GUIDELINES FOR STATE NG911

Legislative Language

Examples and options for legislative language that facilitates the deployment of NG911

VERSION 2.0 | 2018

911.gov

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Executive Summary

911 is in the midst of change—technically, operationally, and *culturally*.

Since its inception in 1968, the 911 system has come a long way and continues to progress toward meeting the emerging needs of current society—a society with exponentially different needs and behaviors than those that accessed 911 services 50 years ago. Technological advancements, population growth, and a variety of other factors challenge the nascent system that was born those years ago at the local jurisdictional level. Today, an individual's mobility and ever-expanding access to new communication technologies require the 911 community to think more broadly, expand its reach, and operate with the utmost efficiency.

Empowering jurisdictions to innovate and keep pace is supported by the essential role state authorities and legislators collectively play in making future-forward policy changes.

In 2012, the National 911 Program[1] and the National Association of State 911 Administrators (NASNA) published the resource titled, *Guidelines for State NG9-1-1 Legislative Language*—a tool intended to help state authorities:

- Understand how legislation can drive and enable migration to Next Generation 911 (NG911) capabilities at state, local, and regional levels.
- Develop legislative language that facilitates NG911 maturation by establishing a comprehensive regulatory framework flexible enough to accommodate variations in jurisdictional governance structures, policies, technical environments, and operational procedures.

Since it was published, *Guidelines for State NG9-1-1 Legislative Language* has helped state officials establish and update 911 policies relevant to jurisdictions within their state and to neighboring jurisdictions with which they collaborate. However, as progress toward NG911 is being made, 911 policies must keep pace to account for the advent of emerging technologies and evolving approaches toward operations and business models. Ensuring that 911 policies accommodate milestones inherent to the NG911 transition and the sustainability of new 911 system environments is essential for all stakeholders who play a part in planning, implementing, supporting, and coordinating the migration toward NG911 capabilities.

[1]The National 911 Program, created by Congress in 2004 as the 911 Implementation and Coordination Office, is housed within the National Highway Traffic Safety Administration at the Department of Transportation and is a joint program with the Department of Commerce National Telecommunication and Information Administration. Further information can be found at https://www.911.gov.

What does NG911 mean?

"NG911" services mean a secure, Internet Protocol (IP)-based, open standards system comprised of hardware, software, data, and operational policies and procedures that:

- Provides standardized interfaces from emergency call and message services to support emergency communications.
- Processes all types of emergency calls, including voice, text, data, and multimedia information.
- Acquires and integrates additional emergency call data useful to call routing and handling.
- Delivers the emergency calls, messages, and data to the appropriate, PSAP [Public Safety Answering Point] and other appropriate emergency entities based on the location of the caller.
- Supports data, video, and other communications needs for coordinated incident response and management.
- Interoperates with services and networks used by first responders [and other 911 systems] to facilitate emergency response.[2]

Figure 1 below depicts a jurisdictional[3] NG911 environment at a very high, conceptual level. Interactions between components are facilitated by both technical and operational elements, including but not limited to technology hardware/software, and processes and procedures implemented by the 911 workforce.

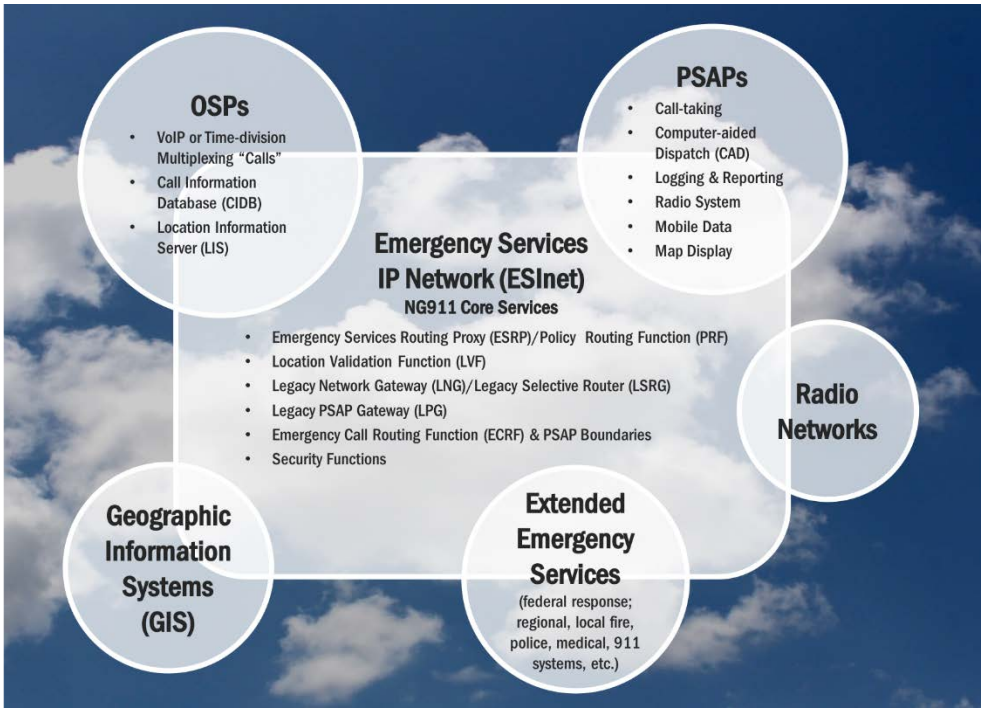

Figure 1: High-level Abstract View of a Jurisdictional NG911 Environment

[2] The NG911 description provided represents a definition that was mutually agreed upon by the National 911 Program and members of the NG911 NOW Coalition: the National Emergency Number Association, the National Association of State 911 Administrators, and the Industry Council for Emergency Response Technologies on January 12, 2018.

[3] The term "jurisdictional" is used generically to refer to government bodies at various levels. "Jurisdiction" could mean a town, a rural community, or a region within a state.

How can this tool help states establish effective NG911 policy?

To help state officials address (and facilitate) the shifting landscape of 911, the National 911 Program and NASNA have partnered with a variety of private- and public-sector 911 stakeholders to update *Guidelines for State NG9-1-1 Legislative Language*. This document represents the second iteration (Version 2.0) of the tool and includes new considerations that pertain to the NG911 transition. Also included is a trove of lessons learned and best practices that have surfaced from the direct experiences of state officials who have tirelessly navigated the legislative labyrinth. Because new perspectives arise with each step forward, the National 911 Program, NASNA, and their partners are committed to updating this tool cyclically.

Specifically, this guidance strives to help state officials develop language for a multitude of issues categorized under the topic areas listed below and includes sample language that can be "cut-and-pasted" and adapted for specific state needs.

1. Legislative Guidance Pertaining to Governance and the Establishment of Authorities
2. Legislative Guidance Pertaining to Planning, Implementation, and Operations
3. Legislative Guidance Pertaining to Funding, Grant-Making, and Budget Oversight

The National 911 Program, NASNA, and the partners who contributed to developing this updated guidance hope that state 911 officials find its content helpful. At the end of the day, success will be measured by contributions this document makes toward helping officials establish policy that:

- Enables state 911 authorities to develop and implement policy-driven NG911 plans.
- Facilitates the complete implementation of NG911.
- Safeguards 911 resources for appropriate use throughout state jurisdictions.
- Bridges divides between public- and private-sector 911 interests.

Contributors

The National 911 Program and NASNA would like to thank the following individuals who, on behalf of their organizations, worked tirelessly to develop Version 2.0 of this guidance.

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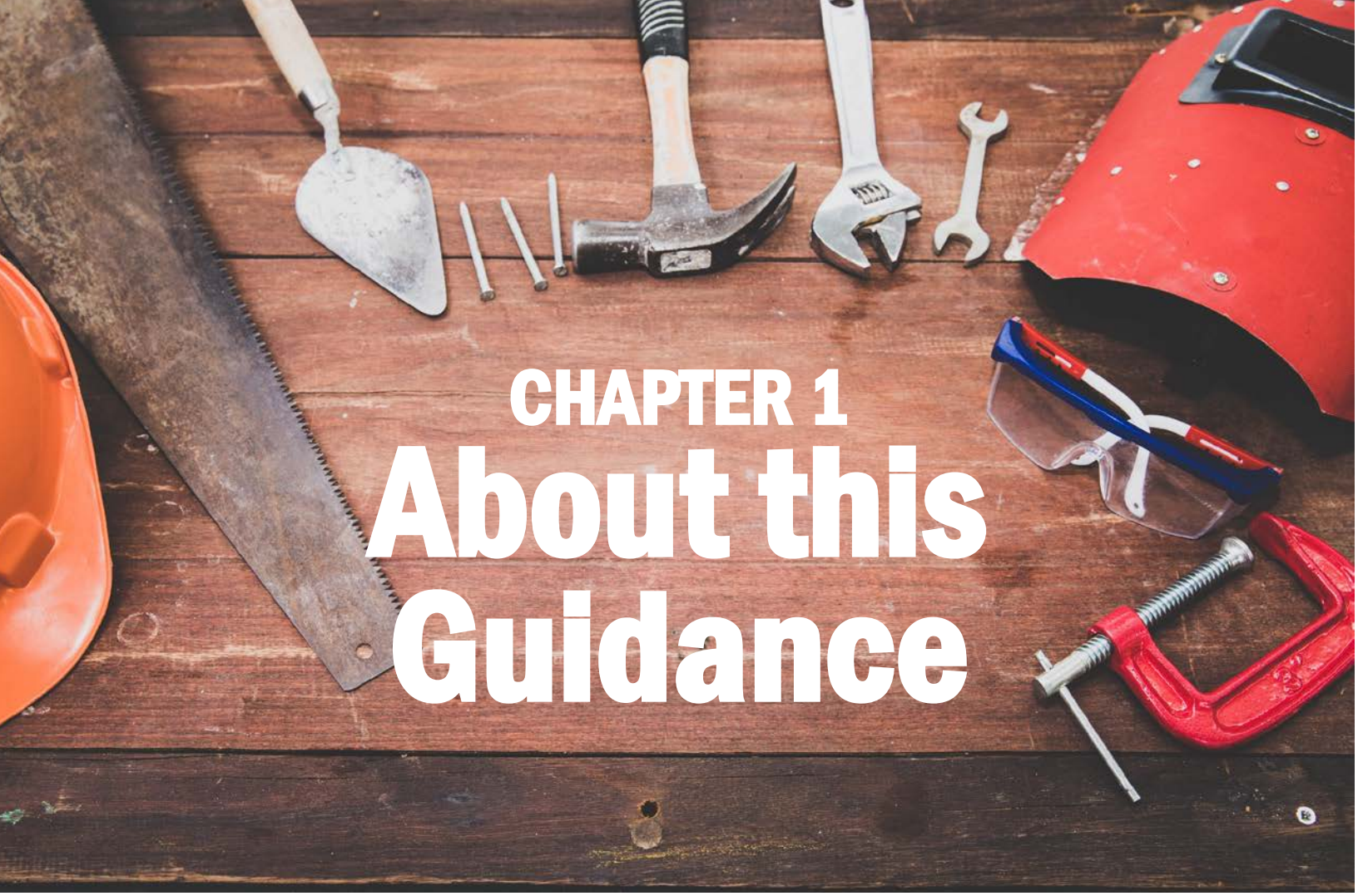
- Brian Fontes, Chief Executive Officer, National Emergency Number Association (NENA)
- Carl Simpson, Chief Executive Officer, El Paso-Teller County 911
- Amber Snowden, International City/County Management Association (ICMA)
- Dorothy Spears-Dean, Public Safety Communications Coordinator, Virginia Information Technologies Agency (VITA)
- Jacob Terrell, Associate Legislative Director for Telecommunications and Technology, National Association of Counties (NACo)

The completion of this document would not have been possible without the generous contribution of their experience and expertise.



CHAPTER 1
About this Guidance

Who Should Use this Guidance

While this guidance generally is relevant to the entire 911 community, its use is specifically geared toward those responsible for drafting legislative language that governs 911 planning, implementation, operations, and service delivery for a given state, commonwealth, or territory.[4] Key users of this guidance can be categorized across the stakeholder groups described in Table 1 below.

	Stakeholders	Relevant Role	Relevant Use of Guidance
Primary	Executive director of the State 911 Office[5] and members of the state 911 advisory board	Responsible for drafting 911 legislative language for approval, designing and maintaining NG911 plans, and all aspects of coordinating and managing NG911 implementation activities	• Ability to obtain understanding of the depth and breadth of policies needed to enable the state to establish and sustain an effective 911 system • Access to sample recommended language that can easily be adapted to the state environment • Potential avoidance of legislative landmines by learning from peer experiences
Secondary	State legislators, legislative staff, and the state governor	Responsible for reviewing and passing 911 legislation	• Ability to obtain understanding of the intent behind draft legislative language and the impact language has at the community level • Ability to make educated recommendations for language revisions
Tertiary	Directors of state offices responsible for planning, procurement, implementation, operations, or delivery of resources involved in 911 service delivery	Responsible for ensuring 911-relevant resources and/or responsibilities within their domain are compliant with 911 legislation	Ability to obtain understanding of the magnitude of their involvement in 911 service delivery and the policies that govern any required collaboration between their office and the State 911 Office

Table 1: Stakeholders Who Should Use this Guidance

How to Use this Guidance

The format of this guidance is intended to be user-friendly and accessible via an a-la-carte approach to content organization. Legislative topic areas are organized by the categories listed below.

1. Legislative Guidance Pertaining to Governance and the Establishment of Authorities
2. Legislative Guidance Pertaining to Planning, Implementation, and Operations
3. Legislative Guidance Pertaining to Funding, Grant-Making, and Budget Oversight

[4] For the purpose of this guidance, the term, "state," will be used when referencing any such entity.
[5] Titles carried by those responsible for overseeing state 911 systems vary from state to state. Some examples of these titles include 911 Administrator, 911 Program Manager, 911 Coordinator, and 911 Executive Director. For the purpose of this guidance, the individual tasked with oversight on behalf of the state is referred to generically as the state 911 Office's "executive director" or "coordinator," regardless of his or her state-given title.

Each legislative topic area in this guidance contains two major components (see Figure 2 below). Additionally, some issue areas include tidbits of "good to know" information and sample language that states have used.

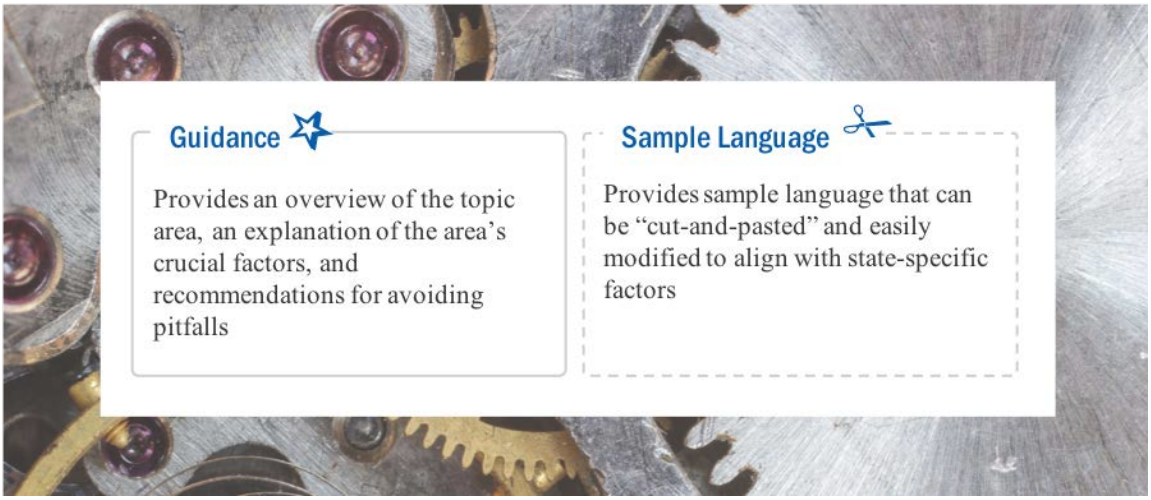


Figure 2: What You Will Find in this Guidance

To help provide additional context, a glossary of widely adopted terms and concepts is included as *Appendix 1: 911 Terms & Definitions*. To provide additional reference points for who you can contact for more information on 911 factors, key 911 stakeholder entities are listed in *Appendix 2: Associations, Organizations & Other Stakeholder Entities Relevant to 911*. Also provided throughout the guidance (and in *Appendix 3: Useful Resources*) are paths to reference materials and resource repositories that address the history and background of 911; 911-related regulations and policies; topic-specific findings and recommendations compiled by 911 stakeholder committees, workgroups, task forces, and professional associations; and, other key sources of information that may be useful. ***BUT FIRST, spend some quality time with the checklist on the following pages!*** It will save you time and headaches along the way!

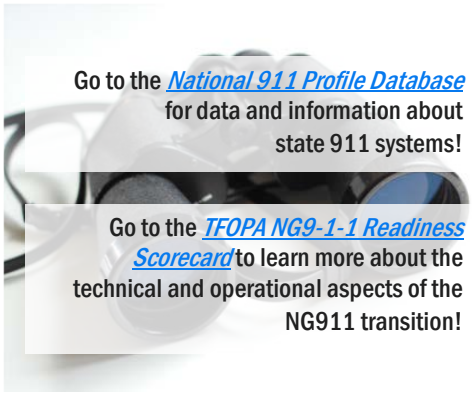
CHAPTER 2
Before You Get Started... a Checklist!

Establishing the right legislation for 911 service in your state is more than just writing solid language. It is essential to know what your state and its jurisdictions need to achieve, the challenges they face, and the ways by which you can help them overcome any barriers. You also will need to be strategic in your timing, communications, and approaches throughout the process of getting language drafted, approved, and socialized. Therefore, you will need to anticipate your own barriers and have enough knowledge to minimize them.

Writing legislative language is an art (not a science)!

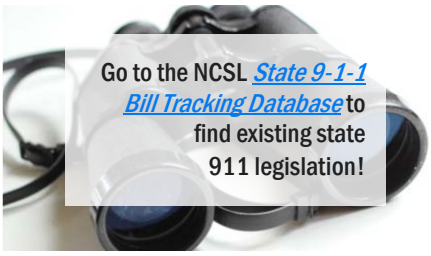
✓ Understand NG911!

NG911 concepts and transition points are complex and highly nuanced depending on a state's governmental, economic, and geographical environments. The good news is that much hard work has been accomplished to define NG911 capabilities; identify the technical, operational, and fiscal factors involved; and streamline a maturity model for states to use throughout the transition process. Refer to *Appendix 3: Useful Resources*, for a list of key resources you can use to educate yourself and those with whom you will need to collaborate.



Additionally, find out where your state currently stands in its own migration path toward NG911 capabilities. The National 911 Program operates the *National 911 Profile Database*, which houses data that can help characterize the status of your statewide 911 system. Also useful is the Federal Communications Commission (FCC) Task Force on Optimal Public Safety Answering Point Architecture (TFOPA) *NG9-1-1 Readiness Scorecard*, which details NG911 capabilities and the five NG911 transitional stages that frame jurisdictional progress and provide maturity benchmarks. This data, coupled with your outreach to your jurisdictional counterparts and partners, will help you obtain visibility on where your state stands and where it needs to go.

✓ Read your state's current 911 legislation



Make sure you know what already exists (and see it for yourself—take care not to rely on word of mouth)! The National Conference of State Legislatures (NCSL) maintains the *State 9-1-1 Bill Tracking Database*, which is maintained in partnership with the Department of Transportation (DOT) National Highway Traffic Safety Administration (NHTSA). This searchable database contains legislative language for the 50 states and the District of Columbia and is updated on a weekly basis and as new measures are passed. Typically, you also can typically find legislation through your state's website or by contacting your state's legislative body.

✓ Read federal laws, regulations, and programs relevant to 911

Over time, the federal government has issued a variety of laws, regulations, and programs that require or encourage baseline capabilities or activities in support of strengthening local, state, and regional public safety approaches; coordinating of emergency communications; and establishing 911 services. It is important to become versed in federal perspectives and directions not only to identify areas that require state-federal alignment, but also to become aware of any conflicts that may exist pertaining to federal expectations, state expectations, and what states and their localities are positioned to accomplish. Additionally, an understanding of federal laws, regulations, and programs is a key enabler to identifying any opportunities to apply for federal funds and support. Refer to *Appendix 3: Useful Resources*, for links to key reference documents.

✓ Understand the composition of your state's legislative body

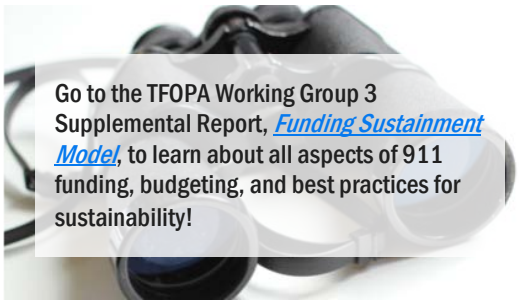
Understanding the composition of your state's legislative body is crucial to obtaining buy-in for your state's 911 needs. Get to know its members, their priorities, and how the body appears to view 911 investments. It also does not hurt review at any 911-related proposals the body has vetoed and passed (and why).

✓ Get to know your state's legislative process and timeline

Writing strong legislative language only to get lost in the shuffle of the legislative process or miss a key deadline is inefficient and demoralizing! Be sure to know how many readings, referrals, and passages must occur before your language hits your governor's desk.

✓ Get to know your state's funding process and budgetary timeline

Become familiar with your state's fiscal year, its budget model (i.e., whether it is executive or legislative driven), how decision-making power is balanced, the budget model your state uses, and any restrictions that exist regarding to increases and cuts. Additionally, understand what factors are involved in 911 funding and transition to NG911 capabilities. A good place to start is with the TFOPA Working Group 3 Supplemental Report, *Funding Sustainment Model*, which details 911 funding (historically and into the future) and provides a model framework for assessing costs and identifying approaches to address them. Understanding the concrete issues and their many nuances is critical to ensuring that policy language supports long-term funding of NG911-capable systems.



✓ Seek the advice of other agencies that have been through it

Lean on those who have been through the legislative process! Find out what they learned, what they would do differently, who they know, and their recommendations for obtaining buy-in and avoiding administrative pitfalls. Most likely, these are the very agencies with which you should be collaborating anyway, so reaching out is also a good way to broaden your network, fortify relationships, and build new partnerships.

CHAPTER 3
Legislative Guidance, Sample Language & Examples

As mentioned in the section, *How to Use This Guidance*, 911-related legislative topics are organized by the categories listed below.

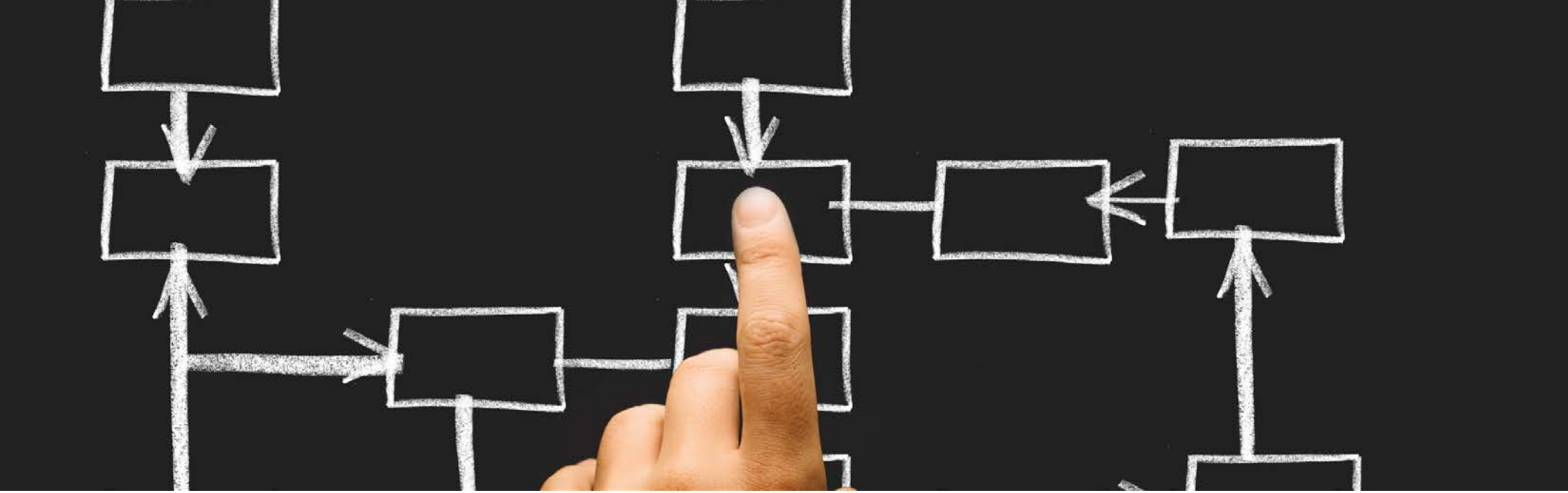
1. Legislative Guidance Pertaining to Governance and the Establishment of Authorities
2. Legislative Guidance Pertaining to Planning, Implementation, and Operations
3. Legislative Guidance Pertaining to Funding, Grant-Making, and Budget Oversight

Each of these areas are divided into sub-topics for which guidance, sample language, and useful information are provided.

In developing content for this guidance, stakeholders adhered to principles, recommendations, findings, and architectures (business and technical) that have been sanctioned by key governing bodies and authorities. Key documents that are reflected throughout this guidance are listed below.

Version 2.0 of this guidance was informed by the…

- FCC TFOPA *Adopted Final Report*
- TFOPA Working Group 1 Supplemental Report—*Optimal Cybersecurity Approach for PSAPs*
- TFOPA Working Group 2 Supplemental Report—*Phase II Supplemental Report: NG9-1-1 Readiness Scorecard*
- TFOPA Working Group 3 Supplemental Report—*Funding Sustainment Model*
- National 911 Program *State Assessment Handbook: A Guide for States Participating in the Statewide 911 System Assessment Process*
- National 911 Program *State Assessment Guidelines Synopsis Chart*
- National 911 Program *Next Generation 911 (NG911) Standards Identification and Review*
- National 911 Program *Next Generation 911 (NG911) Interstate Playbook, Chapter 1*
- National 911 Program *Next Generation 911 (NG911) Interstate Playbook, Chapter 2*



Legislation Pertaining to Governance & Establishment of Authorities

Topics Addressed in this Section

Item #1. 911 as an Essential Government Service

Guidance

As a critical public safety service, and as the conduit for public access to all other emergency services (e.g., police, fire, and emergency medical services [EMS]), 911 service should be defined and treated as an "essential government service" to the extent that a state constitution or statute defines "essential government service" (in terms of the safety or security of the public or a segment of the public).

Adding the specification that 911 service also should be treated as an "essential government service" provides 911 authorities and their emergency management counterpart agencies flexibility in disaster declarations. Identifying staff and support staff as "essential personnel" provides for flexibility of movement for that personnel during disaster declarations.

Sample Language

911 service is defined and treated as an "essential government service" and 911 staff and support staff are considered "essential personnel" consistent with the state constitution and other relevant statutes.

Item #2. The State 911 Authority

Guidance

The establishment of a state-level authority (referred to throughout this guidance as "the State 911 Office") is critical to maximizing the capabilities of 911 systems. This entity shall have a clearly defined 911 program coordination role, statewide authority to address necessary state-level functions and responsibilities, responsibility to coordinate networks statewide, and the authority to support those state-level system operational functions necessary to ensure a statewide 911 system of systems. A state-level 911 authority that is comprehensive and accommodates all forms of originating telecommunication services will be required for NG911 implementation. Legislation authorizing the State 911 Office to conduct specific administrative and operational activities will ensure that the office has the necessary state powers to implement the State NG911 Plan. These specific activities are more fully described in subsequent sections of this document.

- Legislation should not prohibit interstate communications.
- While the sample language shown anticipates the location of a state 911 function within an appropriate state agency, said 911 function could be implemented through an independent state agency or administrative unit.
- Legislation should facilitate state-level coordination of 911 service networks statewide. The State 911 Office should have the authority to coordinate 911 service networks that include local, regional, and statewide systems.
- The authority to coordinate with tribal, federal, and military systems also should be considered, as needed, and as it may already exist under State statute.

Sample Language

There shall be, within the Department of X, a State 911 Office. The State 911 Office shall operate as the entity that oversees and administers the State's 911 system and is expected to facilitate statewide coordination of networks and operational functions toward ensuring a statewide 911 system of systems.

The State 911 Office shall be responsible for statewide coordination of planning and deployment of services, to ensure that coordinated, intrastate 911 communication networks serve all state residents at a consistent level of service.

The State 911 Office shall have the authority to coordinate and oversee the implementation of the State NG911 Plan, which may include the following specific activities:

a) Identify and adopt operational and technical standards and requirements
b) Adopt regulations
c) Enter into contractual relationships
d) Provide technical assistance
e) Establish and operate grant programs
f) Execute financial oversight for state-provided funding
g) Collect and distribute data
h) Conduct general coordination activities
i) Mediate between jurisdictions
j) Operate state-level functions and services necessary to ensure a statewide, consistent level of interconnected 911 services

Item #2. The State 911 Authority (cont.)

FYIs, Good to Knows & Gotchas!

For the **State of Utah**, the key for UCA was to have, in legislation, key statewide roles and responsibilities for a statewide system and emerging technology. Their language reads as follows:

"63H-7a-302. 911 Division duties and powers.

(1) The 911 Division shall:

(a) develop and report to the director minimum standards and best practices for public safety answering points in the state, including minimum technical, administrative, fiscal, network, and operational standards for public safety answering points and dispatch centers in the state;

(b) investigate and report to the director on emerging technology;

(c) monitor and coordinate the implementation of the unified statewide 911 emergency services network;

(d) investigate and recommend to the director mapping systems and technology necessary to implement the unified statewide 911 emergency services network;

(e) prepare and submit to the executive director for approval by the board:

(i) an annual budget for the 911 Division;

(ii) an annual plan for the projects funded by the Computer Aided Dispatch Restricted Account created in Section 63H-7a-303 and the Unified Statewide 911 Emergency Service Account created in Section 63H-7a-304; and

(iii) information required by the director to contribute to the strategic plan described in Section 63H-7a-206;

(f) assist public safety answering points implementing and coordinating the unified statewide 911 emergency services network; and

(g) coordinate the development of an interoperable computer aided dispatch platform:

(i) for public safety answering points; and

(ii) where needed, to assist public safety answering points with the creation or integration of the interoperable computer aided dispatch system."

Item #3. The State 911 Coordinator

Guidance

State 911 offices are overseen by executive directors who are referred to by various terms from state to state (e.g., the State 911 Office coordinator, director, administrator, program manager, executive director). Nomenclature is at the discretion of the State 911 Office. Appointment of the position would occur in alignment with state statute and regulations set forth by the state agency under which the State 911 Office is housed.

- Legislation should identify the baseline functions of the executive director, which entail all aspects of State 911 Office operations.
- States may have hiring and procurement laws that must be considered.

Sample Language

The Secretary/Director of X shall, with the advice of the 911 Advisory Committee, appoint an executive director of the State 911 Office. The executive director shall be considered the "State 911 Coordinator" for purposes of relevant state and federal law and program requirements.

The executive director shall be responsible for administering, directing, and managing the affairs and business of the office, and for the appointment and supervision of all personnel at the office. The executive director may appoint such other employees, including experts and consultants, as deemed necessary, subject to appropriation and/or available funds and state employment and procurement laws, to carry out the office's responsibilities.

Item #4. Local & Regional 911 Authorities

Guidance

Legislation should clarify the role and authority of local and regional 911 authorities, clearly delineating the shared responsibilities pertaining to 911 and any transition to NG911 capabilities among state, regional, and local entities. Regional networks of interconnected systems may develop, involving groups of PSAPs and supporting regional 911 authorities. PSAPs likely will remain responsible for local operational decisions, including staffing, call-taking, and emergency response. Local and regional entities may provide funding, administrative, and functional support to PSAPs.

- Services that comprise a "911 system" should be included in the legislation.
- Legislation should encourage formal partnerships between jurisdictions that may experience the need to transfer requests for emergency services outside of their jurisdictional boundaries.

Sample Language

Every 911 system shall include police, fire services, and emergency medical services, and may include other emergency services such as poison control services, suicide prevention services, and emergency preparedness and homeland security services.

Every local jurisdiction shall establish and operate a 911 system or be part of such a system. The establishment and operation of such systems shall be a coordinated effort among jurisdictions to the extent feasible. Nothing in this article shall be construed to prohibit or discourage in any way the formation of multijurisdictional or regional systems, and any system established pursuant to this article may include more than one public agency or may include a segment of the geographic area served by a public agency.

A public safety agency that receives a request through the 911 system for emergency services outside its jurisdictional boundaries shall transmit the request to the proper PSAP or public safety agency. Public agencies within a single system and public agencies in different systems but whose jurisdictional boundaries are contiguous are authorized to enter into joint powers agreements or any other form of written cooperative agreement to implement this requirement.

FYIs, Good to Knows & Gotchas!

When identifying the services that comprise a 911 system, it is important to specify that the system should be viewed as a function as opposed to a technology. For example, it may be worth highlighting that 911 is not specific to a transport media—regardless of the transport media used in delivering 911 services (or any supportive technological aspect involved in the 911 environment); rather, "911 services" refer to the function of providing emergency services to the public in time of need.

Item #5. The Statewide 911 Advisory Committee

Guidance

Recognizing that an effective statewide 911 system environment will involve state, regional, and local government stakeholders and private sector parties, the 911 Advisory Committee should represent critical stakeholders and should serve as a forum for guidance, coordination, accountability, and collaborative decision-making. As an alternative to gubernatorial appointment, states may establish membership in statute, or provide authority for appointment to a state agency.

- States should consider the level of authority vested in the Advisory Committee. In some cases, states may determine that a stronger, policy board may be appropriate, with authority to review and approve State 911 Office activities. Legislation should not prohibit interstate communications.
- Advisory Committee membership should include representatives of critical, diverse stakeholder groups. ***The sample language contains a list of <u>possible</u> representative groups—appropriate compositions may vary from state to state and are contingent upon the proper balance of roles, domains, and disciplines that are truly representative of a state's 911 stakeholder base.***
- Responsibility for operational and administrative support of the committee should be established.
- Legislation should clearly identify the statewide 911 Advisory Committee protocols (e.g., terms of service, terms of service limitations).
- Reimbursement considerations (e.g., per diem) should be consistent with existing state statutes.

Sample Language

There shall be, within the Department of X, a State 911 Advisory Committee to provide strategic oversight and/or guidance to the State 911 Office and advise the office relative to its annual budget and in all matters regarding 911 service in the state. The Advisory Committee shall act in an advisory capacity to the governor, the secretary/director and the general assembly/legislature on all matters related to the 911 system, service, and funding thereof.

The Advisory Committee shall consist of the following representatives:

a) State secretary of public safety
b) State chief information officer
c) State commissioner police/highway patrol
d) State fire marshal
e) State commissioner of public health
f) State director of emergency medical services
g) Representative of the State emergency medical advisory council or board
h) Representative of the State regulatory commission/public utilities commission
i) Police commissioner/chief of police of X (large city)
j) Police commissioner/chief of police or sheriff of X (rural county)
k) Staff/members of local/regional 911 authorities providing functional, funding and administrative support to PSAPs
l) PSAP managers who collectively represent small, medium, and large PSAP environments

Continued on next page

Item #5. The Statewide 911 Advisory Committee (cont.)

Sample Language

Continued from previous page

m) PSAP telecommunicators who collectively represent small, medium, and large PSAP environments
n) Gubernatorial appointments, including representatives of local police departments, fire departments, sheriff's departments, municipal leadership, ambulance service providers
o) Representative of the First Responder Network Authority (FirstNet)
p) Legislative appointments
q) Representative of commercial 911 service providers
r) Representative of telecommunications providers
s) Representatives of groups with specific needs
t) Representatives of the general public

The executive director of the State 911 Office shall serve as an ex-officio member of the Advisory Committee. The State 911 Office shall provide operational and administrative support for the committee.

The Advisory Committee leadership shall be elected by committee members annually. Members shall be appointed by the governor for terms of three (3) years with no limit on the number of terms they may serve. Members shall hold office until a successor is appointed and no member shall serve beyond the time he or she ceases to hold the office or employment that made him or her eligible for appointment.

Members of the Advisory Committee shall receive no compensation but shall be reimbursed for their expenses actually and necessarily incurred in the discharge of their duties.

Continued on next page

FYIs, Good to Knows & Gotchas!

- For the **State of Utah**, the UCA oversees 911 service, radio communications, and interoperability statewide, and is overseen by a board. Initially far too large, the board modified its membership last year via Senate Bill (SB198) and is now smaller and more efficient. To ensure non-biased opinions, none of the board members can be users of radio or 911 systems. Additionally, operations advisory and regional advisory committees were created. These advisory committees are composed of system users and vendors who provide input to the board.

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Item #5. The Statewide 911 Advisory Committee (cont.)

FYIs, Good to Knows & Gotchas! (cont.)

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- Take care not to let your board get too large! In some cases, it may serve you best to identify one or two representatives from professional organizations who represent the views and perspectives of a spectrum of stakeholders within specific domains. For example, a representative from an association that represents regional or statewide law enforcement agencies may be possible, thus having one or two people represent the concerns and needs of law enforcement as they operate within jurisdictions of all sizes/compositions (e.g., rural, urban).
- Have someone on your board who has comprehensive knowledge and expertise in emergency number program management. Ideally, such board members will possess professional certifications relevant to this area (e.g., Emergency Number Professional [ENP], Registered Public-Safety Leader [RPL]).
- Your board members are also your advocates! They can serve an extended role within and across their networks to help you pass legislation or obtain buy-in on strategic and programmatic initiatives or activities.
- Having local and regional representation on your board is very helpful. Effective balance also can be achieved by ensuring you have representation from field responders, PSAPs, and providers.
- The **State of Nebraska's** legislative language about its board composition reads as follows:

  "(1) The 911 Service System Advisory Committee is created. The committee shall advise the commission concerning the implementation, coordination, operation, management, maintenance, and funding of the 911service system and provide input on technical training and quality assurance. The state 911 director and the Chief Information Officer or his or her designee shall serve as ex officio members. The committee shall include the following individuals appointed by the commission:

  (a) Four representatives of public safety agencies within the state including an emergency manager, a member of a law enforcement agency, a member of a fire department, and a member of an emergency medical service as defined in section 38-1207;
  (b) Two county officials or employees;
  (c) Two municipal officials or employees;
  (d) Two representatives of the telecommunications industry
  (e) Two managers of public safety answering points, one of whom is employed by a county sheriff and one of whom is not employed by a county sheriff;
  (f) One representative of the Nebraska Association of County Officials; and
  (g) One representative of the League of Nebraska Municipalities.

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Item #5. The Statewide 911 Advisory Committee (cont.)

FYIs, Good to Knows & Gotchas! (cont.)

Continued from previous page

(2) Of the fourteen appointed members of the committee described in subdivisions (1)(a) to (g) of this section, at least four members shall be appointed from each of the three congressional districts. The 2 appointed members of the committee shall serve for terms of three years. A vacancy shall be filled for the remainder of the unexpired term. The committee shall annually select a chairperson and vice-chairperson and meet as often as necessary to carry out its duties. Members of the committee shall be reimbursed for their actual and necessary expenses as provided in sections 81-1174 to 81-1177.

(3) The committee shall make any recommendations to the commission regarding the exercise of the commission's duties administering the 911 service system pursuant to section 86-1025, including recommending the adoption and promulgation of any rules and regulations necessary to carry out the purposes of the act or the introduction of any legislation."

Item #6. State 911 Advisory Committee Responsibilities

Guidance

States may include operational activities of the committee at various levels of detail, such as minimum meeting frequency, duties, and responsibilities. Review and guidance provided by the State 911 Advisory Committee should ensure that all critical stakeholders are informed of, and involved as appropriate with, 911 State office activities. In addition, the expertise of Advisory Committee members should be used by the State 911 Office for planning and implementation purposes.

- Coordination among state, regional, and local level 911 roles and authorities should be clearly identified.
- Consider granting the Advisory Committee mediation or dispute-resolution authority regarding to local 911 planning and oversight disputes.
- Legislation should require the Advisory Committee to develop an annual report to be filed with the governor and the general assembly regarding State 911 performance and activities. The report should be made available to the public.

Sample Language

The State 911 Advisory Committee shall advise and review all formulas, percentages, guidelines, or other mechanisms to be used to distribute 911 funds described in Section X of the State NG911 Plan. The Advisory Committee shall advise the State 911 Office regarding regulations, standards, and requirements, and review all regulations and standards proposed by the office, consistent with existing state statutes and administrative procedures.

The Advisory Committee shall advise the State 911 Office on the following subjects:

a) Policies, practices, and procedures for the State 911 Office;
b) Proposed projects and studies conducted or funded by the 911 fund;
c) Upon request of a local public agency, the Advisory Committee shall conduct a hearing on any conflict between a local public agency and the State 911 Office regarding a budget or plan that has not been approved by the office. The committee shall meet within 30 days following the request and shall make a recommendation for resolving the conflict to the office within 90 days following the initial hearing by the committee pursuant to the request. Authority for this action must be consistent with existing state statutes and administrative procedures.

Continued on next page

Item #6. State 911 Advisory Committee Responsibilities (cont.)

Sample Language (cont.)

Continued from previous page

The Advisory Committee shall file a written report annually with the governor and the general assembly regarding state 911 performance and activities. This report shall, at a minimum, include a summary of the progress on the implementation of a coordinated statewide 911 system and NG911 innovations, the capital improvements and expenditures proposed for the upcoming fiscal year, expected 911 fund revenues in the next fiscal year, and a summary of the 911 fund revenues and expenses for the prior fiscal year.

FYIs, Good to Knows & Gotchas!

- Voting rights, governance parameters, and boundaries should be documented. Consider requiring state authorities to establish charters or bylaws to ensure that boards function effectively and appropriately. The *2015 Governance Guide: Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials*, published by the Department of Homeland Security's (DHS) *SAFECOM*, contains useful guidance on creating governance body charters, bylaws, and other documentation.
- Informal groups can provide helpful support to some state board functions. The **Commonwealth of Virginia** relies heavily on its Regional Advisory Council (RAC). While the RAC is not a formal board, it plays a routine and integral role in validating the 911 needs and progress for all seven of Virginia's regions. Additionally, the RAC serves as an integral component of the Virginia Information Technologies Agency (VITA)'s 911 communications pipeline to the public. Other groups that may be useful to engage in this way are state emergency councils and industry groups such as local chapters of the Association of Public-Safety Communications Officials International (APCO) and NENA.

Item #7. Proposed Legislation Affecting 911

Guidance

The expertise of the State 911 Office should be a valuable resource to state legislators during legislative sessions for any issues related to or affecting 911, including 911 system operations, jurisdictional roles and responsibilities, and funding needs.

Sample Language

The State 911 Office shall review and make recommendations to the State legislative body concerning proposed legislation affecting 911.

FYIs, Good to Knows & Gotchas!

- Finding a legislative "champion" among state legislators is highly recommended. It may be someone who has been involved with 911 as a local policymaker, local volunteer firefighter, or emergency medical technician (EMT) or someone who has been touched by 911 in some personal way. Educating these legislators about 911 and building relationships with them helps establish champions who will assist you when you want to introduce a bill and shepherd it through the legislative process.
- Craft your "911 elevator speech" so you can convey your key points to legislators or their staff quickly and effectively.
- Having a one-page, bulleted summary that you can hand to legislators or legislative staff is extremely beneficial. However, avoid summaries that are too long because they are less likely to be read or understood. Keep it to one page.

Item #8. 911 Regulations & Standards

Guidance

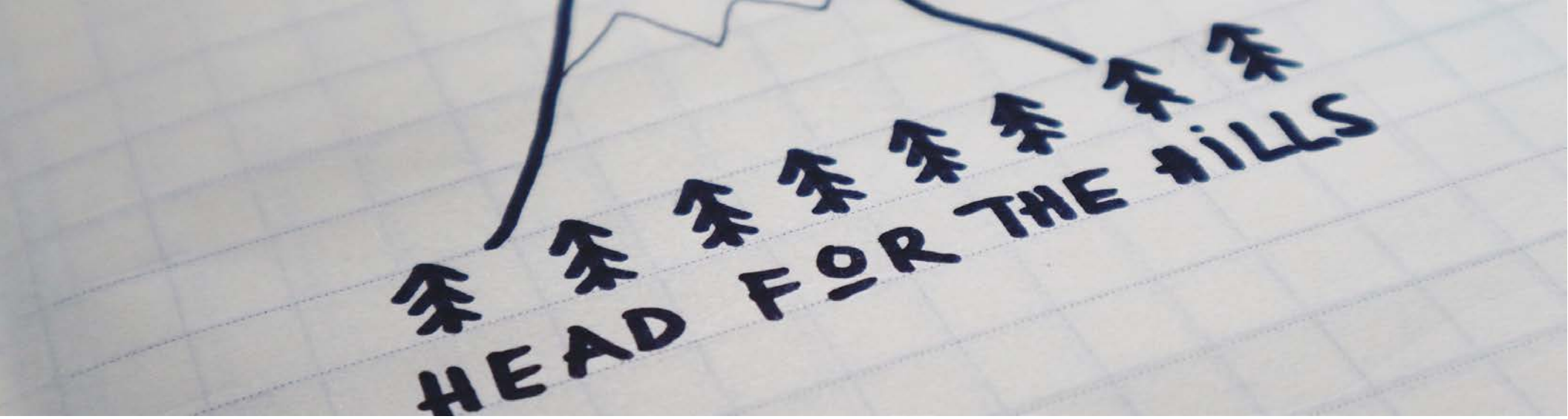
State legislation should grant the State 911 Office the authority to adopt rules to implement its coordination and oversight responsibilities in accordance with existing State rulemaking processes. In some cases, rulemaking authority may rest with other state or regional rulemaking authorities, including public utility commissions (PUCs) or state chief information officers (CIOs).

Rulemaking authority is provided to specific state agencies and delineated according to the specific issue requiring regulation. For example, PUCs typically retain rulemaking authority affecting telecommunications providers; CIOs typically oversee rulemaking as it relates to information technology (IT) service providers. In addition, other state entities may oversee rulemaking with regard to record retention, employee training, and professional certifications. These entities will be critical stakeholders in 911 and NG911 maturation and likely will be involved in rulemaking that affects 911 and NG911. The shared rulemaking responsibilities of these state and regional entities regarding 911 and NG911 transition should be clarified within state processes.

Sample Language

The State 911 Office, with guidance from the 911 Advisory Committee, shall have the authority to develop and adopt rules to implement its coordination and oversight responsibilities in accordance with existing state rulemaking processes.

The State 911 Office shall collaborate with other rulemaking authorities regarding 911- and NG911-related regulations.



Legislation Pertaining to Planning, Implementation & Operations

Topics Addressed in this Section

Item #9. The State NG911 Plan

Guidance

The State 911 Office should have explicit authority to coordinate and oversee the development and implementation of a state plan for emergency 911 communications and NG911 maturation. Issues to be addressed by a plan should include the development of statewide emergency 911 networks, coordination with neighboring states, the adoption of industry standards and requirements, and best practices. Coordination with an extended group of stakeholders is necessary at state, regional, and local levels (public and private sectors).

- Legislation should require the State NG911 Plan to clearly address state, regional, and local roles in the control of all aspects of the statewide system. Liability and jurisdictional demarcations should be clearly identified.
- The plan should be required to include quality of service requirements to specify uniform, minimum levels of 911 service that should be consistently provided across the State.
- State-level functions and services may include such items as GIS data sources shared by PSAPs or the operation of a statewide emergency services IP network (ESInet).

Refer to the guidance, *Guidelines for Developing a State NG911 Plan**, for more information about state plan elements and considerations. The guidance was updated in 2018 to reflect emerging needs and considerations relevant to the migration to NG911 capabilities.

**The guidance will be hyperlinked once it is published and available to the public.*

Sample Language

The State 911 Office shall be responsible for developing, implementing, and maintaining a statewide plan addressing the emergency police, fire, and emergency medical service interaction needed to provide coordinated 911 communication networks serving all state residents and visitors, including the physically disabled. The plan shall identify state, regional, and local roles and shall be reviewed, updated, and prioritized on an annual basis.

The plan shall address the conduct the following activities:

a) Delivery and proper routing of all 911 calls
b) Transfer of 911 calls between geographically dispersed PSAPs (and from PSAPs to remote public safety dispatch centers), if necessary
c) Increased aggregation and sharing of data, resources, procedures, standards, and requirements to improve emergency response and transition to NG911 capabilities
d) Maximizing public capital and operating cost savings for 911 communications services
e) Promotion of increased coordination and partnerships within the emergency communications and response community, to include the identification and development of mutual-aid and interlocal agreements necessary to obtain an effective 911 system
f) Education of the public about access to and use of 911 services
g) Operation of state-level functions and services necessary to support a statewide interconnected 911 system

Item #10. Engagement & Cooperation with State Functions, Local Government & Vendors Related to 911

Guidance

The State 911 Office will benefit from the explicit authority to convene and coordinate 911 efforts among public partners at the state level, tribal and/or local government level, including PSAPs, 911 authorities, regional stakeholder coalitions, and private-sector service providers (e.g., wireline, wireless, voice over Internet Protocol (VoIP), internet, and point-of-sale retailers). Such coordination may involve planning processes as well as rulemaking, contracting, infrastructure development, and resource sharing and management. State navigation of NG911 planning, technical assistance and training, data collection and distribution, public safety and interstate coordination, and information sharing are effective only when key relationships are built, and stakeholder engagement is achieved.

- Legislation should identify the baseline minimum of stakeholders and partners with whom the State 911 Office is expected to collaborate.
- Because governmental systems, structures, and distribution of responsibilities vary from state to state, the legislation identify partners and collaborators as representatives of functions relevant to 911 system operations and service delivery, as opposed to referencing specific departments and offices. This will enable legislation to remain effective despite any state-level organizational changes that may occur over time.

Continued on next page

Sample Language

The State 911 Office shall coordinate and ensure effective stakeholder involvement and input to its official activities. The State 911 Office shall work in cooperation with state entities/agencies responsible for utility oversight and regulations, public safety, emergency management, and information technology (IT) in regard to the development, implementation, and maintenance of the 911 system. The State 911 Advisory Committee shall provide guidance in this area.

Collaboration, at a minimum, shall occur with the following state-function representatives:

a) Data and information management
b) GIS
c) Information technology (IT) procurement and deployment
d) Physical security and cyber security of IT systems and critical infrastructure
e) Legal affairs
f) Procurement/finance
g) Representatives of mobile broadband networks dedicated to public safety use, e.g., the First Responder Network Authority (FirstNet).

The State 911 Office staff may represent the State 911 Office and have the authority to participate in activities to implement and operate interconnecting NG911 systems with neighboring states, counties, and/or the federal government.

Item #10. Engagement & Cooperation with State Functions, Local Government & Vendors Related to 911 (cont.)

Guidance (cont.)

Continued from the previous page

- Implementation and operation of a 911 system and NG911 maturation will require coordination, communication, and information sharing among 911 authorities as well as public safety and homeland security agencies. Legislation granting the State 911 Office authority to participate in and coordinate efforts with other public safety groups and agencies will facilitate the effective information sharing processes and the pursuit of common solutions for issues related to implementation and operation.

FYIs, Good to Knows & Gotchas!

To help linkages between the state and other stakeholders in the **State of Utah**, UCA crafted its language as follows:

"Each regional advisory committee shall review, discuss, and make recommendations to the executive director regarding:

(a) the public safety communications network;
(b) the interoperability of emergency response systems;
(c) the trends and standards in the public safety industry and in public safety technology;
(d) the statewide strategic plan described in Section 63H-7a-206; and
(e) the development of cooperative partnerships."

Item #11. Contracts & Agreements

Guidance

The State 911 Office should have the explicit authority to coordinate 911 efforts with neighboring states, counties, and/or the federal government. This authority should permit the State 911 Office to enter into federal, interlocal, and interstate contracts and agreements. For example, the State may apply for loans from the Department of Agriculture's Rural Utilities Program for the purpose of building a new facility to co-locate with transportation management. The State 911 Office will require explicit authority to procure services and contract with public and private entities to support coordinated State NG911 Plan implementation in accordance with existing state procurement processes.

Sample Language

The State 911 Office, with approval and advice from the State 911 Advisory Committee shall have the authority to enter into interlocal, interstate, and/or federal contracts for the purpose of implementing the State's NG911 Plan.

The State 911 Office may enter into contracts with experts, agents, employees, vendors, and/ or consultants to carry out the purpose of this statute in accordance with existing state contracting practices.

FYIs, Good to Knows & Gotchas!

The **Commonwealth of Pennsylvania's** legislation states the following:
"To execute all contracts, agreements, mutual aid agreements, cross-service agreements and all other documents necessary to implement its 911 plan."

Item #12. Compliance with Federal, State & Other Legal Requirements

Guidance

The State 911 Office should have the authority to address and ensure compliance with relevant federal data-sharing requirements, such as the American with Disabilities Act, the Health Insurance Portability and Accountability Act, and other similar legal issues affecting 911 service.

Sample Language

The State 911 Office shall have the authority to ensure that the state's 911 system is compliant with relevant federal legislation and regulations, and relevant state legislation and regulations, and other legal requirements.

Item #13. Data Collection & Information/Resource Sharing

Guidance

Data from all stages of a 911 response will be collected and maintained—from the initiation of a 911 call to incident resolution. The availability of this information provides an opportunity to identify the strengths and weaknesses of points within the 911 response system and improve overall 911 service provision. To monitor and analyze local, regional, and state 911 response trends and issues, the State 911 Office should have the authority to collect, analyze, share, and disseminate aggregates data from PSAPs and service providers, and to collect and aggregate 911 response-related data to improve and maintain the quality of 911 service. Data should be protected in accordance with existing state statutes.

- State legislation should apply exceptions to state privacy/confidentiality laws to permit information sharing within the public safety and public health communities.
- Legislation should facilitate the sharing of anonymous or aggregated data when sufficient to address broader public safety and public health emergencies or concerns. By using access control and data rights management technologies, information required to facilitate seamless emergency response can be provided to authorized entities.
- State regulations should allow information sharing among system providers to ensure that 911 service transitions between service providers are smooth, and to ensure that providers of different but complementary services in the NG911 environment can interconnect.
- The state may reference existing privacy and confidentiality legislation and rules, making sure it does not contradict existing 911 privacy and confidentiality rules.

Sample Language

The State 911 Office shall have the authority to collect and distribute data to and from PSAPs and other authorized entities regarding the status and operation of the components of the statewide 911 system. The State 911 Office shall have the authority to require, coordinate, oversee, and limit data collection and data distribution, and to ensure that data collection and distribution meets legal privacy and confidentiality legal requirements. Data shall be protected in accordance with existing state statutes.

Data and information that contribute to more-effective 911 services and emergency response and public safety may be accessed and shared among authorized entities, while ensuring the overall privacy/confidentiality of the data involved.

Item #14. Statewide 911 System Operational & Technical Standards, Requirements & Quality Assurance

Guidance

Legislation should ensure that the State 911 Office has the authority to define and require specific outcomes and levels of service, such as call response times, data sharing capabilities, etc. The State 911 Office should be subject to the same quality assurance and improvement processes as other executive branch entities and should implement internal quality assurance policies and processes. Such processes may involve the development and implementation of performance-based benchmarks that are measured and reported at regular intervals. For example, the State 911 Office may measure and report the percentage of time the wireline automatic location identification (ALI) system is operational on a monthly basis. Any quality assurance and improvement processes should be conducted with similar legal protections similar to those of other executive branch quality assurance and improvement processes.

- Network design standards and requirements need to ensure that local and regional 911 networks can communicate with each other and share information seamlessly.
- Standards and requirements should address minimum training requirements, emergency medical dispatch (EMD), emergency fire dispatch, and emergency police dispatch in coordination with the state office or appropriate director of those domains. Standards and requirements also should address PSAP staffing.

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Sample Language

The State 911 Office shall have the authority to coordinate, adopt, and communicate all necessary technical and operational standards and requirements to ensure an effective statewide interconnected 911 system, including the following:

a) State-level network design specifications
b) Emergency call processing standards and requirements
c) Minimum PSAP requirements, including minimum mandatory staff training and certification requirements for 911 call answering and dispatching
d) Identification of PSAP staff training resources and programs
e) 911 service provider certification and accreditation
f) Appropriate technology for system networks, PSAP equipment and database requirements
g) Performance measures for data services necessary for the purposes of this statute
h) Procedures for cooperation and coordination with service providers and municipalities for 911 system implementation and maintenance
i) Sanctions and/or penalties, imposed by the State 911 Office, if technical and operational standards are not met, in accordance with existing state statutes and regulations

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Item #14. Statewide 911 System Operational & Technical Standards, Requirements & Quality Assurance (cont.)

Guidance (cont.)

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- Resources that address minimum training standards include APCO's *Minimum Training Standards for Public Safety Telecommunicators* and the guidance, *Recommended Minimum Training Guidelines for Telecommunicators*.
- State legislation should identify the State 911 Office as the entity responsible for 911 service provider certification and should grant the office with rulemaking authority. The office must coordinate with other relevant state agencies during this process to ensure stakeholder requirements are considered. Certification requirements should be performance-based and task outcome-focused.
- Service provider certification and accreditation (which statutorily may be the responsibility of another state entity, such as a state utility regulatory commission) ensures that all service providers (originating and 911) support appropriate and necessary 911 call delivery in accordance with state policies and standards.
- The state may develop, operate, or identify appropriate available resources.
- There will likely be a variety of technologies supporting 911—these technologies may be provided by a variety of vendors but should meet specific performance standards and requirements.
- Coordination between originating service providers and regional and local 911 entities is critical to consistent and standardized 911 service delivery. The State 911 Office can facilitate such coordination by providing a standard process by which coordination occurs.

Sample Language (cont.)

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The State 911 Office shall develop and implement a quality assurance program internally and shall monitor local and regional 911 call center compliance with technical and operational standards, requirements, and practices.

The State 911 Office shall establish and implement statewide 911 network performance and security testing protocols, in coordination with the state (e.g., office of information technology).

Item #15. Industry Standards & Requirements

Guidance

Industry standards developed for 911/NG911 are promulgated by a variety of standards development organizations, including NENA, APCO, the Internet Engineering Task Force (IETF), and the Alliance for Telecommunications Industry Solutions (ATIS). As new technologies emerge and best practices are identified (particularly as NG911 capabilities progress), related industry standards and best practices will be developed. To help the 911 community keep track of standards development activities, the National 911 Program compiles an annual compendium of NG911 standards.

The State 911 Office should be authorized to require the adoption and application of identified standards and best practices relating to 911 services to coordinate statewide networks. These standards address the following categories: product interface, data, training, performance, and operations. Based upon input from affected stakeholders, the State 911 Office should have the authority to expect statewide compliance with updated or new standards within timeframes it deems appropriate. When standards are not applicable, or have not yet been developed, the State 911 Office should have the authority to require compliance with specified requirements, if appropriate.

Sample Language

The State 911 Office shall have the authority to adopt and apply industry standards, best practices, guidelines, and requirements for all 911 networks and Next Generation Core Services(NGCS), and identify best practices that are beneficial to the purposes of this statute.

FYIs, Good to Knows & Gotchas!

- In the **State of Utah**, SB198 tasked UCA's 911 Division with implementing minimum standards and best practices. The board passed the minimum standards and best practices in April 2018 (standards passed include those established by NENA, APCO, and the National Fire Protection Association [NFPA]). As a result, PSAPs statewide are expected to use the minimum standards and best practices as tools to further enhance their operations and performance.
- If a state is going to implement best practices and minimum standards, the use of existing, nationally accepted standards is recommended. Otherwise, it may be difficult to get standards and best practices approved.

Item #16. 911 Database & System Security (Physical & Cyber)

Guidance

NG911 systems will involve IP network infrastructure and critical supporting database functions. Security of those functions will be a paramount priority. A state entity will have rulemaking authority regarding 911 database and system security. The State 911 Office should coordinate with that entity in the identification, adoption, and application of industry standards and requirements, regarding database and system security. These standards and requirements shall address local, regional, and state emergency network security issues, system capabilities related to role-based access controls and data rights management, and emergency network system security testing protocols as well as other relevant information security issues

Referencing national frameworks for physical security and cybersecurity may help in the development of language that facilitates collaboration among the State 911 Office and other state entities that either lead or play a role in ensuring statewide system security and continuity of operations. An example framework is the Department of Commerce National Institute of Standards and Technology (NIST)'s *Framework for Improving Critical Infrastructure Cybersecurity*. Also useful is the TFOPA Working Group 1 Supplemental Report, *Optimal Cybersecurity Approach for PSAPs*.

Sample Language

The State 911 Office shall coordinate or collaborate with appropriate federal, state, interstate, and local agencies as well as private companies, to ensure the establishment and enforcement of standards for 911 system security and continuity of operations, including but not limited to: system access controls (border control functions), user access and identity, data and hardware protection, and disaster management and recovery.

FYIs, Good to Knows & Gotchas!

If your state does not have a Security Operations Center (SOC) or Information Sharing and Analysis Center (ISAC), consider including in legislation that state authorities shall work/collaborate with appropriate federal and state agencies to increase awareness of security risks and mitigate attacks.

Item #17. Technical Assistance to the 911 Community

Guidance

As part of its statutory responsibility, the State 911 Office should be required to coordinate its activities with local 911 and public safety entities. Within that context, the office should have the responsibility and authority to provide technical assistance to such organizations for the sake of effective statewide 911 operations and coordinated planning.

Sample Language

The State 911 Office shall coordinate with and provide technical assistance to PSAPs, supporting 911 organizations and authorities, and other public safety and emergency medical service entities, regarding State NG911 Plan implementation, as appropriate and necessary.

FYIs, Good to Knows & Gotchas!

The state agency(ies) under which 911 training is administered is an important consideration as it relates to technical assistance. 911 authorities will need to coordinate with such agencies to ensure that technical assistance is provided in alignment with available training (where appropriate) and in concert with any training or technical assistance policies that may govern how such support is provided. Consider adding language to this effect in your legislation.

Item #18. Performance-Based Acquisition & Use of Services & Information Technology/Devices

Guidance

State legislation should require that 911-related regulatory language be performance based and technology neutral. Performance-based language is language that focuses on the functionality and/or outcome of a service or tool, rather than the service or tool itself (which is simply used to achieve an outcome). Consideration should include, but not be limited to, emerging technology and its related potential cost savings while considering the embedded costs of current systems.

- Much of the existing state regulatory language relating to 911 is specific to legacy telecommunications service providers and is often promulgated by state PUCs. This specific language is directly related to the fact that telecommunications service providers were at one time the exclusive providers of access to 911 services. In addition, regulatory language may refer to specific types of equipment or technology components that, while applicable to some services and providers, may not be applicable to all, or may not be the most effective in the NG911 environment.
- This technology-specific language limits the ability of states to maximize the potential of advancing technology and may force the continued operation of obsolete technology. Rather than use language that specifies the type of service providers or type of technology component to be used, states may consider regulations that use performance-based language, focusing on the outcome to be provided by the service or technology. In this manner, future technology advances may be more smoothly incorporated into the regulatory environment without requiring further modifications.

Continued on next page

Sample Language

The State 911 Office shall implement activities necessary to carry out the powers granted in this section in a manner that is competitively and technologically neutral as to all communications service providers.

Item #18. Performance-Based Acquisition & Use of Services & Information Technology/Devices (cont.)

Guidance (cont.)

Continued from previous page

- In addition to limiting the state's ability to use advancing technology to implement NG911 and other emerging technologies, outdated and technology-specific regulations unintentionally limit competition, disallowing other types of service providers or technology solutions to compete in the 911 services marketplace. As states move to NG911 and other emerging technologies (where 911 service provision will occur through emergency service networks), a variety of software and database technologies will be used, and regulations governing them should be performance-based.

Item #19. 911 Record & Data Confidentiality & Privacy

Guidance

As it becomes possible for callers and service providers to share more data and information with PSAPs through updated 911 systems and NG911 applications, and as technology facilitates the sharing of data with first responders and the broader public safety community, issues of confidentiality, privacy, and system security must be appropriately addressed. States should enable the sharing of essential information while protecting data confidentiality and addressing privacy issues. While some state legislatures address privacy and security issues, it is frequently in reference to specific forms of technology. As statutes are amended, the utilization of technology-neutral terms will better ensure that the intent to maintain privacy and security endures as technology advances.

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Sample Language

Communications service provider connection information collected by PSAP personnel during an emergency response is for public safety use only and is not public information under X. No person may disclose or use information contained in the 911 database unless explicitly required or permitted to do so.

All proprietary information submitted to the State 911 Advisory Committee, State 911 Office, or the State auditor is confidential. Proprietary information submitted pursuant to this article is not subject to disclosure under X and it may not be released to any person other than to the submitting communications service provider, the State 911 Advisory Committee, the State 911 Office, and the state auditor without the express permission of the submitting communications service provider. Proprietary information is considered a trade secret under X. General information collected by the State 911 Office may be released or published only in aggregate amounts that do not identify or allow identification of subscribers numbers or revenues attributable to an individual communications services provider.

Item #19. 911 Record & Data Confidentiality & Privacy (cont.)

Guidance (cont.)

Continued from previous page

- Any record, recording, or information (or portions thereof) obtained by a public agency for the purpose of providing services in an emergency that reveals the name, address, telephone number, personal information, or any other identifying information, of any person requesting emergency service or reporting an emergency by accessing an emergency communications 911 system, is confidential, except that such a record or information may be disclosed to a public safety agency. The exemption applies only to the name, address, telephone number, personal information, or other identifying information of any person requesting emergency services or reporting an emergency while such information is in the custody of the public agency or public safety agency providing emergency services.
- Confidentiality of 911 data may be affected or limited by other, broader statues related to the public's access to information, including access by the media. As states implement NG911, states should be mindful of the implications of making audio of the call and non-voice data, such, as images and video, publicly accessible. States may choose to address media access to 911 information more specifically. For example, in the State of Minnesota, the audio recording is determined to be private, while the transcript of what was said may not be private. This condition protects the reporting person and personal privacy in a tragic event. In other words, a caller who has experienced a traumatic experience does not need to hear the recording over and over in the media for weeks following the incident, thus the audio record is private while what was said is not.
- Identifying information of service provider subscribers, provider-specific revenues and expenses, trade secrets, commercial information, and other such information shall be treated as confidential and, notwithstanding other provisions of law, shall not be subject to public disclosure by the state or its representatives. The information made available to the state, its representatives, or providers of emergency services shall be used solely for purposes of delivering or assisting in the delivery of 911 emergency services or services that notify the public of an emergency.

Item #20. 911 Data & Records Retention

Guidance

Legislation should identify the state entity with authority to develop, monitor, and enforce 911 record and data retention policies applicable to calls for service, PSAPs, regional and state networks, and service providers. Typically, this entity is responsible for this activity regarding all state data and records.

- The State 911 Office should coordinate with such entity regarding 911-specific issues, including storage of 911 data and information in non-local shared databases and networks, storage of 911 data and information in local databases and networks, and maintenance of 911 call records for a specified timeframe.
- In some cases, legislation prescribes specific timetables for records retention. In other instances, this level of detail is outlined in state policy.
- In addition to using data to facilitate emergency response, data may be used for quality-assurance efforts, planning and research purposes, and criminal justice implementation. States should consider the implication of data-retention policies on these efforts.

Sample Language

The state shall develop and adopt records retention policies and procedures regarding data and information stored in local and non-local databases and networks. The State 911 Office or the most appropriate state agency also shall ensure that local 911 call records are maintained according to legislative requirements.

a) 911 call centers shall develop and maintain a system for recording 911 calls received at the PSAP

b) 911 call records shall be retained for a period of at least X days from the date of the call and shall include the following information:

a. Date and time the call was received

b. The nature of the problem

c. The actions taken by the 911 public safety communication center personnel

Item #21. 911 Liability

Guidance

Liability legislation should not use language that specifies the type of service provider providing access to 911 service. Liability should be equally applicable to all service providers involved in the provision of 911 services. In addition, liability legislation should not be limited to specific forms of communication (e.g., voice). Liability should be technology-neutral and equally applicable to video, text, telematics, and other developing communications technologies. As 911 information is shared and used with the broader public safety community, state legislation should ensure that liability protection is consistent across the public safety community, including PSAP staff, emergency service providers, and law enforcement.

Section 6506 of the *Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96)* includes language providing parity of protection for the provision or use of NG911 services. See the references included in *Appendix 1: 911 Terms & Definitions* to access this language.

Sample Language

No person involved in the provision of 911 service who in good faith receives, develops, collects, aggregates, processes, relays, or transfers 911 information; operates, maintains, or provides 911 services or system capabilities; or provides emergency 911 communications or services for ambulances, police and fire departments, or other public safety entities, shall be liable for damages in any civil action for any act of omission that results in death, injury, or loss to a person or property unless such action or inaction constitutes gross negligence or an international tort.

FYIs, Good to Knows & Gotchas!

The **State of Nebraska** addresses this area as follows:

"The commission may apply for any federal or other funds available for next-generation 911 service and may distribute such federal funds consistent with federal law and other funds consistent with the directives, purposes, or conditions of such other funds. Except for intentional acts, the commission shall be immune from liability or the payment of damages in applying for any such federal funds. The state 911 director shall be the designated single point of contact for any federal 911 grant program pursuant to 7 C.F.R. part 3015, subpart V, as such regulation existed on January 1, 2018, or any related federal law or regulation.

Any person involved in the provision of next-generation 911service who: (1) receives, develops, collects, or processes information for any 911 data base; (2) provides local exchange, interexchange, or transport service in connection with any next-generation 911 service; (3) relays, transfers, operates, maintains, or provides next-generation 911service or systems capabilities; or (4) provides next-generation 911 communications service for emergency service providers shall, except for failure to use reasonable care or for intentional acts, be immune from liability or the payment of damages in the performance of installing, maintaining, or providing next-generation 911 service."

Item #22. 911 Public Education

Guidance

As changes to 911 capabilities are implemented, the State 911 Office may be best positioned to coordinate, encourage, and support 911 public-education efforts. The State 911 Office should collaborate with other state entities that are able to help relate educational messaging to groups and populations with special needs or characteristics.

Sample Language

The State 911 Office should conduct and promote education of the public regarding the appropriate use of the 911 system. Public education should be relevant to groups with special needs (e.g., children, the elderly, the disabled, and non-English speaking populations).

FYIs, Good to Knows & Gotchas!

Thorough public education is essential. In the **State of Utah**, while UCA has its own website, its 911 Division's goals were to further enhance public knowledge of 911 services. Therefore, the division created a separate site—911.utah.gov—that is solely dedicated to educating the public. The site includes a text-to-911 search, so members of the public can input their ZIP code to check if they can text 911 in their area.

Legislation Pertaining to Funding, Grant-Making & Budget Oversight

Topics Addressed in this Section

Item #23. Eligible Use of 911 Funding

Guidance

Dedicated 911 revenue may be used to support 911 activities, including procurement of equipment, software, and services that comply with established technical and/or training standards and requirements. Expenses should have a demonstrated applicability to the direct provisions and delivery of 911 and emergency call-taking services.

- States should consider authorizing funds to be used for costs associated with developing, maintaining, operating, and upgrading 911 systems and networks solely in a manner that is competitively and technologically neutral to all types of communications services providers. States may consider using general language in the statute (as identified in the guidelines) and requiring the State 911 Office to develop detailed guidance regarding allowable costs, with input from the State 911 Advisory Committee.
- As states consider eligible uses of funding, note that currently many states specifically prohibit the use of 911 funds to support the lease or purchase of real estate, building remodeling, telecommunicator staff salaries, and the purchase of mobile communications vehicles, ambulances, fire engines, and other emergency vehicles.

Continued on next page

Sample Language

a) Dedicated 911 revenues may be used to support 911 activities, including procurement of equipment, software, and services that comply with nationally-accepted technical and/or training standards as published by the State 911 Office with the advice of the State 911 Advisory Committee.

b) Administrative costs related to the operation of state, regional, and local 911 authorities, and any related governing or advising commissions or boards, are permitted at a maximum rate of X percent of 911 revenue distribution.

c) Recovery of any unexpended 911 funds from local and state 911 authorities shall be permitted and recovered funds may be used for future allowable expenditures.

d) 911 funds may be used by state, regional, and local 911 authorities and allowable uses of the funds should be clearly delineated.

Item #23. Eligible Use of 911 Funding (cont.)

Guidance (cont.)

Continued from previous page

- Expenses that states may consider permitting include the lease, purchase, engagement of "as a service" contracts, or maintenance of essential PSAP/Command Center systems/subsystems including, but not limited to necessary computer hardware, software, and database provisioning. Examples include NGCS, call-handling systems, computer-aided dispatch (CAD)/record management systems, multimedia recording/storage, voice dispatch subsystems, analytics, cybersecurity technologies, addressing technologies, GIS and geospatial data technologies, telecommunicator furniture and dispatch equipment located exclusively within a building where a PSAP is located, nonrecurring costs of establishing a 911 system, 911 personnel training, charges associated with the service suppliers of 911 services, and other service supplier recurring charges.

The FCC's annual report to Congress on state collection and distribution of 911 and enhanced 911 fees and charges and the TFOPA Working Group 3 report, *Funding Sustainment Model*, are useful references for more information about typical 911 costs.

FYIs, Good to Knows & Gotchas!

- Sample language used by UCA for the **State of Utah**:

  "(b) In expending funds in the Unified Statewide 911 Emergency Service Account, the authority shall give a higher priority to an expenditure that:
  - *(i) best promotes statewide public safety;*
  - *(ii) best promotes interoperability;*
  - *(iii) impacts the largest service territory;*
  - *(iv) impacts a densely populated area; or*
  - *(v) impacts an underserved area.*

  (c) The authority shall expend funds in the Unified Statewide 911 Emergency Service Account in accordance with the authority strategic plan described in Section 63H-7a-206.

  (d) The executive director shall recommend to the board expenditures for the authority to make from the Unified Statewide 911 Emergency Service Account in accordance with this Subsection (2)."

- Take care to reference spending in terms of functional capabilities as opposed to specific technologies or technology vendors. As NG911 continues to progress and evolve, intended capabilities may be met through a variety of new or emerging systems; therefore, keeping technical specifics out of legislative language provides state 911 offices with flexibility to spend funds on what suits intended capabilities at the time they are able to transition.

Item #24. Oversight, Management & Protection of Funds

Guidance

As a matter of fiscal responsibility, it is important that funds collected and appropriated for the specific purpose of providing 911 services are, in fact, only used for those purposes. 911 fund management and oversight responsibilities may be shared across state agencies. In many states, the responsibility for overseeing the collection (and auditing) of dedicated 911 revenue from service providers assessing the customer-based fees may fall under the general responsibility of the state's comptroller or fiscal officer. Compliance with 911-eligible expenses and State NG911 Plan activities will be monitored in most cases by the 911 Office.

- States may consider identifying a neutral third party to administer the dedicated 911 revenue collection and distribution. A third-party fund administrator provides transparency to interested parties and the public, and uses standardized procedures determined without a vested interest in a particular outcome. In many states, this may fall under the state comptroller's authority.
- The State 911 Office should be responsible for ensuring that those funded entities providing 911 services appropriately and correctly expend the funds in accordance with statutes, program policies and regulations.

Sample Language

The state is responsible for 911 fund management and oversight. The State 911 Office shall have the authority to oversee the distribution and expenditure of 911 funds consistent with existing statutes and regulations.

Item #24. Oversight, Management & Protection of Funds (cont.)

FYIs, Good to Knows & Gotchas!

- NACo strongly advocates for strict management and oversight of 911 funds usage, emphasizing the importance of keeping 911 funds allocated to and used for purposes only that are in service of 911 systems and service delivery.
- The **State of Nebraska** addresses oversight as follows:

  "Money in the fund may be used to pay for costs incurred by or on behalf of governing bodies or public safety answering points to provide 911 service that are determined by the commission to be eligible for funding. The commission is not required to provide funding from the 911 Service System Fund to more than one public safety answering point in any county. Each entity that receives disbursements from the fund under this subsection shall make a full accounting of the money in a manner and form prescribed by the commission."

Item #25. Local, Regional & Commercial Fund Administration

Guidance

Any governing body receiving 911 emergency surcharge funds should deposit all such funds into interest-bearing accounts where possible. All interest earned on fund investment also should be allocated to the 911 Fund. The governing body should keep records identifying critical remittance information.

Sample Language

a) Any agency responsible for the receipt and/or usage of 911 funds must maintain within its accounting system a separate special revenue fund to be identified as the 911 Fund.

b) Any interest earned from these funds should be added to the fund.

c) The financial balances and activities of the 911 Fund must be accounted for and reported in accordance with generally accepted accounting principles or other comprehensive basis of accounting on an annual basis.

Item #26. Local, Regional & Commercial 911 Budgeting

Guidance

Any entity using 911 funds should adopt an annual budget and submit it to the State 911 Office for review and approval to ensure that proposed expenditures are consistent with the State NG911 Plan and allowable uses. The budget should include all project revenues, the source of those revenues, and proposed expenditures by major program activities.

Sample Language

All entities responsible for the expenditure of revenues distributed from the 911 Fund shall adopt an annual budget for the expenditure of such funds and submit such budget to the State 911 Office for review and approval. The recipient shall identify revenues and expenditures for eligible expense reimbursements as provided in this legislation and policies adopted by the State 911 Office.

FYIs, Good to Knows & Gotchas!

It is critical that all 911 authorities understand 911 budgeting, cost factors, and the implications of transitioning to and sustaining NG911 capabilities. The TFOPA Working Group 3 Supplemental Report, *Funding Sustainment Model*, is a comprehensive report that provides practical information about 911 funding streams and approaches for ensuring that streams serve systems for the long term. However, it is also crucial for legislators and 911 authorities to understand how the budgetary process works in their state. Implementing business models and budgeting around them will need to closely align with state budgeting processes and statutes that may prescribe or prohibit certain approaches. Additionally, your state's process will greatly affect the 911 authority's cycle for projecting revenue, setting rates, and obtaining the appropriation of adequate state funds.

Item #27. Financial Reporting & Annual 911 Fund Audits

Guidance

States may consider monthly, quarterly, or semi-annual reporting schedules. Additionally, to ensure that identified revenue collection and distribution methods are implemented, legislation should require the use of appropriate accounting principles by PSAPs, 911 service providers and commercial parties, the State 911 Office, and any other recipients of 911 funding (use of funding should be exclusive to 911 service).

Auditing and financial oversight authority should be specified; this authority likely will rest with a specific agency and be defined by existing auditing and financial oversight structures. Coordination with the State 911 Office in the performance of financial audits should be allowed.

Sample Language

Recipients of 911 fund distributions shall comply with all reporting requirements established by the State 911 Office, State 911 Advisory Committee, governor, and legislature for financial information related to the operation of 911 systems.

Recipients of 911 fund distributions shall complete an annual audit of 911 fund revenues and expenditures, in accordance with local government practices or standard accounting procedures, and shall submit a copy of each audit to the State 911 Office. The State 911 Office shall be audited according to X legislation by the X department of X in accordance with standard state auditing processes and requirements.

Item #28. Protection from Raiding of 911 Funds

Guidance

Although most states currently have legislation identifying allowable uses of dedicated 911 funding, there are many cases of states "raiding," i.e., diverting, dedicated 911 funds for non-911 expenditures, such as law enforcement or fire service purchases or transfers of funds to offset state general fund deficits. States may consider including legislation that makes it more challenging to use 911 funds for other purposes, such as requiring a super-majority to approve the use of 911 funding for non-911 purposes.

Sample Language

The revenues in the 911 Fund may not be reduced, withheld, or allocated for purposes other than those described in Section X.

These funds shall not be obligated or expended, for any other purpose other than the purpose for which charges are designated and presented, and shall not be eliminated or re-designated for purposes other than the implementation or operation of 911, E911, or NG911 services.

Item #29. Grant-Making

Guidance

The State 911 Office should have the authority to develop, implement, and oversee a state 911 program to provide 911 grants to local and regional entities to implement NG911, as appropriate, within the state's funding environment. Such a grant program also could be used to address equity issues among PSAPs.

Sample Language

The State 911 Office shall have the authority to develop and administer grant programs to assist PSAPs and regional emergency 911 communication centers in providing coordinated 911 services, and to foster the development of regional PSAPs, regional secondary PSAPs, and regional emergency 911 communication centers. Programs shall be administered in alignment with applicable state grant procedures.

Item #30. Acceptance of Grants & Gifts

Guidance

State legislation should enable the State 911 Office to pursue, accept, implement, and/or manage federal and private grant funds and financial gifts, within the parameters of the State NG911 Plan, in accordance with existing state law, constitutional authority, and state policies.

Sample Language

The State 911 Office may apply for and accept gifts, grants, contributions, and bequests of funds from any department, agency or subdivision of federal, state, county, or municipal government, and any individual foundation, corporation, association, or public authority, for the purpose of providing or receiving services, facilities, or staff assistance in connection with its work. Such funds will be deposited in the 911 Fund.

Appendices

Appendix 1: 911 Terms & Definitions

TERM	DEFINITION
911 (or 9-1-1)	A three-digit telephone number to facilitate the reporting of an emergency requiring a response by a public safety agency.
911 authority	A state, county, regional, or other governmental entity responsible for 911 service operations. For example, this could be a county/parish or city government, a special 911 or emergency communications district, a council of governments, or other similar body.
911 "call"	A generic term used to include any type of request for emergency assistance (RFEA) and is not limited to voice. This may include a session established by signaling with two-way, real-time media and involving a human making a request for help. We sometimes use "voice call," "video call" or "text call" when specific media is of primary importance. The term "non-human-initiated call" refers to a one-time notification or series of data exchanges established by signaling with, at most, one-way media, and typically does not involve a human at the "calling" end. The term "call" also can be used to refer to either a "voice call," "video call," "text call," or "data–only call" since they are handled the same way by most of NG911 systems.
911 fund	The fund established by state statute that is specifically used to fund 911 activities and/or infrastructure.
911 service area	The geographic area that has been granted authority by a state or local governmental body to provide 911 services.
911 system	A coordinated system of technologies used by a collaborative group of people to operate an efficient and effective network for accepting, processing, and delivering emergency information to facilitate an emergency response—a set of networks, software applications, databases, customer premises equipment (CPE), and operations and management procedures required to provide 911 service. This may include commercial, governmental, and human resources.
Access provider	An access provider is any organization that arranges for an individual or an organization to have access to the internet.
Additional data	Information that further describes the nature of how a call was placed, the person(s) associated with the device placing the call, or the location from which the call was placed. There are three types of additional data: 1) additional data for the call, 2) additional data for the caller, and 3) additional data for the Location.
Agency	In NG911, an organization that is connected directly or indirectly to the Emergency Services Internet Protocol Network (ESInet). Public safety agencies are examples of an "agency." An entity such as a company that provides a service in the ESInet can be an "agency." Agencies have identifiers and credentials that allow them access to services and data.
Agent	In NG911, an "agent" is an authorized person—an employee, contractor, or volunteer—who has one or more roles in an agency. An "agent" also can be an automaton in some circumstances (e.g., an interactive media response [IMR] system answering a call).
Alternate routing	The capability of routing 911 calls to a designated alternate location(s) if all 911 trunks are busy or out of service. May be activated upon request or automatically, if detectable, when 911 equipment fails or the PSAP itself is disabled.

TERM	DEFINITION
Automatic location Identification (ALI)	The automatic display at the PSAP of the address/location of the telephone used to make the 911 call, as well as supplementary emergency services information related to the location from which a call originates.
Automatic number identification (ANI)	The automatic display at the PSAP of the caller's telephone number associated with the access line from which a 911 call originates.
Basic 911	An emergency telephone system that automatically connects 911 callers to a designated answering point. Call routing is determined by the originating telephone central office only. Basic 911 may or may not support ANI and/or ALI.
Call-taker	An agent of a PSAP who answers and processes emergency calls. Synonymous with the term, "telecommunicator."
Call-taking	The act of processing a call for emergency assistance up to the point that the call is ready for dispatch, including equipment usage, call classification, caller location, and determination of the appropriate response level for emergency responders.
Call handling	Functional element concerned with the details of call management of calls. It handles all communication from the caller. It includes the interfaces, devices, and applications utilized by agents to handle the call.
Call routing	The capability to selectively route the 911 call to the appropriate PSAP.
Carrier	A business entity that provides a communications service to a customer base, typically for a fee. Examples of carriers and associated services are public switched telephone network (PSTN) service by a local exchange carrier, voice over Internet Protocol (VoIP) service by a VoIP provider, and e-mail service provided by an internet service provider.
Commercial call center	A privately operated call center that answers emergency and/or nonemergency calls.
Commercial mobile radio service (CMRS)	An FCC designation for any carrier or licensee whose wireless network is connected to the PTSN.
CMRS connection	Each mobile handset telephone number assigned to a CMRS subscriber with a place of primary use in-state.
CMRS provider	An entity (facilities-based or non-facilities-based) that is licensed by the FCC to provide CMRS or that resells CMRS within a state.
Computer-aided dispatch (CAD)	A computer-based system that aids PSAP telecommunicators by automating selected dispatching and record-keeping activities.
Continuity of operations (COOP)	The ability to continue operations during and after a service-impacting event. This is done through a specific set of procedures designed to reduce the damaging consequences of unexpected events resulting in the loss of 911 capabilities.
Customer premises equipment (CPE)	Communications or terminal equipment located in the customer's facilities; terminal equipment at a PSAP.
Database	An organized collection of information, typically stored in computer systems, comprised of fields, records (data), and indexes. In 911, such databases include Master Street Address Guide (MSAG), telephone number/emergency service number (ESN), and telephone customer records.
Data exchange	The process of exchanging 911 data between service providers and the database management system provider.
Dispatch system	The functional element used to assign appropriate resources (emergency responders) to an incident, monitor the response, and relay relevant information. It tracks and logs all transactions associated with the emergency response.

TERM	DEFINITION
Enhanced 911 (E911)	A telephone system that includes network switching, database and PSAP-premise elements capable of providing ALI data, selective routing, selective transfer, fixed transfer, and a call-back number. The term also includes any enhanced 911 service as designated by the FCC in its Report and Order in WC Docket Nos. 04-26 and 05-196, or any successor proceeding.
Emergency medical services	A service ranging from out-of-hospital acute care and transport to definitive care to patients with illnesses and injuries that the patient believes constitute a medical emergency.
Emergency services IP network (ESInet)	An ESInet is a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core services can be deployed, including, but not limited to, those necessary for providing NG911 services. ESInets may be constructed from a mix of dedicated and shared facilities. ESInets may be interconnected at local, regional, state, federal, national, and international levels to form an IP-based inter-network (network of networks). The term ESInet designates the network, not the services that ride on the network.
First Responder Network Authority (FirstNet)	Signed into law on February 22, 2012, the *Middle Class Tax Relief and Job Creation Act* created the FirstNet. The law gives FirstNet the mission to build, operate, and maintain the first nationwide wireless broadband network dedicated to public safety. FirstNet will provide a single interoperable platform for emergency and daily public safety communications. http://www.firstnet.gov/
Geographic information systems (GIS)	A system for capturing, storing, displaying, analyzing, and managing data and associated attributes that are spatially referenced.
i3 solution	The National Emergency Number Association (NENA) i3 (third iteration) standards introduced the concept of an ESInet, which is designed as an IP-based inter-network (network of networks) shared by all agencies that may be involved in any emergency.
Interlocal services agreement	An agreement among governmental jurisdictions or privately owned systems (or both) within a specified area to share 911 system costs, maintenance responsibilities, and other considerations.
Internet Protocol (IP)	The method by which digital data is sent from one computer to another over the internet or other networks.
Interoperability	The ability of disparate communications systems to seamlessly interconnect and work together as a collective system.
Landline	Colloquial term for PSTN access via an actual copper or fiber-optic transmission line that travels underground or on telephone poles. Used to differentiate the “wireless” connectivity of a cellular or personal communications system.
Legacy network gateway (LNG)	An NG911 functional element that provides an interface between a non-IP originating network and a Next Generation Core Services (NGCS)-enabled network.
Legacy PSAP gateway (LPG)	A signaling and media interconnection point between an ESInet and a legacy PSAP. It plays a role in the delivery of emergency calls that traverse an i3 ESInet to get to a legacy PSAP, as well as in the transfer and alternate-routing of emergency calls between legacy PSAPs and NG911 PSAPs. The LPG supports an IP (i.e., Session Initiation Protocol [SIP]) interface towards the ESInet on one side, and a traditional multi-function (MF) or enhanced MF interface (comparable to the interface between a traditional selective router and a legacy PSAP) on the other.
Local exchange carrier	A telecommunications carrier under the state/local public utilities act that provides local exchange telecommunications services. Also known as incumbent local exchange carriers, alternate local exchange carriers, competitive local exchange carriers, competitive access providers, certified local exchange carriers, and local service providers.

TERM	DEFINITION
Location information server (LIS)	A functional element in an IP-capable originating network that provides locations of endpoints (i.e., calling devices). An LIS can provide location by-reference, or location-by-value, and, if the latter, in geographic or civic forms. An LIS can be queried by an endpoint for its own location or by another entity for the location of an endpoint. In either case, the LIS receives a unique identifier that represents the endpoint (for example, an IP address, circuit identification, or media access control [MAC] address) and returns the location (value or reference) associated with that identifier. The LIS is also the entity that provides the dereferencing service, exchanging a location reference for a location value.
Master Street Address Guide (MSAG)	A database of street names and house number ranges within their associated communities defining emergency service zones (ESZs) and their associated emergency service numbers (ESNs) to enable proper routing of 911 calls.
Memorandum of agreement (MOA)	A document written between parties to cooperatively work together on an agreed upon project or meet an agreed-upon objective.
Memorandum of understanding (MOU)	A document that expresses mutual accord on an issue between two or more parties.
Mutual-aid agreement	Written agreement between agencies and/or jurisdictions in which they agree to assist one another, upon request, by furnishing personnel and equipment.
National Information Exchange Model (NIEM)	A community-driven, standards-based, national model for structured information sharing. www.niem.gov
National Incident Management System (NIMS)	A standardized approach to incident management developed by the Department of Homeland Security (DHS). It is intended to facilitate coordination between all responders (including all levels of government with public, private, and non-governmental organizations). https://www.fema.gov/national-incident-management-system
Next Generation 911 (NG911) services	A secure, IP-based, open standards system comprised of hardware, software, data, and operational policies and procedures that: a) Provides standardized interfaces from emergency call and message services to support emergency communications. b) Processes all types of emergency calls, including voice, text, data, and multimedia information. c) Acquires and integrates additional emergency call data useful to call routing and handling. d) Delivers the emergency calls, messages, and data to the appropriate public safety answering point (PSAP) and other appropriate emergency entities based on the location of the caller. e) Supports data, video, and other communications needs for coordinated incident response and management. f) Interoperates with services and networks used by first responders to facilitate emergency response. *REF: Agreed to by NENA, NASNA, and the Industry Council for Emergency Response Technologies (iCERT) as the NG911 NOW Coalition; and the National 911 Program on 01/12/2018.*
Order of authority	A formal order by the state or local authority which that authorizes public agencies or public safety agencies to provide 911 service in a geographical area.
Prepaid wireless telephone service	Telephone service authorized by the purchase of CMRS, either exclusively or in conjunction with other services. This service must be paid for in advance and is sold in units or dollars whose number or dollar value declines with use and is known on a continuous basis.

TERM	DEFINITION
Private 911 emergency answering point	An answering point operated by nonpublic safety entities with functional alternative and adequate means of signaling and directing response to emergencies. Includes training to individuals intercepting calls for assistance that aligns with applicable local emergency telecommunications requirements. Private 911 emergency answering points are an adjunct to public safety response and, as such, must provide incident reporting to the public safety emergency response centers per local requirements.
Proprietary information	Subscriber lists, technology descriptions, technical information, or trade secrets that are developed, produced, or received internally by a voice communications service provider or by a voice communications service provider's employees, directors, officers, or agents.
Public safety agency	A functional division of a public agency that provides firefighting, police, medical, or other services to respond to and manage emergency incidents.
Public safety answering point (PSAP)	An entity responsible for receiving 911 calls and processing those calls according to a specific operational policy. • Primary PSAP: A PSAP to which 911 calls are routed directly from the 911 control office • Secondary PSAP: A PSAP to which 911 calls are transferred from a primary PSAP • Alternate PSAP: A PSAP designated to receive calls when the primary PSAP is unable to do so • Consolidated PSAP: A facility where multiple public safety agencies choose to operate as a single 911 entity • Legacy PSAP: A PSAP that cannot process calls received via i3-defined call interfaces (IP-based calls) and still requires the use of Centralized Automatic Message Accounting (CAMA) or Integrated Services Digital Network (ISDN) trunk technology for delivery of 911 emergency calls • Serving PSAP: The PSAP to which a call normally would be routed. • NG911 PSAP: This term is used to denote a PSAP capable of processing calls and accessing data services as defined in NENA's i3 specification, *NENA-STA-010*, and referred to therein as an "i3 PSAP"
Service provider	An entity providing one or more of the following 911 elements: network, CPE, or database service.
Standards development organization (SDO)	An entity whose primary activities are developing, coordinating, promulgating, revising, amending, reissuing, interpreting, or otherwise maintaining standards that address the interests of a wide base of users outside the SDO.
State NG911 Plan	A document prepared, maintained, implemented, and updated by a state that provides a comprehensive plan for operating a statewide 911 system that communicates 911 call information across networks and among PSAPs, addresses all aspects of the statewide 911 system, and describes the allowable uses of revenue in the 911 Fund.
Subscriber	A person who purchases a communications service and can receive it or use it periodically over time.
Telecommunication	The transmission between and among points specified by the user (or information of the user's choosing) without change in the form of content of the information sent and received, regardless of the facilities, equipment, or technology used.
Telecommunicator	Person employed by a PSAP and/or an emergency medical dispatch (EMD) service provider qualified to answer incoming emergency telephone calls and/or provides for the appropriate emergency response, either directly or through communication with the appropriate PSAP.

TERM	DEFINITION
Virtual PSAP	An operational model directly enabled through NG911 features and/or network-hosted PSAP equipment in which telecommunicators are dispersed geographically, rather than working from the same physical location. Remote access to the PSAP applications by the dispersed telecommunicators requires the appropriate network connections, security, and workstation equipment at the remote location. Unified communications applications supporting voice, data, instant messaging, and video communications between telecommunicators may be used to enable the telecommunicators to work cooperatively from diverse locations. The virtual workplace may be a logical combination of physical PSAPs or an alternate work environment such as a satellite facility (or any combination of the above). Workers are connected and interoperate via IP connectivity.
Voice communications service	The transmission, conveyance, or routing of real-time, two-way voice communications to a point, between/among points, or through any electronic, radio, satellite, cable, optical, microwave, wireline, wireless, or other medium or method regardless of the protocol used, including interconnected VoIP service.
Voice over Internet Protocol (VoIP)	Technology that permits delivery of voice calls and other real-time multimedia sessions over IP networks.

Appendix 2: Associations, Organizations & Other Stakeholder Entities Relevant to 911

NAME/ACRONYM	DESCRIPTION	WEBSITE
American National Standards Institute (ANSI)	Entity that coordinates the development and use of voluntary consensus standards in the U.S. and represents the needs and views of U.S. stakeholders in standardization forums around the globe.	www.ansi.org
Association of Public-Safety Communications Officials (APCO)	The world's oldest and largest not-for-profit professional organization dedicated to the enhancement of public safety communications.	http://www.apcointl.org/
American Registry for Internet Numbers (ARIN)	An organization that provides services related to the technical coordination and management of internet number resources.	https://www.arin.net/
Alliance for Telecommunications Industry Solutions (ATIS)	A U.S.-based organization that is committed to rapidly developing and promoting technical and operational standards for the communications and related information technologies industry worldwide.	www.atis.org
Commission on Accreditation for Law Enforcement Agencies (CALEA)	A credentialing authority created in 1979 through the joint efforts of the following law enforcement's major executive associations. • International Association of Chiefs of Police (IACP) • National Organization of Black Law Enforcement Executives (NOBLE) • National Sheriffs' Association (NSA) • Police Executive Research Forum (PERF) CALEA's accreditation programs improve the delivery of public safety services, primarily by maintaining a body of standards developed by public safety practitioners.	http://www.calea.org/
Communications Security, Reliability, and Interoperability Council (CSRIC) (formerly known as the Network Reliability and Interoperability Council [NRIC])	An advisory body of the FCC that provides recommendations to the FCC to ensure optimal security and reliability of communications systems, including telecommunications, media, and public safety.	https://www.fcc.gov/about-fcc/advisory-committees/communications-security-reliability-and-interoperability-council-0

NAME/ACRONYM	DESCRIPTION	WEBSITE
Emergency Services Interconnection Forum (ESIF)	An open, technical/operational forum, under the auspices of ATIS, with the voluntary participation of interested parties to identify and resolve recognized 911 interconnection issues.	www.atis.org/esif
Federal Communications Commission (FCC)	An independent U.S. government agency overseen by Congress, the FCC regulates interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Columbia, and U.S. territories.	https://www.fcc.gov/
Federal Geographic Data Committee (FGDC)	The FGDC is an interagency committee that promotes the coordinated development, use, sharing, and dissemination of geospatial data on a national basis.	https://www.fgdc.gov/
First Responder Network Authority (FirstNet)	Signed into law on February 22, 2012, the *Middle Class Tax Relief and Job Creation Act* created FirstNet, giving it the mission to build, operate, and maintain the first nationwide wireless broadband network dedicated to public safety. FirstNet will provide a single interoperable platform for emergency and daily public safety communications.	http://www.firstnet.gov/
Industry Council for Emergency Response Technologies (iCERT)	iCERT plays an important role as the voice of companies on issues impacting the emergency response system. iCERT members believe that business leaders' expertise can assist public policymakers and government emergency communications professionals as they address complex choices regarding advanced communications technology alternatives in the years ahead. Through advocacy, research, and in coordination with the public sector, iCERT plays a vital role in the development and deployment of emergency response technologies.	https://www.theindustrycouncil.org/
Internet Architecture Board (IAB)	The committee charged with oversight of the technical and engineering development of the Internet by the Internet Society (ISOC). It oversees numerous task forces including the Internet Engineering Task Force (IETF) and the Internet Research Task Force (IRTF). The body that eventually became the IAB originally was formed in 1979 by the Department of Defense Defense Advanced Research Projects Agency (DARPA) under the name Internet Configuration Control Board.	https://www.iab.org/
International Academies of Emergency Dispatch (IAED)	A non-profit standard-setting organization, formerly known as the National Academies of Emergency Dispatch (NAED), promoting safe and effective emergency dispatch services worldwide.	http://www.emergencydispatch.org/
Internet Assigned Numbers Authority (IANA)	IANA is the entity that oversees global IP address allocation; Domain Name System (DNS) root zone management, and other IP assignments.	www.iana.org

NAME/ACRONYM	DESCRIPTION	WEBSITE
Internet Corporation for Assigned Names and Numbers (ICANN)	Authority for public domain addresses and uniform resource locators (URLs), including related policies and databases.	https://www.icann.org/
Institute of Electrical and Electronic Engineers (IEEE)	A publishing and standards-making body responsible for many telecommunications and computing standards.	https://www.ieee.org/
Internet Engineering Steering Group (IESG)	The IESG is a body composed of the IETF chair and area directors.	https://www.ietf.org/about/groups/iesg/
Internet Engineering Task Force (IETF)	Lead standards-setting authority for internet protocols.	https://www.ietf.org/
Integrated Justice Information Systems (IJIS) Institute	The IJIS Institute, a 501(c)(3) nonprofit corporation, represents industry's leading companies that collaborate with local, state, tribal, and federal agencies to provide technical assistance, training, and support services for information exchange and technology initiatives. The mission of the IJIS Institute is to unite private and public sectors to improve critical information sharing for those who provide public safety and administer justice in U.S. communities.	www.ijis.org
International Committee for Information Technology Standards (INCITS)	A U.S.-based standards development organization (SDO) dedicated to the creation of information technology (IT) standards.	www.incits.org
International Organization for Standardization (ISO)	An independent, non-governmental international organization with a membership of 161 national standards bodies.	www.iso.org
International Telecommunication Union (ITU)	The telecommunications agency of the United Nations established to provide worldwide standard communications practices and procedures. Formerly the Consultative Committee for International Telephony and Telegraphy (CCITT).	https://www.itu.int/en/Pages/default.aspx
National 911 Program	The National 911 Program's mission is to provide federal leadership and coordination in supporting and promoting optimal 911 services. This federal "home" for 911 plays a critical role by coordinating federal efforts that support 911 services across the nation.	https://www.911.gov/
National Suicide Prevention Lifeline (LIFELINE)	A national network of local crisis centers that provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.	https://suicidepreventionlifeline.org/
North American Network Operators Group (NANOG)	A governing body that provides guidance and instructions for the design of an IP network. NANOG is typically involved in the best current operational practices for IPv6 planning.	https://www.nanog.org/about/home

NAME/ACRONYM	DESCRIPTION	WEBSITE
North American Numbering Plan Administration (NANPA)	The organization that has overall administrative responsibility of the North American Numbering Plan (NANP), an integrated telephone numbering plan serving 20 North American countries that share its resources.	www.nationalnanpa.com
National Association of Search and Rescue (NASAR)	Non-profit association dedicated to the advancement of professional, literary, and scientific knowledge and training in the field of search and rescue.	http://www.nasar.org/
National Association of State 911 Administrators (NASNA)	An association that represents state 911 programs in the field of emergency communications.	www.nasna911.org
National Center for Missing and Exploited Children (NCMEC)	NCMEC opened in 1984 to serve as the nation's clearinghouse on issues related to missing and sexually exploited children.	www.missingkids.com
National Exchange Carrier Association (NECA)	A membership association of U.S.-based local telecommunications companies dedicated to keeping customers connected on state-of-the-art communications networks.	www.neca.org
National Emergency Number Association (NENA)	A not-for-profit corporation established in 1982 to further the goal of "One Nation-One Number." NENA promotes research, planning, and training, and strives to educate, set standards, and provide certification programs, legislative representation, and technical assistance for implementing and managing 911 systems.	www.nena.org
National Fire Protection Association	A global nonprofit organization, established in 1896, devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards.	www.nfpa.org
National Highway Traffic Safety Administration (NHTSA)	NHTSA is an agency of the Executive Branch of the U.S. government, part of the Department of Transportation (DOT). It describes its mission as, "Save lives, prevent injuries, reduce vehicle-related crashes." The National 911 Program is housed under NHTSA.	www.nhtsa.gov
National Integration Center (NIC)	A unit of the Department of Homeland Security (DHS), is responsible for managing the implementation and administration of the National Incident Management System (NIMS).	https://www.fema.gov/fema-technical-assistance-program
National Information Standards Organization (NISO)	A non-profit association accredited by the American National Standards Institute (ANSI), NISO identifies, develops, maintains, and publishes technical standards to manage information in the digital environment. NISO standards apply both traditional and new technologies to the full range of information-related needs, including data retrieval, repurposing, storage, metadata, and preservation.	http://www.niso.org

NAME/ACRONYM	DESCRIPTION	WEBSITE
National Institute of Standards and Technology (NIST)	Part of the Department of Commerce (DOC), NIST oversees the operation of the National Bureau of Standards. NIST works with industry and government to advance measurement science and to develop standards in support of industry, commerce, scientific institutions, and all branches of government. Its mission is to promote innovation and industrial competitiveness.	www.nist.gov
National Joint Telecommunicator Emergency Response Taskforce (TERT) Initiative (NJTI)	A partnership between APCO and NENA that has worked to develop the many facets of a TERT program. TERT involves assistance to individual states in developing programs that would lead to the establishment of predetermined and selected trained teams of individuals who can be mobilized quickly and deployed to assist communications centers during disasters.	www.njti-tert.org
National States Geographic Information Council (NSGIC)	NSGIC promotes the efficient development and management of location-based information resources, and advocates for innovative, strategic use of these assets to advance the interests of states, tribal communities, regions, local governments, and the nation.	http://www.nsgic.org/
National Telecommunications and Information Administration (NTIA)	NTIA is an Executive Branch agency that is principally responsible for advising the President on telecommunications and information policy issues. NTIA's programs and policymaking focus largely on expanding broadband Internet access and adoption in the U.S., expanding the use of spectrum by all users, and ensuring that the Internet remains an engine for continued innovation and economic growth.	https://www.ntia.doc.gov/
Organization for Advancement of Structured Information Standards (OASIS)	An SDO that promulgates standards for data interchange.	www.oasis-open.org
Open Geospatial Consortium (OGC)	An SDO that promulgates standards for the global geospatial community.	http://www.opengeospatial.org/
Open Mobile Alliance (OMA)	An SDO that develops standards for the mobile phone industry.	www.openmobilealliance.org
Packet Technologies and Services Committee (PTSC)	PTSC is an ATIS standards committee that develops standards related to services, architectures, signaling, network interfaces, next generation carrier interconnection, cybersecurity, and government emergency telecommunications service within next generation networks.	www.atis.org/PTSC
Urban and Regional Information Systems Association (URISA)	A non-profit association of professionals using geographic information systems (GIS) and other information technologies to solve challenges in state and local government agencies.	http://www.urisa.org/

Appendix 3: Useful Resources

Federal Rules, Regulations & Laws

- *Enhance 911 Service Act of 2004 (PL 108-494)*
- *Food, Conservation and Energy Act of 2008 ("Farm Bill") (PL 110-246)*
- *Implementing Recommendations of the 9/11 Commission Act of 2007 (PL 110-53)*
- *Middle Class Tax Relief and Job Creation Act of 2012*
- *New and Emerging Technologies 911 Improvement Act of 2008*
- *Wireless Communications and Public Safety Act of 1999 (PL 106-81)*

Reports

- FCC TFOPA *Adopted Final Report*
- TFOPA Working Group 1 Supplemental Report—*Optimal Cybersecurity Approach for PSAPs*
- TFOPA Working Group 2 Supplemental Report—*Phase II Supplemental Report: NG9-1-1 Readiness Scorecard*
- TFOPA Working Group 3 Supplemental Report—*Funding Sustainment Model*
- GAO Report to Congressional Committees: *911 Services Most States Used 911 Funds for Intended Purposes, but FCC Could Improve Its Reporting on States' Use of Funds*
- FCC Emergency Access Advisory Committee (EACC) Working Group 7 Report—*Recommendations on Timeline Alignment*
- Canadian Radio-television and Telecommunications Commission, *A Report on Matters Related to Emergency 911*

Guidance & Research Documents

- *Guidelines for Developing a State NG911 Plan**
- National 911 Program *State Assessment Handbook: A Guide for States Participating in the Statewide 911 System Assessment Process*
- National 911 Program *State Assessment Guidelines Synopsis Chart*
- National 911 Program *Next Generation 911 (NG911) Standards Identification and Review*
- *NG911 & FirstNet: Together Building the Future of Public Safety Communications (A Guide for State & Local Authorities)*
- *Guidelines for Minimum Training*
- National 911 Program *Next Generation 911 (NG9-1-1) Interstate Playbook, Chapter 1*
- National 911 Program *Next Generation 911 (NG9-1-1) Interstate Playbook, Chapter 2*

**Hyperlink will be added once resource is published and posted for public distribution.*

Databases & Resource Repositories

- APCO Standards to Download
- NASNA How to Start a State 911 Program
- NASNA State 911 Contacts
- NASNA 911 Regionalization—Tools and Information
- National 911 Program Documents & Tools
- National 911 Profile Database
- NCSL Key Enacted 911 Legislation Database
- NENA Company Identifier Program
- NENA Standards & Other Documents