Interim Report

TO THE EIGHTY-NINTH TEXAS LEGISLATURE

HOUSE COMMITTEE ON HOMELAND SECURITY & PUBLIC SAFETY

JANUARY 2025

HOUSE COMMITTEE ON HOMELAND SECURITY & PUBLIC SAFETY
TEXAS HOUSE OF REPRESENTATIVES
INTERIM REPORT 2024

A REPORT TO THE
HOUSE OF REPRESENTATIVES
89TH TEXAS LEGISLATURE

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January 14, 2025

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The Honorable Dade Phelan
Speaker, Texas House of Representatives
Members of the Texas House of Representatives
Texas State Capitol, Rm. 2W.13
Austin, Texas 78701

Dear Mr. Speaker and Fellow Members:

The Committee on Homeland Security& Public Safety of the Eighty-eighth Legislature hereby submits its interim report including recommendations for consideration by the Eighty-ninth Legislature.

Respectfully submitted,

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INTERIM STUDY CHARGES

CHARGE I: Monitoring

Monitor the agencies and programs under the Committee's jurisdiction and oversee the implementation of relevant legislation passed by the 88th Legislature.

Conduct active oversight of all associated rulemaking and other governmental actions taken to ensure the intended legislative outcome of all legislation, including the following:

HB 3290, relating to the next generation 9-1-1 service fund; and
SB 602, relating to the law enforcement authority of federal border patrol agents.

CHARGE II: Firearm Purchasing Fees

Examine existing firearm purchasing and transfer fees. Consider their efficacy and the impact of reducing or eliminating the fees.

CHARGE III: Use of Less-Lethal Devices in Law Enforcement

Study the use of less-lethal devices in law enforcement encounters, including recent incidents, and their potential to reduce the risk of death or injury to officers and suspects. Consider methods to increase the use of less-lethal devices for the safety and benefit of all parties.

CHARGE IV: Communications Interoperability

Study the communications challenges of first responders and emergency personnel. Make recommendations, considering the need for a cross-agency communications upgrade or statewide interoperability plan, to increase reliable, available, and modern communications for public safety and emergency response purposes in communities across the state.

EXECUTIVE SUMMARY

Charge I: Monitoring

Objective

Monitor the agencies and programs under the Committee's jurisdiction, ensuring the implementation of relevant legislation passed by the 88th Legislature, with a focus on **HB 3290** and **SB 602**.

HB 3290: Relating to the Next Generation 9-1-1 Service Fund

Background

HB 3290 facilitates the modernization of Texas's emergency communication system by transitioning to Next Generation 911 (NG911). This advanced, IP-based system supports multimedia communication, enhances location accuracy, and improves system resilience to meet the evolving demands of public safety.

Implementation Findings

- **Rulemaking and Funding Allocation:**
    - The Texas Commission on State Emergency Communications (CSEC) is actively implementing NG911. Approximately $136 million has been distributed to Emergency Communication Districts (ECDs) to fund infrastructure upgrades, with additional support for regional planning commissions (RPCs). This has driven significant progress, with over half of Texas's 911 entities reaching the intermediate NG911 maturity stage.
- **Operational Advancements:**
    - NG911 has improved call routing, multimedia data sharing, and system redundancy. These upgrades have bolstered emergency response, as evidenced by Greater Harris County's successful management of a massive call surge during a derecho. However, rural areas face challenges in integrating NG911 due to limited infrastructure and technology compatibility.
- **Challenges Identified:**
    - **Sustainable Funding:** The current 50¢ wireless phone fee is insufficient for NG911's recurring costs, including hardware maintenance and software updates.

- **Integration and Training:** Rural regions face barriers in compatibility with first responder legacy systems and require targeted training for advanced NG911 features.

- **Cybersecurity Risks:** The IP-based system introduces new vulnerabilities, necessitating enhanced security protocols.

Recommendations

1. Secure Sustainable Funding

- Evaluate increasing the wireless phone fee from 50¢ to 75¢ to generate an estimated $75-80 million annually for NG911 maintenance, operations, and administrative costs. Explore alternative revenue sources, including grants and partnerships with technology providers.

2. Enhance Cybersecurity Measures

- Implement regular information security assessments based on the National Institute of Standards and Technology (NIST) cybersecurity framework. Invest in threat detection systems, network monitoring, and staff training to mitigate cyber risks.

- Consider the funding needs of these additional investments.

3. Expand Training and Collaboration

- Evaluate partnering with solutions providers to facilitate training on NG911's advanced features, including GIS layers, indoor mapping, and multimedia data sharing.

- Develop collaborative frameworks between ECDs, RPCs, as well as local and state agencies to address integration challenges and streamline procurement processes.

- Consider the funding needs of these additional investments.

4. Accelerate Transition in Rural Areas

- Allocate targeted resources to expedite NG911 adoption in rural regions. Evaluate building redundancy through microwave and wireless broadband backups to address limited fiber availability. Explore options to update legacy systems of first responders to ensure compatibility with NG911 and allow rural first responders to benefit from NG911's enhanced capabilities.

SB 602: Relating to the Law Enforcement Authority of Federal Border Patrol Agents

Background

SB 602 enhances public safety by granting federal border patrol agents the authority to enforce Texas state felony laws at checkpoints and ports of entry. The legislation aims to address jurisdictional gaps, improve coordination between federal and state authorities, and bolster local law enforcement efforts through interagency collaboration.

Implementation Findings

- **Collaboration Between Federal and State Authorities:**
    - **Training Development:**
        - DPS has finalized an 8-hour curriculum on Texas state laws, including arrest, search, and seizure guidelines. Collaboration with the Border Prosecution Unit ensures the training meets legal and operational requirements.
    - **Federal Delays:**
        - Federal approval for training programs and agreements has stalled progress, hindering the state's readiness to fully implement the legislation.
- **Operational Challenges:**
    - **Jurisdictional Gaps:**
        - Federal agents' limited authority to enforce state laws creates enforcement gaps, particularly in remote areas where local law enforcement resources are stretched thin.
    - **Scalability of Training:**
        - While DPS is prepared to train 50 agents per session, federal inaction prevents the full utilization of these training capabilities.
- **Community and Public Safety Impacts:**
        - Enhanced enforcement at checkpoints would reduce road safety risks, curb human trafficking, and improve protections for vulnerable populations.

Recommendations

1. Engage Federal Partners

- Advocate for expedited federal approval of training programs and agreements. Utilize legislative or diplomatic channels to accelerate coordination.

2. Increase Public Awareness

- Highlight the public safety benefits of SB 602 to build public and political support. Emphasize the role of border patrol agents in addressing critical safety concerns, such as drunk driving and other crimes.

3. Develop Regional Training Hubs

- Evaluate establishing training centers in strategic locations to accommodate large groups of border patrol agents. This preparation will ensure rapid deployment once federal approval is obtained.

Charge II: Firearm Purchasing Fees

Objective

To assess the impact and practicality of firearm purchasing and transfer fees in Texas, examine the implications of reducing or eliminating these fees, and propose strategies that uphold Texas's free-market principles while safeguarding public safety and economic balance.

Background

Firearm purchasing and transfer fees in Texas are not mandated by federal or state law. Instead, they are determined independently by Federal Firearm Licensed dealers (FFLs), adhering to federal requirements under 18 U.S.C. § 922. The FBI performs National Instant Criminal Background Checks (NICS) at no cost to FFLs, while the fees charged by dealers are market-driven, reflecting operational costs such as administrative processing, firearm storage, and compliance efforts for private-party or out-of-state transfers. These fees, typically ranging between $35 and $100, align with Texas's commitment to free-market principles and minimal governmental regulation.

Findings

- **Free-Market Economy:**
    - Texas's market-driven approach allows FFLs to set firearm transfer fees autonomously, avoiding governmental interference and fostering economic flexibility for businesses.
- **Public Safety Considerations:**
    - FFLs play a vital role in ensuring that background checks are conducted for private-party and out-of-state transfers, contributing to public safety by preventing firearm access by prohibited individuals.
- **Economic and Operational Impact:**
    - Any regulation fees could discourage FFL participation in private-party transfers, diminishing the use of background checks and reducing public safety compliance. Further, fee subsidies or exemptions for specific populations may impose direct financial costs on the state.

Recommendations

1. Preserve Free-Market Autonomy:

- Maintain the current market-driven fee structure, allowing FFLs to set fees independently based on operational needs and consumer demand.

2. Avoid Regulatory Sprawl:

- Avoid policies that impose financial burdens on the state without clear benefits to public safety.

3. Encourage Transparency:

- Encourage voluntary disclosure of fee structures by FFLs to improve consumer awareness and trust without imposing regulatory burdens. Enforce Chapter 610, Business & Commerce Code, protections against payment card tracking of firearm transactions.

4. Recognize FFL Contributions:

- Support the essential role of FFLs in ensuring lawful firearm transfers and fostering public safety, while respecting their autonomy as private businesses.

Charge III: Use of Less-Lethal Devices in Law Enforcement

Objective

To examine the deployment and effectiveness of less-lethal devices in law enforcement encounters, assessing their impact on reducing injuries and fatalities while identifying barriers to adoption and areas for improvement.

Background

Less-lethal devices, including TASERs, pepper sprays, and tools like the BolaWrap, are essential for law enforcement, offering non-lethal alternatives to manage volatile situations. These tools minimize the risk of fatalities and severe injuries, providing a continuum of force particularly valuable in mental health crises and scenarios involving non-compliance.

Categories of Less-Lethal Force Use:

- **Compliance through Deterrence:** Without deploying the device, compliance is achieved through verbal warnings/instructions by the law enforcement officer or via audible or visual effects of the device.

- **Compliance through Interdiction:** By deploying the device, compliance is achieved through device effects, such as neuromuscular incapacitation, temporary sensory impairment, or physical restraint.

Findings

Effectiveness and Challenges

- **Reduction in Injuries:**
    - Studies show less-lethal devices reduce subject injuries by 65% and fatalities by 80%. Tools like TASERs and BolaWraps enhance de-escalation when used appropriately.
- **Operational Barriers:**
    - Smaller departments face cost constraints, limiting access to advanced tools, while inconsistent or inadequate training hampers effective use.
- **Mental Health Crises:**
    - While less-lethal devices help manage incidents involving individuals in crisis, improper deployment highlights the need for mental health-specific training.

- **Legal Concerns:**
    - Federal and state law inconsistencies, such as classifying TASER 10 as a "firearm," complicate adoption and application of new technologies, discouraging broader use.

Recommendations

1. Clarify Legal Definitions

- Evaluate defining "less-lethal device" under Texas law and establish clear distinctions between less-lethal and lethal use-of-force contexts. Address the inconsistencies that lead to classifying tools like the TASER 10 as firearms.

2. Protect Officers Using Less-Lethal Devices

- Evaluate developing statutory provisions to shield officers from prosecution when deploying less-lethal devices in accordance with training, established protocols, and manufacturers' designed uses.

3. Increase Funding for Less-Lethal Devices

- Evaluate providing state-level funding to ensure equitable access to less-lethal technologies across law enforcement agencies, particularly in smaller and rural jurisdictions. Consider including funding for proper maintenance and inventory management of both the devices and their supplies.

4. Enhance Officer Training

- Evaluate mandating comprehensive, scenario-based training programs that emphasize proportional responses, de-escalation techniques, and the judicious use of less-lethal devices. Consider developing model policies and evaluate requiring their adoption across law enforcement agencies.

5. Address Mental Health Implications

- Study the role of less-lethal devices in managing encounters with individuals in mental health crises, including those at risk of "suicide by cop."

6. Encourage Technological Advancement

- Evaluate incentivizing the development and commercialization of advanced less-lethal tools to improve officer safety and public outcomes.

Charge IV: Communications Interoperability

Objective

Examine communications challenges faced by first responders and emergency personnel, focusing on the development of a statewide interoperability plan to enhance cross-agency communication, coordination, and overall public safety.

Background

Communications interoperability enables seamless information exchange among law enforcement, fire departments, emergency medical services (EMS), and other agencies during emergencies. However, Texas faces significant challenges due to outdated systems, geographic diversity, and inconsistent standards. These challenges are particularly acute in rural and underserved areas, where infrastructure gaps and equipment disparities hinder timely and effective responses.

Findings

Technological and Operational Gaps

- **Outdated Equipment:**
    - Many agencies rely on legacy radio systems incompatible with neighboring jurisdictions.
    - Limited integration between agencies hinders timely information sharing.
    - Lack of standardized communication platforms and tools across agencies limits real-time collaboration and situational awareness.
- **Coverage Gaps:**
    - Rural and remote areas experience frequent communication failures due to limited infrastructure, leaving first responders vulnerable during critical incidents.
- **Training and Preparedness:**
    - Disparate training levels among agencies exacerbate communication inefficiencies during emergencies.
    - Dispatchers and operators face high-stress levels, inadequate compensation, and limited mental health support, affecting workforce stability and effectiveness.

- **Budget Constraints:**
    - Smaller municipalities lack the resources to upgrade systems or implement advanced interoperable technologies, exacerbating disparities in response capabilities.

Recommendations

1. Invest in NG911 Infrastructure

- Evaluate additional support for expanding the implementation of NG911 statewide to allow call routing and enable the processing of multimedia inputs, such as texts, videos, and automated alerts. This infrastructure is vital for bridging the gap between traditional voice calls and multimedia-rich information that first responders increasingly rely on for situational awareness. By modernizing 911 centers with Next Generation 911 technology, emergency services will be better equipped to receive and process a wider array of information from the public, including text messages, videos, images, and real-time location data directly from the scene of the incident.

- Provide training for operators to handle new forms of communication effectively.

2. Improve Accessibility

- Evaluate deploying public awareness campaigns to promote beyond-voice reporting options, such as text-to-911, especially in rural areas with NG911 capabilities.

3. Modernize Dispatch Equipment

- Allocate funding to upgrade dispatch centers with modern hardware and software capable of processing multiple types of information and data streams. This capability is transformative, as it provides a visual and situational context that enhances dispatchers' ability to assess emergencies accurately. For instance, dispatchers can receive live images from a caller witnessing an accident, allowing first responders to arrive more prepared and informed. With access to multimedia data, dispatchers can provide more detailed descriptions and actionable insights, such as potential hazards or the number of individuals involved, to responders on the way to an incident. This integrated system minimizes the need for repetitive or clarifying questions and reduces dispatchers' reliance on relayed information, ultimately speeding up response times and enhancing overall coordination.

4. Enhance Technology Training

- Study the development of statewide training programs for dispatchers to improve their ability to manage multiple types of information and data streams and coordinate between agencies with different protocols.

5. Standardize Protocols

- Evaluate the adoption and implementation of statewide communication protocols consistent with best practices and established standards in incident management to ensure consistent terminology and procedures across all agencies. This will ensure that dispatchers can maintain smooth, clear communication between first responders, especially when coordinating resources in complex incidents.

6. Improve Training, Compensation, and Care

- Evaluate improving compensation, skills training, and support systems, especially in stress management and mental health, for emergency dispatchers, particularly in rural areas.

- Study solutions to critical challenges in talent attraction, development, and retention in the public safety dispatch profession.

7. Develop a Statewide Redundant Communication System

The Initial Incident Response phase is both the most critical to saving lives and property as well as the most vulnerable stage for communication breakdowns, making reliable interoperable communication between agencies absolutely essential. Interoperability should extend from daily routine operations all the way to catastrophic emergency scenarios. During catastrophic emergency scenarios, there are three key components to operability/communication:

  - The technological capabilities of the devices in the hands of responders.
  - The skill sets to leverage the technology and to implement the actions in the field.
  - The skill sets to respond to incident commands.

To achieve this reliable, interoperable communication, the State of Texas should:

- Evaluate establishing a Unified Emergency Communications Council made up of legislative, agency, local government, and industry leaders to provide expertise, guidance, strategic planning, and ongoing oversight and support for interoperability initiatives. The Council would identify suitable solutions in radio, multi-use communications tower, network integration, hardware, and software for both reliable, interoperable voice and beyond-voice emergency communications. Technologies considered should provide the highest level of redundancy in even extreme operational environments and cover analog as well as digital radio networks, Radio over IP, wireless broadband networks including the National Public Safety Broadband Network, Wi-Fi networks, as well as be capable of or be upgradeable to leveraging emerging satellite networks. The Council should be empowered to make investment recommendations in the suitable solutions it identifies.

- Evaluate establishing a Unified Emergency Communications Fund. The Fund would provide resources for recommendations of the Council for state investments and grants to agencies and local governments to transition their communications tools from the status quo onto the statewide network.

- Evaluate the development of a state-wide communication system that would both integrate existing local & regional systems and expand system coverage into currently unserved or underserved areas to give full operability to responders at the local, state, and federal levels. True interoperability is about actionable communications that will result in action. Interoperability can only be achieved if all agencies use compatible radios and equipment that allow first responders to quickly and reliably get onto the same channel upon arrival at the site of an incident.

8. Establish State Wide Incident Command Training Standards

- Evaluate developing a uniform emergency response incident command training and make it mandatory for all agencies and local governments participating in the state-wide redundant radio system. This would allow standardized terminology and procedures, as well as technology skills, to maximize multi-agency coordination.

9. Expand Use of Advanced Tools

- Evaluate the integration of tools like drones, GIS mapping, real-time video feeds, and other beyond-voice technologies into shared platforms accessible by all agencies.

10. Improve Cross-Agency Collaboration

- Evaluate establishing training and protocols for continuous information sharing during incidents, including procedures to provide updates to response leadership and field units in real-time.

11. Secure Beyond-Voice Communication Tools

- Evaluate options to replace the use of consumer-grade apps with purpose-built solutions designed for secure, real-time communication.

FULL-LENGTH REPORT

CHARGE I: MONITORING

Monitoring: Monitor the agencies and programs under the Committee's jurisdiction and oversee the implementation of relevant legislation passed by the 88th Legislature. Conduct active oversight of all associated rulemaking and other governmental actions taken to ensure the intended legislative outcome of all legislation, including the following:

• HB 3290, relating to the next generation 9-1-1 service fund; and

• SB 602, relating to the law enforcement authority of federal border patrol agents.

BACKGROUND

The Texas Legislature passed two transformative pieces of legislation during its 88th session to enhance public safety and emergency response. **House Bill 3290 (HB 3290)** focuses on upgrading Texas's emergency communication system through the deployment of Next Generation 911 (NG911). Meanwhile, **Senate Bill 602 (SB 602)** expands the authority of federal border patrol agents to enforce state laws, addressing significant gaps in law enforcement at border and inland border patrol checkpoints.

Monitoring these laws ensures their effective implementation, identifies challenges, and provides insights for necessary improvements to achieve legislative goals.

PURPOSE OF MONITORING

Monitoring ensures:

a) Accountability: Tracking the responsible use of allocated resources and ensuring legislative compliance.

b) Progress Evaluation: Understanding the pace and success of implementation efforts.

c) Issue Identification: Pinpointing obstacles such as funding gaps, operational delays, or inter-agency conflicts.

d) Public Benefit: Demonstrating the tangible improvements achieved through legislative action.

SUMMARY OF COMMITTEE ACTION

The Texas House Committee on Homeland Security and Public Safety convened a public hearing on August 15, 2024, featuring testimonies from 10 individuals representing public safety agencies, solutions providers, and stakeholders. These discussions were supplemented by additional in-person and virtual meetings before and after the hearing. The committee's findings are grounded in the nuanced perspectives shared during this collaborative inquiry.

HB 3290 OVERVIEW

Purpose

HB 3290 aims to modernize Texas's emergency communication system, replacing the outdated analog infrastructure with NG911, an advanced IP-based network. This transition enables multimedia communication, enhanced location accuracy, and increased system redundancy, ensuring uninterrupted emergency services.

Key Provisions

- Allocates $155 million for the rollout of NG911, out of which $136 million goes to 56 emergency communication districts (ECDs) and additional funding intended for the 20 regional planning commissions (RPCs).
- Requires semiannual reporting to track fund usage, progress, and compliance.
- Builds a framework for future funding appropriations to sustain the NG911 system.

Objectives

- Transition Texas's 911 infrastructure to NG911 by December 2025.
- Improve the speed, accuracy, and effectiveness of emergency response.
- Address technical vulnerabilities and reduce outages through enhanced redundancy.

HB 3290 FINDINGS

Fund Allocation and Technological Progress

- **Efficient Distribution:** Of the $136 million allocated, $136 million has been distributed to ECDs. Funds are being used for equipment upgrades, operations, and the implementation of NG911 services. Prior to receipt, ECDs must certify to use the funds only for the allowed statutory purposes and agree to submit semiannual programmatic and financial progress reports through the biennium. Importantly, the reports will allow

Texas Commission on State Emergency Communications (CSEC) to track ECD status through the various NG911 maturity states and subsequently report back to the legislature on Texas' transition to NG911. Funding for RPCs is deposited in the NG911 general revenue dedicated fund, which requires specific appropriation by the legislature as part of CSEC's legislative appropriation request.

- **Progress Achieved:** Texas has seen significant advancements, with 51% of its 911 entities reaching the intermediate NG911 stage, up from just 8 entities in 2022. The number of legacy systems has been reduced from 17 to 9, underscoring Texas's leadership in NG911 adoption.

- **Technological Advancements:** NG911 enables real-time data sharing, including video, photos, and text, enhancing situational awareness for emergency responders. It also facilitates seamless routing of 911 calls to various operational centers. This technology is particularly critical during natural disasters and mass emergencies, allowing spiking call volumes to be rerouted seamlessly to other operational centers to handle calls with minimal to no delay.

Operational Impact

- **Improved Resilience:** NG911 significantly reduces the impact of infrastructure disruptions. For example, Greater Harris County successfully managed a 16,000% surge in call volume during a derecho, thanks to NG911's enhanced routing capabilities. To support such capabilities in emergency situations, wireless backup connections and geodiverse routing is important to ensure maximum reliability and capacity availability.

- **Expanded Capabilities:** NG911 allows for much broader information sharing than legacy systems, including real-time location data, multimedia communication, situational awareness dashboard, the integration of GIS data, indoor mapping, and live video feeds, which improve first responders' ability to assess and respond to emergencies.

Challenges

- **Recurring Costs:** NG911 incurs substantial ongoing costs for hardware maintenance, software updates, and operational expenses. The current 50¢ wireless phone fee, unchanged since 1997, is insufficient to sustain the system in the long term as funding models for maintenance, upkeep, and updates to the system were implemented for legacy systems, not the current needs.

- **Integration Issues:** Rural areas face unique challenges in integrating NG911 with other legacy systems, in particular ensuring compatibility with first responder networks which also operate on legacy technology. Additionally, emergency communication centers (ECCs) need consistent training to utilize NG911's advanced features effectively.

- **Cybersecurity Risks:** The IP-based nature of NG911 introduces potential vulnerabilities to cyberattacks, necessitating robust security measures.

HB 3290 RECOMMENDATIONS

1. Secure Sustainable Funding

- Evaluate increasing the wireless phone fee from 50¢ to 75¢ to generate an estimated $75-80 million annually for NG911 maintenance, operations, and administrative costs. Explore alternative revenue sources, including grants and partnerships with technology providers.

2. Enhance Cybersecurity Measures

- Implement regular information security assessments based on the National Institute of Standards and Technology (NIST) cybersecurity framework. Invest in threat detection systems, network monitoring, and staff training to mitigate cyber risks.

- Consider the funding needs of these additional investments.

3. Expand Training and Collaboration

- Evaluate partnering with solutions providers to facilitate training on NG911's advanced features, including GIS layers, indoor mapping, and multimedia data sharing.

- Develop collaborative frameworks between ECDs, RPCs, as well as local and state agencies to address integration challenges and streamline procurement processes.

- Consider the funding needs of these additional investments.

4. Accelerate Transition in Rural Areas

- Allocate targeted resources to expedite NG911 adoption in rural regions. Evaluate building redundancy through microwave and wireless broadband backups to address limited fiber availability. Explore options to update legacy systems of first responders to ensure compatibility with NG911 and allow rural first responders to benefit from NG911's enhanced capabilities.

SB 602 OVERVIEW

Purpose

SB 602 extends the authority of federal border patrol agents to enforce Texas state laws at checkpoints and ports of entry. This law addresses jurisdictional gaps where certain state felony offenses are not covered by federal law or covered by federal law in a different manner from state law, for example, offenses like drunk driving, human smuggling, or sexual assault.

Key Provisions

- Authorizes federal border patrol agents to arrest individuals for state-level felony offenses.
- Mandates the Texas Department of Public Safety (DPS) to develop a training program for border patrol agents on the criminal laws of this state, including laws relating to arrest, search, and seizure. On request, DPS shall provide the training program to border patrol agents.
- Requires agreements between United States Customs and Border Protection (USCBP) and DPS for training delivery.

Objectives

- Enhance public safety by addressing enforcement gaps at federal ports of entry and checkpoints.
- Utilize border patrol agents as a force multiplier to support local law enforcement.
- Improve coordination between federal and state authorities.

SB 602 FINDINGS

Collaboration Between Federal and State Authorities

- **Training Development:** DPS has finalized an 8-hour curriculum covering Texas laws, prosecution processes, and operational guidelines. The Border Prosecution Unit provided input to ensure the training aligns with both legal requirements and practical needs. DPS is ready to train and can accommodate USCBP requests when and where needed.
- **Delays in Implementation:** Federal approval for training and collaboration agreements remains a bottleneck. Without federal cooperation, the state's readiness to deploy training programs cannot translate into operational changes.

Operational Challenges

- **Jurisdictional Gaps:** Federal agents currently lack the authority to enforce state laws, limiting their ability to address state felony offenses like drunk driving and others. This gap is particularly problematic in remote areas where checkpoints are commonly located and where local law enforcement has limited availability.
- **Scalability of Training:** While DPS is prepared to train up to 50 agents per session, federal inaction prevents these capabilities from being utilized.

Legislative Benefits

- **Enhanced Enforcement:** Implementation of SB 602 would enable federal agents to enforce state laws effectively, reducing demands on overstretched local law enforcement.
- **Public Safety Impact:** By addressing offenses at checkpoints, the implementation of SB 602 would improve road safety, reduce human trafficking, and protect vulnerable populations.

SB 602 RECOMMENDATIONS

1. Engage Federal Partners

- Advocate for expedited federal approval of training programs and agreements. Utilize legislative or diplomatic channels to accelerate coordination.

2. Increase Public Awareness

- Highlight the public safety benefits of SB 602 to build public and political support. Emphasize the role of border patrol agents in addressing critical safety concerns, such as drunk driving and other crimes.

3. Develop Regional Training Hubs

- Evaluate establishing training centers in strategic locations to accommodate large groups of border patrol agents. This preparation will ensure rapid deployment once federal approval is obtained.

CONCLUSIONS

Summary of Efforts

HB 3290 has positioned Texas as a leader in emergency response modernization, but sustained funding and cybersecurity measures are critical for long-term success. SB 602 has significant potential to enhance public safety but is hindered by delays in federal cooperation.

Future Monitoring

Ongoing oversight is essential to ensure compliance, address challenges, and measure outcomes. Focus areas include equitable NG911 deployment, cybersecurity improvements, and federal-state coordination for SB 602.

Commitment to Excellence

By addressing these challenges and implementing the recommendations, Texas can establish itself as a national leader in public safety and emergency response, ensuring a safer future for its citizens.

CHARGE II: FIREARM PURCHASING FEES

Firearm Purchasing Fees: Examine existing firearm purchasing and transfer fees.

Consider their efficacy and the impact of reducing or eliminating the fees.

BACKGROUND

Overview of Firearm Purchasing and Transfer Fees in Texas

In Texas, firearm purchasing and transfer fees are determined by the free market, reflecting the state's commitment to minimal governmental interference in private enterprise. Neither federal nor state law mandates or provides specific statutory authority for such fees, and their imposition is entirely at the discretion of Federal Firearm Licensed dealers (FFLs). These fees serve as compensation for the administrative and operational costs FFLs incur during the firearm transfer process.

Legislative Context

Federal law, specifically 18 U.S.C. § 922, governs firearm purchasing and transfer requirements nationwide. FFLs are required to perform National Instant Criminal Background Checks (NICS) through the FBI prior to transferring firearms to unlicensed individuals. These NICS checks are provided by the federal government at no cost to FFLs or purchasers when transferring firearms from the dealer's inventory. However, FFLs often charge fees for facilitating private-party transfers or transfers involving firearms purchased from out-of-state sources to recover costs related to storage, paperwork, and overall time and effort required for compliance with federal regulations.

SUMMARY OF COMMITTEE ACTION

Data Collection

The committee conducted informal research and gathered insights from various stakeholders. No formal hearings were held, but the discussions were supplemented with a review of federal and state statutes and industry practices. Input was sought from advocacy organizations to assess the broader implications of firearm purchasing and transfer fees on public safety, business operations, and consumer access.

Legislative Review

The committee reviewed federal statutes, particularly 18 U.S.C. § 922, to understand the regulatory framework for firearm transfers, as well as relevant Texas laws such as Penal Code §§ 46.01 and 46.06.The committee also reviewed Business & Commerce Code Chapter 610, created during the Regular Session of the 88th Texas Legislature, providing protections against payment card tracking of firearm transactions.

FINDINGS

Overview of Existing Firearm Purchasing and Transfer Fees

Administrative Cost Recovery:

- Transfer fees charged by FFLs are not government-mandated but are market-driven, aligning with Texas's free-market principles.
- FFLs use these fees to recover time and effort costs associated with NICS checks, completing Form 4473, storing firearms, and ensuring regulatory compliance.

Public Safety Impact:

- NICS checks, performed at no cost by the FBI, are an essential tool for ensuring public safety by preventing firearms from being transferred to prohibited individuals.
- Fees for private-party transfers may discourage the use of FFLs for such transactions, thereby limiting the use of background checks in transactions not explicitly regulated by federal or state law.

State Considerations for Reducing or Eliminating Transfer Fees

Economic Dynamics:

- Texas's free-market approach allows FFLs to set fees based on their operational needs and local market conditions.
- Regulating or capping these fees could undermine the autonomy of businesses and disincentivize FFLs from offering transfer services, potentially reducing public safety benefits.

Revenue Impact:

- Any effort to regulate or subsidize fees would require state funding, potentially introducing significant fiscal costs.
- Incentives to subsidize fees for specific groups, such as concealed carry permit holders or military personnel, or for private-party transfers, may limit direct fiscal impact but would result in increased administrative expenses for the state as well as an expansion of bureaucracy.

State Options for Reducing or Eliminating Transfer Fees

Maintain Current Structure:

- Retain the existing free-market system, allowing FFLs to determine fees autonomously.
- Encourage voluntary transparency from FFLs to promote consumer understanding and informed decision-making.
- Enforce Chapter 610, Business & Commerce Code, protections against payment card tracking of firearm transactions.

Partial Reduction:

- Consider voluntary agreements with FFLs to moderate fees for specific services, such as private-party transfers.
- Any financial incentives offered to FFLs for fee reductions should be weighed against the potential costs to the state budget.

Targeted Subsidies:

- Evaluate subsidization for specific populations, such as law enforcement officers or active-duty military personnel, to encourage firearm safety while recognizing their public service.
- Evaluate subsidization for private-party transfers, to encourage ensuring public safety by preventing firearms from being transferred to prohibited individuals.
- Assess the financial implications of such policies, including administrative costs and lost revenue.

State Financial Considerations

- Incentivizing fee reductions or subsidies for specific groups may impose direct costs on the state.
- Policymakers should carefully evaluate whether the potential benefits justify increases in administrative expenditures and expansion of bureaucracies.

State Options for Transparency Measures

- Promote voluntary disclosure of fee structures by FFLs to foster trust and consumer awareness without imposing regulatory burdens.

State Options for Recognition of FFL Contributions

- Highlight the essential role of FFLs in ensuring lawful firearm transfers and public safety.
- Avoid regulatory changes that could discourage FFLs from providing services, as this could inadvertently reduce compliance with background check requirements and public safety.

RECOMMENDATIONS

1. Maintain Current Structure

- Preserve Texas's free-market approach, allowing FFLs to set fees independently.

2. Avoid Regulatory Sprawl

- Avoid policies that impose financial burdens on the state without clear benefits to public safety.

3. Promote Fee Transparency

- Encourage voluntary transparency by FFLs to improve consumer trust and understanding. Enforce Chapter 610, Business & Commerce Code, protections against payment card tracking of firearm transactions.

4. Recognize FFL Contributions

- Acknowledge and support the critical role of FFLs in ensuring lawful firearm transfers and fostering public safety, while respecting their autonomy as private businesses.

CONCLUSIONS

Firearm purchasing and transfer fees in Texas are market-driven, reflecting the state's commitment to free-market principles. Federal law governs the firearm transfer process, including the requirement for NICS checks, which are conducted at no cost by the FBI. FFLs charge fees to recover time and effort costs for facilitating transfers outside their inventory, but these fees are not required by federal or state law. Regulating or subsidizing these fees could have unintended consequences, including discouraging FFL participation and imposing additional costs on the state.

By prioritizing a free-market framework, Texas can continue to uphold its economic principles while ensuring that firearm transfers are conducted responsibly and in compliance with federal regulations.

CHARGE III: USE OF LESS-LETHAL DEVICES IN LAW ENFORCEMENT

Use of Less-Lethal Devices in Law Enforcement: Study the use of less-lethal devices in law enforcement encounters, including recent incidents, and their potential to reduce the risk of death or injury to officers and suspects. Consider methods to increase the use of less-lethal devices for the safety and benefit of all parties.

BACKGROUND

Overview of Less-Lethal Devices

Less-lethal devices are "Weapons, devices and munitions that are explicitly designed and primarily employed to incapacitate targeted personnel or materiel immediately, while minimizing fatalities, permanent injury to personnel, and undesired damage to property in the targeted area or environment. [Less-lethal devices] are intended to have reversible effects on personnel or materiel."[1]

"Less-lethal technologies give police an alternative to using other physical force options that potentially are more dangerous to officers and suspects. There are seven types of less-lethal device technologies: conducted or directed energy devices, chemical agents, physical restraint technologies, blunt force projectiles, distraction tools, barriers, and vehicle-stopping technologies."[2]

Less-lethal devices give law enforcement the tools they need to gain compliance during police encounters while protecting civilians. "Law enforcement officers should use only the amount of force necessary to mitigate an incident, make an arrest, or protect themselves or others from harm. The levels, or continuum, of force police use include basic verbal and physical restraint, less-lethal force, and lethal force."[3]

In addition to police responding to criminal activity, "Police officers…often encounter individuals who are in a mental health or behavioral health crisis, are threatening public safety, and are not complying with police directions…They must rely on communications, tactics, and some less-lethal technologies to handle incidents…"[4]

Therefore, less-lethal devices are tools explicitly designed to incapacitate individuals or control situations with a focus on minimizing fatalities, permanent injuries, and unintended property damage. These devices serve as crucial alternatives for law enforcement, allowing officers to address dangerous situations without resorting to lethal force.

Use Cases of Less-Lethal Devices

Less-lethal devices provide a range of alternative options for law enforcement to ensure compliance from subjects without the need to use lethal force. Analogous to lethal devices, compliance is obtained in two ways:

Compliance through Deterrence: This is done without deploying the less-lethal device itself. Compliance is obtained via:

a) Verbal warning from law enforcement threatening the use of the device

b) Display of the device itself

c) Psychological intimidation from the threat of device effects

d) Visual warning emitted by the device

e) Audible warning emitted by the device

Compliance through Interdiction: This is done by deploying the less-lethal device. Compliance is obtained via:

a) Neuromuscular incapacitation

b) Temporary immobilization

c) Temporary sensory impairment

d) Irritation

e) Physical restraint

f) Disorientation

g) Area denial

h) Knockdown or blunt impact

i) Pain induction

Law enforcement agencies are increasingly using less-lethal devices in complex situations, such as encounters involving mental health crises or non-compliant individuals. However, their deployment is influenced by legal classifications, and the discretion officers must exercise in dynamic scenarios.

Key Characteristics of Less-Lethal Devices

- Minimized potential for fatality or long-term harm
- Designed for reversibility in effects
- Facilitate de-escalation and compliance in volatile situations

Types of Less-Lethal Technologies

a) **Conducted Energy Devices (CEDs):** Examples include TASERs, which incapacitate through neuromuscular disruption

b) **Chemical Agents:** Such as pepper spray, inducing irritation and temporary incapacitation

c) **Physical Restraint Technologies:** Devices like the BolaWrap

d) **Blunt Force Projectiles**: Beanbags, rubber bullets, or foam rounds

e) **Distraction Tools:** Flashbangs or loud auditory devices

f) **Barriers:** Designed to impede movement or provide area denial

g) **Vehicle-Stopping Technologies**: Devices to halt vehicular threats

Legal Classifications of Less-Lethal Devices

The legal classification of Less-lethal differs between federal and state law.

Federal Law: The United States uses its legislative and judicial authority to define and interpret less-lethal devices and use-of-force contexts.

- Under the Gun Control Act of 1968 (GCA), 18 U.S. Code § 921 "(3)The term "firearm" means (A) any weapon (including a starter gun) which will or is designed to or may readily be converted to expel a projectile by the action of an explosive; (B) the frame or receiver of any such weapon; (C) any firearm muffler or firearm silencer; or (D) any destructive device. Such term does not include an antique firearm.[5]

- Fifth Circuit case law holds that TASER energy weapons are generally considered to be non-lethal weapons. See e.g., Orr v. Copeland, 844 F.3d 484, 492 (5th Cir. 2016); Salazar v. Molina, 37 F.4th 278, 283 fn1 (5th Cir. 2022).[6]

State Law: The State of Texas uses its own definitions related to less-lethal devices.

- Tex. Penal Code Sec. 46.01(3) defines a "firearm" as "any device designed, made, or adapted to expel a projectile through a barrel by using the energy generated by an explosion…"[7]

- Tex. Penal Code Sec. 38.14(a)(2) defines a "stun gun" as "a device designed to propel darts or other projectiles attached to the wires that, on contact, will deliver an electrical pulse capable of incapacitating a person."[8]

SUMMARY OF COMMITTEE ACTION

The Texas House Committee on Homeland Security and Public Safety convened a public hearing on August 15, 2024, featuring testimonies from 11 individuals representing law enforcement agencies, solutions providers, and stakeholders. These discussions were supplemented by additional in-person and virtual meetings before and after the hearing. The committee's findings are grounded in the nuanced perspectives shared during this collaborative inquiry.

FINDINGS

Compliance Through Deterrence (Without Deployment)

Less-lethal devices serve as a preventive measure, often achieving compliance through the mere threat of their deployment.

Perspective of Law Enforcement Agencies:

Officers emphasized the critical role of less-lethal devices in diffusing high-stakes scenarios, including mental health crises and armed confrontations. Training programs stress the importance of maintaining a full spectrum of tools, from verbal commands to less-lethal devices to lethal ones, in order to minimize harm. For example, at the Texas Department of Public Safety, the Dynamic Resistance Response Model requires officers to escalate or de-escalate their response based on the scenario's threat level:[9]

- Verbal commands for non-threatening resistance scenarios
- Less-lethal tools for threatening resistance scenarios
- Lethal force as a last resort in deadly resistance scenarios

Perspective of Solutions Providers:

TASER devices use audible and visual warning signals, such as bright pulsing lights and loud sounds, to deter subjects before deployment. The latest generation TASER 10 introduces enhanced warnings and increased range to encourage compliance at a safer distance. The BolaWrap emits a visible green laser, offering a non-verbal warning that deters individuals without causing pain or physical contact.

Compliance Through Interdiction (Through Deployment)

In situations where deterrence fails, less-lethal devices provide non-lethal methods to physically incapacitate individuals, ensuring officer and public safety.

Perspective of Law Enforcement Agencies:

Officers are equipped with various less-lethal devices, including conducted energy devices and chemical agents, to address scenarios involving threatening resistance. Strict protocols ensure officers deploy these tools only when justified by the threat level and articulated facts. Beyond application in the traditional law enforcement context, less-lethal devices have also found application in Texas' border security efforts where Texas Military Department members have deployed pepper rounds to control mass migration at the Texas border. This strategy has successfully prevented large-scale breaches without escalating to lethal force.

Perspective of Solutions Providers:

Advanced less-lethal devices, such as the TASER 10, provide significant improvements, offering a greater range (45 feet), increased probes (10 versus previous models' 2), and higher deployment success rates. These enhancements have improved officer safety and reduced the likelihood of injuries in high-risk scenarios. Less-lethal devices such as the BolaWrap, which deploys a Kevlar tether to immobilize individuals from a distance of 10 to 25 feet, achieves compliance without inducing pain or injury, making it particularly valuable in mental health crises.

Legislative Implications

The classification of less-lethal devices under federal and state law affects their perception, adoption, and usage. For example, under federal law, the ATF's classification of the TASER 10 as a "firearm" due to design modifications has not affected its practical application as a less-lethal tool, but complicates its perceived appropriate use cases. Under state law, legal ambiguity in Texas has resulted in officer indictments for using less-lethal devices, creating hesitation among officers to deploy these tools, even when justified. Clearer statutory definitions could eliminate confusion surrounding less-lethal devices, and clearer statutory regulations could clarify their appropriate use in law enforcement encounters.

RECOMMENDATIONS

1. Clarify Legal Definitions

- Evaluate defining "less-lethal device" under Texas law and establish clear distinctions between less-lethal and lethal use-of-force contexts. Address the inconsistencies that lead to classifying tools like the TASER 10 as firearms.

2. Protect Officers Using Less-Lethal Devices

- Evaluate developing statutory provisions to shield officers from prosecution when deploying less-lethal devices in accordance with training, established protocols, and manufacturers' designed uses.

3. Increase Funding for Less-Lethal Devices

- Evaluate providing state-level funding to ensure equitable access to less-lethal technologies across law enforcement agencies, particularly in smaller and rural jurisdictions. Consider including funding for proper maintenance and inventory management of both the devices and their supplies.

4. Enhance Officer Training

- Evaluate mandating comprehensive, scenario-based training programs that emphasize proportional responses, de-escalation techniques, and the judicious use of less-lethal devices. Consider developing model policies and evaluate requiring their adoption across law enforcement agencies.

5. Address Mental Health Implications

- Study the role of less-lethal devices in managing encounters with individuals in mental health crises, including those at risk of "suicide by cop."

6. Encourage Technological Advancement

- Evaluate incentivizing the development and commercialization of advanced less-lethal tools to improve officer safety and public outcomes.

CONCLUSIONS

Less-lethal devices represent a vital evolution in modern policing, bridging the gap between verbal commands and lethal force, yet there are still barriers to their effective deployment. The success of these devices in achieving compliance through both deterrence and interdiction—from border security operations to mental health crisis responses—demonstrates their crucial role in Texas law enforcement. By addressing legal classifications, protecting officers who properly deploy these tools, and ensuring agencies have both the resources and training to utilize them

effectively, Texas can maintain public safety while reducing risks to both law enforcement and the civilians they encounter.

CHARGE IV: COMMUNICATIONS INTEROPERABILITY

Communications Interoperability: Study the communication challenges of first responders and emergency personnel. Make recommendations, considering the need for a cross-agency communications upgrade or statewide interoperability plan, to increase reliable, available, and modern communications for public safety and emergency response purposes in communities across the state.

BACKGROUND

Definition and Importance of Communications Interoperability

Communications interoperability refers to the ability of different agencies—law enforcement, fire departments, emergency medical services (EMS), and others—to communicate seamlessly across jurisdictions, equipment, and technologies. Effective interoperability allows for the timely exchange of information, ensuring a unified and efficient response to emergencies. Without it, response time delays, misunderstandings, and operational gaps can arise, placing lives and property at greater risk.

In Texas, due to the geographic scale, topographic and climatic diversity, and dramatic differences in the density of populations and infrastructure, the challenges of communication interoperability extend beyond those faced by many other states. Due to these geographic, topographic, climatic, and demographic factors, simple operability, or the ability to communicate at all, is a structural challenge, even before regulatory, political, jurisdictional, and economic complexities play a factor in generating further fragmentation which further hampers operability. Interoperability faces an additional set of challenges, from outdated systems to incompatible technologies, and these barriers are particularly acute during complex, multi-agency emergencies.

While first responder communications in Texas have seen significant advancements due to various local, regional, state, and federal investments over the years, numerous challenges remain, especially when it comes to communications interoperability between agencies for critical incident response where lives and property are at stake.

Addressing these issues requires coordinated efforts for the State to invest in modernizing communication systems, establish statewide standards, and ensure that all agencies are equipped to handle emergency communications efficiently and effectively.

The Four Stages of Emergency Communications

To better understand the challenges and opportunities for improving communication, the committee examined the emergency process in four critical stages:

1. **Public Reporting**: *The initial point of contact where the public reports emergencies to authorities.* Communication breakdowns at this stage can delay the response effort from the start. During Stage 1, reports of incidents are relayed to authorities, primarily via the 911 network, through various channels. Inconsistent communication technologies and processes at this stage can create barriers to timely and effective emergency response due to delays, misunderstandings, inaccuracies, or inadequacies in report intake capacity, resources, and technologies.

    - **Voice Communication**

      For Stage 1, voice communication remains the primary method for the public to report emergencies. This is primarily handled through 911 call centers across Texas. However, issues such as call center overload, inconsistent training of operators, insufficient staffing, and outdated technology can impede the effective intake of crucial information.

      Variability in 911 systems across Texas creates disparities in response times and information-gathering capabilities.

    - **Beyond-Voice Communication**

        - **Human Beyond-Voice Communication**

          In recent years, and thanks to the increased adoption of Next Generation 911 capabilities, emergency reporting communication has evolved beyond traditional voice calls. The use of text-to-911 services is increasing, allowing individuals to reach emergency services in situations where a phone call may not be possible. Other digital reporting systems, such as emergency apps and social media reporting, are also becoming more common, though their adoption remains inconsistent.

          While these systems offer new ways to report emergencies, they are not universally available or fully integrated into existing emergency reporting protocols or solutions. This lack of standardization creates communication gaps that can hinder response times and limit information-gathering capabilities.

        - **Non-Human Beyond-Voice Communication**

          Automated systems, many of which are software-based, are increasingly being integrated into emergency response frameworks. For example, automated crash detection systems in vehicles and smart devices like

home security systems or social media monitoring solutions can directly alert emergency services without or with limited human intervention. These non-human reporting tools provide a valuable supplement to traditional public reporting methods by offering real-time data and reducing reporting delay times.

Despite their potential, many of these systems are not fully integrated at 911 centers, limiting their effectiveness. Furthermore, automated systems may not always convey the full context of an emergency, requiring human verification and follow-up.

2. **Dispatch**: *The facilitation of information from the public report to appropriate first responder resources.* Dispatch is the Second Stage to emergency communications. Dispatch plays a huge role in facilitating the information received from public reports and communicating it effectively to the appropriate first responders. Dispatch also often serves as the bridge connecting first responders from different entities responding to a specific incident and are therefore crucial in the communications process across all four stages of emergency communications. However, many of the current processes and systems in dispatch centers across the state face a plethora of challenges related to voice communication, the integration of beyond-voice technologies, and the seamless handling of both incoming and outgoing information.

    - **Voice Communication**

      Voice communication remains the foundation of dispatch operations in Texas. When 911 operators relay emergency calls to dispatchers, these dispatchers typically relay information to first responders through radio systems. For maximum effectiveness, dispatchers must maintain communication with multiple agencies, coordinating the response based on the information received during Stage 1, yet Texas dispatchers face a number of challenges in this area, including the use of different radio systems and bands by the various agencies. These core differences hinder efficient communications and present a major impediment to interoperability.

      In rural or underfunded areas, outdated equipment, understaffing, and a lack of training often increase communication challenges. Day-to-day dispatch operations are further challenged as dispatchers often need to juggle multiple incidents simultaneously, increasing the risk of miscommunication or delayed responses. Different agencies using incompatible radio systems or communication tools lead to dispatchers struggling to coordinate collaboration effectively. Maintaining clear, real-time updates across multiple agencies is challenging, especially in complex or rapidly evolving emergency situations.

    - **Beyond-Voice Communication**

      In addition to traditional radio communication, dispatch centers are increasingly

incorporating beyond-voice technologies, such as text-to-dispatch and advanced computer, device, or cloud-based data-sharing solutions that leverage broadband networks to enhance response coordination and communication.

- **Incoming Beyond-Voice Communication**

  In addition, dispatch centers handle a variety of incoming information from other agencies and automated systems like crash sensors and emergency alarms. These systems provide dispatchers with more immediate data, which can enhance decision-making and can speed up the identification of the appropriate resources to dispatch.

  Yet, if not properly trained or equipped, the influx of information from multiple sources can overwhelm dispatchers, especially in high-stress situations or in large-scale emergencies. Additionally, integrating new, innovative data streams with legacy systems often requires manual intervention, which can slow down response times.

- **Outgoing Beyond-Voice Communication**

  Outgoing communication from dispatch centers is vital for effectively coordinating the response of multiple first responders or agencies. Dispatchers must ensure that all agencies—law enforcement, EMS, fire departments, and others—receive clear and accurate instructions and information, often simultaneously. Additionally, dispatchers must relay updates as new information becomes available, ensuring that responders are always working with the latest information.

  The lack of a consistent, state-wide deployment of interoperable beyond-voice emergency communication solutions remains one of the obstacles to maximizing the effectiveness of outgoing dispatch communications.

3. **Initial Response**: *The first moments when responders arrive on the scene and begin action*. This third stage is, by far, the most critical step in the entire emergency communications process, and where effective and efficient interoperability, or the lack thereof, makes the biggest difference. It is during this stage that first responders, who are en route or first arrive at the scene of an incident, decide what the appropriate plan of action is. While, from a temporal perspective, this stage is relatively short, oftentimes covering only a few or few dozen minutes, effective communication and access to critical information at this stage can mean the difference between life and death, and significantly impact the levels of property damage.

   - **Voice Communication**

     Voice communication remains the primary method used by first responders during Stage 3. Responders rely on handheld/in-person land mobile radio (LMR)

systems designed to withstand the different extreme operational environments to communicate with each other and dispatch, thereby coordinating resources and sharing vital information. However, this is also the stage where communication breakdowns are most likely to occur. The use of different radio bands, radio frequencies, non-compatible communication devices, and varying protocols across agencies creates barriers to effective and timely communication and collaboration in a setting where accurate information and seconds matter the most.

Interoperability challenges at Stage 3 are particularly severe in Texas, resulting in many, or all, agencies responding to the same incident often operating on separate channels or utilizing incompatible systems. For example, police may use one radio band or frequency while fire and EMS use others. When different agencies are unable to communicate directly with each other, they rely on dispatch as an intermediary, which can create delays and lead to critical miscommunication. Furthermore, as the situation evolves, the inability to quickly relay updates to all agencies simultaneously hampers the overall coordination of the response during Stage 3.

Presently, establishing direct communication between different agencies on-site becomes almost impossible without dispatch acting as a middleman, which in various emergency situations may be challenging due to the unavailability or failure of radio tower / wireless broadband tower / satellite communication. This is quite common when the site of the incident is a large above or below-ground facility, is very remote, or communication infrastructure has been knocked offline for a variety of reasons. This can lead to delays in sharing critical information and hinder the ability of first responders to collaborate effectively on-site.

Currently, one of the workarounds to this challenge is the distribution of compatible radios at the site of the incident, but this not only requires the radios to be among the first arrivals, but also takes up valuable time when seconds matter.

Ultimately, the lack of effective-straight-out-of-the-box on-site voice communication during Stage 3 can often lead to harm or loss of life among both the victims of the incident and the first responders who came to assist them.

- **Beyond-Voice Communication**

Voice communication is the primary communication method during Stage 3 as oftentimes, the different extreme operational environments make the use of devices that are not purpose-built handheld / on-person radio impractical, inadvisable, or even potentially dangerous for on-site first responders. Yet for non-extreme operational environments, coordinators, or dispatchers, the integration of data-sharing tools and digital platforms has become increasingly valuable in emergency response. It offers the opportunity to share real-time data, such as video feeds from body cams and GPS tracking, expanding operational awareness beyond just voice communication. However, if the beyond-voice

platforms utilized by the different agencies on-site for an incident response operate on separate systems that do not integrate seamlessly with one another, this can lead to a fragmented view of the situation. Without a unified, or at least interoperable beyond-voice platform, it can be challenging to synthesize all incoming data quickly, and important details from beyond-voice channels may not reach all necessary recipients effectively. As technology continues to evolve, prioritizing interoperable data-sharing solutions is crucial to enhancing the situational awareness and efficiency of beyond-voice communication.

- **Incoming Beyond-Voice Communication**

  One of the major challenges with beyond-voice communications during Stage 3 is the volume and variety of incoming information. First responders, while in the act of saving lives and property, would need to filter through different communication methods on different devices in real time, which can overwhelm responders and lead to important details being missed. Additionally, the lack of integration between incoming voice communication over LMR systems and data communications through other devices further complicates the ability to quickly process information flows during evolving emergency response situations. And even if the first responder is able to manage the devices and information flow, once new information is available, it is difficult to get all different agencies on the same page when it comes to a plan of action if systems are not unified or inter-operable.

- **Outgoing Beyond-Voice Communication**

  Outgoing communication during the initial response is essential for information flows between different first responder teams and dispatch to ensure coordinators remain updated on the situation as it unfolds. Beyond-voice communication offers the ability to share real-time data, such as video feeds from body cams and GPS tracking, expanding operational awareness of dispatchers and coordinators. The lack of adoption of a unified or interoperable beyond-voice communications platform diminishes potential positive impact of this outgoing communication, but utilization of a unified or interoperable system holds significant potential.

4. **Ongoing Response**: *The extended phase of managing the incident as it evolves.* This fourth stage, which immediately follows the initial response stage, transitions from initial to ongoing response once the first responders have established a level of operational awareness and control allowing response coordination to transition from broadly reactive to tactical and strategic. In some incidents this stage is reached within a few minutes, while in others it may take longer, and the speed of this transition is influenced by a multiplicity of factors, including the number of the responders on site, the quantity and quality of their response resources, and, critically, by the speed and effectiveness of the establishment of incident response and command procedures and the adherence to them by the responders on-site.

For the purpose of this report, Stage 4 lasts through the remainder of the time when responders remain at the site of the incident and/or incident victims are in transport to care. A successful Stage 4 requires maintaining effective communication throughout the duration of an incident, as new information emerges, and as response and recovery strategies evolve. Coordinating efforts between multiple agencies, ensuring that responders have up-to-date information, and facilitating a smooth transition from the initial emergency response to recovery management is critical at this stage.

- **Voice Communication**

  Voice communication remains a key component during Stage 4, as first responders and command centers continually exchange information. As the incident progresses, communication fatigue and equipment limitations can hamper the effectiveness of voice communication. Moreover, when different agencies operate on separate radio bands, frequencies, or systems, critical information can be delayed or lost. This is particularly problematic in multi-agency incidents where real-time coordination of increasing numbers of on-site assets is essential. Yet, solely voice communication also has limitations when it comes to sharing detailed or complex information that may require more than verbal instructions at this stage of the incident.

- **Beyond-Voice Communication**

  Stage 4 is where beyond-voice communication tools, such as real-time data sharing, GPS tracking, video feeds, and other information streams, can play an increasingly important role. These technologies allow first responders and command centers to access real-time information about the evolving situation, enhancing situational awareness and enabling more informed decision-making. For example, live drone footage, video from body cameras, or data from sensors can provide valuable insights into the developing conditions at the scene.

  - **Incoming Beyond-Voice Communication**

    During Stage 4, responders can receive a steady stream of incoming communication from dispatch, other agencies, and emerging sources of information, such as civilian reports, sensor data, and media coverage. Managing incoming communication during Stage 4 can be overwhelming, especially when responders are dealing with a high volume of information from multiple sources. Beyond-voice communication tools that can synthesize the information hold promise as effective support tools for voice communication at this stage. Yet, the lack of adoption of unified or interoperable systems means that not all responders are in the position to receive the same information at the same time, which leads to inconsistent responses or missed opportunities for coordination. Additionally, outdated systems may struggle to integrate data from newer technologies, further complicating the process of receiving and processing incoming information.

- **Outgoing Beyond-Voice Communication**

  Outgoing communication during Stage 4 is crucial for maintaining coordination between agencies, updating command centers, ensuring that responders have the most current information about the incident, and providing off-site facilities expecting victims for care with critically important information to prepare themselves. Once again, beyond-voice communication tools, which can synthesize information, hold promise as effective support tools for voice communication at this stage. Yet outgoing beyond-voice communication faces similar challenges to incoming beyond-voice communication, particularly in terms of system interoperability. When agencies operate on different communication platforms, it can be difficult to ensure that all teams are receiving comprehensive, consistent, timely, and mission-critical updates.

SUMMARY OF COMMITTEE ACTION

The Texas House Committee on Homeland Security and Public Safety convened a public hearing on August 15, 2024, featuring testimonies from 20 individuals representing public safety agencies, solutions providers, and stakeholders. These discussions were supplemented by additional in-person and virtual meetings before and after the hearing. The committee's findings are grounded in the nuanced perspectives shared during this collaborative inquiry.

FINDINGS

Stage 1: Public Reporting

Challenges and Weaknesses

Technological Gaps in Reporting

- To-date incomplete implementation of Next Generation 911 (NG911) across Texas has prevented full utilization of advanced capabilities such as receiving text messages, videos, or location data in real time. This also limits the ability to leverage beyond-voice emergency communication solutions to their fullest potential.

- Automated systems like crash detection and home security alerts are not universally integrated into current 911 systems across the state, also limiting their potential positive impact.

Inconsistent Infrastructure and Overload

- Urban vs. Rural Disparities: Urban centers face frequent call overloads during large-scale incidents, while rural areas often lack sufficient infrastructure and

staffing, leading to slower response times. The to-date incomplete implementation of NG911 across Texas has prevented full utilization of call distribution capabilities.

Training Disparities

- Testimony revealed that operators across Texas receive inconsistent training, impacting their ability to extract and relay critical information during high-stress emergencies.

Stage 2: Dispatch

Challenges and Weaknesses

Outdated Equipment

- Many rural dispatch centers still rely on analog systems that cannot process modern data streams, such as GIS mapping or real-time video feed, or information provided by automated systems like crash detection and home security alerts.
- Outdated systems often require significant manual intervention to relay beyond-voice communication, delaying coordination of response.

Training, Compensation, and Care Disparities

- Testimony revealed that dispatchers across Texas receive inconsistent training, impacting their ability to extract and relay critical information during high-stress emergencies.
- Compensation of dispatchers also varies significantly across the state, and there is a large discrepancy between rural and rural compensation rates, resulting in significant challenges in talent attraction, development, and retention in the regions with low compensation rates.
- Like 911 operators, dispatchers deal with various extremes of human experiences on a minute-by-minute, hour-by-hour, and day-by-day basis. These interactions take a significant mental and emotional toll, and inadequate care resources, combined with the high stress levels and low compensation levels, lead to many exiting the profession, exasperating workforce shortages and reducing skills levels shaped by experience.

Information Overload

- Without technology solutions to synthesize the information into easily processed and actionable packages, dispatchers are increasingly overwhelmed by incoming data from automated systems and public reports, making it difficult to prioritize and relay critical information.

Interoperability Issues in Voice Communication

- Agencies operating on different radio bands or frequencies cannot communicate directly, forcing dispatch to repeat multiple steps of the initial communication process as well as continuously act as a relay throughout the various stages of the incident. This adds significant delays to critical communication during the various stages of the incident and may also negatively impact the dispatcher's ability to promptly handle additional unrelated incidents, resulting in degradation of overall incident response quality.

Security Risks

- Agencies occasionally rely on consumer-grade apps, rather than public safety designed tools, for operational communication, introducing vulnerabilities in data security.
- Testimony also highlighted that communication towers in border regions are prone to interference originating beyond Texas' borders, exacerbating security risks and diminishing the ability of dispatchers to communicate with responders and vice-versa.

Stage 3: Initial Response

Challenges and Weaknesses

Issues in Voice Communication

- First response from different agencies arriving at the scene operating on different radio bands or frequencies cannot communicate directly, reducing the lack of operational awareness, increasing risk for the responders, and hampering assistance to the victims of the incident.

Severe Interoperability Gaps

- Many agencies lack P25-compliant radios, which are essential for cross-agency communication during emergencies.
- Testimony emphasized incidents where police, fire, and EMS had to rely on dispatch as an intermediary due to incompatible systems.

Inconsistent Equipment

- Agencies use radios with different frequency bands and communication protocols, further complicating direct communication.

Reliance on Consumer Apps

- The use of public apps like WhatsApp for sensitive communication introduces security risks and inefficiencies.

Lack of Unified Protocols

- Differing terminologies and procedures across agencies create confusion during initial responses.

Stage 4: Ongoing Response

Challenges and Weaknesses

Fragmented Communication Systems

- Sustaining cohesive communication during extended incidents is difficult due to the lack of a unified platform.
- Testimony from Skydio highlighted the potential of drones to improve situational awareness, but these tools are not universally accessible.

Lack of Situational Awareness

- Tools like GIS mapping, drones, and real-time video feeds are often siloed within individual agencies, preventing a unified operational view.

Case Studies from Other States

- **New Hampshire and New Jersey** have implemented interoperable systems that allow for real-time data sharing. Texas DPS has already implemented some potential solutions for their use.

Technology Integration Challenges

- Advanced communication tools are not fully integrated with legacy systems, limiting their effectiveness.

RECOMMENDATIONS

Stage 1: Public Reporting

1. Invest in NG911 Infrastructure

- Evaluate additional support for expanding the implementation of NG911 statewide to allow call routing and enable the processing of multimedia inputs, such as texts, videos, and automated alerts. This infrastructure is vital for bridging the gap between traditional voice calls and multimedia-rich information that first responders increasingly rely on for situational awareness. By modernizing 911 centers with Next Generation 911 technology, emergency services will be better equipped to receive and process a wider array of information from the public, including text messages, videos, images, and real-time location data directly from the scene of the incident.

- Provide training for operators to handle new forms of communication effectively.

2. Improve Accessibility

- Evaluate deploying public awareness campaigns to promote beyond-voice reporting options, such as text-to-911, especially in rural areas with NG911 capabilities.

Stage 2: Dispatch

3. Modernize Dispatch Equipment

- Allocate funding to upgrade dispatch centers with modern hardware and software capable of processing multiple types of information and data streams. This capability is transformative, as it provides a visual and situational context that enhances dispatchers' ability to assess emergencies accurately. For instance, dispatchers can receive live images from a caller witnessing an accident, allowing first responders to arrive more prepared and informed. With access to multimedia data, dispatchers can provide more detailed descriptions and actionable insights, such as potential hazards or the number of individuals involved, to responders on the way to an incident. This integrated system minimizes the need for repetitive or clarifying questions and reduces dispatchers' reliance on relayed information, ultimately speeding up response times and enhancing overall coordination.

4. Enhance Technology Training

- Study the development of statewide training programs for dispatchers to improve their ability to manage multiple types of information and data streams and coordinate between agencies with different protocols.

5. Standardize Protocols

- Evaluate the adoption and implementation of statewide communication protocols consistent with best practices and established standards in incident management to ensure consistent terminology and procedures across all agencies. This will ensure that dispatchers can maintain smooth, clear communication between first responders, especially when coordinating resources in complex incidents.

6. Improve Training, Compensation, and Care

- Evaluate improving compensation, skills training, and support systems, especially in stress management and mental health, for emergency dispatchers, particularly in rural areas.

- Study solutions to critical challenges in talent attraction, development, and retention in the public safety dispatch profession.

Stage 3: Initial Response

7. Develop Statewide Redundant Communications System

The Initial Incident Response phase is both the most critical to saving lives and property as well as the most vulnerable stage for communication breakdowns, making reliable interoperable communication between agencies absolutely essential. Interoperability should extend from daily routine operations all the way to catastrophic emergency scenarios. During catastrophic emergency scenarios, there are three key components to operability/communication:

  - The technological capabilities of the devices in the hands of responders.

  - The skill sets to leverage the technology and to implement the actions in the field.

  - The skill sets to respond to incident commands.

To achieve this reliable, interoperable communication, the State of Texas should:

- Evaluate establishing a Unified Emergency Communications Council made up of legislative, agency, local government, and industry leaders to provide expertise, guidance, strategic planning, and ongoing oversight and support for interoperability initiatives. The Council would identify suitable solutions in radio, multi-use communications tower, network integration, hardware, and software for both reliable, interoperable voice and beyond-voice emergency communications. Technologies considered should provide the highest level of redundancy in even extreme operational environments and cover analog as well as digital radio networks, Radio over IP, wireless broadband networks including the National Public Safety Broadband Network, Wi-Fi networks, as well as be capable of or be upgradeable to leveraging emerging satellite networks. The Council should be empowered to make investment recommendations in the suitable solutions it identifies.

- Evaluate establishing a Unified Emergency Communications Fund. The Fund would provide resources for recommendations of the Council for state investments and grants to agencies and local governments to transition their communications tools from the status quo onto the statewide network.

- Evaluate the development of a state-wide communication system that would both integrate existing local & regional systems and expand system coverage into currently unserved or underserved areas to give full operability to responders at the local, state, and federal levels. True interoperability is about actionable communications that will result in action. Interoperability can only be achieved if all agencies use compatible radios and equipment that allow first responders to quickly and reliably get onto the same channel upon arrival at the site of an incident.

8. Establish Statewide Incident Command Training Standards

- Evaluate developing a uniform emergency response incident command training and make it mandatory for all agencies and local governments participating in the state-wide redundant radio system. This would allow standardized terminology and procedures, as well as technology skills, to maximize multi-agency coordination.

Stage 4: Ongoing Response

9. Expand Use of Advanced Tools

- Evaluate the integration of tools like drones, GIS mapping, real-time video feeds, and other beyond-voice technologies into shared platforms accessible by all agencies.

10. Improve Cross-Agency Collaboration

- Evaluate establishing training and protocols for continuous information sharing during incidents, including procedures to provide updates to response leadership and field units in real-time.

11. Secure Beyond-Voice Communication Tools

- Evaluate options to replace the use of consumer-grade apps with purpose-built solutions designed for secure, real-time communication.

CONCLUSIONS

Improving communication across all four stages of emergency response is critical for creating a more efficient and cohesive system in Texas. The testimony highlighted the need for substantial investment in NG911 infrastructure, better dispatcher operational environments, a statewide

radio system, and statewide standards for incident command training and beyond-voice solutions integration. By addressing these challenges, Texas can strengthen its emergency response capabilities and serve as a national leader in public safety interoperability.

Appendix A – List of Public Testimony

The individuals listed below testified to the Committee on Homeland Security & Public Safety during the public hearing held on August 15th, 2024, at the Texas Capitol. Individuals are listed in the order of their testimony, and a recording of the hearing is publicly accessible on the website of the Texas House of Representatives (https://house.texas.gov/)

I. Interim Committee Charge #1: Monitoring SB 602, relating to the law enforcement authority of federal border patrol agents; Invited Testimony

- National Border Patrol Council - Chris Cabrera
- Texas Department of Public Safety - Assistant Chief Derek Prestridge
- Border Prosecution Unit - Tonya Ahlschwede

II. Interim Committee Charge #1: Monitoring HB 3290, relating to the next generation 9-1-1 service fund; Invited Testimony

- Commission on State Emergency Communications - Andrew Friedrichs
- Texas Division of Emergency Management - Chief Nim Kidd
- Montgomery County Emergency Communications District - Chip VanSteenberg
- Lower Rio Grande Valley Development Council - Manuel Cruz
- AT&T - JD Salinas III
- Rapid Deploy - Dami Bullock
- RapidSOS - Jennifer White

III. Interim Committee Charge #4: Communications Interoperability; Invited Testimony

- Texas Department of Public Safety - Karla Jurrens
- Texas Military Department - Brigadier General Tanya Trout
- Texas Division of Emergency Management - Chief Nim Kidd
- Texas A&M Forest Service - James DeGrazia
- Texas Department of Transportation - Matthew Heinze
- North Central Texas Emergency Communication District - Christy Williams
- Kenedy County Sheriff's Office - Capt. Edward Cruz
- Motorola - Lauren Kirkland
- Austin EMS Association - Morgan Benefield
- McAllen Police Department - Chief Victor Rodriguez
- Socorro Police Department - Chief Robert Rojas
- AT&T - JD Salinas III
- Mutualink - Chrissie Coffey
- RapidSOS - Jennifer White
- Bridge4PS - Niki Papazoglakis
- Rapid Deploy - Dami Bullock

- GeoComm - Dan Craigie
- Peregrine - Aakash Pattabi
- Skydio - Deepu John
- Albers - Mike Frizzell

IV. Interim Committee Charge #3: Use of Less-Lethal Devices in Law Enforcement; Invited Testimony

- Combined Law Enforcement Associations of Texas - Jennifer Szimanski
- Houston Police Department Training Division - Officer Wesley Fikes
- Axon - Amy Nguyen
- Texas Municipal Police Association - John Wilkerson
- Sheriff's Association of Texas - Sheriff Brian Hawthorne
- Texas Police Chiefs Association - Chief Gene Ellis
- Texas Department of Public Safety - Lieutenant Brian Sunderman
- Texas Military Department - Brigadier General Tanya Trout
- Bolawrap - Chief Bo Kidd
- Dr. Mark Kroll - Dr. Mark Kroll
- Office of the Attorney General of Texas – Director Brent Dupre

ENDNOTES

[1] https://www.supremecourt.gov/opinions/URLs_Cited/OT2015/14-10078/14-10078-3.pdf.
[2] https://nij.ojp.gov/topics/articles/overview-less-lethal-technologies.
[3] https://nij.ojp.gov/topics/articles/overview-police-use-force#noteReferrer1
[4] https://www.policeforum.org/assets/LessLethal.pdf.
[5] https://uscode.house.gov/view.xhtml?path=/prelim@title18/part1/chapter44&edition=prelim.
[6] https://www.ca5.uscourts.gov/opinions/pub/22/22-20028-CV0.pdf
[7] https://statutes.capitol.texas.gov/docs/pe/htm/pe.46.htm
[8] https://statutes.capitol.texas.gov/docs/PE/htm/PE.38.htm
[9] https://www.aepscorp.com/wp-content/uploads/2020/03/DPS-DRM.pdf