

**Commonwealth of Massachusetts
Executive Office of Public Safety and Security
Response: June 14, 2012**

**National Telecommunications and Information Administration
[Docket No: 120509050-1050-01] RIN 0660-XC001**

**Development of the State and Local Implementation Grant
Program for the Nationwide Public Safety Broadband Network**

1. Regional consultation required of FirstNet.

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

States should provide what their understanding and expectations are for this network, which at a minimum include coverage requirements. In addition, states should be in position to provide available or planned fiber infrastructure and services inclusive of state, county, municipal or commercially owned. Other information that should be considered are the entities or organizations that may participate in the overall project, as well technical, business, legal and governance resources that are available, including state population, population density, geographic background, urban and rural area designations, # of primary and secondary responders, inventory of rolling stock, data application inventories and future technology plans.

States should also provide information pertaining to specific state issues and impacts relative to the loss of T Band, including coverage base, type of services and infrastructure and costs associated with the operation and potential replacement. The NTIA should also require data on those areas unserved or underserved with access to affordable, high speed broadband and any public or private efforts to bring new service to these areas. States should be required to address how the NPSBN could be used to deliver services to these areas without jeopardizing public safety use.

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

Yes, it will be essential for a dedicated funding stream to support the state efforts to participate in this endeavor. Massachusetts has established a Public Safety Broadband Office under the Secretary of Public Safety, but current funding is limited and cannot sustain what we believe will be needed. At a minimum, we recommend that NTIA consider establishing a funding model that would allow for each state to stand-up and operate a consistent Public Safety Broadband office with defined job functions.

At a minimum this office should include the following functions: Program Director; Project Manager; Network Architect/Engineer; Legal Counsel; Communications and Support Personnel. It is suggested that NTIA establish a funding model that each state receives the same amount to run this office - \$500,000 per year. Additional funding would include coverage of costs such as photocopying, supplies, communications, public awareness/media services, etc. It should also include additional funding for the State Broadband Initiative grantees mapping/GIS resources to assist in developing the network.

2. Certified grant coordinator for each state.

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

We believe each state has its own defined process that receives and administers public safety related federal grant funds including past awards from NTIA. We recommend that the processes that are established and successful remain in effect. We do not support a new model. In Massachusetts, the Secretary of Public Safety and Security can best coordinate these funds by leveraging process and resources that are already in place to manage these types of federal funds as the SAA. The Executive Office of Public Safety & Security's Office of Grants and Research has extensive experience in working with local, regional, state & federal partners and has the resources available to award sub-grants and procure goods and services from existing state contracts.

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

It is recommended that states first ensure that agencies and organizations that maintain statutory authority are engaged and participate as required, as well as potential customers of the network, state and public safety IT leadership, state administration and budget executives, the state's current public safety/law enforcement data and network providers such as a state's Criminal Justice Information Services (CJIS) agency, the State's Interoperability Executive Committee (SIEC).

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

Utilize and build on existing processes that each state has successfully established. Within Massachusetts, the Secretary of Public Safety and Security will involve local and regional entities through its' Public Safety Broadband Office in which the SWIC is a member, as well as using the well-established Office of Grants and Research (OGR) process. Our State's SIEC will be used as an advisory body to the Secretary of Public Safety and Security in these matters.

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

All coordination with tribal entities should be made through established state processes and in accordance with guidance as established by the federal government through similar grant requirements.

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

That the responsible state governing body ensures that local and tribal (if applicable) participation in the planning process is present. This should be a stipulation for funding of state implementation grants.

(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?

By using a formalized communications process and leveraging existing structures and associations. Within Massachusetts, our PS Broadband Office in consultation with our SIEC - Advisory Group and regional homeland security bodies or councils will ensure cross-discipline involvement.

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

Regional should be defined how public safety officials operate and communicate on a daily basis...traditional boundaries do not always apply in public safety communications. By utilizing existing tools and models that have collected useful data such as the CASM system (supported by the DHS- Safecom program), regional needs and relationships may be better defined in a meaningful way. The grant process should include sufficient flexibility to allow for states to jointly apply for a grant funding. This would allow for cost sharing across states and also would enable interstate cooperation and existing structures that exist though the current FEMA regional planning grant process

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

States could engage with federal stakeholders to determine what their requirements are for broadband and in what regions of their state they need this service; however, federal entities have been slow to participate with states in these areas. Within Massachusetts, our PS Broadband Office will include for planning purposes federal involvement. Some direction from NTIA and other federal organizations would be helpful.

3. FirstNet consultation with States about existing infrastructure.

(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?

At a minimum, we recommend that NTIA consider establishing a funding model that would allow for each state to stand-up and operate a consistent Public Safety Broadband Office with defined job functions such as: Program Director; Project Manager; Network Architect/Engineer; Legal Counsel; Communications and Support Personnel. It is suggested that NTIA establish a funding model that each state receives the same amount to run this office - \$500,000 per year.

Additional funding would include coverage of costs such as photocopying, supplies, communications, public awareness/media services, etc.

Other specialized work can be paid for by the grant to seek consultants to aid the broadband office in accomplishing required task such as engineering coverage studies, existing infrastructure identification, business model planning, and developing a marketing strategy. Integrating efforts of the Massachusetts Broadband Institute (MBI), the state's broadband office for closing the digital divide will provide additional staff resources and critical information relevant to the NPSBN.

(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?

Ideally yes, if it is clear as to what data will be collected by FirstNet. Each state has unique challenges and relationships with organizations and agencies that control the data or manage the infrastructure. To prepare for this, we strongly recommend that sufficient information and awareness of what the PBSN is and what information is needed and why it is needed be made clear to ALL owners and stakeholders. A strong and clear message from FirstNet that this information must be provided to the state POC will benefit the states we believe. FirstNet should establish standardized data collection processes and forms that each state may take advantage of. Thought should be given to requiring any entity that has received federal funds for network build outs to provide necessary information and cooperate with the POC. This would include grants given from Departments of Commerce, Health, Transportation, Public Safety and Agriculture to name a few.

(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?

We recommend no less than 6 months but no more than 24 months from the start up of the state program. The states will need adequate time and funding to ensure that the Program Office can hit the ground running. Also strongly recommend that the forms and data collection processes be distributed to the states prior to the data collection period so that adequate time is allowed for program ramp up.

Existing Public Safety Governance and Planning Authorities

4. Governance structures for Interoperable Communications

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

Our state's Executive Office of Public Safety and Security is standing up a dedicated public safety broadband office - this office has transitioned from the former Fiber Backbone Project Management Office (PMO) that was responsible for oversight of the Commonwealth of Massachusetts' public safety fiber infrastructure and services program. This office managed the day-to-day fiber deployments as funded under our PSIC grant. Our SWIC will integrate into this office, and the SIEC will continue to meet in an advisory capacity to the Secretary of Public Safety and Security. We will continue to use existing capacity and groups to augment the planning process for the NPSBN. Planning for the transition from traditional LMR and T-Band will be necessary.

(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?

The Secretary of Public Safety and Security through the state's Public Safety CIO and PS Broadband Office has begun the process. To date, several high level meetings to discuss strategies and resources has taken place as well as the. Outreach to interested parties such as the City of Boston who is one of the 21 waiver recipients, the Mass Broadband Institute, a partner and recipient of NTIA - BTOP funds, and builder of significant infrastructure and the Commonwealth's Information Technology Division has resulted in agreements to work together to support the FirstNet program.

Massachusetts has also invested resources in educating stakeholders of the NPSBN at regional and statewide Interoperability conferences. The SIEC has been actively involved in national initiatives such as the NPSTC and Broadband Task Force. In addition, ongoing state public safety fiber projects under are definite examples of forward thinking and a commitment to the FirstNet, as this infrastructure can be purposed to support FirstNet.

(c). Can these existing governance structures be used for the NPSBN, 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 plan.
Yes, within Massachusetts, the current governance structures will support the LTE technology plan.

(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?

Like many states, Massachusetts is in the beginning stages of updating its SCIP. Updated SCIP plans should address the impacts of the NPSBN including the loss of the T Band, which is a significant impact in our state. Massachusetts encourages NTIA to petition DHS to formalize broadband as one of the focus areas for the SCIP.

(e). What actions do the States need to take to update the SCIP's to include broadband?

SCIP plans should reflect broadband planning to date and areas of focus within the state. High-level work that will be done by states in preparation for the FirstNet consultation would be good to place in the SCIP plans. It may be too early to update SCIP plans beyond planning efforts until we have a better understanding of what the NPSBN will be for Massachusetts.

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

Yes, it should be a byproduct of the work that is completed for the consultation, and then a living document to reflect what actually gets built and used within the State. It is essential that costs for governance evolution and/or expansion is an eligible cost as part of this program.

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

Yes, this would most definitely benefit and incent states.

Leveraging Existing Infrastructure

5. How should States and local jurisdictions best leverage their existing infrastructure assets with the NPSBN?

(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?

FirstNet needs to determine their strategy for building out the NPSBN to aid states in planning. If FirstNet decides to run a commercial carrier overlay of the public safety LTE system - then states will need to focus on what fiber

infrastructure may be available in urban settings to aid carriers in moving the public safety LTE traffic. In rural settings dependent upon how far funding will stretch, states can aid carriers with backhaul support through the use of microwave systems.

In Massachusetts, our Massachusetts Broadband Institute and Open Cape, a non-profit, are both Broadband Technology Opportunity Program grantees under NTIA and are making significant investment in fiber infrastructure. The NPSBN should be designed to maximize and require the use of federally funded broadband projects across agencies such as Commerce, Agriculture and Transportation and to help provide affordable broadband access to unserved, underserved areas and those with a likelihood of low broadband adoption.

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

Currently, state resources are fairly limited, with the exception of specific project related staff and several public safety IT management members. Our Public Safety IT organization supports a statewide law enforcement wireless environment - mostly for access and firewall configuration. These skill sets and duties are more relevant to day-to-day operations. We strongly support the ability to staff up additional resources through the grant program to assist in any deployment activities.

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

Massachusetts would engage these parties as needed through a collaborative effort of our PS Broadband Office and our Mass Broadband Institute who has a long standing relationship with these groups. Existing relationships with companies such as Verizon and other utilities will be explored as well.

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

Yes, NTIA should encourage planning for the formation and use of public/private partnerships for the NPSBN. Forming partnerships with the main cell carriers today to co-locate on their sites and leverage use of their backhaul infrastructure - may be the fastest way to establish a national public safety broadband network. For NTIA to stand-up a private/public partnership model they would need some type of relief from the federal procurement regulations to ensure FirstNet can act swiftly and efficiently with the private sector.

6. Section 6206(b)(1)(B) of the Act directs FirstNet to issue open, transparent, and competitive request 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?

It would be anticipated that publicly owned infrastructure might need to be incorporated into the NPSBN in areas where private infrastructure would be available or financially viable to construct. The information provided to potential bidders about publically owned infrastructure would be collected in the consultation phase and be made available to bidders for use in their proposals to include potential terms of compensation for their incorporation. Information on all public infrastructures should be collected and included in any RFP's and also incorporated in state network designs. States should be required to determine the presence of such networks and identify the willingness of these networks to partner with the NPSBN.

(a). How would States plan for this integration?

Massachusetts has already started the planning process by forming a PS broadband office under the Secretary of Public Safety, and will continue its efforts to collect data relative to fiber infrastructure, services and potential. The state is in a good position to move swiftly and respond to FirstNet, as we are under way in multiple fiber projects in which we have collected and assimilated data that would be important to the FirstNet program. Inventories of certain assets from PSIC activities have been assimilated and Massachusetts has completed a CASM collection project. The state also maintains an inventory of microwave and other infrastructure assets.

We expect detailed direction and request from any FirstNet consultation. From there we will work collaboratively to move this forward.

(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?

We support a model that the FirstNet prime contractor serves in this capacity with support from state and local entities. Attempting to manage non-state owned resources could be unmanageable.

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

Yes, if the decision is made to operate the clearinghouse at the state or regional level.

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?

Both IECGP and PSIC grants helped support SWICs, support staff and planning expenses. This greatly helped in the identification of the interoperability goals and objectives that guided our actions for the past 5 years. Without these grant streams we would be unable to support these projects.

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

Planning and engineering activities to determine what gaps exist in desired broadband coverage in the state base on current commercial cell carrier coverage and state and local system coverage. Also, strategic planning service for general voice to data migration and T-Band migration. Program and Project management activities related to preparation of state material for the FirstNet consultation.

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)?

- Salaries for FTE employees to establish and maintain the broadband office
- Administrative overhead to manage the grant program
- Supplies and services costs such as paper, equipment, photocopying, general office supplies and telecommunications costs
- Use of consultants as an engineering team, or on an individual requirements basis
- Regional, interstate collaboration to identify shared resources
- GIS data development and mapping costs
- Cover travel & meeting cost for local, state, tribal, and federal employees
- Consultant cost required to align efforts from a business perspective
- Consultant cost to provide engineering studies and analysis to determine existing private and public infrastructure
- Communications, marketing and outreach cost associated with helping stakeholders understand what LTE is
- Associated cost with public/private partnership development

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

The NTIA should work to maximize the full value of the network to support its use in deploying affordable, high-speed broadband Internet in all areas. We believe the network infrastructure will compliment the BTOP investments already made in Massachusetts and every effort should be made to strategically locate network infrastructure to support the delivery of last mile broadband in hard to serve and low income 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?

The Rural Development Telecommunications Programs offered by USDA in the form on loans may provide some best practices to be included in the State and Local Implementation grant program; however, this is not best practice for all states. Of greater note are some practices the Commonwealth believes the NTIA should avoid, including the classification of unserved areas as being 100% unserved.

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, the Massachusetts Broadband Institute is a partner with the Executive Office of Public Safety and Security and this relationship continues to support each entity's mission.

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

By using the broadband data it has collected in support of NPSBN planning and deployment activities.

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

Provide states with the opportunity to develop business plans in support of the NPSBN. States can engage local governments to foster collaboration and form working relationships if they don't exist that will strengthen the States ability to work with FirstNet. Consideration should also be given to supporting a consistent communication/technical staffing model to support the efficiency of the FirstNet Consultation process

The grant should be used to support each state in developing detailed planning document according to a standardized format, including an analysis of state needs and existing infrastructure. Such an exercise will show the local, state and regional public safety and broadband needs and help ensure that the NTIA has the information required to make the best possible network design.

Standardization of information is an important factor to ensure that information is useful, accurate and easily comparable across local, state and regional areas.

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

Yes, key performance indicators such as adoption rate and new application deployment should be considered.

(b.) If so, how should they be measured?

State requirements should be measured against current capabilities identified to operate the NPSBN within the state. In an ideal situation FirstNet and the States would work together to determine the best method of filling gaps or leveraging the most opportunity for dollars spent.

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

The authority appointed by the Governor's Office of each state should collect information. State standards for mapping GIS data, and engineering drawings should be adhered to unless FirstNet specifies standardization. A platform such as Google Maps that can be used on an LTE device for basic info transfer may be efficient.

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

Data that shows the major fiber networks in the state exist, and information related to local/state LMR communications systems. In some cases developed dependent upon the size of the public safety jurisdiction and their capabilities. Getting all the cell carriers site locations will improve our data resources - this data exist today, however we need to collaborate with industry. Collaboration and coordination with state and local government entities is also a must. Massachusetts has a fairly mature process in place, but there remain challenges intra-governmentally.

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.publicsafteytolls.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, States should be encouraged to use the federal resources available to them to aid in development of their broadband planning efforts. Massachusetts has an established relationship with the DHS Office of Emergency Communications (OEC) and will continue to take advantage of the relationship and 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?

Massachusetts strongly prefers up front allotment/distribution of the funds. It is suggested that NTIA establish a funding model that each state receives the same amount to run a PS Broadband Office at a minimum \$500,000 per year and consider standard allotment followed by a quantitative /needs based model then possibly some type of innovation grant (like MESH overlay for DAS research)

We suggest that the NTIA develop a formula for allocating grant funds that takes into consideration multiple variables weighting mainly a combination of population and total area, but also factoring population density, presence of areas unserved by broadband, areas with low levels of broadband adoption and areas with significant occurrence of public safety events and natural disasters.

Those states that have both large populations and large land mass are likely to require more planning, as are those that have significant unmet broadband needs or infrastructure that is going to be subject to extreme weather conditions and use.

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

Massachusetts does not support based solely on population.

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

Geographic size of the state and population density factors should be considered

(c.) Should NTIA considers phasing the distribution of grant funds in the new program?

A three-year cycle of funding seems reasonable.

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 consultation with FirstNet?

The State's CIO and CTO should be kept abreast of the plans and activities as it relates to their specific authority within each state. In Massachusetts, a strong relationship exists with the CIO and CTO, and representation from their offices will be provided for in the PS Broadband Office.

(a.) How will these different positions interact and work with public safety officials under the State and local Implementation grant program?

Though the state's PS Broadband Office.

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?

In kind match opportunities such as: existing fiber capabilities, communications sites, private/public partnerships and state and local government employee FTE. Two potential factors the NTIA might consider in granting waivers are fiscal need and demonstration of support- those states that submit a strong grant application, but lack the financial ability to provide matching funds should be given some consideration, additionally those states that demonstrate strong public/private partnerships or ability to contribute or leverage resources should also receive consideration for full or partial waivers.

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

In making decisions to grant waivers, the NTIA should recognize those applications that demonstrate a real commitment by states to maximize the public benefit of both the grant funds as well as the impact of the NPSBN to

enhance not just public safety communications, but also affordable access to high speed broadband. The NTIA should have an interest in encouraging states to be fully invested in collaborating to make this program as successful as possible. One such measure of that commitment may be the financial investment a state has already contributed to the development of a public broadband systems.

Massachusetts, for example, has already committed millions of dollars in multiple fiber projects that could support FirstNet.

- MBI - \$30 - 40 million
- Open Cape - \$5 million
- Loop A - \$ 1 million
- METFON - \$7 million

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.

T-Band migration planning? This is a major issue and concern for Massachusetts's public safety, as a significant portion and populace currently use T-Band.