

U.S. Department of Transportation Wireless E9-1-1 Initiative Priority Action Plan

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.

(1) Establish Support for Statewide Coordination and Make 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 that activities be planned, coordinated, and monitored in an efficient and productive way—one that involves all private and public safety stakeholders. However, institutional and administrative approaches to this process vary greatly among States. The 1999 Wireless Telecom Act 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 been the same. 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 one of facilitating and regulating deployment at the state and local level or one where the state may simply act as a facilitator that creates a forum for voluntarily cooperation and coordination to occur. 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 inter-jurisdictional 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.

Key Resource Stakeholders

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

- Wireless service providers;
- 9-1-1 network service providers;
- Potentially, other Customer Premise Equipment (CPE) vendors and support service providers;
- The Federal Communications Commission (FCC), and other involved federal agencies like the US Department of Transportation (DOT), FEMA and DOJ;
- National Association of State Nine-One-One Administrators (NASNA), and members;
- National Emergency Number Association and Association of Public Safety Communication Officials (NENA and APCO), including Chapter Leadership, and members;
- Cellular Telecommunications and Internet Association (CTIA), and members;
- United States Telephone Association (USTA), and related state telephone associations;
- National Governors Association (NGA);
- American Association of State Highway Transportation Officials (AASHTO);
- National Conference of State Legislatures (NCSL);
- National League of Cities (NLC), along with state municipal leagues;
- National Association of Counties (NACO), along with state county associations;
- State Governors, and their respective offices;
- State legislatures, along with relevant Committee leadership;
- National Sheriffs' Association; and
- Other state and local public safety and health functions and associations.

Action Plan by Task*1.a. Clarify and interpret national policy in this area, as necessary.***Lead Stakeholder:** FCC**Time Period:** through FY '04 (2nd Qtr)**Contributing Stakeholders:** NENA, APCO and NASNA

Comment: By legislation, Congress has already established national policy in this area, and the FCC has promulgated rules implementing that policy. Interpretative guidance by the FCC may be appropriate and beneficial, as necessary. The national associations, including NENA's SWAT initiative, may also help provide coordination in this area.

Critical Factors:

- Implementation of this policy depends upon state and local public policy, and associated implementation approaches.
- Leadership will be critical.
- Further Congressional Action may be necessary.
- Program and Project coordination can be provided in many ways.

*1.b. Provide technical assistance and guidance to states without coordinating infrastructure or resources.***Lead Stakeholder:** NASNA and its membership**Time Period:** through FY '04**Contributing Stakeholders:** NENA and APCO

Comment: NASNA and its membership, reflect the intent of this action item, and are in a position to assist states in establishing legislation and statewide coordinating infrastructure. NASNA should organize itself to provide that kind of support. NENA and APCO can assist in developing, documenting and distributing model efforts, legislation and policy. NENA's SWAT initiative is particularly focused at this effort.

Critical Factors:

- Funding, time and resources (can not depend upon solely volunteer effort).
- Leadership will be critical.
- Efforts must be focused to specific situations and locations within the state and local arena.

*1.c. Provide leadership to foster new public policy and similar efforts in states without such structure.***Lead Stakeholders:** Governors and their offices, State Legislatures**Time Period:** through FY '04**Contributing Stakeholders:** NGA, NCSL, USTA, NENA, APCO and NASNA

Comment: All of the above Stakeholders have a role to play in this effort. Ultimately the lead role is at the state level. NGA and NCSL can provide guidance, support and

encouragement. So can the public safety community, along with state municipal and county associations, the three national associations and the wireless industry.

- Critical Factors:**
- Experiences and support should be provided state and local governments to help establish appropriate public policy.
 - Efforts must be focused to specific needs and situations.
 - Additional funding and resources may be required to provide comprehensive and effort support.

1.d. *Monitor status and progress of deployment.*

Lead Stakeholders: NENA and APCO

Time Period: through FY '05

Contributing Stakeholders: NASNA

Comment: Good public policy and procedure depends upon good descriptive and factual information. Keeping track of deployment characteristics across the country will be essential to properly coordinating and managing the implementation process. NENA, along with APCO, with support from a variety of sources, are currently under contract to help perform this function.

- Critical Factors:**
- Maintaining and updating this resource will be critical. That may require additional resources beyond 2003.
 - Self-reporting of status information and data will be helpful.

1.e. *Develop white paper on the advantages and disadvantages of statewide 9-1-1 institutions.*

Lead Stakeholders: NASNA and CTIA

Time Period: FY '03 (3rd Qtr)

Contributing Stakeholders: NENA, APCO, NGA, NCSL

Comment: While ultimately acknowledging the inherent advantages of statewide coordination this paper should also reflect the potential disadvantages of focusing implementation, coordination and oversight at the state level. Special attention should be specifically focused in the areas of local control and governance, and the distribution of wireless revenues for the purpose of cost recovery. Parochial interest notwithstanding, ideally the intent of this action item should be to provide a fair assessment of the advantages and disadvantages of statewide coordination.

- Critical Factors:**
- Review should not only address coordination options, but implementation and funding options as well.
 - Timing will be important.
 - NENA's SWAT Initiative will explore advantages and disadvantages of various funding options.

*1.f. Educate local stakeholders***Lead Stakeholders:** Steering Council**Time Period:** through FY '04**Contributing Stakeholders:** Steering Council members, Expert Working Group members**Comment:** This task involves the products of this "Priority Action Item" and their implementation through member constituencies, state, regional and local memberships, as appropriate. A variety of models may be described, reflecting various approaches to program implementation and coordination. NENA's and APCO's current contract with DOT, along with NENA's SWAT Initiative, APCO's Public Safety Foundation, and other resources can contribute.**Critical Factors:**

- To some extent, assistance under this item must be focused to specific states and their local characteristics.
- Additional resources and funding may be required.

*(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 between 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 between 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 decision-makers 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 in which to measure quality of service that are easily understood and for which data can be collected.

Resource Stakeholders

There are many government stakeholders, including:

- Federal Communications Commission;
- DOT;
- American Association of State Highway Transportation Officials (AASHTO)
- State 9-1-1 Coordinators (most are members of National Association of State Nine-One-One Administrators – NASNA);
- National Association of Counties (NACO);
- United States Telephone Association (USTA), and related state telephone associations;
- County 9-1-1 Coordinators (most are members of National Emergency Number Association – NENA);
- County Commissioners;
- Municipalities;
- Wireless carriers;
- 9-1-1 network service providers;
- CPE vendors; and
- Other 9-1-1 service providers (e.g. telematics service providers).

Action Plan by Task

2.a. *Identify leads for convening stakeholders and define roles and responsibilities.*

Lead Stakeholders: NASNA and NGA

Time Period: FY '03 (3rd Qtr)

Comment: It is important that appropriate leads for convening stakeholders be identified, and that roles and responsibilities are defined. NASNA and NGA represent state-level organizations that must be part of any implementation process. Other stakeholders will also be identified.

Critical Factors:

- Identify appropriate divisions/individuals within NASNA and NGA.
- May require additional dedicated resources to support lead stakeholder role (APCO's Public Safety Foundation may be a possible source).

2.b. *Develop a mini-plan, including a "roadmap" for stakeholders.*

Lead Stakeholders: NENA and APCO

Time Period: FY '03 (3rd Qtr)

Contributing Stakeholders: NGA, NASNA, AHA, CTIA, USTA and AASHTO

Comment: This mini-plan will guide the work to be accomplished. It will serve as a “roadmap” for all stakeholders that identifies steps to be taken by public and private partners that provide a path to wireless E9-1-1 deployment. It will include a Gantt Chart of tasks and milestones, best methods to convene all stakeholders (workshops, summit-type meeting, web conferencing), and target dates that may coincide with DOT schedules for expert committee and steering committee meetings. Parallel efforts by other general public/special interest groups will be recognized and to the extent possible, incorporated into the mini-plan.

Critical Factors: – NENA will be the lead association for the mini-plan. This is consistent with the DOT project.

2.c. Identify appropriate parties.

Lead Stakeholder: NENA, APCO and NASNA

Time Period: FY '03 (2nd Qtr)

Comment: This task will identify appropriate parties at each governmental level, with the product being a list of organizations and individuals to represent each entity. Private-sector stakeholders will also be identified.

Critical Factors: – Activities under the DOT Wireless E9-1-1 Initiative have identified stakeholders, which will form the first-cut list of appropriate parties.
– Additional stakeholders may need to be identified.

2.d. Determine method(s) to involve all stakeholders.

Lead Stakeholder: NENA, NGA and NACO

Time Period: FY '03 (3rd Qtr)

Contributing Stakeholder: DOT

Comment: Identify events (e.g. conferences) where we can “piggyback” on attendees already convening. Prepare single guidance document for all states/counties.

Critical Factors: – Will meet with NGA and NACO to accomplish this task.
– Funding and other resources may be a factor.

2.e. Develop agenda for each event.

Lead Stakeholders: NENA and APCO

Time Period: FY '03 (3rd Qtr)

Comment: Agendas for each event will be targeted to all stakeholders involved, and what would be accomplished in each respective region.

Critical Factors: – DOT project staff will lead this effort.

2.f. Schedule meetings and hold events.

Lead Stakeholders: Government agencies and private-sector partners

Time Period: through FY '04

Contributing Stakeholders: NENA, APCO, AASHTO and NASNA

Comment: Events may include meetings, workshops, and web conferences. Following each event, major findings will be documented and distributed to all interested parties.

Critical Factors: – A detailed calendar of meetings and events will be prepared by the DOT project staff.

2.g. Monitor implementation of stakeholder convening actions

Lead Stakeholders: NASNA

Time Period: through FY '04

Comment: Over time stakeholders will implement various actions to implement wireless E9-1-1. This subtask entails monitoring those actions and their positive impact on implementation. Progress will be reported back to all stakeholders so that successes can be shared among all parties.

Critical Factors: – NASNA will appoint a working group to monitor implementation and will develop a reporting mechanism. May require support from NENA and APCO.

– May require additional funding and resources.

(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 or the carrier. By FCC rules this is a state and local issue, not a federal issue. The barrier 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 forty 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 of which 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 implementations. 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 see if that is 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 if it is working and if 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 see if it is working and if it can be improved.

Resource Stakeholders

- PSAP officials;
- Wireless Carriers;
- Emergency Services Interconnection Forum (ESIF);
- Local Exchange Carriers;
- American Association of State Highway Transportation Officials (AASHTO);
- National Association of Regulatory Commissions (NARUC);
- National, Regional, and Rural wireless carriers;
- National Association of State Nine-One-One Administrators (NASNA), and members;
- National Governors Association (NGA);
- National Conference of State Legislatures (NCSL);
- National Emergency Number Association and Association of Public Safety Communication Officials (NENA and APCO), including Chapter Leadership, and members;
- United States Telephone Association (USTA);
- American League of Cities (NLC), along with state municipal leagues;
- National Association of Counties (NACO), along with state county associations;
- State Governors, and their respective offices; and
- State legislatures, along with relevant Committee leadership.

Action Plan

3.a. Clarify policy as established by the FCC and by precedent.

Lead Stakeholder: FCC

Contributing Stakeholders: ESIF, NENA, APCO and NASNA

Time Period: FY '04 (2nd Qtr)

Comment: The FCC has ruled that the selective router will be the demark for cost splitting, but this ruling needs to be more specific on certain cost items. How the FCC

ruling is applied to the technical or mechanical delivery of a wireless E9-1-1 call (in light of the nature and approach of the ruling) may affect cost recovery responsibility in some states. It is noted that the ESIF is attempting to help address this clarification issue (by clarifying—not developing). Additionally, the issue of only “partial” cost recovery being available to carriers in some states needs to be addressed to prevent this being a roadblock.

Critical Factors:

- More-specific FCC rulings/clarifications as necessary.
- Cost and practice standardization by the industry.

3.b. *Provide education to PSAPs on reasonable expense allocation.*

Lead Stakeholders: APCO, NASNA, NENA, USTA and NARUC

Time Period: FY '04 (3rd Qtr)

Comment: The PSAPs need to know which expenses they can reasonably be expected to cover, which the carriers should cover, and receive guidance that will help them through negotiations with the carriers.

Critical Factors:

- Development of educational material using data from models and successful implementations.
- Establishment of cost models by wireless carriers.
- Development and distribution of upgrade guidelines (equipment needs, software needs, network requirements, cost estimates).
- Cooperative, and coordinated efforts by public safety agencies in providing education opportunities and materials.
- Funding methods to allow low-cost symposiums/forums for PSAPs to attend.
- Knowledgeable writers to develop articles for publication, to explain technical subject matter in laymen's terms, and wide publication of these articles.

3.c. *Educate PSAPs about their responsibilities in Phase II implementation.*

Lead Stakeholders: APCO, NENA

Time Period: FY '04 (3rd Qtr)

Comment: Much confusion still exists regarding what actions need to be taken, which expenses each party may incur, and what how much is a reasonable amount to pay.

Critical Factors:

- Cooperative, and coordinated efforts by public safety agencies in providing education opportunities and materials.
- Funding methods to allow low-cost symposiums/forums for PSAPs to attend.

3.d. *Develop guidelines and tools to assist in generating cost estimate analyses.*

Lead Stakeholders: APCO, NENA and NARUC

Time Period: FY '04 (1st Qtr)

Comment: Development of a “cook book” on implementing Phase II will be very beneficial to agencies involved in the learning process.

Critical Factors:

- Development of educational material using data from models and other successful implementations.
- Establishment of cost models by carriers.
- Development of upgrade guidelines.

3.e. *Prepare and publish some example cost estimates as guidelines.*

Lead Stakeholders: DOT, APCO, AASHTO and NENA

Time Period: FY '04 (1st Qtr)

Comment: As systems are implemented we should gather the actual costs of the various components and make them available to other agencies, identifying where appropriate that these may vary with local tariffs.

Critical Factors:

- Development of educational material using data from models and other successful implementations.
- Establishment of cost models by carriers.
- Development of upgrade guidelines.

3.f. *Identify potential funding sources and make information available to PSAPs.*

Lead Stakeholders: DOT, APCO, AASHTO and NENA

Time Period: FY '04

Comment: From a broad perspective identify potential funding sources (like APCO's Public Safety Foundation, and other public and private sources). Make this information available through websites and distribution channels used for all educational information.

Critical Factors:

- Identification of useable information.
- Wide dissemination of this information, particularly to PSAPs outside of the “mainstream.”

(4) *Initiate Program of Knowledge Transfer and Outreach*

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 a high priority is to quickly and effectively accomplish knowledge transfer of successful wireless E9-1-1 implementation programs to PSAPs about to embark on their own programs. Knowledge transfer and outreach programs are a proven method to accelerate 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 successful programs for Wireless Phase I, and several for Wireless Phase II, most notably by the State of Rhode Island and St. Clair County, Illinois. 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:

- Early adopters (e.g. Rhode Island and St. Clair County, IL);
- Government agencies (e.g. FCC, DOT);
- American Association of State Highway Transportation Officials (AASHTO);
- State 9-1-1 Coordinators (most are members of National Association of State Nine-One-One Administrators – NASNA);
- County 9-1-1 Coordinators (most are members of National Emergency Number Association – NENA);
- County Commissioners;
- Emergency Service Interconnection Forum (ESIF);
- Wireless carriers;
- Local Exchange Carriers;
- Municipalities; and
- Third Party Providers.

Action Plan by Task

4.a. *Determine methods for knowledge transfer and outreach.*

Lead Stakeholders: AASHTO, NENA and APCO

Time Period: FY '03 (1st Qtr)

Comment: Methods may include written “how-to” products similar to those guidelines already prepared by NENA, white papers on key issues, video tapes, and workshops/seminars. A 12-15 month schedule of when and how these methods will be carried out will be developed.

Critical Factors: DOT project staff will determine methods and develop a 12-15 month schedule.

Funding for widespread distribution of products may become an issue.

4.b. *Identify early adopters and document their experiences.*

Lead Stakeholders: NASNA, NENA and APCO

Time Period: FY '03 (3rd Qtr)

Comment: Early adopters include the State of Rhode Island, St. Clair County (IL), and those who have already requested Phase II. Their experiences will be documented - what went right, pitfalls to avoid lessons learned, helpful hints to others.

Critical Factors: Ability to identify and contact early adopters. Procedures to do this are already in place with NASNA members.

May require support from APCO and NENA.

May require additional funding and resources.

4.c. *Prepare and distribute white papers, videos, and other printed and electronic materials to all stakeholders.*

Lead Stakeholders: PSAPs

Time Period: through FY '04

Contributing Stakeholders: NENA, APCO and DOT

Comment: White papers and videos are being prepared by NENA under the scope of the DOT project. These materials will be distributed to PSAPs and other stakeholders from lists developed by NENA and DOT. Outreach to the general public and other special interest groups, such as the AHA and NHLBI, will also be accomplished in this task. Knowledge transfer and outreach will be reviewed on a quarterly basis. This in itself is another form of knowledge transfer important to DOT and other stakeholders

Critical Factors: Timely preparation of white papers.

Distribution lists will be maintained as part of the DOT project.

Costs of video distribution need to be determined.

4.d. *Produce a "guidebook" on Phase II deployment*

Lead Stakeholders: PSAPs

Time Period: FY '03 (3rd Qtr)

Comment: A guidebook for PSAPs and other stakeholders on how to achieve Phase II deployment will be written and distributed under this Action Plan.

Critical Factors: NENA and APCO will prepare the guidebook, with input and review by appropriate stakeholders.

4.e. *Provide expert consulting team to support knowledge transfer and outreach*

Lead Stakeholders: DOT

Time Period: through FY '04

Comment: Expert consultants will be available to assist PSAPs with their readiness for wireless E9-1-1 implementation.

- Critical Factors:** NENA's DOT project staff will be the core of the technical outreach team.
Will require additional funding and resources.

(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 in an efficient and productive way. 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 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

- National Association of State Nine-One-One Administrators (NASNA);
- National Emergency Number Association and Association of Public Safety Communication Officials (NENA and APCO);
- National Governors Association (NGA);
- Federal Communications Commission (FCC);
- Emergency Services Interconnection Forum (ESIF);
- National Association of County Officials NACO;
- United States Telephone Association (USTA), and related state telephone associations;
- Wireless Carriers operating in the region;
- American Association of State Highway Transportation Officials (AASHTO); and
- DOT.

Action Plan by Task*5.a. Develop deployment characteristics.***Lead Stakeholder:** NASNA, NGA, and NACO**Time Period:** FY '03 (4th Qtr)**Contributing Stakeholders:** NENA, APCO, AASHTO, USTA and CTIA**Comment:** Identify wireless customer quantities and growth rates on a per-County (or equivalent) basis. Include factors for major highway pass-through and commuter movement between rural and metro areas. Identify present County deployment status. (NENA will have baseline deployment status developed under the NENA-DOT contract in 2002).**Critical Factors:** Customer and calling rate information must be developed, by cell tower set associated with Counties, from wireless carriers.

Data on commuter and highway traffic rates from DOT groups.

Reporting capabilities from the NENA/DOT Survey data base.

Potential additional funding to support above.

*5.b. Develop project plans and deployment sequence by state, where they do not currently exist.***Lead Stakeholders:** NASNA, NENA, and APCO**Contributing Stakeholders:** NCSL, NGA, NACO and CTIA**Time Period:** through FY '03**Comment:** These plans will guide the work to be accomplished. They will include a Gantt chart of tasks and milestones, best methods to convene government stakeholders (workshops, conference calls, and web-based meetings), and target dates. Convene stakeholders by state, and, where needed, identify a lead team from the stakeholder groups, who will then define the wireless deployment state project plan and schedule, based on activities below and additions.**Critical Factors:** Model project plan development.

Summary of best practices for stakeholder collaboration methods.

Funding to accomplish above.

*5.c. Identify rural area strategies.***Lead Stakeholder:** NASNA, NGA, AASHTO and NACO**Time Period:** FY '03 (4th Qtr)**Contributing Stakeholders:** NENA, APCO, CTIA, USTA and RCA**Comment:** Identify strategies for alternate organizational, infrastructure and cost recovery/funding models that can be successfully applied for rural area support.

Critical Factors: Modification of model project plans to match rural factors.
 Summary information on best practices for rural stakeholder collaboration methods.
 Funding work required as necessary.

5.d. *Identify infrastructure needs, and PSAP operational needs.*

Lead Stakeholders: NENA

Time Period: FY '04 (1st Qtr)

Contributing Stakeholders: APCO and NASNA

Comment: Identify carriers and 9-1-1 service system providers by County. Identify PSAP, 9-1-1 system, and carrier capability issues, such as network, switching, and data equipment capability, E9-1-1 system upgrade requirements, wireless methodology needs, mapping needs, etc. Identify PSAP call-taking requirements, such as staffing and training, and funding impacts and needs, by County. (NENA will have baseline information developed under the NENA-DOT contract in 2002)

Propose a National policy for call routing, analyze impacts and funding needs for E9-1-1 system upgrade requirements to support call delivery for all service areas (NENA is already working this issue in its Technical Development and SWAT Initiative process).

Critical Factors: Survey and evaluation of remaining info needs, as above.
 Funding may be required to accomplish some of the above.
 Results of the NENA SWAT Team project, expected 1st half, FY '03

5.e. *Identify alternative funding sources and strategies (e.g., rural health program grants)*

Lead Stakeholder: NASNA, NENA and APCO

Time Period: FY '03 (3rd Qtr)

Contributing Stakeholders: NGA, NACO, NENA, and APCO

Comment: The stakeholders would identify available and applicable funding sources, such as federal and state monetary sources concerned with national security, public safety, public health, anti-crime, etc. Develop strategies to investigate and apply for funds, prioritizing actions based on deployment sequence. Establish application of funds specifically to wireless E9-1-1 support functions, within any related state law guidelines. The Monitor Group study under NENA's SWAT initiative is directly focused on this issue and task.

Critical Factors: Survey of available funding sources, and applicability.
 Develop model grants application package, targeted to 9-1-1 support needs.

5.f. *Establish common service agreement/contract*

Lead Stakeholder: NASNA, NENA and APCO

Time Period: FY '04 (1st Qtr)

Contributing Stakeholders: NENA, CTIA, NGA, and NACO

Comment: Coordinate service agreements/contracts across jurisdictions (state-county-municipality).

Critical Factors: Develop national wireless readiness evaluation/communications package (done by ESIF and NENA in Nov 2002).

Carrier voluntary contributions under FCC enforcement actions shifted to national public safety efforts.

Complete development of model service agreements and contracts, with in-out and buy-off by all involved parties (started by NENA in 2002).

Funding as required for above.

(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 it's 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 also a learning process for them as well. The documentation process and the subsequent development of educational case studies is the real value 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
4. PSAP readiness
5. LEC readiness
6. Geography (mix; national location; etc.)
7. Metro/rural
8. Home rule v. centralized State authority
9. Interoperability with public safety.

Resource Stakeholders

- National Association of State Nine-One-One Administrators (NASNA), and members;
- DOT;
- PSAP officials;
- CTIA/USTA/Telephone Service Providers;
- National Governors Association (NGA);
- National Conference of State Legislatures (NCSL);
- American Association of State Highway Transportation Officials (AASHTO);
- National Emergency Number Association and Association of Public Safety Communication Officials (NENA and APCO), including Chapter Leadership, and members;
- Emergency Service Interconnection Forum (ESIF);
- National League of Cities (NLC), along with state municipal leagues; and
- National Association of Counties (NACO), along with state county associations.

Action Plan by Task

6.a. *Establish criteria for selection of model locations.*

Lead Stakeholder: DOT Wireless E9-1-1 Steering Council

Time Period: FY '03 (3rd Qtr)

Contributing Stakeholder: Expert Working Group

Comment: To achieve maximum effectiveness it is important that the models be carefully selected based on their demographics and technical ability to serve as effective role models. Factors that may be included in the selection criteria include:

- i. Leadership
 - Strong statewide
 - Decentralized
 - Progress
 - Rural/urban – state planning
- ii. Cost Recovery
 - Collection/disbursement models
 - Cost estimates policy
- iii. PSAP Readiness

- Funding
 - Education/technical assistance
- iv. Political Considerations
- Federal
 - State
 - Municipal

Critical Factors: Find models well positioned for success.

Models, and their carriers, must show a keen interest in being a role model, willing to document and share their process.

Adequate personnel funded and staffed to accomplish thorough documentation, with acknowledgment and encouragement of this by the implementation team.

6.b. *Establish procedures for collecting and analyzing information from the models.*

Lead Stakeholders: US DOT

Time Period: FY '04 (1st Qtr)

Contributing Stakeholders: APCO, NENA and NASNA

Comment: This task will be critical to the success of this action item, and will require close cooperation between all three associations. Some guidance may be provided by NENA's Strategic Wireless Action Team (SWAT) initiative.

Critical Factors: Identifying critical areas of need by a "high level" team, and conveying this information to the implementation team.

Creation of an "education attitude" in the implementation team.

6.c. *Establish methods of disseminating "lessons learned" to all interested stakeholders.*

Lead Stakeholders: DOT

Time Period: FY '04 (1st Qtr)

Contributing Stakeholder: AASHTO, APCO and NENA

Comment: To be effective the information gleaned, and the resulting conclusions, must be promptly distributed to all parties, including PSAPs, Public Safety Associations, Wireless Carriers, and the FCC.

Critical Factors: Cooperative and coordinated efforts by public safety agencies in providing education opportunities and materials.

Establishing funding methods to allow low-cost symposiums and forums for PSAPs.