

  
**II.****WIRELESS E9-1-1  
PRIORITY ACTION PLAN**

*This section presents the  
Priority Action Plan that  
was developed by the  
DOT Wireless E9-1-1  
Steering Council.*

**Statement of Principle**

We recognize that our six priorities are interdependent and that successful implementation requires effective working relationships to be created and maintained among stakeholders in the private sector as well as at all levels of Federal, State, county and local government. Additional stakeholders may be identified and should be included.

**ACTION ITEM #1**

***Establish Support for Statewide Coordination  
and Identify Points of Contact***

**Need Statement**

By nature, wireless service is not limited to specific jurisdictional or governmental boundaries. However, implementation and the recovery of costs associated with implementation are often a function of such boundaries. The relationship of the two, therefore, can be a very complex and confusing mix of service providers, vendors, and public safety entities.

**Discussion**

Effective implementation of wireless E9-1-1 requires activities to be planned, coordinated, and monitored efficiently and productively—with involvement from all private and public safety stakeholders. However, institutional and administrative approaches to this process vary greatly among States. The Wireless Communica-

## **ACTION ITEM #1 ■ STATEWIDE COORDINATION**

tions and Public Safety Act of 1999 encourages States to adopt a single point of contact for such activity. Indeed, the Act requires the FCC to “encourage and support efforts by States to deploy comprehensive end-to-end emergency communications infrastructure and programs, based on coordinated statewide plans, including seamless, ubiquitous, reliable wireless telecommunications networks and enhanced wireless 9-1-1 service.”

This approach potentially raises issues of local control and governance. Emergency response is ultimately a local governmental responsibility, and traditionally emergency communications has also been a local government function. Historically, administrative and cost recovery infrastructure has reflected that approach. New technology, on the other hand, including, but not limited to wireless E9-1-1, is forcing these institutional arrangements to be reexamined. That is paramount, recognizing their importance to public safety and homeland security.

While many States have adopted implementation and cost recovery approaches emphasizing a single statewide point of coordination and facilitation, a great degree of diversity exists in the detail of those approaches. Furthermore, ten States have yet to adopt any implementation approach, yet alone one at the State level. In light of that, this action item has two goals: 1) to assist the ten States that have not adopted an implementation approach to explore the policy and implementation issues involved, and move forward; and, 2) to foster statewide coordination in deploying wireless E9-1-1 utilizing a single statewide point-of-contact.



Political realities notwithstanding, it is reasonable to assume that State government should have an inherent interest in promoting and facilitating the implementation of E9-1-1 service from a standard of care position. However, it is recognized that the methodology that a particular State may or may not employ could vary greatly and still achieve equal levels of success. Furthermore, it is recognized that the process for statewide coordination may range from facilitation and regulation of deployment at the State and local level to simple facilitation of voluntarily cooperation and coordination. It is also important to note that a single point of contact may be a single

individual appointed to act as State coordinator, or a group of individuals or associations that serve in an advisory capacity to the State. These may range from ad hoc groups and associations of local 9-1-1 interests, to State APCO and NENA chapters, and similar coordination mechanisms. These recommended action items are not intended to preempt any local jurisdiction from aggressively and independently pursuing deployment. Nor is it the intent of this action item to promote a one-size-fits-all model. What is intended is to insure that there is a recognized individual, group, or association in place in each State that is actively engaged in coordinating and/or facilitating the deployment of wireless location technology, and helping overcome the interjurisdictional issues involved. Ultimately, these approaches should balance local interests and responsibilities with regional and State perspective. More than anything else, this action item should emphasize local action, with global thinking.

**ACTION ITEM #1 ■ STATEWIDE COORDINATION**

**Key Resource Stakeholders**

Fostering statewide, coordinated approaches potentially involves many stakeholders, including:

- 9-1-1 network service providers;
- Potentially, other Customer Premise Equipment (CPE) vendors and support service providers;
- National Association of State Nine-One-One Administrators (NASNA), *and* members;
- American Association of State Highway Transportation Officials (AASHTO);
- Cellular Telecommunications and Internet Association (CTIA), *and* members;
- Federal Government, including the Federal Communications Commission (FCC), and other involved Federal agencies such as the Department of Transportation (DOT), the Federal Emergency Management Agency (FEMA) and the Department of Justice (DOJ);
- National Association of Counties (NACO), *along* with State-level associations of counties;
- National Emergency Number Association (NENA) and Association of Public-Safety Communication Officials (APCO), *including* chapter leadership, *and* members;
- National Conference of State Legislatures (NCSL);
- National Governors Association (NGA);
- National Sheriffs' Association (NSA); and the International Association of Chiefs of Police (IACP);
- State Governors, and their respective offices;
- State legislatures, along with relevant committee leadership;
- National League of Cities (NLC), *along* with State municipal leagues;
- Other State and local public safety, emergency medical services, and public health professionals and their associations; and
- Wireless service providers.

**Priority Action Plan Tasks, Lead Agencies or Organizations, & Time Frame**

#	ACTION ITEM	LEAD(S)	TIME FRAME
<b>1</b>	<b><i>Establish Support for Statewide Coordination and Identify Points-of-Contact</i></b>		
1.a.	Clarify and interpret national policy in this area, as necessary.	FCC	Through FY '04 (2nd Qtr)
1.b.	Provide technical assistance and guidance to States without coordinating infrastructure or resources.	NASNA and its membership	Through FY '04
1.c.	Provide leadership to foster new public policy and similar efforts in States without such structure.	Governors and their offices, State legislatures	Through FY '04
1.d.	Monitor status and progress of deployment.	NENA and APCO	Through FY '05
1.e.	Develop white paper on the advantages and disadvantages of statewide 9-1-1 institutions.	NASNA and CTIA	FY '03 (3rd Qtr)
1.f.	Educate local stakeholders.	WE9-1-1 Steering Council	Through FY '04

## **ACTION ITEM #2 ■ CONVENE STAKEHOLDERS**



### **ACTION ITEM #2**

#### **Help Convene Stakeholders in Appropriate 9-1-1 Regions**

##### **Need Statement**

Effective implementation of wireless service requires a coordinated effort by everyone involved in the process. A primary need, then, is to convene all stakeholders – both public and private, to ensure a coordinated effort. After defining respective roles and responsibilities at each level, a plan for implementation will be developed. Developing practical solutions to institutional barriers and other issues, as they arise, are critical to the success of the effort. Stakeholders will be convened frequently to monitor progress toward achieving the goals as outlined in the action plan for each region or location. Effective communications will facilitate that effort.

##### **Discussion**

Effective implementation of wireless E9-1-1 requires cooperation among agencies of the Federal government (e.g. the FCC and DOT), State governments (primarily State wireless coordinators, where they exist), local governments (especially county 9-1-1 coordinators), and the private sector. Each level of government must understand and respect the roles and responsibilities of other government entities, in order to achieve wireless



E9-1-1 implementation in a well-planned manner. Clear-cut interactions among government, public safety organizations, the telecommunications industry (wireless carriers and local exchange carriers, or LECs) and other commercial firms need to be defined.

Appropriate leads for convening stakeholders will likely come from organizations such as NASNA and NGA. Both are active in wireless 9-1-1 issues at the State and national levels, and have access to decisionmakers that can have a positive impact on implementation. Private-sector stakeholders include wireless carriers, 9-1-1 network service providers, and others involved in the implementation of wireless E9-1-1.

In preparation for the 9-1-1 wireless deployment surveys under the DOT project, NENA has already completed the first ever compilation of 9-1-1 county coordinators. This information will be of value not only to the survey, but also for other tasks that involve government stakeholders.

Government at all levels must also monitor implementation of wireless E9-1-1 to ensure citizens that there is no degradation of 9-1-1 services. It is important to establish ways to measure quality of service that are easily understood and for which data can be collected.

##### **Resource Stakeholders**

There are many government stakeholders, including:

- AASHTO;
- County 9-1-1 Coordinators (most are members of NENA);
- CPE vendors;
- FCC;
- Local elected and appointed officials;
- NACO;
- State 9-1-1 Coordinators (most are members of NASNA);
- DOT;
- Wireless carriers; and
- 9-1-1 network service providers and other 9-1-1 service providers (e.g. telematics service providers).

**ACTION ITEM #3 ■ COST RECOVERY**

<b>Priority Action Plan Tasks, Lead Agencies or Organizations, &amp; Time Frame</b>			
<b>#</b>	<b>ACTION ITEM</b>	<b>LEAD(S)</b>	<b>TIME FRAME</b>
<b>2</b>	<b><i>Help Convene Stakeholders in Appropriate 9-1-1 Regions</i></b>		
2.a.	Identify leads for convening stakeholders and define roles and responsibilities.	NASNA and NGA	FY '03 (3rd Qtr)
2.b.	Develop a mini-plan, including a “roadmap” for stakeholders.	NENA and APCO	FY '03 (3rd Qtr)
2.c.	Identify appropriate parties.	NENA, APCO and NASNA	FY '03 (2nd Qtr)
2.d.	Determine method(s) to involve all stakeholders.	NENA, NGA and NACO	FY '03 (3rd Qtr)
2.e.	Develop agenda for each event.	NENA and APCO	FY '03 (3rd Qtr)
2.f.	Schedule meetings and hold events.	Government agencies and private-sector partners	Through FY '04
2.g.	Monitor implementation of stakeholder convening actions.	NASNA	Through FY '04



**ACTION ITEM #3**  
***Examine Cost Recovery and Funding Issues***

***Need Statement***

The lack of the ability to recover the costs of wireless implementation can be a barrier for public safety and the carrier. By FCC rules this is a State and local issue, not a Federal issue. The issue goes beyond just the question of whether cost recovery exists, and includes how the cost recovery funds will be utilized.

***Discussion***

The FCC has ruled that PSAPs are responsible for recovering costs for their own upgrades and enhancements back through the selective router, and that the carriers are responsible for their costs down to the

selective router. However, States are permitted to reimburse the carrier’s expenses if they so choose. Today 40 States have some type of cost recovery mechanism in place, with wide variances in the amount of the fees, the method of applying and collecting the fees, the allowable use of the fees, and the administrative oversight of the fee distribution and usage. This lack of consistency adds to the confusion regarding which of the wireless carriers’ costs are to be reimbursed by the State or the PSAP, and which are to be covered by the carrier through their own rate base.

States need to clarify which expenses are eligible for recovery through their State plans, and which the carriers are expected to cover through their rate base. Firm guidelines on such issues as system configuration, system cost, and which portions of the plan each is responsible for, need to be established to guide the carriers and the PSAPs in their negotiations as they work through the implementation process. Making this information widely available will speed the implementa-

**ACTION ITEM #3 ■ COST RECOVERY**

tions. Much time is lost today as these things are negotiated repeatedly with each PSAP.

States that do not have any type of cost recovery mechanism need to review this issue and determine the most beneficial policy for their citizens. Those that choose not to implement a statewide fee should set guidelines for the PSAPs and carriers to follow so that each will know their responsibilities.

States that have a funding mechanism in place need to review their program and determine whether it is working and whether the income projections are adequate to cover the anticipated expenses. In the event of projected shortfalls they should be prepared to revise their fee schedule or make clear which expenses they expect to cover and which ones they expect the wireless carriers to recover (which, in turn, may include the development of guidelines on acceptable charges for these services). Wide variances in rate quotes from carriers on what appear to be similar items are causing delay in many areas. Allowable guidelines will be beneficial in speeding the process of cost reimbursement and thereby speeding deployment. These States

should be prepared to make a thorough analysis of their entire process to assess how it is working and whether it can be improved.

**Resource Stakeholders**

- AASHTO;
- Emergency Services Interconnection Forum (ESIF);
- Local Exchange Carriers (LECs);
- NACO *and* State-level associations of counties;
- National Association of Regulatory Commissions (NARUC);
- NASNA *and* members;
- National Council of State Legislatures (NCSL), State legislatures, and their relevant committee leadership;
- NENA and APCO, *including* Chapter Leadership, *and* members;
- National Governors Association (NGA), State Governors, and their respective offices;
- National League of Cities (NLC), *along* with State municipal leagues;
- Wireless carriers (national, regional, and rural).

**Priority Action Plan Tasks, Lead Agencies or Organizations, & Time Frame**

#	ACTION ITEM	LEAD(S)	TIME FRAME
<b>3</b>	<b><i>Examine Cost Recovery / Funding Issues</i></b>		
3.a.	Clarify policy as established by the FCC and by precedent.	FCC	FY '04 (2nd Qtr)
3.b.	Provide education to PSAPs on reasonable expense allocation.	APCO, NASNA, NENA, NARUC and USTA	FY '04 (3rd Qtr)
3.c.	Educate PSAPs about their responsibilities in Phase II implementation.	APCO and NENA	FY '04 (3rd Qtr)
3.d.	Develop guidelines and tools to assist in generating cost estimate analyses.	APCO, NENA and NARUC	FY '04 (1st Qtr)
3.e.	Prepare and publish some example cost estimates as guide lines.	DOT, APCO, AASHTO and NENA	FY '04 (1st Qtr)
3.f.	Identify potential funding sources and make information available to PSAPs.	DOT, APCO and NENA and AASHTO	FY '04

**ACTION ITEM #4 ■ KNOWLEDGE TRANSFER / OUTREACH**



**(4) ACTION ITEM #4  
Initiate Knowledge Transfer and  
Outreach Program**

**Need Statement**

A major barrier to accelerated deployment of wireless E9-1-1 is a lack of understanding by many PSAPs of exactly how to go about implementing wireless E9-1-1. Therefore it is a high priority to provide PSAPs with information about how to implement a successful wireless E9-1-1 program. Knowledge transfer and outreach programs are a proven method for accelerating the rate of adoption of new technologies or programs. Information dissemination to all PSAPs regarding precursor requirements and actions leading to PSAP readiness for Phase II is needed.

**Discussion**

A common pattern in innovation is for early adapters to lead the way for others. So it is with wireless E9-1-1 implementation. There already are many suc-

cessful programs for Wireless Phase I, and several for Wireless Phase II, most notably by the State of Rhode Island and St. Clair County, IL. Early innovators nearly always share their experiences, both good and bad, so that others can benefit from what they did correctly and avoid the problems resulting from mistakes made.

DOT plans to select and work with several “model” States and/or counties to address issues and share lessons learned. Knowledge transfer in this program is intended to accelerate the rate of wireless E9-1-1 implementation. Outreach efforts will identify what PSAPs need to do to prepare for Phase II; that is, to achieve readiness.

**Resource Stakeholders**

There are many stakeholders to be involved in knowledge transfer, both those who have implemented wireless E9-1-1 and those who are in need of implementing it. Stakeholders include:

- AASHTO;
- County 9-1-1 Coordinators (most are members of NENA);
- Early adopters (e.g. Rhode Island and St. Clair County, IL);
- Emergency Service Interconnection Forum (ESIF);
- Federal agencies (e.g. FCC, DOT);

**Priority Action Plan Tasks, Lead Agencies or Organizations, & Time Frame**

#	ACTION ITEM	LEAD(S)	TIME FRAME
<b>4</b>	<b><i>Initiate Knowledge Transfer and Outreach Program</i></b>		
4.a.	Determine methods for knowledge transfer and outreach.	AASHTO, NENA and APCO	FY '03 (1st Qtr)
4.b.	Identify early adopters and document their experiences.	NASNA, NENA and APCO	FY '03 (3rd Qtr)
4.c.	Prepare and distribute white papers, videos, and other printed and electronic materials to all stakeholders.	PSAPs	Through FY '04
4.d.	Produce a “guidebook” on Phase II deployment.	PSAPs	FY '03 (3rd Qtr)
4.e.	Provide expert consulting team to support knowledge transfer and outreach.	DOT	Through FY '04

**ACTION ITEM #5 ■ RURAL / METRO DEPLOYMENT COORDINATION**

- LECs;
- Local elected and appointed officials;
- State 9-1-1 Coordinators (most are members of NASNA);
- Third party providers; and
- Wireless carriers.



**Action Item #5:  
Develop Coordinated Deployment  
Strategy Encompassing Both Rural  
and Metropolitan Areas**

**Need Statement**

Wireless E9-1-1 deployment tends to be requested by those PSAPs/Public Safety Authorities who are most knowledgeable about 9-1-1 processes and/or who have the most resources to apply to planning, implementation, and costs. This causes service requests that are not only rather random geographically, but also tend toward

more metropolitan areas with higher wireless set concentration. Strategies are needed to enable significantly populated rural areas to deploy wireless E9-1-1 more rapidly than would otherwise occur.

**Discussion**

Effective implementation of wireless E9-1-1 requires that activities be planned, coordinated, and monitored efficiently and productively. Ways must be found to coordinate the diverse governmental and service provider environment toward a common plan of attack on roadblocks to rapid deployment of wireless E9-1-1 in rural areas.

Considerations include wireless E9-1-1 knowledge availability (including project planning) to 9-1-1 managers in rural areas of each State, level of technology needed in regard to geographic complexity and population density in each rural area, and identification and applicability of funding sources, including grants. For instance, a single source of expertise funded and available across a State or a group of States might be a means to support the knowledge availability issue. It is

**Priority Action Plan Tasks, Lead Agencies or Organizations, & Time Frame**

#	ACTION ITEM	LEAD(S)	TIME FRAME
<b>5</b>	<b><i>Develop Coordinated Deployment Strategy Encompassing Both Rural and Metropolitan Areas</i></b>		
5.a.	Develop deployment characteristics.	NASNA, NGA, and NACO	FY '03 (4th Qtr)
5.b.	Develop project plans and deployment sequence by State, where they do not currently exist.	NASNA, NENA and APCO	Through FY '03
5.c.	Identify rural area strategies.	NASNA, NGA, AASHTO and NACO	FY '03 (4th Qtr)
5.d.	Identify infrastructure needs, and PSAP operational needs.	NENA	FY '04 (1st Qtr)
5.e.	Identify alternative funding sources and strategies (e.g., rural health program grants).	NASNA, NENA and APCO	FY '03 (3rd Qtr)
5.f.	Establish common service agreement/contract.	NASNA, NENA and APCO	FY '04 (1st Qtr)

## **ACTION ITEM #6 ■ MODEL LOCATION PROGRAM**

noted that work under this action item should be an important contribution to Action Item 1.e. above (white paper dealing with the advantages and disadvantages of statewide approaches and institutions to wireless implementation).

### **Key Resource Stakeholders**

- AASHTO;
- ESIF;
- FCC;
- NACO;
- NASNA;
- NENA and APCO;
- NGA;
- DOT; and
- Wireless carriers operating in the region.



### **Action Item #6: Implement Model Location Program**

#### **Need Statement**

A number of issues have been identified as potential barriers to the deployment of wireless telephone location technology. These issues range from PSAP readiness, to who pays for what. Some of the issues are complex and pose some real challenges, while others appear to be more bureaucratic or procedural in nature. The purpose of this action item is to clearly identify and isolate some of these issues in a model or test case environment. The well-documented results of these model programs will greatly assist all stakeholders in understanding what each entity must do to achieve success.

#### **Discussion**

These models programs need to represent true cross-sections of the PSAPs, including large, small, and midsize agencies. They should include PSAPs that are technologically advanced as well as those that lack funding resources. They should also represent wireless carriers and local exchange carriers, both large and small. The models will serve to assist the telephone service providers as well as the PSAPs. Through the use of model programs the Steering Committee will need to determine what the critical success factors must be. Careful selection should be made to ensure that a representative sampling of systems is utilized.

In determining the criteria for participation, emphasis should be placed on the commitment of all parties involved and not on any monetary incentive that may be derived. While some financial assistance may be forthcoming, it should be clear that the participating PSAP must have its own ongoing source of self funding. Emphasis should be placed on the technical support and commitment from participating public and private stakeholders. Agencies selected to serve as models must be willing to devote the time necessary to fully document their process and progress. Additionally, the wireless carriers must be willing to make a similar commitment, as this may be a learning process for them as well. The documentation process and the subsequent development of educational case studies are the real values of this action item. Models can be a very effective learning experience and educational tool, but only if they are carefully selected and examined.

It is noted that activities under this Action Plan need to be reviewed to ensure that model sites are providing information that will be useful to many. The following criteria are recommended for use in selecting model locations:

1. Cost recovery status (legislation; policy)
2. Leadership
3. Carrier community readiness

**ACTION ITEM #6 ■ MODEL LOCATION PROGRAM**

- 4. PSAP readiness
- 5. LEC readiness
- 6. Geography (mix; national location; etc.)
- 7. Metro/rural
- 8. Homerule vs. centralized State authority
- 9. Interoperability with public safety

- PSAP officials;
- CTIA/Telephone Service Providers;
- NGA;
- National Conference of State Legislatures (NCSL);
- AASHTO;
- NENA and APCO *including* Chapter leadership, *and* members;
- ESIF;
- National League of Cities (NLC), *along* with State municipal leagues; and
- NACO *along* with State-level associations of counties.

**Resource Stakeholders**

- NASNA *and* members;
- DOT;

Priority Action Plan Tasks, Lead Agencies or Organizations, & Time Frame			
#	ACTION ITEM	LEAD(S)	TIMEFRAME
<b>6</b>	<b><i>Implement Model Location Program</i></b>		
6.a.	Establish criteria for selection of model locations.	WE9-1-1 Steering Council	FY '03 (3rd Qtr)
6.b.	Establish procedures for collecting and analyzing information from the models.	USDOT	FY '04 (1st Qtr)
6c.	Establish methods of disseminating “lessons learned” to all interested stakeholders.	USDOT	FY '04 (1st Qtr)

