

Draft Report for
National 9-1-1 Assessment
Guidelines



June 2012



A CDI Company

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The goals of the 9-1-1 Resource Center are to provide technical assistance and information to PSAPs and 9-1-1 authorities, and to monitor the progress of 9-1-1 authorities across the United States in implementing more advanced 9-1-1 systems based upon next generation networks and facilities. The purpose of the 9-1-1 Resource Center can be described in the following statement:

"The 9-1-1 Resource Center is THE FIRST place to go for 9-1-1 information and technical assistance."

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EXECUTIVE SUMMARY

The National 9-1-1 Assessment Guidelines Work Group (NAGWG), in conjunction with L.R. Kimball, is pleased to present this *National 9-1-1 Assessment Guidelines* report to the United States Department of Transportation (USDOT), through the National 911 Program. L.R. Kimball is under contract to facilitate a document that contains consensus-based universal guidelines to serve as the basis of a best practice assessment of a State 9-1-1 system.

With a population exceeding 308 million people, residents and visitors to the United States place over 240 million 9-1-1 calls annually. While the public safety industry has made significant progress upgrading technology for the betterment of 9-1-1, this 40-year old system has not kept pace with advancing communications technologies. 9-1-1 systems must continue to serve the public and meet public expectations today and throughout future technological transitions.

9-1-1 professionals from local and state government, national associations, and industry experts participated as members of NAGWG, which was charged by the National 911 Program with developing consensus guidelines that can be used to assess statewide 9-1-1 systems. To accomplish this task, the work group established a development process that included face-to-face meetings, conference calls, and sub-work groups.

The consensus guidelines serve as an objective benchmark for the assessment of the status of a statewide 9-1-1 system. States will find an assessment based on consensus guidelines to be a useful tool as it will evaluate where a state's system currently stands, provide a path for enhancement, and provide an objective evaluation that may help states leverage their respective resources. States will not be required to adopt the guidelines; any established assessment process will be conducted on a voluntary basis.

NAGWG developed eight guideline categories that constitute the basis for the consensus guidelines:

1. Statutory and Regulatory
2. Governance
3. Functional and Operational Planning
4. Standards
5. Security and Continuity of Operations
6. Human Resources and Training
7. Evaluation
8. Public Education

The guidelines in each category illustrate what an effective 9-1-1 system encompasses, but does not dictate how to achieve an end result. The guidelines are operational in nature and are not meant to be technical, nor are they intended to be standards or requirements. The guidelines are intended to unify the goals of the industry and facilitate a coordinated effort to advance 9-1-1 across the country. NAGWG determined the guidelines needed to be as constructive as possible and decided against establishing a pass/fail designation or a graded structure.

NAGWG determined core elements for each guideline: the guideline itself, guidance, criteria, and rationale. While the guidance is designed to provide assistance for assessors, it may also provide information for states. The rationale describes why the guideline is important. Most guidelines are based on three criterion levels: minimum, advanced and superior. Each graduated rating assumes compliance with the prior rating. Some guidelines are binary in nature, and are indicated by 'Binary' in the minimum criteria and grayed-out in the advanced and superior criteria boxes. With a binary guideline, the assessment result will be either a yes or no answer; either the state meets the guideline or it does not. There are no graduated ratings possible with such a guideline.

1 INTRODUCTION

In the United States, with a population exceeding 308 million, citizens make over 240 million 9-1-1 calls annually to 6,130 primary and secondary public safety answering points (PSAP) across the country. While the public safety community has made significant progress upgrading technology for the betterment of 9-1-1, this 40-year old system has not kept pace with advancing communications technologies. 9-1-1 systems must continue to serve the public and strive to meet public expectations today and throughout future technological transitions.

The development and maintenance of 9-1-1 has largely been a local issue, driven by the capabilities of local telephone companies to deliver various levels of service and the desires of the local jurisdictions. With the introduction of newer communications technologies, the 9-1-1 community is taking steps to integrate these technologies into existing systems. Many states are also beginning to take steps toward improving the 9-1-1 system in their state, and implementing technologies and operations that enable intra- and inter-jurisdictional communications. With the Wireless and Public Safety Telecommunications Act of 1999 and other Acts, Congress indicated that state coordination is a key to full deployment of “next generation” 9-1-1 technology. As new technologies have been integrated, states with strong state-level coordination have been more able to make advancements in technology and operations; demonstrating that state-level 9-1-1 coordination and leadership has been and will continue to be paramount to the successful evolution of 9-1-1.

The National 911 Program’s goal is to improve 9-1-1 systems across the country. One method of improvement is establishing a uniform assessment process to be used by the states in evaluating the status of their statewide 9-1-1 system. Currently, no universal mechanism exists to evaluate aspects of the 9-1-1 system within any given state. No comprehensive benchmark exists for State 9-1-1 authorities to measure the progress and status of a state’s 9-1-1 system. Development of guidelines can serve as the basis for a statewide 9-1-1 system assessment process, which will allow states to measure where they currently stand and obtain objective feedback on potential ways to enhance their system.

The *Consensus Guidelines for State 9-1-1 System Assessment: Review of Other Tools and Systems Report* prepared by L.R. Kimball was the first step in developing such guidelines. That report outlined guidelines and assessment tools that are currently relevant in the public safety realm.

As part of the consensus guideline effort, 9-1-1 professionals from local and state government, national associations, and industry experts participated in NAGWG, which was charged by the National 911 Program with developing consensus guidelines that can be used to assess statewide 9-1-1 systems and assist states in improving their 9-1-1 system.

The mission statement of NAGWG is: *Develop consensus guidelines that can be used statewide to determine the status of the 9-1-1 system within a state.*

To better define this mission, the group developed the following definitions:

- **Consensus Guidelines** – A set of activities or functions developed by NAGWG that are considered benchmarks or standards of excellence. When a guideline indicates a specific requirement or function, it does not imply that the function has to be performed by State government, just that it should be performed within the statewide 9-1-1 system and apply to the entire state.

- **State** – The geographic area that is a state or territory of the United States, or a tribal nation. A state for the purpose of this document includes the political subdivisions, and the people of a state. When a guideline says that the state should do something, it does not imply that it should be done by State government, but rather that it should be done in the state, and apply to the entire state.
- **Statewide** – A term used to define functions that apply to the entire state in order to provide uniform 9-1-1 service for all public and private entities within the state.
- **9-1-1 System** – A group of entities, functions and activities that provide the public with the necessary communications system to request help in an emergency. There may or may not be a single entity with control of the entire system. In either case, system coordination is critical.

The guidelines provide uniform goals for the 9-1-1 community across the United States and territories. The universal guidelines can be used as benchmarks for the assessment of 9-1-1 systems at the state operations level. States will find an assessment based on the guidelines to be a useful tool as it will evaluate where a state's system currently stands, provide a path for enhancement, and provide an objective evaluation that may help states leverage resources. States will not be required to adopt the guidelines, and any established assessment process will be conducted on a voluntary basis.

State-level assessments provide a method for state coordination agencies to gauge the status of state and local programs, and to identify strengths and weaknesses within the current system. Where they exist, state oversight entities can provide support for PSAPs and 9-1-1 authorities in many areas that are important to the advancement of 9-1-1 technologies. As 9-1-1 becomes more complicated and interconnected, coordination becomes more important to all entities that are part of public safety.

Technology plays a large role in 9-1-1 systems and will continue to do so moving forward into the future. As technology and the public safety environment changes, it is fully expected that the guidelines will change as well. As guidelines change, any assessment and/or assessment process will adjust to best serve the guidelines.

The guidelines presented in this report were released for public comment; all public comments were considered and addressed, where appropriate, prior to the release of the final guidelines.

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2 BACKGROUND

L.R. Kimball, in coordination with NAGWG, was tasked with compiling guidelines to be used for assessing statewide 9-1-1 programs across the country and throughout the territories.

In April 2010, L.R. Kimball submitted the *Consensus Guidelines for State 9-1-1 System Assessment: Review of Other Tools and Systems Report* to the USDOT.¹ This document outlined guidelines and assessment tools that exist today in the public safety realm and beyond. The report encompassed the research and evaluation of existing standards that relate to 9-1-1, examined assessment processes related to the 9-1-1 industry, and analyzed their applicability to the development of universal guidelines for a 9-1-1 assessment. The research and evaluation process also included information on assessment processes used by other first responder disciplines. For additional information on researched standards used to create this report, see *Appendix A– References*.

To ensure balanced participation, L.R. Kimball recommended stakeholders representing various segments of the 9-1-1 community participate in the development process. These included the following:

- Small PSAP
- Large PSAP
- Rural state
- Urban state
- State with limited coordination
- Tribal representation
- US territory
- Association of Public-Safety Communications Officials, International (APCO)
- National Emergency Number Association (NENA)
- Standards development community

With input from the USDOT, NAGWG members were selected through a consensus of industry members and leaders of the National Association of State 911 Administrators (NASNA), NENA and APCO, and were asked to participate in the guidelines development process. NAGWG members and respective associations are listed below:

- Becky Berger – State of Montana (rural state)
- John Chiamonte – Program Manager, supporting the USDOT National 9-1-1 Program
- Marlys Davis – King County, Washington (large PSAP)
- Rick Jones – Operations Issues Director, NENA
- Gladys Rodriguez – Puerto Rico (US territory)
- Dorothy Spears-Dean – Public Safety Communications Coordinator, Commonwealth of Virginia (urban state)
- Dan Tancibok – Centre County, Pennsylvania (small PSAP)
- Terry Traynor – Assistant Director of Policy and Programs for the North Dakota Association of Counties (state with limited coordination)
- Stephen Wisely - Director, Communications Center & 9-1-1 Services Department, APCO

¹ <https://www.911resourcecenter.org/code/ContentDetail.aspx?ContentID=303>

Despite multiple attempts, L.R. Kimball and the USDOT were unable to secure a tribal representative to participate.

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3 CONSENSUS PROCESS

The National Highway Traffic Safety Administration (NHTSA) and the Office of Emergency Medical Services (EMS) have found success with an assessment program they established during the 1980s that assesses statewide EMS systems. Forty-six states, two territories, the National Park Service, and the Indian Health Service have completed EMS assessments. As of May 2011, nine states have had reassessments.

States were able to implement positive change to their EMS system as a result of the assessments. Overall, assessments have produced recommendations that have helped to draw needed attention to critical issues with the EMS systems in respective states. State response has been positive based on the findings in the *EMS System Development: Results of the Statewide EMSA Assessment Program*. Of the positive outcomes in the EMS assessment, one that is important and of interest to the 9-1-1 community is states' ability to add or change legislation for the betterment of the EMS system and to secure the resources necessary to implement improvements.

NHTSA decided to model this program to develop a similar assessment process for 9-1-1. As such, NAGWG was charged with developing consensus-based guidelines for a statewide 9-1-1 assessment. To accomplish this task, the work group established a development process that included face-to-face meetings, conference calls, and sub-work groups. L.R. Kimball participated as facilitators, and subject matter experts when necessary.

Feedback on the process was requested at each face-to-face meeting. It was important to ensure that there were no impediments to an open environment. At these meetings, each NAGWG member was asked the following questions:

- Do you have any feedback for process improvement?
- Do you have suggestions for this meeting based on the last?
- Have you discussed the work group with anyone in your state? If so, what was their reaction?
- Do you have any concerns?

Responses were noted and action taken when necessary.

3.1 COMMUNICATIONS PROCESS

NAGWG held face-to-face meetings every other month and conference calls every other week. Full group calls allowed everyone to be kept up-to-date on the project, discuss guidelines in progress, and work through any issues that might arise. Sub-work groups were suggested by NAGWG members to ensure that work continued between full group calls and meetings. The nine-member NAGWG was split into three-member sub-work groups based on experience and expertise. The purpose of the sub-work groups was to draft individual guidelines to serve as a starting point for full work group discussions and consensus building. While guidelines were started in sub-work groups, every guideline was developed and structured by the full NAGWG and consensus was gained for each guideline.

Between the face-to-face meetings and the conference calls, approximately 1,541 hours have been spent on the guidelines development process. This figure does not include hours spent by approximately 15 individuals outside the meetings and conference calls.

3.2 CATEGORY DEVELOPMENT

The primary goals for the first face-to-face NAGWG meeting were: 1) introductory: to acquaint everyone with the project, each other, and to create an environment of free flowing ideas, and 2) brainstorm overarching categories, which would establish the scope of the guidelines. At the first meeting, NAGWG brainstormed every issue area that has the potential to touch 9-1-1. The work group was advised to use a vision of a statewide 9-1-1 system, not necessarily the state itself, but the system contained within the state. Detailed notes were taken and ideas recorded for consideration. The breadth of this initial brainstorm generated 76 primary and sub topics.

In the meetings that followed, the work group consolidated their brainstorming sessions and arrived at eight guideline categories that would constitute the basis for the guidelines:

- Statutory and Regulatory
- Governance
- Functional and Operational Planning
- Standards
- Security and Continuity of Operations
- Human Resources and Training
- Evaluation
- Public Education

NAGWG utilized the *Review of Other Tools and Systems Report* to reference guidelines and standards currently being used with success as they began to collaboratively discuss the guidelines.

NAGWG developed 74 guidelines to provide an assessment of the status of specific functions and/or activities of a statewide 9-1-1 system based on specified criteria. The guidelines illustrate what an effective 9-1-1 system encompasses, but does not dictate how to achieve an end result.

3.3 GUIDELINES FORMAT

NAGWG determined the guidelines needed to be as constructive as possible and decided against establishing a pass/fail designation or a graded structure.

NAGWG determined the core elements of a guideline: the guideline, guidance, criteria, and rationale. While the guidance is designed to provide assistance for assessors, it may also provide information for states. The rationale describes why the guideline is important. Most guidelines are based on three levels of criterion: minimum, advanced and superior. Some guidelines are binary in nature, and are represented by 'Binary' in the minimum criteria and grayed-out in the advanced and superior criteria boxes.

Each graduated rating assumes compliance with the prior rating.

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Table 1 illustrates the guideline template.

Table 1 – Guideline Template

Guideline: <i>The benchmark on which the statewide system is being assessed.</i>		
Guidance: <i>Information that gives further direction to states to understand and achieve the benchmark (including references to other standards and documents). This is the how one would go about assessing the system against the benchmark. Qualitative explanation.</i>		
Guideline Cross-reference(s): <i>Other guidelines that have similarities to this particular guideline, if any.</i>		
Minimum Criteria	Advanced Criteria	Superior Criteria
<i>This is the minimum level expected of the statewide system to meet the recommended guideline (the benchmark).</i>	<i>This is an advanced level criterion that denotes the statewide system exceeds the minimum criterion.</i>	<i>This is the highest level criterion that denotes the statewide system exceeds the advanced criterion. This is the model to which states should strive.</i>
Rationale: <i>This is the explanation of why the benchmark exists and is considered important.</i>		

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4 ASSESSMENT PROCESS

The 9-1-1 assessment guidelines represent high-level functions that should exist within a statewide 9-1-1 system. These guidelines are intended to be used as objective benchmarks in statewide system assessments to aid states in achieving an optimal level of 9-1-1 service. To that end, each guideline has been formatted to best communicate to the state and potential evaluators how each guideline should be interpreted. This format will allow for consistent guideline interpretation between states and evaluators and across the nation.

The guidelines take into consideration the variety of ways 9-1-1 is implemented across the country. These guidelines are not intended to imply that a single entity must follow each guideline. There are also many entities in and outside of state government that may be appropriate to perform the function listed in a specific guideline. The assessment guidelines are consensus-driven and should be reviewed by each state to determine the best way to perform functions and activities within their respective statewide 9-1-1 system.

The guidelines are the primary tool to be used in the assessment process. The intent is for a state to request an assessment by a team of qualified evaluators from outside the state. Evaluators are trained in the guidelines and the assessment process. When an assessment is requested, the team will request preparatory information (current state environment) from the state and schedule a time to be on-site. The team will then familiarize themselves with the preparatory information and use the guidelines to perform an assessment of a respective statewide 9-1-1 system.

The benefits of performing an assessment based on the consensus guidelines are considerable and will vary depending on the need of each state; states can potentially improve 9-1-1 services, educate decision-makers within the state, leverage the assessment to promote changes in legislation, expose the need for grant funding and appropriations across the state, and promote staffing and training needs. These are only a few of the benefits.

It is not NAGWG's intention to have the assessment process compare states with one another. There is no pass/fail, but rather a comparison of the state's current system with the guidelines. Evaluators will use the guidelines to develop a set of recommendations for system improvement. The evaluation becomes the property of the state for its own use or release. The recommendations will be a consensus of the evaluators, not a specific agency.

It is important to note that peer evaluation is where much of the value lies in the assessment process. While a self-assessment may help states in some cases, it will not be as valuable as input from third-party industry peers who are not intimately involved in the state and have no vested interest in the assessment results.

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5 NATIONAL 9-1-1 ASSESSMENT GUIDELINES

The sections that follow present the assessment guidelines by category. Each guideline is numbered based on its respective category, followed by the guidance, criteria, and rationale. In most cases, the criteria are broken up into minimum, advanced, and superior. Advanced and superior criteria build on the previous criteria. For example, to meet the advanced criteria, a state first has to meet the minimum.

Several guidelines are binary in nature, and are represented by 'Binary' in the minimum criteria and grayed-out in the advanced and superior criteria boxes.

Appendix B is a visual representation of the guideline categories and respective guidelines.

5.1 STATUTORY/REGULATORY

The statutory and regulatory environment outlines the items that a state should have codified to enhance 9-1-1 system performance. This does not have to be within the 9-1-1 statutes, but can be from another area of statute. For example, privacy issues may be in a right-to-know statute. Examining these against a state's current statutory and regulatory environment will enhance the service provided to the citizens and visitors to the state.

This category has 27 guidelines.

Guideline SR1: The statutory environment provides for comprehensive statewide 9-1-1 coordination.		
Guidance: Statewide coordination should include all 9-1-1 stakeholders, all 9-1-1 accessible services (e.g., wireline, wireless, Voice over Internet Protocol [VoIP] and emerging technologies) and governmental and non-governmental entities. Comprehensive coordination includes statewide planning, funding support, stakeholder involvement, uniform statewide adherence to established technical and operational standards, influencing policy creation to the benefit of the stakeholders, public education, training, enforcement, rulemaking, procurement authority, grant writing assistance, grant management, dispute resolution, and program evaluation.		
Guideline Cross-reference(s): GV1, GV2, GV3, GV4, GV5, GV6, GV7		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute(s) provides for the roles and responsibilities of statewide 9-1-1 coordination.	Statute(s) provides authority for statewide planning, with a mechanism for input from stakeholders statewide.	Statute(s) provides authority and sustainable funding.
Rationale: Statewide 9-1-1 coordination helps improve uniform quality service across the state. Lack of comprehensive coordination can increase costs and decrease desirable outcomes.		

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Guideline SR2: The state has a designated State 9-1-1 coordinator.		
Guidance: The comprehensive authority of the State coordinator includes review and enforcement of 9-1-1 regulations and laws. Having a designated coordinator for the 9-1-1 system is imperative with the migration to next generation on the horizon. If this function is not the responsibility of a State agency, the State should designate a responsible party, which could ultimately be the State 9-1-1 coordinator. Whether a person or an entity, the 9-1-1 coordinator needs to be a recognized authority. Effectively and efficiently performing the requirements of this role requires authority and staff. The 9-1-1 coordinator operates and acts as a facilitator for the 9-1-1 system across the state. "System," in this case, refers to the 9-1-1 function as a whole and/or the technology, depending on how the responsibilities are defined. A State coordinator is viewed differently than statewide coordination. The responsibilities may or may not overlap.		
Guideline Cross-reference(s): GV2, GV4		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has an appointed 9-1-1 coordinator.	The appointed 9-1-1 coordinator's role and responsibilities are defined and mandated by law.	The appointed 9-1-1 coordinator has comprehensive authority and adequate staffing to support all aspects of the state's role and functions.
Rationale: Having a designated State 9-1-1 coordinator allows for focused direction of the state 9-1-1 system as well as communication planning and execution of 9-1-1 goals.		

Guideline SR3: The statutory environment defines jurisdictional roles and responsibilities.		
Guidance: Jurisdictional roles and responsibilities should be set forth in a statewide 9-1-1 plan and in any governance agreements that are established between jurisdictions. There should also be a mechanism in place to ensure roles and responsibilities are fulfilled. "Mechanisms" can include auditing, funding, or penalties.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute(s) defines jurisdictional roles and responsibilities.	Statute(s) mandates jurisdictional roles and responsibilities.	The state has a mechanism to ensure roles and responsibilities are fulfilled.
Rationale: Defining jurisdictional roles and responsibilities enables State and local stakeholders to understand what is expected of them in terms of their mutual obligations to one another in the delivery of 9-1-1 service to the public.		

Guideline SR4: The statutory environment provides for dedicated and sustainable 9-1-1 funding.		
Guidance: The funding mechanism should be technology-neutral, allow for capital and operational expenditures, and address capital replacement needs. Surcharge money dedicated to 9-1-1 should only be used for 9-1-1 purposes. Review may look at the dedicated revenue in relation to the uses established by the State. The statute protects and has mechanism for adjustment of revenue stream as conditions change. There should be an annual audit conducted by the State with all service providers to ensure they are receiving all the revenues to which they are entitled; service providers need to be made to "certify" their subscribers.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Funding is needed to sustain service.		

Guideline SR5: The statutory environment prohibits the use of 9-1-1 funds for purposes other than those defined in the state's 9-1-1 statute.		
Guidance: The funding mechanism should be protected from diversion. 9-1-1 funding is often used for purposes not related to 9-1-1, such as to cover a budget short-fall or large capital purchases. The guideline is measured in accordance with the NET 911 Improvement Act. One purpose is to ensure that funds collected on telecommunications bills for enhancing 9-1-1 are used only for the purposes for which the funds are being collected.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The State has specifically defined eligible use of funds. There is no diversion of 9-1-1 funds.	State statute mandates the eligible use of funds.	The State audits and enforces the eligible use of funds.
Rationale: 9-1-1 funds should only be used for the provisioning of 9-1-1 services and for eligible 9-1-1 expenditures.		

Guideline SR6: The statutory environment authorizes the operation of a 9-1-1 system.		
Guidance: A 9-1-1 system must have the authority to operate within the state. There need to be responsible organizations within the state responsible for the planning, implementation, operation, and maintenance of 9-1-1 services. It is important to note that authorization could exist in non-9-1-1 sections of statute. State-level coordination should exist.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: There is no assurance that 9-1-1 will occur statewide, as such, a statutory requirement is necessary.		

Guideline SR7: The statutory environment provides for interlocal cooperation.		
Guidance: Interlocal cooperation can be less formal or more formal using a legally binding agreement such as a Memorandum of Understanding (MOU). The substance of the agreements is not being evaluated, just the ability to enter into them.		
Guideline Cross-reference(s): GV6, GV7		
Minimum Criteria	Advanced Criteria	Superior Criteria
Interlocal agreements are allowed by statute.	Interlocal agreements exist.	The capability to share costs and resources exists.
Rationale: Interlocal cooperation has many advantages, including cost and resource sharing. Interlocal agreements are one avenue to accomplish this and provide a degree of protection for the involved parties.		

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Guideline SR8: The statutory environment enables and allows public and private cooperation in providing 9-1-1 services required by statute.		
Guidance: Collaborative activities can include inter- and intrastate to consortiums supporting Emergency Service Internet Protocol networks (ESInets), joint service arrangements, and public and private partnerships. Examples may include consortia of regional operations, state planning, public groups organized by an entity, and the ability of those governments to collaborate. Funding may also be available.		
Guideline Cross-reference(s): GV3, GV5, GV6		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute(s) enables joint service arrangements and/or other collaborative activities.	Statute(s) provides full support for joint service arrangements and/or collaborative activities.	The state has implemented joint service arrangements and/or collaborative activities.
Rationale: Quality of service and efficiency improve through access to resources and cooperation/collaboration with other states, federal agencies, tribal, international and private entities. As NG9-1-1 moves into the forefront, the ability for public and private entities to work together to achieve a common goal will be increasingly important. Working cooperatively is cost effective and efficient for the deployment of 9-1-1 service. States are able to leverage industry expertise.		

Guideline SR9: The statutory environment provides contractual authority to procure and/or operate statewide 9-1-1 components.		
Guidance: For the majority of states, 9-1-1 is operated on a local level. NG9-1-1 is an entirely different concept than what currently exists. There is a difference between operating a statewide system and 9-1-1 components. NENA's Next Generation Partner Program (NGPP) Transition Policy Implementation Handbook can be used as a reference.		
Due to the required interconnectivity among local, regional and interstate systems, the State's role is expected to increase in an NG9-1-1 environment. The need for accuracy and system functionality will drive this increased role, as well as the need to minimize duplication of efforts and use of public funds. Planning is a key element whether operating a statewide 9-1-1 system or addressing system components including but not limited to GIS.		
This guideline refers to accuracy and the ability to effectively use public funds, such as eliminating duplication of functions for carriers in statewide operations. It is important to note that authorization could exist in non-9-1-1 sections of statute, which could also authorize non-traditional 9-1-1 service providers to operate. State-level coordination should exist. Components of the 9-1-1 system are also included in this guideline.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The statutory environment provides the necessary authority to procure state-level functional components of a 9-1-1 system.		The statutory environment provides the necessary authority to operate state-level functional components of a 9-1-1 system.
Rationale: With NG9-1-1, there will be a more pronounced role for the State in procuring and operating components of a statewide system.		

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Guideline SR10: The state fosters an open and competitive procurement of 9-1-1 services.		
Guidance: Some aspects of 9-1-1 service are regulated. This applies when services are not required. Examples include bundling versus unbundling and contract versus tariff, and certification requirements. There should be clear evidence that the state uses a competitive procurement process to procure system elements.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Restrictive practices and other rules limit the procurement process, leading to extra costs and limited choices. Competitive services allow states to strive to attain the best value.		

Guideline SR11: The statutory environment provides liability protection.		
Guidance: Statutory provisions should be technology-neutral and extend to emergency responders. It is important to be aware that liability protection is not only found in statutes, but is frequently included in telephone company tariffs.		
NENA's Next Generation Partners Program (NGPP) transition policy handbook has a section on liability that could be of assistance to states. The handbook speaks to the impact of federal liability protection and how it affects states. The policy handbook details what states should explicitly cover, while providing generalized federal information.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute includes full liability protection for 9-1-1 personnel and originating service and system component providers from the point of call to dispatch.	Statute includes current technologies, and situational protection.	Statute includes emerging technologies.
Rationale: Individuals, PSAPs and companies need liability protection to perform their services. Liability protection is essential for those performing and providing 9-1-1 services and should be as inclusive as possible.		

Guideline SR12: The statutory environment fosters the adoption of technical and operational consensus standards for the statewide system.		
Guidance: There is no standardized network in the current 9-1-1 environment, although some system components are regarded as standard. Standardization will become increasingly more important to enable the seamless interconnectivity between local, regional and state 9-1-1 systems that will be required for NG9-1-1. The same level of service should be provided in rural areas as in metropolitan areas. The state should have criteria on how 9-1-1 should be delivered. It is not necessary for the statute to establish the standards or mandate the adoption of specific standards as technology and operations are ever-evolving; however, states should have the ability to adopt and promote the use of such standards. This guideline references interoperability and consistency of service throughout the state.		
Guideline Cross-reference(s): ST1, ST2, ST3, ST4, ST5, ST6		
Minimum Criteria	Advanced Criteria	Superior Criteria
The rule making authority exists to establish standards.	The state has adopted and maintains current comprehensive standards.	The state oversees and enforces current standards and has a mechanism for periodic review.
Rationale: The public expects to receive a uniform service level that meets minimum requirements necessary to process a 9-1-1 call. Consensus standards also foster interoperability.		

Guideline SR13: A mechanism is in place for periodic reviews of statutes and regulations.		
Guidance: At a minimum, there needs to be a process for reviewing existing legislation and determining what, if any, barriers are in place for emerging technologies or other aspects of the 9-1-1 system. Regardless of the process or group, individuals involved need to be knowledgeable in relevant technological fields and/or 9-1-1 as a whole. The processes need to be open to stakeholder input and review. NENA's Next Generation Partner Program (NGPP) has developed a handbook designed to help stakeholders review their state statutes and rules to identify potential barriers to NG9-1-1.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The ability and documented process exist for reviewing and recommending legislation.	A formally appointed group or documented process exists to review and recommend legislation.	The formally appointed group or process receives input from stakeholders, meets and drafts legislation, when appropriate.
Rationale: Statutory rules may impede technological advances. A process to determine and develop options should be in place.		

Guideline SR14: The statutory environment provides for stakeholder involvement.		
Guidance: Stakeholders should be identified, to include State, local and tribal representing varying jurisdictions; the public safety community and the service provider community. There should be interaction among state agencies. "Balanced" means that stakeholders are equally represented.		
Guideline Cross-reference(s): GV3, GV4, GV5		
Minimum Criteria	Advanced Criteria	Superior Criteria
The statutory environment allows for balanced stakeholder involvement.	The statutory environment requires balanced stakeholder involvement.	The state has fully implemented balanced stakeholder involvement.
Rationale: Stakeholder involvement helps to ensure the coordination of the 9-1-1 system statewide. Stakeholder involvement also leads to buy-in and increased cooperation. Stakeholder input removes barriers and brings expertise to the process.		

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Guideline SR15: Service providers that deliver and/or enable telecommunications services to the public are involved in the 9-1-1 system.		
<p>Guidance: The intent is for the state to develop parameters for providers, including network/access providers and customer providers for wireline, wireless, and Voice over Internet Protocol (VoIP). Broadband providers are included as the NG9-1-1 environment will be IP-based.</p> <p>The statutory/regulatory environment should require all service providers in a respective state that provide service to general users of telecommunications services to coordinate and cooperate with the State in the provision of 9-1-1 service. There should be a registration process. This includes originating service providers and access providers.</p> <p>The state needs to understand various service providers and the capabilities of those providers to help integrate these services into the 9-1-1 system, and to educate the public on the capabilities of these services.</p>		
Guideline Cross-reference(s): GV3, GV4		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state maintains contact information for all user service providers.	The state maintains regular and routine communications with user service providers.	The state statutory or regulatory environment requires service providers to be actively involved in the 9-1-1 system through registration or participation at the state level.
<p>Rationale: The 9-1-1 system is designed to take information from general users and get that information to the correct entity. This is best accomplished in an environment that involves cooperation and communication between all parties.</p>		

Guideline SR16: The statutory environment provides for a comprehensive quality assurance (QA) program for the 9-1-1 system.		
<p>Guidance: QA is not meant to be punitive, but provides a constructive critique of work processes. This guideline is intended to measure the effectiveness of the 9-1-1 system. This QA program applies to originating service providers and 9-1-1 system service providers. The 9-1-1 system service provider includes both hosted and non-hosted solutions. The QA program for a 9-1-1 system should include all components of the call from call origination through dispatch support systems, regardless of provisioning. QA should look at the level of customer service, network functions and services, records management, and service level agreements (SLAs). The environment should provide for comprehensive quality assurance requirements for the originating service providers and 9-1-1 system service providers.</p> <p>SR17 references QA for call handling.</p>		
Guideline Cross-reference(s): EV1		
Minimum Criteria	Advanced Criteria	Superior Criteria
The statutory environment requires a QA program for the 9-1-1 system.	The state audits the 9-1-1 system QA program.	The state audits the QA program against minimum standards. Staffing and funding for the QA program are provided.
<p>Rationale: Having a QA program ensures that all entities that touch the system meet their obligations and provide consistent service. The QA program can identify if the system is working as intended and can identify issues before they become more serious.</p>		

Guideline SR17: The statutory environment provides comprehensive quality assurance (QA) for call handling.		
Guidance: Regardless of the aspects of the process subjected to QA, the QA program should meet or exceed nationally recognized and accepted consensus standards. For example, call handling could include a call answering standard of 90 percent of all 9-1-1 calls within 10 seconds during the busy hour of the day; call overload, call overflow, and abandoned calls. This guideline is not limited to call answering, but encompasses the entire call handling process, which can include customer feedback.		
Guideline Cross-reference(s): EV2		
Minimum Criteria	Advanced Criteria	Superior Criteria
The statutory environment requires a QA program for call handling.	The QA program for call handling is audited.	The QA program is audited against minimum standards. Staffing and funding for the QA program are provided.
Rationale: QA can provide for improvements to the 9-1-1 process. Providing QA can aid in the provision of consistent customer service statewide and can limit liability. The QA process can identify issues before they become more serious.		

Guideline SR18: The statutory environment provides for training.		
Guidance: Some state statutes already address training standards, although only a few statutes detail specifics. Training standards should be set at the state level and should be consistent with existing industry standards, such as APCO and others. The state should regularly evaluate the effectiveness and completeness of the program. Continuing education should also be evaluated. Furthermore, the state should provide adequate and sustainable funding for training; it is important that it not be an unfunded mandate.		
Guideline Cross-reference(s): HR1, HR7		
Minimum Criteria	Advanced Criteria	Superior Criteria
The statutory environment requires minimum training standards.	The statutory environment provides a funding source(s) for mandated training.	The statutory environment audits the funded mandated training and provides certification.
Rationale: Training promotes a consistent service level to be delivered to the public and a consistent level of competency of 9-1-1 staff. Training can also decrease liability.		

Guideline SR19: The statutory environment provides for professional certification and accreditation.		
Guidance: This type of certification or accreditation may be issued by a State agency or a national organization. Personnel may include call takers, dispatchers, and technical staff. The statute should include continuing education and recertification.		
Guideline Cross-reference(s): HR6		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute(s) requires a certification or accreditation process for personnel/PSAPs that are part of the 9-1-1 system.	Statute(s) requires and enforces an evaluation of personnel/PSAPs that are part of the 9-1-1 system.	Statute(s) requires an assessment/certification process for personnel/PSAPs that are part of the 9-1-1 system. This process is fully implemented and demonstrated.
Rationale: Certifications and accreditation illustrate a measure of competence and can decrease liability. Having certifications and/or accreditation standards fosters a consistent service level across the state.		

Guideline SR20: Statute exists for the provision of emergency medical dispatch (EMD).		
<p>Guidance: EMD is the term for providing medical information and instructions over the phone, prior to the arrival of emergency medical assistance in the form of first responders or paramedics. Twenty-five states and territories have legislation regarding emergency dispatch, ranging from certification and training to use of protocols to a full emergency medical dispatch program. Providing medical instructions before the arrival of first responders and/or paramedics requires a comprehensive program with medical protocols, appropriate and ongoing training, quality assurance, and medical oversight.</p> <p>EMD protocols, should meet the American Society for Testing Materials (ASTM) Standard Practice for Emergency Medical Dispatch (F1258-95). This guideline applies to state, regional and local 9-1-1 systems. This guideline is not meant to mandate any specific protocols.</p>		
Guideline Cross-reference(s): OP2		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute(s) requires use of EMD.	Statute(s) addresses the enforcement of EMD usage.	The state enforces, audits, and fully funds EMD.
Rationale: Providing early medical instruction, or pre-arrival instructions, often times can save a life or prevent further injury.		

Guideline SR21: Statutory environment provides for medical oversight of the policies and procedures governing the use emergency medical protocols.		
<p>Guidance: This guideline applies to state, regional and local 9-1-1 systems. Most state statutes that mandate emergency medical dispatch (EMD) also provide for medical authority/direction. The organization publishing the protocols is responsible for keeping them up-to-date. Medical oversight is provided by a licensed physician with the appropriate qualifications in emergency medicine. Changes in protocol are allowed based on medical direction. Medical oversight should meet National Highway Traffic Safety Administration (NHTSA) requirements and standards.</p>		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Oversight is necessary to ensure adopted protocols are being followed.		

Guideline SR22: The statutory environment provides for public education.		
<p>Guidance: Educating the public, including elected officials, special needs communities, and schools/campus environments, on the abilities and limitations of 9-1-1 is imperative, especially moving forward into NG9-1-1.</p>		
Guideline Cross-reference(s): PE1, PE2, PE3, PE4, PE5		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Funding public education provides for greater tools to educate the public on 9-1-1 as a whole.		

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Guideline SR23: The statutory environment provides for the collection of 9-1-1 system data.		
<p>Guidance: This guideline addresses a state’s authority to aggregate, collect and publish local data (consistent with established confidentiality rules and regulations) in order to meet these federal requirements. 9-1-1 data collection may include financial, system, service descriptions, technology, and progress measurement information. National reporting requirements exist: 1) The National 911 Program has provided a mechanism and a database for states to upload data that could be used to measure the progress of 9-1-1 service at state and national levels; 2) The Federal Communications Commission (FCC) requires states to report annually on the status of their respective 9-1-1 surcharges, including local surcharge usage. Data sharing can be enabled on a national level.</p>		
Guideline Cross-reference(s): EV3, EV4		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute(s) allows for the collection of 9-1-1 system data and facilitates data sharing.	Statute(s) requires the uniform collection of 9-1-1 system data statewide, and data sharing.	The state ties performance metrics to funding and utilizes collected data to assess system performance.
<p>Rationale: System data can improve planning and decision-making. Development and consistent reporting of system and performance data is both a tool for establishing transparency and also a mechanism for demonstrating effective operations, including reports to legislative and interested party groups.</p>		

Guideline SR24: The statutory environment has rules for retention of 9-1-1 call records and 9-1-1 related data.		
<p>Guidance: In the current 9-1-1 environment, a record is limited to call logs. In NG9-1-1, a record will include other information transmitted, acquired and recorded in the context of a call, such as video, text, medical data, or accident information. Some data will be stored in locations off-site from the PSAP that handled the call. Emerging technologies will need to be considered under this guideline as communication technology changes over time. The state should set specific 9-1-1 record retention requirements as a matter of law and regulation. Who retains and how data is retained is not the issue. Any entity with a responsibility for 9-1-1 records and related data would be subject to the legal provisions.</p>		
Guideline Cross-reference(s): OP4		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
<p>Rationale: Retention of 9-1-1 records and related data is imperative for legal and investigative purposes and reporting statistics.</p>		

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Guideline SR25: The statutory environment defines confidentiality and disclosure of 9-1-1 records.		
<p>Guidance: While some portions of 9-1-1 data should be confidential in all states to avoid re-victimization, states should have leeway to establish their own rules. At a minimum, personally identifiable information should be protected, although more comprehensive protection of 9-1-1 records is desirable.</p> <p>The statutory environment should provide for the confidentiality and disclosure of automatic number identification/automatic location identification (ANI/ALI) data, 9-1-1 voice calls, and multimedia. Regulatory provisions, tariffs, confidentiality agreements, vendor non-disclosure agreements (NDAs), access to public records laws, and Health Insurance Portability and Accountability Act (HIPAA) may also be considered in this guideline. Different types of data and their use should be reviewed, such as information provided to the first responders that could be misused. In an NG9-1-1 environment, more personal data, such as medical or accident information, may be relayed to a PSAP. Therefore, issues relating to confidentiality and disclosure will become more important.</p> <p>Aggregated anonymous data can be provided in real-time to governmental, non-governmental and private entities for legitimate purposes. NENA's Next Generation Partner Program (NGPP) transition policy handbook addresses confidentiality and disclosure in terms of the concept of pieces of 9-1-1 call data sent to off-site locations, such as a central database. Data can be sent and archived anywhere in a NG9-1-1 environment.</p>		
Guideline Cross-reference(s): SC4		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
<p>Rationale: Confidentiality and disclosure rules directly affect how effective 9-1-1 services are within a state. Rules allow for the protection of callers, encourage people to report crimes, and protect callers/victims from retribution. It also serves to protect infrastructure and staff.</p>		

Guideline SR26: A statute/regulation exists that addresses multi-line telephone systems (MLTS) statewide for 9-1-1.		
<p>Guidance: States may have different requirements in their statutes. Some state statutes only address MLTS in residential and school environments. All MLTS should interface to 9-1-1 with call back and location information, regardless of the number of stations or square footage involved. The statute should be examined for improvements based on the stated criteria.</p> <p>Reference NENA E9-1-1 for Multiline Telephone System requirements, 06-750 v3.</p>		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Statute contains provisions for non-business MLTS systems in the state for 9-1-1.		Statute requires all MLTS systems to interface to 9-1-1 and provide specific call back and location information.
<p>Rationale: MLTS is an important issue in 9-1-1. The ability must exist to accurately locate calls coming from an MLTS.</p>		

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Guideline SR27: The statutory environment identifies 9-1-1 as an essential government service for states that are able to make the distinction.		
Guidance: In general, government services that are defined as “essential government services” are those that are required to be provided, and which are included in continuity of operations policies, procedures and plans.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The statutory environment defines 9-1-1 as an essential service.		The statutory environment provides for the protection of funds specifically dedicated to 9-1-1 and protects resources.
Rationale: When 9-1-1 is defined as an essential service, funds dedicated to the provision of 9-1-1 should not be diverted elsewhere.		

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5.2 GOVERNANCE

The governance environment outlines areas of stakeholder involvement with the 9-1-1 system. History has shown that cooperation enhances a 9-1-1 system, and with the diversity of stakeholders and user needs, the governance of the 9-1-1 system is critical.

This category has seven guidelines.

Guideline GV1: The State has a comprehensive statewide 9-1-1 plan.		
<p>Guidance: A comprehensive statewide 9-1-1 plan is fundamental to the success of any 9-1-1 program and should be an integral part of a larger state plan. A comprehensive plan ensures all 9-1-1 stakeholders are working towards the same end goal. Having the plan in statute formalizes it and allows it to have a standing in the state. The plan cannot stand alone, but must integrate with other plans within the state, which requires coordination with other entities.</p> <p>The plan acknowledges and is consistent with other plans in place in the state (emergency preparedness, interoperability, emergency evacuation, emergency operations, security, and training and exercises). The process for developing and reviewing the plan must include stakeholder participation.</p>		
Guideline Cross-reference(s): SR1, OP5, OP8, SC1, SC2, SC5, SC6		
Minimum Criteria	Advanced Criteria	Superior Criteria
The 9-1-1 plan is documented and updated consistently according to an established timeline. The plan is implemented and followed.	The 9-1-1 plan is consistent with and reviewed against other related plans within the state.	The 9-1-1 plan has authority through statute or regulation to be consistent and integrated with other related plans within the state and plans for sustainable funding. The 9-1-1 plan is integrated with such plans.
Rationale: A comprehensive statewide 9-1-1 plan is fundamental to the success of any 9-1-1 program. A plan will foster consistent goals and advancement throughout the state.		

Guideline GV2: An entity has authority and responsibility for statewide 9-1-1 coordination.		
<p>Guidance: Coordination is the end point. If two or three organizations are doing the same thing, there needs to be coordination. The focus should be on the function – one entity whose primary responsibility is to support and promote optimal 9-1-1 services. The entity could be a coordinator, an agency, or a board/council with a primary responsibility to support and promote optimal and cost effective 9-1-1 service. The entity provides governmental services to ensure the existence of 9-1-1 currently and into the future. There is a need for an entity that can coordinate the efforts of all appropriate agencies/entities that support the vision and mission for delivery of statewide 9-1-1 services. See the relationship between this guideline and SR1 and SR2, which state that the coordination function and the coordinator should be funded.</p>		
Guideline Cross-reference(s): SR1, SR2		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: 9-1-1 is a complex system that necessitates leadership among the diverse and potentially competing stakeholder community.		

Guideline GV3: Stakeholder groups participate in 9-1-1 planning, implementation, and changes.		
<p>Guidance: 9-1-1 stakeholders should be adequately represented at every stage of 9-1-1, including planning, implementation, updates, and modification. It is recognized that there may not be much involvement in the planning and implementation, however. While statute may vest final decision-making on key investments and timeframes with specific State and/or local governmental entities, structures should be in place to ensure that relevant State agencies, responsible local governing boards, traditional and non-traditional responder groups, and communications providers have meaningful input into this decision-making.</p>		
Guideline Cross-reference(s): SR8, SR15, OP8		
Minimum Criteria	Advanced Criteria	Superior Criteria
Stakeholders participate informally in development and implementation of a statewide 9-1-1 program for consensus building.	Documented organized change control processes involve stakeholder participation.	Documented organized change control processes are set in statute. There is an evaluation of the processes to manage change.
<p>Rationale: Strong 9-1-1 programs incorporate stakeholder contributions. Decision-making, absent broad-based stakeholder input, can increase costs, decrease desirable outcomes, and delay necessary changes.</p>		

Guideline GV4: A statewide board or advisory council provides input and oversight for statewide 9-1-1 system coordination.		
<p>Guidance: Coordination at the state level is essential. While a designated 9-1-1 coordinator and statewide coordination are paramount to the effective and efficient operation of 9-1-1, it is important to have input and involvement from the 9-1-1 community as a whole. This facilitates the process to broaden the authority of the 9-1-1 coordinator, as in a next generation environment, the authority to regulate is more important.</p> <p>Oversight can be provided through a board or advisory council and can include representatives from public safety affiliations, as well as other stakeholder groups, such as service providers. The board or advisory council should work with the statewide coordinator where applicable. There needs to be a separation of duties from the coordinator that should be defined and delegated. States need to have some flexibility; coordination may be staff augmentation for example.</p>		
Guideline Cross-reference(s): SR1, SR2, SR14, SR15		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has a board, agency, or council with defined responsibilities.	The board/agency/council holds regularly scheduled meetings. Recommendations are public and actively distributed. There is a mechanism for receiving input from 9-1-1 users/agencies/stakeholders.	This board/agency/council is established and funded by legislation.
<p>Rationale: Statewide coordination provides a structured process for stakeholder involvement and input.</p>		

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Guideline GV5: The state facilitates working relationships between 9-1-1 and groups within the state that interact with 9-1-1.		
Guidance: Communications are necessary between 9-1-1 and emergency management and other agencies or entities related to 9-1-1, such as law enforcement, fire, emergency medical services (EMS), information technology (IT), and statewide Department of Homeland Security (DHS) organizations. Working relationships include communication, cooperation, stakeholder management and collaboration. This not only relates to what happens at the state level, but also what happens at the regional and local levels.		
Guideline Cross-reference(s): SR8, SR14, SR15		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state provides for working relationships between 9-1-1 and other entities within the state.	The state provides for a structured and comprehensive working relationship between 9-1-1 and specified entities within the state. Working relationships are demonstrated at the state level.	State, regional and local representation exists in the working relationships demonstrated at the state level.
Rationale: 9-1-1 needs to work with other agencies for coordination, cooperation, responsiveness and effectiveness in the provision of emergency services.		

Guideline GV6: The ability exists within the state to facilitate essential partnerships statewide, across state lines, and for specific strategic purposes.		
Guidance: Agencies at a state level that relate to 9-1-1 need to be able to enter into agreements. There are two concerns: 1) if something is not prohibited in writing, then it is allowed, and 2) if something is not in writing, it is not allowed. It is not the intent to impose statutory requirements. One can only do what legislation allows. As such, agreements and partnerships do not necessarily have to be addressed in statutes.		
Conformance with this guideline could be demonstrated by statutory permission to enter into such agreements and through the successful implementation of agreements for past developments. State-level agencies (State police, emergency management, environmental conservation) and local agencies, such as 9-1-1 authorities and first responders, are examples of potential partnerships. Working relationships could include executed interlocal agreements, Memoranda of Understanding (MOUs), EMAC services and contracts, which could be tracked in a central repository.		
Guideline Cross-reference(s): SR7, SR8		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state permits regional or sub-state and statewide agreements, and allows State agencies and local governments to enter into agreements across state lines.	The statutory ability and structure is in place for agreements to be successfully implemented. A statewide plan is in place to complete all working relationship agreements.	All agreements are successfully implemented and reviewed when necessary.
Rationale: To work effectively, all entities involved in the delivery of emergency services must have pre-defined working relationships, supported where necessary by agreements.		

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Guideline GV7: The State provides a statewide governance model for resource sharing and agreements between jurisdictions.		
Guidance: The "depth" of agreements will likely vary greatly - with the better agreements addressing governance, cost allocation, modification and/or termination of same, addition of partners, disaster recovery responsibilities, and liability. Agreements could exist for joint dispatch or equipment sharing, for example.		
Guideline Cross-reference(s): SR7		
Minimum Criteria	Advanced Criteria	Superior Criteria
A statewide governance model is in place.	Successful multi-jurisdictional agreements, based on the statewide model, can be referenced as examples.	Multi-jurisdictional agreements, based on the statewide model, are in practice. Resources are available to assist jurisdictions in developing agreements.
Rationale: Technology has made it more cost-effective to share resources (e.g., staff, equipment, contracts) among 9-1-1 jurisdictions. The ability to easily form, amend, and discontinue these multi-jurisdictional agreements as needs dictate is critical to the effective use of limited resources. Resource sharing increases efficiency, effectiveness, and cost control among jurisdictions.		

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5.3 FUNCTIONAL AND OPERATIONAL PLANNING

The functional and operational planning environment outlines the areas of service delivery that should be addressed in a 9-1-1 system. This environment includes areas such as record retention, call handling protocols, continuity of operations plans, and exercises.

This category has nine guidelines.

Guideline OP1: All traditional wireline and wireless calls within the state route to a PSAP enabled to receive Enhanced 9-1-1 (E9-1-1) data and route to an appropriate dispatcher.		
Guidance: Currently, varying levels of service may exist across a state. While it is not feasible for every jurisdiction to have its own 9-1-1 system or PSAP; every citizen should have access to 9-1-1.		
E9-1-1 provides automatic location identification (ALI) data, selective routing, selective transfer, fixed transfer and a call back number. Phase II provides delivery of a wireless 9-1-1 call with call back number, the location of the caller within current FCC requirements, and selective routing based on those coordinates. These data parameters provide a greater certainty that callers can be located in emergency situations. If a PSAP is able to receive E9-1-1 data and wireless Phase II data, Voice over Internet Protocol (VoIP) calls are also able to be processed.		
The assessment is designed for the state and PSAP, not the service providers and carriers. This guideline refers to system capabilities and customer premise equipment (CPE) capabilities; processing the calls is a capability issue. Technical failures are an exception.		
Guideline Cross-reference(s): ST1		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Having caller location improves the chances of saving lives.		

Guideline OP2: The state is pursuing full implementation of emergency medical dispatch (EMD).		
Guidance: While the statutory environment provides for EMD and requires the use of EMD if it is in statute, there should be something in place for states where it is not in statute, but is being pursued or actively done. This recognizes efforts of the state and is not inconsistent with the statutory environment.		
EMD protocols, if used, should meet the American Society for Testing Materials (ASTM) Standard Practice for Emergency Medical Dispatch (F1258-95) and ASTM Standard Practice for Emergency Medical Dispatch Management (F1560-94). This guideline applies to regional and local 9-1-1 systems. This guideline is not meant to mandate any specific protocols. Medical oversight is a licensed physician with the appropriate qualifications in emergency medicine. Funding should not include operational costs of staff in the PSAP. Maintenance includes software updates, licenses, and staff training.		
Guideline Cross-reference(s): SR20		
Minimum Criteria	Advanced Criteria	Superior Criteria
The State provides models for EMD implementation.	Measurable steps have been taken to implement EMD statewide. The state has a plan for completion and an identified funding source.	EMD is implemented statewide. Maintenance and support of the EMD program is fully funded by an identified source.
Rationale: Protocols should exist for EMD. These protocols should be used and there should be oversight to ensure the protocols are being followed. Changes in protocol are allowed based on medical direction.		

Guideline OP3: Provisions exist for interpretation capabilities statewide.		
Guidance: Equal service should be available for the deaf and hard-of-hearing community, as well as those for whom English is not a primary language. NENA and other organizations recognize the term non-English speaking, which includes American Sign Language users. This guideline recognizes that some territories may have a non-English primary language.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The State recommends that PSAPs have an interpretation capability or access to similar services.	The State requires that PSAPs have an interpretation capability or access to similar services. There is an identified funding source.	Required interpretation capabilities or access to similar services are fully funded by an identified source.
Rationale: This ensures equal service for non-English/non-native language speaking callers requesting assistance of any kind.		

Guideline OP4: The state provides guidelines for the retention of 9-1-1 call records and 9-1-1 related data.		
Guidance: The role of the State is to perhaps be an advocate for PSAPs and/or set standards. The State should define what is considered a "record." The creator of the record is the custodian of the record (or whoever is specified in statute if applicable). Local, state and federal laws may affect the retention of data and not all data will have the same retention period. The retention laws may not be in the 9-1-1 statute, but in other provisions of law.		
Guideline Cross-reference(s): SR24		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: The retention of 9-1-1 records and data ensures consistency across the state and ensures data is available when needed.		

Guideline OP5: The state requires a data backup plan.		
Guidance: All data essential to the operation of a PSAP should have a backup available. Examples of data essential to the operation of the PSAP are Master Street Address Guide (MSAG), automatic location identification (ALI), computer aided dispatch (CAD), and customer premise equipment (CPE) data. Periodic backups are executed and logged. At least one backup should be stored off-site. Any off-site storage should comply with all security requirements.		
Guideline Cross-reference(s): GV1		
Minimum Criteria	Advanced Criteria	Superior Criteria
PSAPs implement a local data backup and recovery procedure and plan. This plan is documented.	PSAPs' backup and recovery procedures and plans are documented and maintained. Data backup is off-site.	Implemented data backup and recovery procedures and plans are documented and maintained, and the backups are audited.
Rationale: This is one method to ensure continuity of data should there be any type of component failure.		

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Guideline OP6: State-level guidance exists for public safety's use of social media.		
Guidance: Public safety includes PSAPs. Leveraging the capabilities of social media (incoming and outgoing) and the use of social media can enhance the image of public safety agencies. This should be part of an organization's public information plan. Guidance may also cover future uses of this technology.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Social media is being used by the public to talk about emergencies. Social media can be a tool to give the public accurate information before and during emergencies.		

Guideline OP7: Statewide support and coordination exist for managing/operating emergency notification systems (ENS).		
Guidance: This service may be housed in other areas besides 9-1-1. Notification examples include ENS alerts, warnings, sirens, and broadcast intercepts. Many warnings are sent out at varying levels (state-level alerts, local alerts, interstate alerts). There should be a determination of who is responsible for specific alerts. Agreements should be in place between agencies within the state that utilize this service. The use of alerts and warnings could also be part of the state plan.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Guidelines and policies at the state level clearly document 9-1-1 jurisdictional roles. The statewide plan defines the agency responsible for specific alerts. There is communication between the party who issues the alert and the appropriate PSAP(s).	The state defines the proper use of ENS and other protocols, regardless of who has responsibility for alert generation.	A statewide body assists in unifying and coordinating the consistent use of alerts and warnings throughout the state.
Rationale: Alert/warning resources and technologies are of critical importance to the public, and have a very direct relationship to 9-1-1. Managing and operating these resources are, however, somewhat ancillary to the 9-1-1 function and careful integration into the overall emergency communications operation is critical.		

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Guideline OP8: The state has a formalized process and communication plan for change management.		
<p>Guidance: Change management is becoming increasingly more important in the technological age. This guideline involves changes that impact others – state down, local up – and any area in between where someone else is impacted or affected. A local level change could be just as catastrophic as a state change. Communications is a significant component; changes must be communicated.</p> <p>The communications plan should address the process and how any state, regional or local level changes are communicated throughout the state and, where appropriate, to the employees. Change management processes should be included for software and hardware, changes in technology, changes to the staff, and changes in operational/technical functions, changes in regulations, changes by vendor community – such as changes in technologies that should be communicated to 9-1-1 authorities. Advance notice of changes should also be a consideration. The change management process may be included in an operational plan. This change management process should include a test plan, where appropriate.</p>		
Guideline Cross-reference(s): GV1		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
<p>Rationale: Changes to any component or area of a 9-1-1 system can affect many aspects of the system and need to be controlled and communicated properly.</p>		

Guideline OP9: The State monitors and enforces compliance of 9-1-1 related provisions of the Americans with Disabilities Act (ADA).		
<p>Guidance: Statewide 9-1-1 system compliance should include Americans with Disabilities Act (ADA) and its 9-1-1 related provisions.</p>		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
<p>Rationale: Compliance with ADA's 9-1-1 related provisions is important to ensure equal access to 9-1-1 services.</p>		

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5.4 STANDARDS

The standards environment outlines the areas for which a state should develop or adopt standards. This includes technology and performance standards.

This category has six guidelines.

Guideline ST1: Standards and best practices have been identified and implemented at the state level.		
Guidance: A review of the existing standards and best practices from a technical and operational level should be conducted to ensure that those standards have been identified, evaluated and implemented (as appropriate). Examples of standards and best practices include technical interface, data, performance, and operations from the American National Standards Institute (ANSI), Internet Engineering Task Force (IETF), National Fire Protection Association (NFPA), APCO, and NENA. Once a set of standards has been adopted, there needs to be a regular review (by a statewide coordinating body, such as a State agency, association of counties, or other state public safety associations) of existing and proposed design and performance standards to determine the changes needed (if any).		
Guideline Cross-reference(s): SR12		
Minimum Criteria	Advanced Criteria	Superior Criteria
Standards have been identified and implemented at the state level.	A state-level entity regularly reviews adopted and proposed design and performance standards to determine what changes, if any, are needed.	Proposed changes from the state-level entity are implemented. The implementations are adequately funded.
Rationale: Standards and best practices ensure consistency of 9-1-1 service across the state.		

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Guideline ST2: The State requires specific operational standards for PSAPs to ensure a minimum level of service delivery.		
<p>Guidance: A minimum level of 9-1-1 service is required regardless of the type of service. It includes E9-1-1, wireless Phase I, wireless Phase II, Voice over Internet Protocol (VoIP) and NG9-1-1 (emerging technologies).</p> <p>With Basic 9-1-1, a caller is automatically connected to a PSAP based on the central office that originates the call; automatic number identification (ANI) and/or automatic location identification (ALI) may not be supported. This means that the PSAP may not have the location or call back number of the caller.</p> <p>With wireline E9-1-1, the PSAP has capabilities for ALI, ANI, selective routing, and selective transfer. For E9-1-1, the PSAP receives the caller's location and call back number, and other identifying information. The call is routed to the correct PSAP based on the caller's location, not the central office.</p> <p>For wireless E9-1-1 Phase I, the PSAP receives the call back number of the caller and the identification of the cell tower from which the call originated. The call is usually routed based on cell tower sector.</p> <p>For wireless E9-1-1 Phase II, the wireless call is delivered with the call back number as well as the location of the caller within 125 meters 67 percent of the time. The wireless call is routed to the PSAP based on the caller's coordinates at the time of the call.</p>		
Guideline Cross-reference(s): SR12		
Minimum Criteria	Advanced Criteria	Superior Criteria
The State has defined a minimum level of service, which is at least Enhanced 9-1-1 (E9-1-1). The minimum level of service is specific, consistent and implemented at all PSAPs across the state.	The service level is regularly reviewed and updated based on evolving operational and technical capabilities at a national level.	The State-defined service level is enforced and adequately and sustainably funded.
Rationale: A minimum level of service for all PSAPs ensures a consistent delivery of 9-1-1 service to all callers regardless of the caller's location or method of accessing 9-1-1.		

Guideline ST3: The state has defined PSAP performance standards.		
<p>Guidance: Defined performance standards allow for consistent delivery of service across the state. It also allows for the identification of issues that need to be addressed, such as the need for additional trunks or additional call takers within a specific PSAP.</p> <p>Performance standards include technical and operational standards such as call answering (timeliness, call overflow and call overload), call protocols or interrogation, reliability, redundancy, congestion control, quality of service, and Teletypewriter (TTY) testing. For example, these standards could include a call answering standard of 90 percent of all 9-1-1 calls within 10 seconds during the busy hour of the day.</p>		
Guideline Cross-reference(s): SR12		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has defined PSAP performance standards.	The defined performance standards are implemented.	The defined performance standards are enforced and funded. Funding is not dependent on call answering standards being met.
Rationale: Consistent performance standards enable evaluation and maximize consistent and effective service.		

Guideline ST4: The state requires specific interface standards for the exchange of 9-1-1 related data between functional entities.		
<p>Guidance: It is often not possible for one PSAP to transfer data to another PSAP, which can result in delayed responses. If data exchange is a capability, the data may be in a different format or layout. Standards development organizations have identified interfaces for the exchange of 9-1-1 data, which, if enabled statewide, allows all call takers/dispatchers to have the same understanding and ability to interpret the received data.</p> <p>Interface standards describe the definition, format, layout, and other characteristics of 9-1-1 related data shared across disparate systems, ensuring the seamless exchange of data, and permitting a common understanding to interpret and use 9-1-1 related data consistently. Examples of industry-accepted standard organizations include APCO, the Internet Engineering task Force (IETF), and the National Information Exchange Model (NIEM).</p>		
Guideline Cross-reference(s): SR12		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state encourages the exchange of 9-1-1 related data at the local and regional level using industry-accepted interface standards.	At a state level, industry-accepted interface standards have been adopted for 9-1-1 related data exchange and applied to statewide procurement efforts and funding priority.	The state is compliant with national industry-accepted interface standards for 9-1-1 related data exchange, which is applied to statewide procurement efforts and funding priority.
Rationale: Interface standards that permit data exchange are necessary when data is being shared across functional entities.		

Guideline ST5: The state has minimum standards for emergency call processing protocols.		
<p>Guidance: Call processing starts at call receipt and ends at call disconnect. Protocols are a set of rules or conventions that govern how a call is handled internally. The state could choose to recommend or encourage specific commercially available protocols or develop their own.</p> <p>Minimum standards for call processing may include items such as questions, procedures, minimum service level, consistency, and integration procedures. Protocols could include law enforcement, emergency medical, fire, hearing impaired, and missing children. "Emerging" means that the criterion provides for flexibility and adjustment as new standards emerge.</p>		
Guideline Cross-reference(s): SR12		
Minimum Criteria	Advanced Criteria	Superior Criteria
A minimum set of call processing protocols exist in the state.	The call processing protocols are adjusted as necessary to remain consistent with emerging national call processing standards.	There is an audit to ensure compliance with the call processing protocols/standards.
Rationale: These standards will support a minimum level of consistency in call processing.		

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Guideline ST6: The state program fosters the adoption of technical and/or operational consensus standards and requirements.		
<p>Guidance: The public expects to receive a uniform level of 9-1-1 service, regardless of their location. With current 9-1-1, there is no standardized network, although some components are regarded as standard. The same level of service should be provided in rural areas as in a metropolitan area. This will become increasingly more important with NG9-1-1 and the advent of operational and technical standards for seamless interconnections. Interoperability between local, regional, and state 9-1-1 systems is essential.</p> <p>This is the operational policy or rule that standards adoption should be encouraged. This guideline includes state systems and any statewide procurement. Aspects of technical and operational standards include security, redundancy, reliability and interdependencies between the systems. NENA's Next Generation Security (NG-SEC) document can be referenced.</p>		
Guideline Cross-reference(s): SR12		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state program encourages the adoption of technical and operational standards.	Leading industry standards and best practices have been reviewed and adopted at a statewide level and applied to statewide procurement efforts.	A state-level entity identifies, then implements and maintains statewide standards and recommended best practices. Funding priority is given to agencies that adopt these standards.
Rationale: The adoption of technical and/or operational consensus standards and requirements improves consistency and effectiveness of the state 9-1-1 system.		

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5.5 SECURITY AND CONTINUITY OF OPERATIONS

The Security environment outlines areas that should be addressed to secure the facility and data associated with 9-1-1. These guidelines outline plans and actions that a state should facilitate or coordinate to enhance the 9-1-1 system.

This category has seven guidelines.

Guideline SC1: The state has business continuity of operations plans (COOP) for 9-1-1 to ensure continuous operations.		
<p>Guidance: A backup site is in operations to take over full load of 9-1-1 calls at any time. Interagency agreements will provide for other PSAPs to take over call handling during a disaster or as a business continuity plan or backup. There are best practices and standards in place including: NENA Operations Standards for Contingency Planning, 53-001 through 53-507, National Fire Protection Association (NFPA) Standard on Disaster/Emergency Management and Business Continuity Programs (NFPA 1600), recovery point objective (RPO) and recovery time objective (RTO).</p> <p>"Operational impact analyses should be conducted to identify scenarios where facilities, systems, equipment, or operations are interrupted or disrupted, and any opportunities for hazard mitigation. As part of the research, the organization should determine continuity requirements and develop strategies based on the requirements, so that a more general continuity plan can be formulated with training, testing, and exercise. Focus on the impact of interruptions to critical business functions will help define thresholds for minimum/maximum down time." (From Next Generation Procurement Tool Kit)</p>		
Guideline Cross-reference(s): GV1		
Minimum Criteria	Advanced Criteria	Superior Criteria
A plan and procedures exist that describe business continuity.	The state's plan defines and meets business owner expectations, needs and priorities to respond to and recover from a disaster.	The state's continuity plan is used, maintained, exercised and audited. The COOP is coordinated with the critical infrastructure plan statewide.
Rationale: A business COOP is established to assure that service delivery will continue uninterrupted when faced with a threatening situation that may hinder operations.		

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Guideline SC2: Plans are in place statewide that define and meet needs and priorities to respond to and recover from a disaster.		
Guidance: A disaster can mean loss of data, equipment, facility or people, or all of the above. Disaster recovery plans should encompass the smallest “disaster” to largest.		
The State should manage expectations for disaster recovery. Components of a disaster recovery plan should include, at a minimum: level of recovery (what you get), time to recovery (when you get it) for equipment, software, facilities and people. Stakeholders (depending on what level of services the State is providing), including the 9-1-1 authorities who will participate in disaster recovery should provide input into the plan.		
Guideline Cross-reference(s): GV1		
Minimum Criteria	Advanced Criteria	Superior Criteria
Plans and procedures exist for disaster recovery, to include critical infrastructure.	The disaster plan(s) is used, maintained and exercised.	The disaster plan(s) is audited, and is coordinated with the critical infrastructure plan statewide and is reviewed on a regular basis and amended as appropriate.
Rationale: Disaster recovery plans ensure continuity of service.		

Guideline SC3: The state has a plan and procedures to safeguard information from unauthorized use, disclosure or modification, damage or loss.		
Guidance: System security must be in place to ensure internal and external users cannot access unauthorized areas. System security should mitigate business risks to an acceptable level and has legal, regulatory and policy implications.		
A data loss prevention solution, network protection, and access control issues can be examples. The plan should be consistent with the NENA security standard and international standards, where appropriate. This plan needs to reflect appropriate interstate coordination and national interconnection as appropriate.		
Guideline Cross-reference(s): SR25		
Minimum Criteria	Advanced Criteria	Superior Criteria
A plan and procedures exist that describe the minimum network and data protection measures to be in place for each facility, locally at the PSAP and under State responsibility, and the connectivity between the two.	A plan exists that describes the minimum logical security, features, and specific escalation procedures to be in place for statewide emergency communications systems. This plan is used and maintained.	A data and network plan is coordinated with agencies responsible for critical infrastructure protection within the state. This plan is used, maintained and audited.
Rationale: Network and data protection measures must be in place to prevent unauthorized access and/or damage to security. These measures can minimize negative and unintended consequences.		

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Guideline SC4: The state has a procedure that ensures confidentiality of information to the extent permitted and/or required by law.		
<p>Guidance: In some cases, 9-1-1 incident data and recordings are only given by subpoenas. A formal contract and non-disclosure agreement should be defined and agreed upon prior to rendering services. A non-disclosure agreement may be necessary for State and local employees where it is not addressed in the employment contract. Specific areas which may require specific levels of protection include the Health Insurance Portability and Accountability Act (HIPAA). Data may be required to be released by law in some instances.</p>		
Guideline Cross-reference(s): SR25		
Minimum Criteria	Advanced Criteria	Superior Criteria
A plan and procedures exist that describe confidentiality policies for incident data protection measures.	The confidentiality plan/policies is used and maintained.	The confidentiality plan/policies is used, maintained and audited.
<p>Rationale: Confidentiality is imperative to safeguard victim and witness information, as well as data. Confidentiality and security of information policies help ensure proper use, handling and exchange and storage of incident data and system records.</p>		

Guideline SC5: The state has a plan and procedures that address the logical security of the system and network.		
<p>Guidance: Logical security consists of software safeguards for an organization's systems, including user identification and password access, authentication, access rights and authority levels. Systems (network, data, hardware and users) preventative monitoring will safeguard the information and equipment from unauthorized use, disclosure, damage or loss. The idea is to monitor to prevent and detect holes or security breaches in the system. Network and systems configuration data must be protected from hackers and cyber terrorism. This plan must address data rights management and identity and access management. In an NG9-1-1 environment, more consistency in security becomes necessary.</p>		
Guideline Cross-reference(s): GV1		
Minimum Criteria	Advanced Criteria	Superior Criteria
A plan exists that describes the minimum logical security and features to be in place for each system under the State's control. An alert system exists to notify individuals when problems arise.	The plan describes the specific escalation procedures to be in place for statewide emergency communications systems. This plan is used and maintained.	The plan is coordinated with agencies responsible for critical infrastructure protection within the state. This plan is used, maintained, audited and integrated with statewide escalation procedures.
<p>Rationale: Network and data must be proactively monitored to protect it from unauthorized users and cyber terrorists. An alert system should notify administrators when an intrusion occurs in order to respond appropriately.</p>		

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Guideline SC6: The state has a plan for physical security and access control.		
<p>Guidance: This guideline addresses physical security and access control to all aspects of the 9-1-1 system, including PSAPs, data centers, and network service providers. Physical security is the perimeter and access control is the means for the physical security. Higher or multiple control measures must be set for the computer room and telephony room. Has there been a critical infrastructure assessment? Has PSAP site selection criteria been considered? Is this compliant with the NENA site survivability criteria? Ideally the premise or building housing the 9-1-1 center should only be accessed or visited by personnel from such center. Visitors must be registered and logged entering and exiting the premises. NENA's Next Generation Security (NG-SEC) document can be referenced. National Reliability and Interoperability Council (NRIC) best practices related to physical security and access control can be used where appropriate.</p>		
Guideline Cross-reference(s): GV1		
Minimum Criteria	Advanced Criteria	Superior Criteria
A plan exists to describe the minimum physical security and access control features to be in place for each facility under the State's control.	The plan describes the minimum physical security and access control features to be in place for primary and secondary PSAPs, system service providers, and originating service providers across the state. This plan is used and maintained.	The plan for primary and secondary PSAPs, system service providers, and originating service providers is coordinated with agencies responsible for critical infrastructure protection within the state. This plan is used and maintained.
<p>Rationale: Physical and access control measures for the 9-1-1 system must be in place to guarantee the safety and security of the personnel and the systems.</p>		

Guideline SC7: PSAP facilities and system facilities are planned, designed and constructed according to accepted site selection standards and best practices.		
<p>Guidance: Properly designed or retro-fitted facilities support operational and technical requirements of the state-level 9-1-1 system. It is recognized that there is a need to avoid imposing/funding hardening of other's facilities. However, if a state takes over a network, the state should assume responsibility.</p> <p>This guideline applies to new PSAP or system facility construction or the renovation of existing PSAP or system facilities. Best practices include NENA best practices for PSAP site selection criteria 56-506 and others. System facilities include off-site data centers, Network Operations Centers (NOCs) under control of the localities or states, and Security Operations Centers (SOCs) under control of the localities or states. This is not intended for vendors.</p>		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
A plan exists that describes standards and best practices for the planning, design and construction/renovation of PSAP and system facilities.	There are examples of recent construction or renovation of PSAP and system facilities that followed the standards and guidelines.	The State, through adequate assistance and funding, enables PSAPs and system facilities to plan, design or construct/renovate according to standards and best practices.
<p>Rationale: Properly designed, planned and implemented facilities support the technical and operational requirements for the safe and secure operation of a PSAP and system facility.</p>		

5.6 HUMAN RESOURCES/TRAINING

The Human Resources and Training environment outlines the areas where personnel can have an impact on 9-1-1. This includes training for staff, establishing standards and certifications, and programs for staff stress management. The people that work in 9-1-1 are a critical asset and should be considered in any 9-1-1 system.

This category has eight guidelines.

Guideline HR1: The state has minimum/essential telecommunicator training requirements.		
Guidance: Training should exist and be the same for all staff who perform telecommunicator duties. Training requirements include specialized training for remote/virtual workers. If the call taking and dispatch functions are separate, the state should require appropriate training for each. Industry-based standards should be met or the state could establish their own standards that meet or exceed APCO/American National Standards Institute (ANSI) Telecommunicator Training, National Fire Protection Association (NFPA) or an equivalent. Areas of focus could include, initial training, continuing and remedial training. Training should include special needs populations.		
Guideline Cross-reference(s): SR18, HR7		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state requires a training program that meets national training standards or equivalent; where applicable, the program is supported by an identified funding source(s).	The state enforces its training requirement, which is supported by an identified funding source(s).	The state provides and enforces advanced telecommunicator training requirements, which maintain consistency with national training standards. The advanced training requirements and subsequent enforcement are supported by an identified funding source(s).
Rationale: A training program and associated requirements improve job performance and decrease liability.		

Guideline HR2: The state recommends PSAPs have a professional code of ethics for telecommunicators.		
Guidance: The telecommunicator position should be seen as a profession or career, not just a "job." Having a code of ethics associated with this position is a first step. It is recognized, however, that having a code of ethics or a statement of professionalism does not make a PSAP better, more efficient or more effective. These are directly related to personnel and performance.		
The state could establish a professional code of ethics or adopt an existing industry code of ethics. This helps assure professional conduct. This is a step in professionalizing the telecommunicator position. The code of ethics could be part of a standard operating procedure (SOP) or a training program in a PSAP. An example is APCO's Telecommunicator Code of Ethics.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Telecommunicators should be held to a standard of professional conduct.		

Guideline HR3: All emergency communications staffing positions have an associated job description.		
Guidance: 9-1-1 Authorities/PSAPs should be able to take the models provided by the State and apply them locally.		
Jobs that would benefit from defined job descriptions include, but are not limited to, 9-1-1 coordinators, PSAP managers, telecommunicators, and staff working in remote/virtual environments.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The State provides model job descriptions for each emergency communications position.	Job descriptions are detailed and unique to each position.	Job descriptions for emergency communications positions are consistent across the state.
Rationale: Specific job descriptions assist staff by clearly defining their roles and responsibilities. They also provide the basis for performance evaluations. Further, defined job descriptions that are used statewide can enable PSAPs and 9-1-1 authorities to share staff resources.		

Guideline HR4: Comprehensive pre-employment screening for telecommunicators exists within the statewide system.		
Guidance: Pre-employment screening can include evaluation, testing, background checks, hearing tests, vision tests, physical tests, psychological tests, drug tests, and typing tests. NENA has standards for hearing requirements. The State could recommend a process or a process could exist at a local level. In some instances, assessors may look at whether pre-employment testing exists within the state, how widespread it is, and whether the state facilitates it.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The State encourages pre-employment screening at a local level for telecommunicators.	The State requires pre-employment screening for telecommunicators.	An identified funding source provides for the State-required pre-employment screenings.
Rationale: Pre-employment evaluations and testing will help ensure quality staff.		

Guideline HR5: The State recommends regular staff performance evaluations are conducted locally.		
Guidance: Performance evaluations can be used to identify training needs and establish training goals for the upcoming evaluation cycle; identify deficiencies and set expectations for resolving them; identify opportunities for professional development; and determine the level of pay increases. Considerations include if the evaluations are done on a regular basis, whether the State provides any training to help supervisors conduct performance evaluations, whether the evaluations are consistent, and whether the State provides funding.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Binary		
Rationale: Performance evaluations are an essential means of providing feedback to an employee and identifying needs and/or deficiencies.		

Guideline HR6: The state has a telecommunicator certification program.		
Guidance: This guideline is intended to recommend professional certification, which carries more weight than just attending training and receiving a certificate. The certification program should define the minimum job skills required for acceptable performance. There should be a process for those who are not able to meet certification requirements. Varying levels of certification should be commensurate with experience.		
Guideline Cross-reference(s): SR19		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has taken measurable steps towards a telecommunicator certification program.	The state has implemented a telecommunicator certification program.	The certification program is consistent with emerging national standards. The certification program is funded and enforced.
Rationale: Certification helps to ensure professional job performance.		

Guideline HR7: The state has continuing education guidelines for operational staff.		
Guidance: Operational staff includes call takers, dispatchers, and managers. Continuing education should utilize current standards. The purpose is to increase professionalism and improve skills at a specific position or on a specific topic. There are many options for meeting the continuing education requirement, including, but not limited to, exercises and drills; comprehensive position-specific training, such as information technology (IT), geographic information systems (GIS), communications manager; or Teletypewriter (TTY) testing.		
Guideline Cross-reference(s): SR18, HR1		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state encourages continuing education for call takers, dispatchers, and managers.	Minimum continuing education requirements have been established. Continuing education is supported by an identified funding source.	The state monitors, enforces, and audits minimum continuing education requirements to ensure they are being met. Comprehensive position-specific training exists.
Rationale: Continuing education improves job performance and decreases liability.		

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Guideline HR8: The state has a comprehensive stress management program accessible statewide.		
Guidance: PSAP personnel routinely process calls involving life-threatening/traumatic incidents, and in the future will have to “view” them, depending on the technology employed at respective centers.		
A model plan has been utilized and shown to be effective over time. A model plan can include preventing post-traumatic stress disorder (PTSD), identifying and treating PTSD, critical incident stress, chronic stress management, and family stress programs.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state encourages having model stress management programs available for staff.	The state has identified stress management programs that can be made available to staff and has identified funding sources.	The state defines and requires stress management programs be available to staff; use of the programs is funded by a dedicated source.
Rationale: Communications center personnel deal with life-threatening incidents on a daily basis. Preventive stress management and critical incident stress management will help staff deal with these incidents. Such support could reduce turnover and absenteeism.		

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5.7 EVALUATION

The Evaluation environment as a whole relates to how states evaluate/assess their 9-1-1 systems. This is an on-going process to use statewide data for evaluation purposes. It also encourages a practice that is not a standard operating procedure across the board. Some states will have quality assurance and quality improvement (QA/QI), while others will not.

This category has five guidelines.

Guideline EV1: The state fosters the ongoing evaluation of statewide system(s) quality performance.		
Guidance: This guideline refers to the people. The State does not need to have “state-specific” standards as a 9-1-1 Authority/PSAP may use local standards. A typical quality program would include call reviews and performance. Performance standards could be established at a state or local level or use already established standards such as NENA 56-006 and others. Another factor for consideration is the level of participation within the state for quality evaluation.		
Guideline Cross-reference(s): SR16		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state evaluates quality based on a set of industry-accepted quality standards.	Measurable steps have been taken to implement a quality performance program statewide; the state has a plan for completion.	The evaluation process supports quality improvement and quality assurance; the program has been implemented statewide.
Rationale: A regular review of quality will help to ensure quality of services statewide.		

Guideline EV2: The state has a comprehensive and standardized quality assurance (QA) process for call processing.		
Guidance: The QA process needs to take into account day to day operations for call processing and dispatching.		
Guideline Cross-reference(s): SR17		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state recommends that PSAPs have a QA process.	The state mandates a standardized QA process with specific requirements and appropriate funding.	The state audits the standardized QA process.
Rationale: A standardized QA process improves call handling within a PSAP by identifying weakness and providing opportunities for improvement.		

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Guideline EV3: The state collects information and data for evaluation and planning purposes.		
Guidance: The National 9-1-1 Profile Database can be referenced for data collection specifics. Examples of data to be collected include call receipt times, call processing times, and down time. Some 9-1-1 Authorities/PSAPs may not have an idea of cost or lease out services, but the providers or another entity will have records.		
Guideline Cross-reference(s): SR23		
Minimum Criteria	Advanced Criteria	Superior Criteria
Data is collected from all PSAPs in the state, to include all system data at the state level. The State defines the minimum set of criteria based on identified metrics.		The State actively participates in the national data collection process. Data is shared throughout the state with 9-1-1 authorities that have provided data.
Rationale: Data can affect performance metrics, quality and cost effectiveness. Use of this data allows the State to analyze the performance of the state 9-1-1 system.		

Guideline EV4: The state utilizes statewide collected data for evaluation purposes.		
Guidance: This guideline uses technical system data to evaluate performance quality, cost-effectiveness, and basic customer service information. Evaluation should include stakeholders in the 9-1-1 community. Performance should meet industry standards, such as National Fire Protection Association (NFPA) 1221.		
Guideline Cross-reference(s): SR23		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has a process to evaluate collected data.	The state's evaluation of collected data is consistent with nationally-accepted benchmarks.	The evaluation process supports quality improvement and quality assurance statewide.
Rationale: Utilizing collected data for evaluation ensures the state is able to apply a consistent quality of service statewide.		

Guideline EV5: The state has guidelines, based on specific metrics, for measuring and managing telecommunicator staffing levels.		
Guidance: This guideline is intended to identify staffing requirements based on call volumes; the focus is on the telecommunicators – not field units, such as law enforcement. Guidelines may exist for call volume, busy times, or number of units handled per dispatcher. The emphasis is on staffing the PSAP/communications center based on these metrics. For most states, this will be a local decision and is often based on budget, but having the state provide guidance/assistance is a step towards assuring appropriate staffing to meet citizens' needs. Nothing in the guideline suggests that 9-1-1 Authorities/PSAPs have to follow the guidelines or that states enforce their guidelines. Some states do not have the statutory authority for this.		
Guideline Cross-reference(s): Not Applicable		
Minimum Criteria	Advanced Criteria	Superior Criteria
Guidelines are based on the use of historical data.	Guidelines are based on the use of industry standards and metrics tools.	Guidelines include the use of predictive levels of need/statistical analysis.
Rationale: Calls that do not get answered, incidents that get delayed in dispatch, and/or units that do not get answered on the radio need to be minimized.		

5.8 PUBLIC EDUCATION

The Public Education environment outlines areas of education for the general public, appointed/elected officials, and stakeholders. A better informed user community enhances the 9-1-1 system. Target audiences should be identified and specific messages should be tailored for each of them. For example, informational needs differ depending on whether the audience is the general public, people with special needs, emergency responders, or government officials and policy makers. Messages include the appropriate use of 9-1-1, when to call, what to call, the limitations of system capabilities, and national issues.

This category has five guidelines.

Guideline PE1: The state has an effective public education program that includes information about the capabilities and appropriate use of 9 1-1.		
Guidance: The program should be comprehensive; it should identify the target audiences and the message for each of the target audiences, and disseminate the message using different media. Tracking the effectiveness of the program would include a market research strategy. National education programs can include 9-1-1 public educator forums. Coordination with organizations that have related public education programs (such as health departments, Federal Emergency Management Agency [FEMA] and other national organizations) should be considered. States may also educate the public on the limitation of certain communication devices or technologies in terms of their ability to contact 9-1-1. A description of the issues associated with technology-specific challenges and limitations should be developed (examples include multi-line telephone system [MLTS], Voice over Internet Protocol [VoIP], and wireless location).		
Guideline Cross-reference(s): SR22		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has a documented public education program and plan that includes dissemination of information to the public using electronic and print media.	There is a coordinated multi-media program between the state, local 9-1-1 and other public education organizations. The program and information is reviewed, offered and updated annually.	A mechanism exists to track the effectiveness of the program. The state program leverages national programs. The program and information is reviewed, offered and updated semi-annually.
Rationale: A well-educated community will be better prepared when the need to contact 9-1-1 arises, and to understand the appropriate use and limitations of the 9-1-1 system.		

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Guideline PE2: The state has a 9-1-1 education program for appointed/elected officials and policy makers.		
Guidance: Officials need to understand the capabilities and limitations of 9-1-1 in order to appropriately support it and set appropriate policy. Every state has a different model for public education based upon unique state issues and needs. An education program for appointed/elected officials may include existing forums such as 9-1-1 Goes to Washington, statewide conferences, regional association conferences. A description of the issues associated with technology-specific challenges and limitations should be developed (examples include multi-line telephone system [MLTS], Voice over Internet Protocol [VoIP], and wireless location).		
Guideline Cross-reference(s): SR22		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has a plan and program to reach out to officials to educate them on 9-1-1 issues, including governance, technical and operational matters.	Information is updated and offered annually. The state offers a program to local governments.	Information is updated and offered at least semi-annually. A mechanism is in place to track the effectiveness of the program. The state program leverages national programs and outreach.
Rationale: Individuals in leadership roles and in regulatory and legislative positions need to understand the current and changing environment of public safety communications as it relates to 9-1-1. Education can include the capabilities/limitations and appropriate use of 9-1-1.		

Guideline PE3: The state has identified special needs populations and developed specific educational programs for each.		
Guidance: The minimum criterion focuses on the ADA; any program beyond that is considered advanced or superior. Special needs communities include but are not limited to: non-English speakers, deaf and hard of hearing, young children, seniors, speech impaired, and vision impaired populations as well as those hesitant to contact 9-1-1 for cultural or demographic reasons. Evaluation can be done in the form of questionnaires out to the community. Another consideration is the level of participation within the state that utilizes quality evaluation.		
Guideline Cross-reference(s): SR22		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state has a plan and program to educate stakeholders and advocacy groups in federal Americans with Disabilities (ADA) requirements.	In addition to providing education on ADA requirements, the state has an educational program for special needs communities.	The state evaluates the effectiveness of the educational program and has a documented process to make appropriate updates at least annually.
Rationale: Special needs communities have unique challenges when contacting 9-1-1. PSAPs have unique challenges in being able to respond to callers with special needs. The unique challenges presented in communicating with the special needs community require the highest level of attention.		

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Guideline PE4: The state has specific 9-1-1 educational programs for children at all grade levels.		
Guidance: The state can participate in National 9-1-1 Education Month and utilize materials provided at a national level to promote 9-1-1 education. Other examples of state-level programs could include public service announcements. Messages should be age-appropriate.		
Guideline Cross-reference(s): SR22		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state prepares and makes available to 9-1-1 authorities printed or electronic training materials to educate on the uses and misuses of 9-1-1.	The state has a documented working relationship with the state education department to develop minimum curriculum for comprehensive 9-1-1 education.	The state monitors and evaluates the working relationship with the state education department for 9-1-1 educational programs, and updates the program as necessary.
Rationale: The educational needs of young children, teens, and young adults differ. The program should include appropriate messages for all grade levels so they understand how to utilize 9-1-1 properly.		

Guideline PE5: The state has an educational program for emergency responders.		
Guidance: Emergency responders include, but are not limited to, first responders, emergency management agencies (EMAs), and homeland security. Capabilities of the 9-1-1 system include call handling, dispatch, data, and incident management.		
Guideline Cross-reference(s): SR22		
Minimum Criteria	Advanced Criteria	Superior Criteria
The state prepares and makes available to 9-1-1 emergency responders printed or electronic training materials to educate them on the capabilities of 9-1-1 systems.	The state has a documented working relationship with emergency responders to develop minimum curriculum to educate on 9-1-1 capabilities.	The state monitors and evaluates the working relationship with emergency responders, and updates the program as necessary.
Rationale: Emergency responders should be educated about the capabilities and appropriate use of 9-1-1, to guide their own use of 9-1-1 and to allow them to assist in educating the public.		

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6 NEXT STEPS

6.1 NAGWG RECOMENDATIONS

While the guidelines could be utilized as an independent tool to improve statewide 9-1-1 systems, NAGWG recommends that the guidelines be used as the basis for a state-level assessment program. NAGWG recommends that a 9-1-1 assessment program be developed and include an established team of reviewers. NAGWG recognizes that such a program would require a dedicated source of support to implement and recommends that a Federal Governmental entity be identified to implement the assessment program. The roles and responsibilities of all parties involved in an assessment should be clearly defined. NAGWG also recommends that a funding source be identified to support continued use of the assessments on a regular basis.

NAGWG recommends that a formal process be developed to evaluate and update the guidelines. A defined schedule for modifying the guidelines on a regular basis should be developed and documented.

Once an assessment program is implemented, it will be important to demonstrate the positive results generated from assessments in order to produce interest in the process.

6.2 FUTURE INCLUSIONS

During the guidelines development process, there was a great deal of discussion on the current 9-1-1 environment, which often included the changing nature of 9-1-1 processes, technology, and expectations (such as Next Generation 9-1-1 [NG9-1-1]). As a result, several areas were discussed as possible guidelines; however, the work group deemed them not appropriate for inclusion in the assessment at this time. NAGWG recommends the areas indicated below be re-evaluated in the future.

- Management should have management-level training and certification, such as Emergency Number Professional (ENP), Registered Public-Safety Leader (RPL), or an equivalent.
- 9-1-1 organizations should utilize a professional human resources department or third-party locally to navigate complex personnel issues.
- Enacted legislation should include appropriate mechanisms to implement the statute's requirements and adequate resources to ensure compliance with the statute's provisions does not constitute an unfunded mandate.
- The state maintains a statewide geographic information system (GIS) database available to local jurisdictions. As an alternative, the state receives GIS data from the localities and ensures seamless data is available to local jurisdictions.
- Guidelines for interconnection are consistent with national interconnection standards.
- 9-1-1 is legislatively identified as an essential government service.
- Reviewing how a state deals with implementing new and emerging technologies into the 9-1-1 system.
- States can assist with putting improvements in place in conjunction with the audit process based on findings in the assessment.
- Licensure versus certification should be explored. Current guideline requires a certification program; developing a state licensure program for telecommunications is viewed as a further opportunity to enhance the professionalism of staff.
- Consideration should be given to a guideline that identifies/assesses intergovernmental interactions between 9-1-1 and other entities within a state, such as military installations and Tribes.

As the guidelines are re-evaluated as NG9-1-1 evolves and technology changes, these topic areas should be addressed in future guideline reiterations.

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APPENDIX A – REFERENCES

Association of Public-Safety Communications Officials, International (APCO)

www.apcointl.org

- APCO Project 33: Certification of Training Programs as meeting the APCO International Minimum Training Standards for Public Safety Telecommunicators
- APCO ANS 1.106.1-2009: Core Competencies for Public Safety Communications Managers/Directors
- APCO ANS 3.101.1-2007: Minimum Training Standards for Public Safety Communications Training Officer
- APCO - Minimum Training Standards for Public Safety Communications First-Level Supervisors
- APCO ANS 1.101.1-2007: Standards for Calltakers When Handling Calls Pertaining to Missing and Sexually Exploited Children
- APCO ANS 1.103.1-2008: Wireless 9-1-1 Deployment and Management Effective Practices Guide
- APCO Project 25

Commission on Accreditation for Law Enforcement Agencies (CALEA)

<http://www.calea.org/>

- CALEA 6.1.2 FCC Requirements
- CALEA 6.7.1 Records Privacy and Security Precautions
- CALEA 1.2.5 & 1.2.6 Goals and Objectives & Evaluations of Progress of Goals & Objectives
- CALEA 1.2.9 Multiyear Plan
- CALEA 1.4 Organizational Integrity
- CALEA 2.1.3 Lawful Order of Superior
- CALEA 2.1.5 Written Directive System
- CALEA 2.1.6 Dissemination of Directives
- CALEA 2.2.2 Values Acknowledged
- CALEA 2.2.6 Critical Incident Stress
- CALEA 3.1 Classification and Delineation of Duties and Responsibilities
- CALEA 5.1.5 Requirements for Trainers
- CALEA 5.2.1 - 5.2.3 New Hire Training and Orientation
- CALEA 5.2.6 Annual Retraining
- CALEA 5.2.8 Remedial Training
- CALEA 5.2.12 Promotional Training
- CALEA 6.2.11 First Aid Instructions
- CALEA 6.2.12 Non-English Speaking Callers
- CALEA 1.1 Organizational Structure
- CALEA 1.2.2 Expectation of Privacy
- CALEA 1.3.1 Position Management System
- CALEA 5.1.6 & 5.1.7 Updating & Maintaining Records
- CALEA 6.1.4 Dissemination of Information
- CALEA 6.1.5 Quality Checks
- CALEA 6.1.6 Disposal of Work Sensitive Documents
- CALEA 6.2.1 Immediate Access to Communication Center Resources
- CALEA 6.2.3 Immediately Available Procedures
- CALEA 6.2.4 Obtaining and Recording Information

- CALEA 6.2.5 & 6.2.6 Misdirected Emergency Calls & Procedure for Emergency Hang-up Calls
- CALEA 6.4.1 Security for Communications Center

Department of Homeland Security (DHS) – The Office of Interoperability and Compatibility (OIC)

Department of Transportation (DOT) – The National Highway Traffic Safety Administration (NHTSA)

Emergency Management Accreditation Program (EMAP)

The full standards document is available at: <http://www.emaponline.org>

Federal Communications Commission (FCC) – Network Reliability and Interoperability Council (NRIC)

National Academies of Emergency Dispatch (NAED)

<http://www.emergencydispatch.org/downloads/EMDStatute.pdf>

<http://www.emergencydispatch.org/downloads/Statrules-fin.pdf>

National Emergency Number Association (NENA)

www.nena.org

- NENA 06-750: NENA Model Legislation Enhanced 9-1-1 for Multi-Line Telephone Systems
- NENA 53-507: Virtual PSAP Management (NENA 53-507)
- NENA 57-001: Wireless 9-1-1 Overflow, Default and Diverse Routing
- NENA 53-501: Hazard and Vulnerability Analysis
- NENA 53-503: PSAP Survivability
- NENA 53-506: Intra-Agency Agreements
- NENA 53-507: Virtual PSAP Management
- NENA 07-501: Future 9-1-1 Model
- NENA 54-002: Hearing Standards for Telecommunicators
- NENA 56-005: 9-1-1 Call Answering Standard
- NENA 56-006: Emergency Call Processing Protocol
- NENA 56-501: Silent or Hang-Up 9-1-1 Calls
- NENA 56-505: Handling Calls Regarding Missing & Exploited Children
- NENA 54-001: PSAP Daily Personnel Operations
- NENA 58-001: IP-capable PSAP Minimum Operational Requirements Standard
- NENA 07-504: Collision Notification & Telematics Information

National Fire Protection Association (NFPA)

<http://www.nfpa.org/index.asp?cookie%5Ftest=1>

- NFPA 1221: Establish a Continuity of Operations Plan (COOP)

- NFPA 1061, NFPA 1221 Section 7.2: Establish standards for public safety telecommunicator qualifications and training
- NFPA 1600: Establish public education
- NFPA 1221 7.4.1, 7.4.2, 8.3.4: Establish call handling parameters
- NFPA 1221 1.2[4], 8.4.2: Establish required level of performance
- NFPA 1561: Establish a standards for an incident management system
- NFPA 1221 7.1.1.1: Establish technical assistance parameters
- NFPA 1221 7.1.1.3, 8.3: Establish service level parameters
- NFPA 1221 7.4.4, 7.4.4.1, 8.3.2: Establish standards for call transfer/misdirected calls

State legislation

- Indiana Code 36-8-16.5 Enhanced Wireless Emergency Telephone System
- IOWA ADMINISTRATIVE CODE, CHAPTER 10, ENHANCED 911 TELEPHONE SYSTEMS
- Tennessee Code Annotated, Title 64, Chapter 2, Section 13
- Code of Maine Rules 25-625 Sections 3-A & 3-B
- Appendix A to 560 Mass. Code Regs 2.00 Statewide Emergency Telecommunications Board – Standards for Enhanced 9-1-1.
- 4 PA. Code § 120D.

APPENDIX B – GUIDELINES SYNOPSIS

GLOSSARY

These are the terms defined as they are used in the guidelines. Other entities have prepared glossaries of terms.

TERM	REPORT USAGE
9-1-1 Call	A generic term used to include any type of request for emergency assistance and is not limited to voice. (NENA)
9-1-1 Resource Center	The 9-1-1 Resource Center website was developed in partnership with 911.gov (National 911 Program's website) to provide services and information to the 9-1-1 community. www.911resourcecenter.org
9-1-1 System	A group of entities, functions and activities that provide the public with the necessary communications system to request help in an emergency. There may or may not be a single entity with control of the entire system. In either case, system coordination is critical. The system includes telecommunicators and their functions.
Audit	A structured formal process to review adherence to a process. The content, timeframe, extent, and who performs these audits is determined by the entity unless specified in the guideline. For the purpose of this document, this does not necessarily require an auditing firm and/or generally accepted accounting principles (GAAP).
Best Practice	Methods or techniques identified as the most effective, efficient and practical means to achieve an objective. Based on a repeatable process, best practices often emerge as a result of generally accepted principals followed by many individuals groups or organizations which have been established over time.
Change Management	A structured approach to shifting/transiting systems, applications, and people/organizations from a current state to a desired future state.
Consensus Guidelines	A set of activities or functions that are considered benchmarks or standards of excellence developed by general agreement of participating stakeholders.
Next Generation 9-1-1 (NG9-1-1)	NG9-1-1 is the next evolutionary step in the development of the 9-1-1 emergency communications system known as E9-1-1 since the 1970s. NG9-1-1 is a system comprised of managed IP-based networks and elements that augment present-day E9-1-1 features and functions and add new capabilities. NG9-1-1 is designed to provide access to emergency services from all sources, and to provide multimedia data capabilities for PSAPs and other emergency service organizations.
Policy	A plan or a course of action intended to influence and determine decisions, actions, and behavior created in response to statute, regulation or need.
Public Safety Answering Point (PSAP)	An emergency communications center authorized by a governing body and operating under common management which receives 9-1-1 and other emergency calls and notifications for a defined geographic area and processes those calls and events according to a specified operational policy.
Quality Assurance	A structured and formal process that periodically measures performance against an accepted metric for the purpose of determining progress, maintaining service quality, or improving the process and/or quality.
Regulation	An order or administrative rule issued by a governmental department or agency that has the force of law.
Regulatory	To control or direct with the force of law.
Service Level	Features, functions or capabilities of the various systems as defined by the 9-1-1 authority.
Service Provider	An entity either providing originating telecommunication service or one or more of the following 9-1-1 elements: network, CPE, applications or data base service.

Stakeholder	Those entities that “touch” the 9-1-1 space or benefit from 9-1-1 service.
Standard	A document established by consensus and approved by a recognized body that provides for common and repeated use, rules, guideline, or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.
State	A state for the purpose of this document includes the political subdivisions, and the people of a state.
State level	Activities occurring at the state organizational level.
Statewide	Functions that apply to the entire state in order to provide uniform 9-1-1 service for all public/private entities within the state.
Statute	A law enacted by legislative body.
Statutory	Authorized by statute.
Sustainable funding	Statutory or regulatory action that ensures continuous financial resources to provide expected 9-1-1 service levels.
Telecommunicator	As used in 9-1-1, a person who is trained and employed in public safety telecommunications. The term applies to call takers, dispatchers, radio operators, data terminal operators or any combination of such functions in a PSAP.