State of Utah

Response to NTIA Request for Information
[Docket No: 120509050-1050-01]

Introduction

This document represents the response of the State of Utah to the National Telecommunications Information Agency's (NTIA) RFI for *Development of the State and Local Implementation Grant Program for the Nationwide Public Safety Broadband Network (NPSBN)*, which NTIA is required to establish pursuant to the Middle Class Tax Relief and Job Creation Act of 2012 (the Act). The response was formulated by the Department of Technology Services (DTS), Utah Communications Agency Network (UCAN), Utah Broadband Advisory Council, Utah Division of Indian Affairs, Salt Lake City Corporation, members of the Utah State Interoperability Executive Committee (SIEC) and the Utah 911 Committee, and is supported by Governor Gary R. Herbert.

In any public safety emergency or response, communication is a vital tool. It is the common thread that allows agencies to respond in a cohesive and cooperative manner. Whether a natural disaster, fire, police chase, or rescue, the citizens expect their public safety officials to respond quickly, mitigate the trouble and restore order. Part of that response requires good communication. Whether routine or emergency, communication is the key to the success of any public safety operation.

This response is a cooperative effort of these organizations, to state the position of agencies within Utah concerning the future development of a broadband network in cooperation with the First Responders Network Authority (FirstNet). Utah has long prided itself in using cooperative efforts to support public safety communications efforts. From the deployment of the first microwave system in the early 1970's to the current public safety systems in the 150 and 800 MHz networks, resources have been developed with the idea of common infrastructures and provisioning of service. Agencies in Utah have and will continue to plan on working together to formulate the best direction moving forward. The addition of Broadband services in a mobile environment will enhance the capabilities of our agencies and their ability to respond, and will similarly add to citizen engagement during emergency situations.

Over the past ten years, Utah has successfully established several organizations which support the effective development and maintenance of public safety communications. These organizations, some codified in State Statute, have allowed us to utilize available scarce state and federal funding to further communications initiatives. These organizations include:

- **The State Interoperability Executive Committee (SIEC)** which brings together state, local and tribal agencies to develop common communications resources for furthering public safety communications abilities. This action was codified in 2009 to insure the on-going representation of all areas of state and local government and tribal nations.

- **The Utah Communications Agency Network (UCAN)** is an independent quasi-state agency, governed by an Executive Committee serving agencies with public safety communications. This organization has been in place for ten years and was the supporting network for the 2002 Winter Olympic Games. It has since expanded to include coverage statewide and to supplement rural radio networks.

- **The Utah 9-1-1 Committee** has overseen the migration of 9-1-1 services to Wireless Phase II, and the development of shared resources for the delivery of 9-1-1 services to Utah's 38 public safety answering points statewide.

- **The Utah Broadband Advisory Council** was established by the Utah Governor's Office of Economic Development through a grant from NTIA to further broadband deployment and adoption through stakeholder coordination.

As we visualize the future of public safety communications in Utah, we see a multi-faceted approach to developing a network that will be accessible by all agencies who desire it. We believe that the organizational structures now in place give us the best of all options, leveraging shared resources and instituting the most useful and economical solutions possible. Our shared goal is to make the best communications decisions to support our responders and protect our citizens.

We will be supportive of the development of FirstNet, and look forward to the opportunity to cooperatively move forward to develop the national network.

(Steve Proctor, UCAN Executive Director)

The Consultation Process

1) The Act requires FirstNet to consult with local, tribal, State, and regional jurisdictions about the build out of the network. What should States do to prepare to consult with FirstNet?

a) What data should States compile for the consultation process with FirstNet?

- ***Ownership***
- ***Coordinates***
- ***Space availability***
- ***Power***
- ***Technology transmission type (i.e., fiber, microwave, etc.)***
- ***Backhaul capability and availability***
  - ***Public (cellular providers)***
  - ***Private (public safety networks)***
- ***Existing LTE coverage***
- ***Data on possible tower locations for site selection process***

b) Should this activity be covered by the State and Local Implementation grant program?

- ***Yes***

2) The Act requires that each State certify a single officer or governmental body to coordinate the grant fund implementation.

a) Who might serve in the role as a single officer within the State and will it or should it vary for each State?

- ***Grant coordination should be through each State's Administering Agency (SAA)***

b)Who might serve on the governmental body (e.g., public partners, private partners, technical experts, Chief Information Officers, SWIC, finance officials, or legal experts)?

- ***The State Interoperability Executive Committee (SIEC), created by the Governor's Executive Order 2007-0002, and codified at Utah Code § 63F-1-801 and 63F-1-802 (2009), as the Statewide Communications Interoperability Committee.***
- ***Other partners can be brought in 'as needed'***

c) How should the States plan to involve the local entities in the State and Local Implementation grant program?

- ***Utah's SIEC (Utah Code § 63F-1-801) is designed to involve local entities.***

d) How should the States plan to involve the tribal entities in the grant program?

- ***Utah's SIEC (Utah Code § 63F-1-801) is designed to involve tribal entities.***

e) What requirements should be included in the grant program to ensure that local and tribal public safety entities are able to participate in the planning process?

- ***Governing bodies (SIEC in Utah's case) must include representation by local and tribal public safety entities.***

f) How should the State and Local Implementation grant program ensure that all public safety disciplines (e.g., police, sheriffs, fire, and EMS) have input into the State consultation process?

- ***Governing bodies (SIEC in Utah's case) must include representation by multiple public safety disciplines.***

g) How should the State and Local Implementation grant program define regional (e.g., interstate or intrastate) and how might the grant program be structured to facilitate regional participation through the States?

- ***Governing bodies (SIEC in Utah's case) must include representation by multiple local government regions. (In Utah's case, the SIEC has representation by each of the Association of Governments AOGs)***
- ***FEMA RECCWGs should be used to coordinate interstate efforts. These working groups should have no authority over the funding, but should provide assistance as needed or requested.***

h) How should States plan to involve the Federal users and entities located within their States in the grant program?

- ***Federal agencies should be invited to attend and participate in governing body meetings (Utah: SIEC). As with the RECCWG (above), federal agencies should have no authority over the actual funding decisions of the grants.***

3) FirstNet may request information from the States regarding existing infrastructure that could be used in the network.

a) Given these interrelated activities, how should the State and Local Implementation grant program be used by States to assist in gathering the information to consult with FirstNet?

- ***Reimburse staffing costs, to include the use of consultants and technical experts, to:***
  - ***Identify current public safety broadband usage***
  - ***Create a database of all available communication sites***
    - ***Ownership***
    - ***Coordinates***
    - ***Space Availability***
    - ***Power***
  - ***Backhaul capability and availability (i.e., fiber, microwave, etc.)***
    - ***Public (cellular providers)***
    - ***Private (public safety networks)***
  - ***Existing LTE coverage.***
- ***Reimburse hardware/software and/or usage costs related to gathering and housing the collected data.***

b) Should consistent standards and processes be used by all States to gather this information? If so, how should those policies and standards be established? What should those policies and standards be?

- ***Yes***
- ***By NTIA – because NTIA will be writing the RFP.***
- ***NTIA is in the best position to develop nationwide policies and standards relative to the grant program.***

c) What time period should NTIA consider for States to perform activities allowed under the grant program as it relates to gathering the information to consult with FirstNet?

- ***No comment***

Existing Public Safety Governance and Planning Authorities

4) States have already established planning and governance structures such as an SIEC and Statewide Interoperability Coordinators.

a) What is the current role of these existing governance structures in the planning and development of wireless public safety broadband networks?

- ***Utah's SIEC duties and powers include (Utah Code § 63F-1-802):***
  - ***"coordinate statewide efforts for implementation of interoperable statewide voice and data networks;***

- ***improve data and information sharing and coordination of multi-jurisdictional responses;***
- ***evaluate current technologies and determine if they are meeting the needs of agency personnel in respective service areas;***
- ***develop and recommend short- and long-term proposals for future communication needs."***
- ***Pursuant to Utah Code § 63F-1-801, the governor shall appoint… 25 committee members:***
  - ***State CIO***
  - ***Representative from:***
    - ***Each of the five counties of the first or second class***
    - ***Six Associations of Government from rural Utah***
    - ***Utah Communications Agency Network***
    - ***Native American tribes***
    - ***Utah National Guard***
    - ***Association that represents urban security efforts***
    - ***Associations of:***
      - ***Chiefs of Police***
      - ***Sheriffs***
      - ***Fire Chiefs***
  - ***Executive Directors of:***
    - ***Department of Public Safety***
    - ***Department of Transportation***
    - ***Department of Corrections***
    - ***Department of Natural Resources***
    - ***Department of Health***
    - ***Department of Technology Services***

- ***The Utah Communications Agency Network (UCAN) was established in Utah Code Title 63C, Chapter 7:***
  - ***"The Utah Communications Agency Network is an independent state agency and not a division within any other department of the state." (Utah Code § 63C-7-201)***
  - ***UCAN has the power to "enter into agreements with public agencies, the state, and federal government to provide communications network services on terms and conditions it considers to be in the best interest of its members." (Utah Code § 63C-7-202)***
  - ***"The executive committee shall consist of the following 17 individuals:***
    - ***12 member representatives elected by the board at its annual meetings; and five state representatives." (Utah Code § 63C-7-205)***

- ***The Utah 911 Committee Duties and Powers (Utah Code § 53-10-602) include:***
    - ***Review and make recommendations on the implementation of a unified statewide wireless and land-based E9-1-1 emergency system;***
        - ***Specific technology and standards for the implementation of a unified statewide wireless and land-based E9-1-1 emergency system;***
        - ***Emerging technological upgrades;***
        - ***Mapping systems and technology***
    - ***Pursuant to Utah Code § 53-10-601, the Utah 911 Committee consists of the following 18 members:***
        - ***A representative from:***
            - ***Each of the five counties of the first or second class (Salt Lake, Davis, Utah, Weber and Washington)***
            - ***Each of the Six Associations of Governments***
                - ***Bear River***
                - ***Uintah Basin***
                - ***South East***
                - ***Six County***
                - ***Five County***
                - ***Mountainlands, not including Utah County***
            - ***Representatives from:***
                - ***A local exchange carrier***
                - ***A rural incumbent local exchange carrier***
                - ***(2) Cellular providers***
                - ***Department of Public Safety***
                    - ***One who represents urban***
                    - ***One who represents rural***
                - ***Department of Technology Service***

b) What actions have the States' governance structures (*e.g.*, SWIC, SIGB, or SIEC) taken to begin planning for the implementation of the nationwide public safety broadband network?

- ***Developed broadband subcommittee to:***
    - ***increase the committee's awareness of developments with the NPSBN efforts***
    - ***Make recommendations for updating Utah's SCIP to include broadband initiatives***
    - ***Inform local government participants of developments associated with the NPSBN***
    - ***Support the nomination of a local public safety leader to serve on the TAC committee***

- ***Support the recommendation of a local public safety leader to serve on the FirstNet Board***
- ***Coordinate efforts with the Utah Broadband Advisory Council***

c) Can these existing governance structures be used for the PSBN, and if so, how might they need to change or evolve to handle issues associated with broadband access through the Long Term Evolution (LTE) technology platform?

- ***Yes***
- ***The SIEC broadband subcommittee has been formed to address such issues and can invite subject matter experts to participate as necessary.***
  - ***The Utah Broadband Project (a State Broadband Initiative program) has experience coordinating with broadband service providers on a local and statewide basis. The Broadband Project also has experience gathering and validating data on broadband availability.***
  - ***The Utah 911 Committee regularly interfaces with public safety agencies throughout the state, and has successfully promoted the implementation of a statewide 9-1-1 FCC Phase Two wireless infrastructure.***

d) What is or should be the role of the Statewide Communications Interoperability Plans (SCIPs) in a State's planning efforts for the nationwide public safety broadband network?

- ***Complementary. The SCIP document and the planning efforts should reflect the same vision. Initiatives within the SCIP should support the vision of the NPSBN with appropriate objectives and milestones.***

e) What actions do the States need to take to update the SCIPs to include broadband?

- ***States should already have methodologies for keeping their SCIP plans current. These methodologies should include keeping the SCIP current with broadband and other emerging technologies.***

f) Should the costs to change or evolve existing governance and Statewide Plans be eligible in the new program?

- ***No. The limited grant funding needs to be targeted at a more specific purpose.***

g) Should the maintenance of those existing governance bodies and plans be eligible in State and Local Implementation grant program?

- ***Yes, but the reimbursement requests should be specific to planning of the NPSBN.***

Leveraging Existing Infrastructure

5) How should States and local jurisdictions best leverage their existing infrastructure assets and resources for use and integration with the NPSBN?

a) How should State and local jurisdictions plan to use and/or determine the suitability of their existing infrastructure for integration into the NPSBN?

- ***There is not enough information to answer this question. We do not yet know the space and support requirements of the LTE technology – particularly since a vendor has not been awarded a contract yet.***

b) What technical resources do States have available to assist with deployment of the nationwide public safety broadband network?

- ***Utah has two statewide organizations that supply both public safety two-way radio and microwave backhaul technologies.***
- ***Utah Communications Agency Network (UCAN)***
- ***Department of Technology Services (DTS)***
- ***The DTS Automated Geographic Reference Center (AGRC) has staff and technology capable of mapping existing and future resources.***
- ***Utah 911 Committee***
- ***The Utah Broadband Advisory Council and Utah Broadband Project***

c) How will States include utilities or other interested third parties in their planning activities?

- ***As the planning needs require, utilities and other entities that can use public safety spectrum will be asked to participate in SIEC meetings.***

d) Should NTIA encourage planning for the formation and use of public/private partnerships in the deployment of the nationwide public safety broadband network? If so, how?

- ***Yes***
- ***The RFP to be developed by FirstNet should include the possible use of public/private partnerships.***

6) How can Federal, State, tribal, and local infrastructure information be incorporated into the RFP process?

a) How would States plan for this integration?

- ***A new database will need to be established to capture as much information as possible.***

b) Should States serve as clearinghouses or one-stop shops where entities bidding to build and operate portions of the FirstNet network can obtain access to resources such as towers and backhaul networks? If so, what would be involved in setting up such clearinghouses?

- ***NTIA/FirstNet should be given authority to require either a central database with state logins or each state should be given very specific database requirements.***

- ***The NTIA's State Broadband Initiative (SBI) program is a good model for building a relevant, nationwide technology oriented dataset. States have formed partnerships to be the 'boots on the ground' to lift and maintain a data acquisition process that conforms to clearly-established, national content expectations as well as processes for data validation, verification, aggregation, and submission. Making web and map services available to interested parties at a national level is also an important component to the SBI program's success. However, states should also be encouraged to build custom information components specifically needed to meet localized challenges and to otherwise work together to create best practices that expand upon the data gathering analysis that will happen nationally.***

c) Should setting up a clearinghouse be an eligible cost of the grant program?

- ***Only if states are required to create and host their own database.***

State and Local Implementation Grant Activities

7) What are some of the best practices, if any, from existing telecommunications or public safety grant programs that NTIA should consider adopting for the State and Local Implementation grant program?

- ***PSIC Grant Program***
  - ***Interactions and operations between SIEC and state SAA are already successful established***
  - ***NTIA is already experienced with this process***
  - ***Local government entities are familiar with the process***

8) What type of activities should be allowable under the State and Local Implementation grant program?

- ***Mapping***
- ***Data collection***
- ***Data entry***
- ***Data validation and verification***
- ***Planning***

- ***Education***
- ***Outreach***
- ***Legal issues***

9) What types of costs should be eligible for funding under the State and Local Implementation grant program (*e.g.*, personnel, planning meetings, development/upgrades of plans, or assessments)?

- ***Allowable activities (#8 above) should be reimbursable***
  - ***Labor***
  - ***Travel***
  - ***Hardware***
  - ***Software***
- ***Consulting services that support allowable activities in #8 above***

a) Should data gathering on current broadband and mobile data infrastructure be considered an allowable cost?

- ***Yes, should be required to coordinate with each state's SBI program***

b) Should the State and Local Implementation grant program fund any new positions at the State, local, or tribal level that may be needed to support the work to plan for the nationwide public safety broadband network? If so, what, if any, restrictions should NTIA consider placing on the scope of hiring and the type of positions that may be funded under the grant program?

- ***No***

10) What factors should NTIA consider in prioritizing grants for activities that ensure coverage in rural as well as urban areas?

- ***Backhaul capabilities for rural areas***
- ***Major transportation corridors are often in very rural areas***
- ***Populations from urban areas recreate and travel in rural areas; therefore rural areas often have critically low coverage capabilities***
- ***National Parks and other outdoor recreational areas that attract tourism are usually located in rural geography***
- ***Firefighting in rural areas requires a coordinated federal, state and local government response across multiple disciplines***

11) Are there best practices used in other telecommunications or public safety grant programs to ensure investments in rural areas that could be used in the State and Local Implementation grant program?

- ***NTIA's BTOP grant program***
- ***PSIC***

- ***Utah 911 Committee Grant Program***
    - ***Utah Code § 53-10-605 authorizes the Utah 911 Committee to grant state agencies and local entities funds to enhance the 9-1-1 emergency services with a focus on areas or counties that do not have E9-1-1 services. The Utah 911 Committee receives a portion of the Statewide Unified E9-1-1 Emergency Services Fund and provides grant opportunities to agencies and local entities to provide a statewide, unified, wireless E9-1-1 service available to public service answering points, with emphasis on grants to counties of the third through sixth class the amount dedicated for rural assistance. Grants to rural counties do not require matching funds; grants to counties if the first through third class have a fund matching requirement of 10% to 30%. The Utah 911 Committee grant program has expedited implementation of statewide enhanced 9-1-1 service and the appropriate maintenance and upgrade of the public safety answering point equipment.***

12) In 2009, NTIA launched the State Broadband Initiative (SBI) grant program to facilitate the integration of broadband and information technology into state and local economies.

a) Do States envision SBI state designated entities participating or assisting this new State and Local Implementation grant program?

- ***Yes***
- ***Those working within the SBI program(s) are very familiar with the current state of broadband deployment, they have experience with gathering broadband availability data, and have experience interfacing with broadband providers and other state and local level stakeholders.***

b) How can the SBI state designated entities work with States in planning for the nationwide public safety broadband network?

- ***Active participation on the SIEC broadband subcommittee.***
- ***The SBI office can also examine the aggregation of commercial broadband resources that would work in connection with deployment of the NBPSN where it makes sense for multiple anchor institutions, such as education, economic development, health care or transportation.***

13) What outcomes should be achieved by the State and Local Implementation grant program?

- ***Let FirstNet Decide***

a) Are there data that the States and local jurisdictions should deliver to document the outcomes of the grant program?

b) If so, how should they be measured?

c) Who should collect this information and in what format?

d) What data already exist and what new data could be gathered as part of the program?

14) The U.S. Department of Homeland Security's Office of Emergency Communications (OEC) has developed the following tools through its Technical Assistance Program available at http://www.publicsafetytools.info, including: (1) Mobile Data Usage and Survey Tool – Survey process to document the current-state mobile data environment, in preparation for a migration to LTE; (2) Statewide Broadband Planning Tool – Template and support on Statewide strategic broadband planning issues designed to serve as an addendum to the SCIP; (3) Frequency Mapping Tool – Graphical tool to display FCC license information and locations including cellular sites within a jurisdiction; and (4) Communications Assets Survey and Mapping Tool (CASM) – Data collection and analysis tool for existing land mobile radio assets. Should States be encouraged to utilize tools and support available from Federal programs such as those developed by OEC? Are there other programs or tools that should be considered?

- ***Yes. We should not splinter away from current resources unless we intend to completely replace them.***
- ***No known other tools***

15) Do the States have a preferred methodology for NTIA to use to distribute the grant funds available under the State and Local Implementation grant program?

a) Should NTIA consider allocating the grant funds based on population?

- ***No. Funding should not be solely based on population. Populations travel and recreate through rural areas. Rural areas can get by with smaller node density, but minimal coverage must exist.***

b) What other targeted allocation methods might be appropriate to use?

The allocation of FirstNet planning grant funds should not be made based on a single factor such as population or land area. Rather, the allocation formula should be based on easily obtainable data, characterizing factors that reflect the difficulty of planning and deploying the FirstNet network.

As all states will incur a portion of the overall FirstNet planning costs for project initiation, management, reporting efforts that do not scale to measures of size, NTIA is strongly encouraged to also include a fixed amount, per state, within the formula that determines funding allocation.

Population, while a good indicator for anticipated network volumes, is a poor indicator with regard to the challenges associated with network build out as LTE-based services are already widely available in the most densely populated areas of the country that offer attractive markets to private providers.

Coverage area will be a key component of FirstNet's success but the overall area or size of a state can be a misleading indicator as many large areas exist that are undeveloped, devoid of economic and other attractions, and/or inaccessible. These areas should receive a lower priority relative to areas where FirstNet will be used much more frequently such as transportation corridors, settlement areas, recreation areas, agricultural areas, etc. With that said, large scale natural disasters that do not respect human boundaries, such as wildland fires and hurricanes, will require FirstNet-based response in areas seen otherwise as low priority for commercial providers.

Factors that better reflect the challenges of building and operating FirstNet that should be considered for inclusion in a suitable allocation formula may include:

- ***Miles of federal and state highway system (and possibly miles of federal aid eligible roads) not currently served by LTE class mobile broadband service;***
- ***Square miles of populated areas not currently served by LTE class mobile broadband service;***
- ***Areas with identified back haul deficiencies;***
- ***Number of communities with high economic need and rurality scores according to the criteria developed by the USDA Community Connect program;***
- ***Terrain variability in priority areas; and***
- ***Public lands in priority areas that will trigger NEPA and other more detailed planning/permitting processes for new siting and construction.***

The data necessary to use any of these identified measures in the allocation formula are readily available nationwide from the Census Bureau, US DOT, USGS, FCC, and other federal agencies.

c) Should NTIA consider phasing the distribution of grant funds in the new program?

- ***Yes, if***
  - ***NTIA intends to introduce new requirements along the way;***
  - ***A state can demonstrate that they have established maturity in the planning and implementation of statewide networks. These states could serve as an example for other states by establishing best practice models to emulate in a later phase of funding.***

State Funding and Performance Requirements

16) What role, if any, should the States' Chief Information Officer (CIO) or Chief Technology Officer (CTO) play in the State and Local Implementation grant program and the required consultations with FirstNet? How will these different positions interact and work with public safety officials under the State and Local Implementation grant program?

- ***The State CIO or CTO is in a unique position to merge what are normally two separate technology efforts: Two-way radio and data networks.***
- ***By state statute, Utah's CIO is the chair of the SIEC, which has broad representation across geography, agency, and disciplines.***
- ***The CIO/CTO should be involved in all planning efforts.***

17) The Act requires that the Federal share of the cost of activities carried out under the State and Local Implementation grant program not exceed 80 percent and it gives the Assistant Secretary the authority to waive the matching requirement, in whole or in part, if good cause is shown and upon determining that the waiver is in the public interest. As NTIA develops the State and Local Implementation grant program, what are some of the factors it should consider regarding States' ability to secure matching funds?

- ***We concur with the response provided by South Dakota:***
  "In-kind match offset for facilities, technical assistance, and other services provided by the states to the project should be considered."

18) What public interest factors should NTIA consider when weighing whether to grant a waiver of the matching requirement of State and Local Implementation grant program?

- ***No Comment***

Other

19) Please provide comment on any other issues that NTIA should consider in creating the State and Local Implementation grant program, consistent with the Act's requirements.

- ***No Comment***