

National States Geographic Information Council (NSGIC) responses to NTIA's *Request for Information* on the Development of the State and Local Implementation Grant Program for the Nationwide Public Safety Broadband Network

Docket No: 120509050–1050–01

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The following response is offered by the National States Geographic Information Council (NSGIC). NSGIC is a 501 (c) (6) organization committed to efficient and effective government through the prudent adoption of geospatial information technologies. Voting members include the senior state geographic information system managers and coordinators. Other members come from federal agencies, local government, the private sector, academia and other professional organizations. NSGIC members include nationally and internationally recognized experts in geospatial information technologies and policy. NSGIC provides a unified voice on geographic information and technology issues, advocates State interests and supports its membership in their statewide initiatives.

We would like to begin with some overarching concerns in response to Question 19. Our responses are written in blue text.

“OTHER” Question 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.

NSGIC is interested in FirstNet because of the connection to the State Broadband Initiative (SBI). While our members are not typically responsible for the deployment of communications technologies or for the maintenance of broadband infrastructure, many have been grantees or cooperators on SBI, and will be logical collaborators on FirstNet planning activities. Seventeen States also received SBI funds for addressing. Geocoded addresses will be a critical component of dispatch and response activities during the implementation of Next Generation 911. Our members are the leading state experts on state GIS program coordination and they will have a role in FirstNet for reasons related to efficiency and cost savings.

FirstNet planning should be done using GIS. Many states already have an inventory of state/local assets available for FirstNet construction. Others will need to develop the appropriate information. These data will support management decisions, users, governance and maintenance of FirstNet in each state, because GIS is the Velcro that will connect FirstNet to many other pieces of critical information.

The GIS data gathered for FirstNet plans will support many other public purposes, including general Public Safety activities, Emergency Dispatch, NG911, Critical Infrastructure mapping and protection planning. There are also a myriad of other uses for addresses, base layers, etc. in all government programs.

GIS data also can, and should be the basis for the transparency and accountability of FirstNet. State GIS Clearinghouses already exist, and can be extended for use in FirstNet planning activities. We recommend development of a public web mapping site similar to the National Broadband Map for FirstNet. We can avoid the “silos” that are a legacy of Public Safety dedicated funding, and develop rational policies on GIS data in the public domain, or when necessary due to data sensitivity, protected from disclosure.

NSGIC will support the states to assist NTIA with the GIS standards, policies, templates, etc. that will be required for implementation of FirstNet. We did this with the SBI program through development of a Geodatabase model and other technical assistance. We believe that our effort helped get the SBI effort off to a quick start.

The Consultation Process

1. Section 6206(c)(2) of the Act directs FirstNet to consult with regional, State, tribal, and local jurisdictions about the distribution and expenditure of any amounts required to carry out the network policies that it is charged with establishing. This section enumerates several areas for consultation, including:

- (i) Construction of a core network and any radio access network build-out;*
- (ii) placement of towers;*
- (iii) coverage areas of the network, whether at the regional, State, tribal, or local level;*
- (iv) adequacy of hardening, security, reliability, and resiliency requirements;*
- (v) assignment of priority to local users;*
- (vi) assignment of priority and selection of entities seeking access to or use of the nationwide public safety interoperable broadband network; and*
- (vii) training needs of local users.*

What steps should States take to prepare to consult with FirstNet regarding these issues?

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

States should complete a comprehensive inventory of towers (and relevant attribution such as power sources, ownership, antennas, etc.) and spatial representation of their coverage areas. Additionally, the tower inventory information collected should be required to be submitted to the state’s designated SBI contractor for inclusion in the statewide broadband coverage data analysis.

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

This should be resourced as part of the planning process with grant funds. Prioritizing use by entities can be done based on broadband data collected through the SBI.

2. The Act requires that each State certify in its application for grant funds that the State has designated a single officer or governmental body to serve as the coordinator of implementation of the grant funds.

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

Designated Entities should exist within state government (not an external contractor). This is necessary because of the cross-agency nature of the planning that will be required for FirstNet.

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 inventory for planning should be connected with the GIO/State GIS Coordination Office, if not actually run out of the GIOs office. Other representation in the process may vary depending on different state organizations.

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

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

Many states are already connected with tribal communities through their GIS coordination efforts. At minimum, these coordination efforts should be recognized and leveraged.

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?

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?

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?

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

It would be good to have one designated federal coordinating agency. A lead Federal agency or liaison to coordinate the activities other Federal agencies could be specified by NTIA or could be arranged on a state-by-state preferential basis.

3. The Act contemplates that FirstNet will consult with States regarding existing infrastructure within their boundaries, tower placements, and network coverage, which FirstNet can use to develop the requests for proposals called for by the Act. The States, however, will need time and funding to collect the necessary information before they are ready to consult with FirstNet.

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?

The State and Local Implementation Grant should direct state and local entities to undertake the necessary information discovery and sharing activities as required for the FirstNet implementation. These state entities should be organized and directed by a single state entity as designated by the Governor of each state. The selected state entity that manages the State and Local Implementation Grant should be required to work with the designated SBI manager on data development activities to ensure data sharing and prevent the duplication of resources. States that designated a non-government 3rd party for SBI should work with NTIA to designate an appropriate government agency to manage this activity.

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?

See the answer to questions 2 a. and 2 b. above about designated entities. States should be able to use grant funds for FTE staff, software, and hardware necessary to support data collection. Connection with existing GIS Coordination Offices and infrastructure is critical to make best use of grant funds.

Standards should be used to facilitate the creation of a uniform national program. Standards can be established collaboratively in consultation with other stakeholder groups. NSGIC will be happy to assist, offer guidance, provide comments, and document best practices to facilitate the roll-out of FirstNet. Using the Broadband Map model, standard data structures can evolve through the planning process.

Consistent policies, standards and definitions must be established before data collection begins. The lack of consistent policies, etc. will almost certainly result in lost time and wasted resources. If an important goal of the Grant is the establishment of a consistent national broadband network for support of Public Safety communications, that goal can only be achieved with a consistent set of national standards and policies. These defined policies and standards should only cover Grant implementation areas that require functional interoperability among federal, state and regional partners. Below the level of system design that demands interoperability, states and local entities should be free to implement any solution that meets the Grant requirements.

The program policies, standards and definitions should be established by an independent panel composed of private sector, public sector (local, state and federal), and academic subject area experts and that activity should begin as soon as State and Local Grant program activities are defined.

The State and Local Implementation Grant should prohibit the use of proprietary network technology that does not allow hardware flexibility among the public safety user community.

The implementation of non-proprietary hardware solutions will allow public safety entities to purchase equipment in a more cost competitive environment and allow public safety personnel more flexibility in the field.

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?

2 years

Existing Public Safety Governance and Planning Authorities

4. Over the years, States have invested resources to conduct planning and to create governance structures around interoperable communications focused primarily on Land Mobile Radio (LMR) voice communications, including the Statewide Interoperability Coordinators (SWIC) and Statewide Interoperability Governing Bodies (SIGB), often called Statewide Interoperability Executive Committees (SIEC).

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

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?

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?

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?

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

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

Resources at the state level are limited and without funding specifically identified to support changes to and maintenance of existing governance and Statewide Plans those changes will occur only rarely and slowly.

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

Resources at the state level are limited and without funding specifically identified to support changes to and maintenance of existing governance and Statewide Plans those changes will occur only rarely and slowly.

Leveraging Existing Infrastructure

5. How should States and local jurisdictions best leverage their existing infrastructure assets and resources for use and integration with the nationwide public safety broadband network?

a. How should States and local jurisdictions plan to use and/or determine the suitability of their existing infrastructure and equipment for integration into the public safety broadband network?

States should be required to indicate use levels, standards used, or other aspects of existing infrastructure through the inventory process.

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

States that has a designated geographic information officer (GIO) or equivalent should be required to include the GIO on the state implementation and planning team. The GIO should be tasked to provide the best available geospatial information, or other relevant information for the planning activities.

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

Existing governance structures as identified above may be useful for this. The big issue regarding inclusion of private sector parties is a concern about data vulnerability. Many states have demonstrated credibility in working with utilities through the State Broadband Initiative and other efforts. These efforts should be leveraged and NTIA should provide leadership to continue these relationships and foster more data sharing.

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?

6. Section 6206(b)(1)(B) of the Act directs FirstNet to issue open, transparent, and competitive requests for proposals (RFPs) to private sector entities for the purposes of building, operating, and maintaining the network. How can Federal, State, tribal, and local infrastructure get incorporated into this model?

a. How would States plan for this integration?

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?

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

States can do this and many GIS coordination offices already have Clearinghouses and have demonstrated this capability. Associated costs should be covered by the grant. States will have to develop policies and procedures to protect sensitive data and NSGIC will work in concert with NTIA to develop a rational national policy.

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?

The State Broadband Initiative is clearly an excellent model for FirstNet. NSGIC's For the Nation initiatives should also serve as a model for any consistent national data layers that will be required.

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

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)?

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

Yes. Data gathering should absolutely be an allowable cost for the states. Only if it is a funded activity will the states have the breadth and depth of information and staff resources necessary to plan and then implement FirstNet in the most efficient manner.

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?

Yes.

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

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?

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?

The State and Local Implementation Grant should direct state and local entities to undertake the necessary information discovery and sharing activities as required for the FirstNet implementation. These state entities should be organized and directed by a single state entity as designated by the Governor of each state. The selected state entity that manages the State and Local Implementation Grant should be required to work with the designated SBI manager on data development activities to ensure data sharing and prevent the duplication of resources. States that designated a non-government 3rd party for SBI should work with NTIA to designate an appropriate government agency to manage this activity.

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

If the designated entity is within state government, this will not be a problem. If the designated entity is an external entity, there may be some requirement that the entity share raw data with the state, particularly tower information or other infrastructure information. Some 3rd party entities do not have this as their operating model. This may be difficult to do, because it is not included in the current contract with these entities. NTIA might have to be proactive in expediting the provision of this information.

The SBI state designated entities should act as the designated information gathering coordinator. This is a role they currently maintain in the SBI Grant and they can bring to the effort the numerous statewide data resources already being utilized for the SBI. This will, in effect, ensure that the two Grants share as many available resources as possible.

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

Outcomes should include an indication of which existing infrastructure may be used in a national network and where. Also, in locations where infrastructure doesn't exist or is inadequate, an indication of the actions required to provide adequate infrastructure and cost of infrastructure should be outcomes.

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?

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?

NTIA should consider using a data-driven formula that very closely reflects the tasks at hand. If population alone best accounts for the level of effort needed, then that should be the formula. If it's another data element or a straightforward combination of several factors then that's what it should be.

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

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

Phasing the distribution of funds is encouraged, but states should know their full grant amount in the beginning so that they can apply appropriate resourcing to develop products and resolve issues. It's essentially impossible to plan a multi-year project, if the amount of funding isn't clear and definitive. Also, legislative mandates regulating the budget process in each state may hinder the utilization of funds. Each state should be required to address potential budgetary process issues in their applications.

Experience with the SBI Grants has shown that the implementation approach changes as the full community comes together to address the goals of the Grant. In addition, new innovative solutions are made available from the private sector as funding is released and approaches are

further defined. Implementation planning should support and encourage changes to the defined approach as each state learns more about available solutions.

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?

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?

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?

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.

[See the top of this document for answers to this question.](#)