



National Broadband Plan: National Purposes Update

Commission Meeting
February 18, 2010

27 days until Plan is due

The National Purposes mandate

American Recovery and Reinvestment Act, §6001(k)(2)(D):

“a plan for use of broadband infrastructure and services in:

- advancing consumer welfare
- civic participation
- public safety and homeland security
- community development
- health care delivery
- energy independence and efficiency
- education
- worker training
- private sector investment
- entrepreneurial activity
- job creation and economic growth
- and other national purposes.”

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Healthcare

Education

Energy and
the environment

Government performance
and civic engagement

Public safety and
homeland security

Economic opportunity

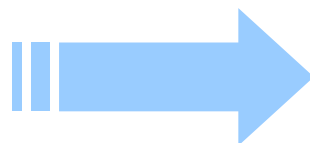
A vision for “high performance America”

- Make government more effective, efficient, and transparent
- Ensure that public investments are aligned and forward-thinking
- Create the conditions for innovation and America's competitive advantage in key strategic areas
- Unlock the value of data for new applications and research

Public safety and homeland security

As a platform for efficient information flow, broadband can change the future of public safety communications

Current State



Future goal



Gaps persist in fully utilizing broadband for public safety and homeland security purposes

Gaps

No nationwide public safety network

Outmoded 9-1-1 system

Outmoded alerting system

Critical infrastructure vulnerabilities

Issues

- No nationwide, interoperable broadband wireless network that is ubiquitous, redundant, and resilient
- Few public safety agencies have access to commercial wireless mobile broadband
- Commercial broadband does not support public safety requirements and is not cost effective

- 9-1-1 services utilize varied legacy communications networks
- Few public safety agencies have access to broadband services to support next-generation 9-1-1

- Current distribution technology limits amount of audio/visual to Americans over broadcast channels
- FEMA has taken steps to develop IPAWS but clear implementation milestones are needed

- Companies reported \$265M+ in cyber crime-related losses
- Communications providers subject to frequent attacks on critical IP-based infrastructure
- Insufficient incentives and safeguards for security of critical communications assets

Framework for recommendations

- 1 **Creating a nationwide interoperable broadband wireless public safety network**
- 2 **Transitioning to a next-generation 9-1-1 system**
- 3 **Developing a comprehensive next-generation alerting system**
- 4 **Enhancing security measures to safeguard networks and core infrastructure**

Creating a nationwide interoperable broadband wireless public safety network

- Ensure network capacity and resiliency
- Leverage commercial technologies to capture economies of scale
- Create an Emergency Response Interoperability Center to ensure interoperability nationwide
- Fund network construction, operation, and evolution

Transitioning to a next-generation 9-1-1 system

- Identify costs and recommend congressional appropriations
- Enact a federal regulatory framework to ensure nationwide standards
- Conduct proceedings to address IP-based communications devices, applications and services for next-generation 9-1-1

Developing a comprehensive next-generation alerting system

- Examine all issues associated with a next-generation alerting system
- Ensure coordination between agencies that have overlapping jurisdictions over alerting

Enhancing security measures to safeguard networks and core infrastructure

Cyber security

- FC • Examine creating voluntary cyber security certification program for communications services providers
- FC • Explore extending outage reporting to broadband service providers
- FC • Create a cyber security information reporting system

Critical infrastructure

- FC • Ensure survivability of critical infrastructure
 - Understand capacity and vulnerabilities of core infrastructure
 - Address networks' preparedness to deal with pandemics or incidents of high network stress/overload
 - Develop priority network access and routing rules
 - Understand reliability and resiliency issues in broadband networks