challenges below through their annual Focus Group Reports. Appendix B highlights the Focus Group survey results from the COGs and Tribal Nations for 2023.

- 1 remaining COG has reported that less than 25% of their agencies are P25-compliant. This is an improvement from last year, where 2 COGs reported less than 25% of their agencies are P25compliant
- 15 COGs reported agencies within their area are partners of existing regional radio systems
- 8 COGs completed projects to construct towers, upgrade antennas, and generators
- 5 COGs reported conducting regular drills, exercises, and events using interoperability assets

Conclusion

Interoperability is essential to public safety and quickly responding to emergencies. While Texas is at an average maturity level, opportunities for improvement remain.

As Texas seeks to improve our statewide interoperability maturity level, it is essential for local jurisdictions to participate Dedicated funding will help ensure that participation. Government Code Chapter 421 does not mandate the involvement of local governments. This lack of participation contributes to the lack of training, collaboration, standardization, and adoption of the best practices.

APPENDIX A: VOICE RADIO COMMUNICATIONS INTEROPERABILITY LEVELS ACROSS TEXAS

THE TEXAS STATEWIDE COMMUNICATIONS INTEROPERABILITY MATURITY MODEL

The Texas Statewide Communications Interoperability Maturity Model is based on the SAFECOM Interoperability Continuum.³ The model outlines the evolution from the lowest level to the highest level of communications interoperability (Level One – least interoperable to Level Five – most interoperable). The map of Texas on page 11 highlights the 2023 status of each county regarding their level of interoperability in the "Voice Technology" lane of the model. The status is indicated by the distinctive colors associated with the five levels of interoperability. The information was obtained directly from the 24 COGs and 3 Federally Recognized Tribes in Texas through a survey submitted to TxDPS. The map indicates that Texas has achieved an average Level Three Mid-Range wireless communications interoperability rating.

Level One = The lowest level of interoperability, accomplished by physically exchanging radios to communicate with other agencies (swap radios).

Level Two = Minimal interoperability, accomplished using gateway devices (electronically interconnecting two or more disparate radio systems through gateways).

Level Three = Mid-range interoperability using shared channels.

Level Four = Improved interoperability using shared proprietary system(s).

Level Five = The optimal level of full interoperability using P25 standards-based shared systems to communicate with other agencies.

³ https://www.cisa.gov/publication/interoperability

Level 5 - Full Intercoperability (P25 Standards-Based, Shared Systems)

Texas Statewide Communications

Interoperability Maturity

Model

Level 4 Improved Interoperability (Use of Proprietary Shared Systems)

Governance

Key Multi-Discipline Staff

Collaboration on a Regular Basis

<u>SOP</u>

Regional Set of

CommunicationsSOPs

Governance

Regional Committee Working withina Statewide Communications Interoperability Plan Framework

SOP

National Incident Management System Integrated SOPs

DATA VOICE Technology Technology Two-Way Standards-Standards- Based Shared Based Sharing Systems

Training and Exercises Regular Comprehensive Region

wide Training and Exercises

Usage Daily Use Throughout Region

Level 2 Limited Interoperability (Use of Gateways)

Governance

Informal Coordination

Between Agencies

<u>SOP</u>

Joint SOPs for Planned

Events

VOICE

Technology

Gateway

DATA

Technology

Common

Applications

Key Multi-Discipline Staff Collaboration on a Regular Basis

Level 3

Mid-Range Interoperability

(Use of Shared Channels)

Governance

SOP

Training and Exercises

Multi-agency Tabletop

Exercises for Key Field and

Support Staff

Incidents

VOIŒ

Technology

Shared

Channels

DATA

Technology

Custom

Interfaced

Applications

Joint SOPs for Emergencies DATA

Technology Technology One-Way Proprietary Standards-Shared Based Sharing System

VOICE

Training and Exercises

Multi-agency Full Functional Exercises Involving All Staff

Usage Regional Incident Management

Level 1 Minimal Interoperability (Swap Radios)

Governance Individual Agencies Working Independently

> SOP Individual Agency SOPs

DATA VOICE **Technology** Technology Swap Radios Swap Files

Training and Exercises General Orientation on Equipment and Applications

> Usage Planned Events

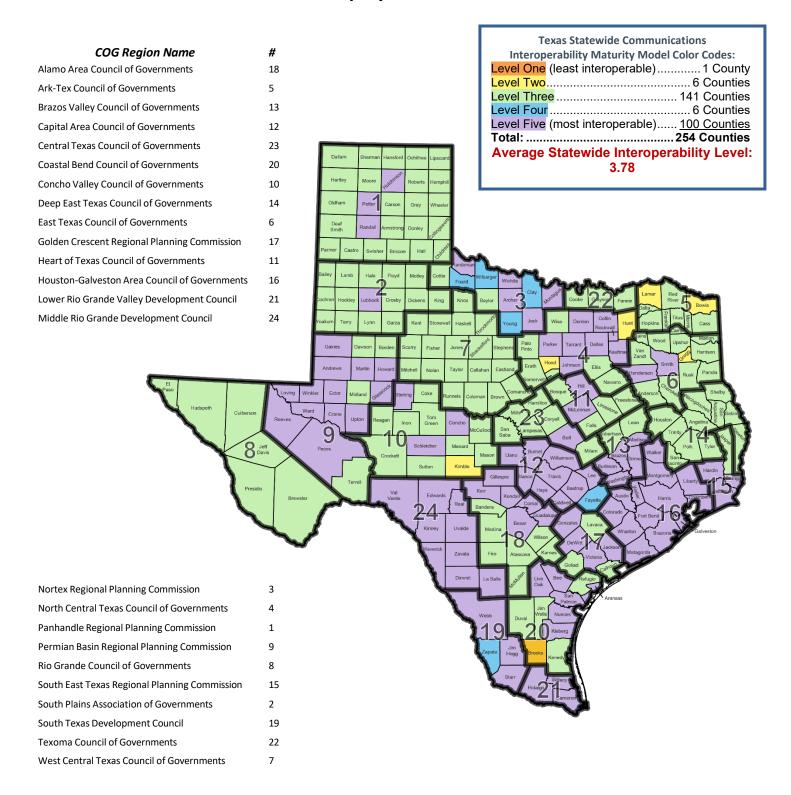
Training and Exercises Single Agency Tabletop Exercises for Key field and Support Staff

> Usage Localized Emergency Incidents

Usage LocalizedEmergency

2023

Texas Statewide Voice Communications Interoperability Color-Coded Map by COGs and Counties



APPENDIX B: 2023 FOCUS GROUP SURVEY RESULTS

The Focus Group Survey was available for COGs, Tribes, and State Agencies from December 2023 through March 2024 to report on activities accomplished in 2023. 20 of 24 Texas COGs, 1 of 3 Tribes, and the Combined State Agencies completed the 2023 Focus Group Survey.

Governance

- 73% of Texas COGs and Tribes reported that they have a Homeland Security Committee that meets regularly to set Interoperable Communications priorities.
- 76% of the Committees meet as needed, but all meet at least annually.
- 31% of Texas COGs have updated contact lists with the SWIC Office.
- 80% of Texas COGs reported having met with regional decision-makers or elected officials to promote interoperability and support sustainable funding for communications.

Planning and Procedures

- 56% of Texas COGs participated in a public event displaying communications equipment.
- 60% of COGs and Tribes have or are in the process of updating their RICP within the last five years.

Training, Exercises, and Evaluation

- 68% of COGs and Tribes participate in regularly scheduled drills using interoperable communication.
- 92% of COGs and Tribes reported participating in a multi-agency exercise.
- 64% of COGs and Tribes reported participating in an exercise or event that employed mobile communications assets as part of the exercise.
- 42% of COGS and Tribes reported agencies are using broadband applications daily and in exercises.
- 67% of COGs and Tribes have designated a Communications Unit point of contact.
- 20% of COGs and Tribes have updated assets and equipment in the CASM database.

Communications Coordination

36% of COGs and Tribes reported updating their Regional SOP in the last three years.

Technology and Infrastructure

- COGs and Tribes report that P-25 standards are being adopted for communications infrastructure and subscriber equipment.
 - o 60% report that 90-100% of their agencies use P-25 equipment.
 - o 36% report that 50-90% of their agencies use P-25 equipment.
 - o 0% report that 25%-50% of their agencies use P-25 equipment.
 - o 4% report that Less than 25% of their agencies use P-25 equipment.

- COGs and Tribes report that P-25 radios have been programmed in compliance with the TSICP.
 - o 68% report that 90-100% of their agencies have programmed radios to the TSICP.
 - o 20% report that 50-90% of their agencies have programmed radios to the TSICP.
 - 4% report that 25-50% of their agencies programmed radios to the TSICP.
 - o 8% report that less than 25% of their agencies programmed radios to the TSICP.
- COGs and Tribes report that many agencies have executed the TSICP MOU.
 - o 40% report that 90-100% of their agencies have executed the MOU.
 - o 28% report that 50-90% of their agencies have executed the MOU.
 - o 8% report that 25-50% of their agencies have executed the MOU.
 - o 24% report that less than 25% of their agencies have executed the MOU.
- COGs and Tribes report that agencies are generally part of a Regional Radio System.
 - o 60% report that their agencies are generally part of a Regional Radio System.

Cybersecurity

- COGs and Tribes report that only a few agencies are conducting Cybersecurity Threat Assessments.
 - o 28% report that 90-100% of their agencies have done assessments.
 - o 32% report that 50-90% of their agencies have done assessments.
 - o 16% report that 25-50% of their agencies have done assessments.
 - o 24% report that less than 25% of their agencies have done assessments.
- COGs and Tribes indicate that Land Mobile Radio, Broadband Applications, 9-1-1/CAD, Alerts and Warnings, and IT Infrastructure are technologies included in cybersecurity threat assessments.
- COGs and Tribes report implementation of multi-factor authentication on broadband applications.
 - o 20% report that 90-100% of their agencies have enabled multi-factor authentication.
 - o 20% report that 50-90% of their agencies have enabled multi-factor authentication.
 - o 20% report that 25-50% of their agencies have enabled multi-factor authentication.
 - o 40% report that less than 25% of their agencies have enabled multi-factor authentication.
- COGs and Tribes report agencies have developed Cybersecurity Incident Action Plans.
 - o 20% report that 90-100% of their agencies have developed plans.
 - o 16% report that 50-90% of their agencies have developed plans.
 - o 20% report that 25-50% of their agencies have developed plans.
 - 44% report that less than 25% of their agencies have developed plans.

2023 Capability Gaps reported during the COG and Tribe Focus Group survey:

Funding remains the number one gap indicated in the Focus Group survey.

- Many COGs reported agencies lack sufficient funds to purchase P25 infrastructure such as towers, repeaters, connectivity, and generators.
- Consistent funding is needed to replace P25 subscriber equipment adequately for most smaller agencies.
- · Coverage gaps indicated additional tower sites are still needed in most COGs.
- Interoperable communications equipment for VFDs and Rural EMS agencies lack funding.
- PSAPs require funding for console and radio upgrades.

Cybersecurity

- Improvements have been made, but overall, Many agencies are not conducting Cyber Threat Assessments nor developing Cyber Incident Action Plans.
- Implement a Federated Identity, Credentialing, and Access Management (ICAM) system to enable data interoperability.

Training and Exercises

- Funding for regional exercises and training is needed.
- RICPs need to be updated.
- One COG reported needing an SOP for interoperability.
- A tribe reported needing MOUs with other agencies and a regional SOP for interoperability.

Regional Radio Systems

- Funding is required to join and operate most region/county systems. Due to the monthly user costs, there is continued resistance to joining existing systems.
- More cities and counties have decided to purchase their own core system and bypass the existing regional system, causing core equipment redundancies and funding inefficiencies.
- The ability of agencies to have interoperable communications using broadband information-sharing applications continues to be a growing gap.