State of Oregon comments in reference to National Telecommunications and Information Administration (NTIA) RFI - Docket No: 12050905-1050-01. Comments prepared on behalf of the Oregon State Interoperability Executive Council (SIEC) and the Oregon Department of Transportation (ODOT) Major Projects Branch.

The Consultation Process

1. Regional consultation required of FirstNet

(a). What data should states compile for the consultation process with FirstNet?
First and foremost, states should provide their coverage requirements to FirstNet, and in those discussions determine the levels of hardening and mission-critical capabilities vs. coverage required initially. States working in unison with local cities and counties should be able to provide basic fiber infrastructure in key metropolitan areas and a summation of infrastructure available in less densely populated rural areas of their state, identifying areas that are currently underserved and unserved. States and local government entities should have their current public safety wireless network information on hand. In addition, states should compile information about:

(1) existing core network infrastructure,
(2) basic fiber infrastructure in key metro areas and
(3) commercial cell carrier service areas and carrier locations within their borders, as well as identify where regional systems support multistate efforts.

States may also be able to provide additional broadband-related data in support of FirstNet through their participation in NTIA's State Broadband Initiative (SBI) initiative (although there may be legal restrictions that will need to be addressed related to sharing broadband coverage data that are currently covered by non-disclosure agreements under SBI). Once FirstNet has completed its contract for the network, it may be able to provide states with assistance on this effort.

(b). Should this activity be covered by the State and Local Implementation grant program?
Yes, the consultation process with FirstNet should be funded by the State and Local Implementation grant program. Grant funding will provide the means to procure support for dedicated local/state staff and consultants to develop and deliver essential spatial data and network capabilities for FirstNet. Most states do not have a fully staffed broadband office dedicated to this public safety effort; grant funding can help build this foundation piece by supporting full-time employees in addition to consultants at the state level.

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 that this can and should vary from state to state. It is our view that each governor should appoint a state agency to be responsible for management of the grant and that a representative from the appointed organization should be directed to oversee and coordinate the state and local implementation grant program**.** Statewide Interoperability Coordinators **(**SWICs), state Chief Information Officers (CIOs), invested state agency CIOs and CIOs from metropolitan areas should be involved in the planning and implementation efforts.

(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?
We recommend establishing a governing body comprised of members who are presently working with public safety officials on public safety wireless communications. In our state we have completed a State Communications Interoperability Plan (SCIP) update this year focused on public safety broadband. The governing body being established for our state is the existing State Interoperability Executive Council (SIEC). The SIEC includes representatives from:

(1) State agencies responsible for emergency communications such as State Police, Transportation, Corrections, Administrative Services, Human Services, Health Authority, Military Department and Office of Emergency Management
(2) Fire Chiefs Association
(3) Association of Chiefs of Police
(4) State Sheriff's Association
(5) APCO/NENA
(6) Regional Radio Planning Committee
(7) Tribes
(8) League of Cities
(9) Association of Counties
(10) Special Districts Association
(11) Legislative Assembly

This committee will be expanded to accommodate for more participation from local government CIOs and members from industry and the Oregon Broadband

Advisory Council. Currently the state SWIC, state CIO and public partners are active in the SIEC.

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

Local entities are essential to the success of the State and Local Implementation grant program. States should plan to involve local entities through coordination with and through existing governance bodies. In Oregon, the SIEC will help facilitate local government involvement. The SIEC has been active in facilitating local government involvement and will increase this facilitation as the PSBN moves forward. In addition, our state is an early adopter in regard to working on the public safety broadband system as a state waiver jurisdiction. We plan to build on the collaborative efforts we've had with our BTOP grant and currently with local jurisdictions and other state agencies in planning for an LTE project within the state. Oregon has put on hold an LTE pilot project originally scheduled to launch in Portland and Salem this summer.

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

We plan to involve tribal entities through our SIEC; currently the SIEC has a tribal member from the Confederated Tribes of Warm Springs, a federally recognized confederation of Native American Tribes. We suggest that existing shared governance bodies be utilized as much as possible (in Oregon, the SIEC, Oregon Geographic Information Council and the Oregon Broadband Advisory Council). In addition, we would seek out tribal entities that are working on broadband projects to see if this project would complement what they are doing.

(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?

As a baseline, the grant coordinator should be required to submit the information to all public safety entities in the state. Conversely, our state is very rural, and unless we are able to secure enough funding to implement a broadband network across the whole state and get everyone involved, we would be building false expectations. It may be best to work through our SIEC governance entity to get locals and tribal entitles involved. At a minimum, each grant recipient should provide a complete listing of all local and tribal entities to NTIA and should develop an outreach plan to engage those entities in the FirstNet 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?
Input into the state consultation process can be accomplished by ensuring that public safety disciplines coordinate or have the opportunity to participate through the statewide governance entity, in our case the SIEC. Each grant recipient should provide a list of all state public safety entities within their jurisdiction to NTIA and describe how those entities are represented in the FirstNet planning 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?
The State and Local Implementation grant program should define "regional" public safety officials' regular communication methods, since traditional jurisdictional boundaries do not always apply in public safety communications. In Oregon, we would need to utilize an interstate regional construct, since our major population center (Portland) coordinates with public safety professionals in the state of Washington (just across the Columbia River to the north). To facilitate regional participation in the grant program, it would be helpful to require applicants to specifically describe the degree and extent of interstate interactions among public safety communities in the grant narrative and to identify the efficiencies that would be gained by joint activities using grant funds. However, some regional modeling across state boundaries, using like-terrain and urban vs. rural settings, may help FirstNet and local/state governments with the build-out design and implementation process.

(h). How should states plan to involve the federal users and entities located within their states in the grant program?
While each state has a different configuration of federal agencies that operate field offices, each grant recipient (or perhaps NTIA) should designate a lead federal agency that will coordinate the federal interaction with the state recipient on federal broadband requirements. As part of the grant application process, each state should suggest an appropriate federal coordination agency and develop an outreach plan in collaboration with that agency to ensure that federal requirements are known for the FirstNet planning process. States can work with federal stakeholders to determine what their requirements are for broadband and in what regions of their state they need this service.

Unfortunately, federal users have not been receptive to using local public safety radio systems in LMR. In Oregon, we have the Integrated Wireless Network that is a federal trunked radio system that runs the length of Interstate 5. This system could be better utilized as a shared public safety resource; we can take lessons

learned from this project and apply them to NPSBN in working a collaborative system sharing effort between federal and state/local officials. This is the human factor, not technology driven. The same concept applies to different regions and agencies.

The success of this component will be more heavily dependent upon cultivating and maintaining productive coordination between federal, state and local personnel than it will be with overcoming technological challenges. This applies also to any collaborative efforts among multiple regions or agencies.

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?

States should utilize grant funding to establish a working broadband office with a minimum of three full-time equivalent (FTE) employees to support the infrastructure data gathering in addition to the requirements of supporting other FirstNet initiatives. This office will be required to act as the central coordination point for this implementation with all local jurisdictions. Suggested positions are a program manager, project manager and administrative assistant. Other specialized work can be paid for by the grant to seek consultants to aid the broadband office in accomplishing required tasks such as engineering coverage studies, existing infrastructure identification, business model planning and developing a marketing strategy. Another alternative is to leverage the Broadband Data Collection and Mapping Programs that already exist in many states, including Oregon. Oregon's Broadband Data Collection and Mapping program is already staffed with 3.5 FTE and is housed within the Oregon Office of the State CIO's Geospatial Enterprise Office.

(b). Should consistent standards and processes by 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?

Consistent standards and processes are essential to the success of FirstNet and should be established prior to data collection. If FirstNet provides states with a baseline statement of work prior to gathering data, then states would be able to deliver data that is/are consistent with FirstNet requirements. Many states manage communications infrastructure differently; some own/manage/control telephone systems and fiber networks directly, while others, such as Oregon, rely heavily on the private sector for a majority of the telecommunications functions within the state. State CIOs may not manage public safety communications systems but typically have responsibilities for network operations in their state

whether outsourced or managed in house. It would be helpful if the NTIA or FirstNet or an independent panel established protocols for all carrier and fiber infrastructure companies to provide their site information and fiber locations to each state POC. An alternative approach would involve the leveraging of state broadband data collection and mapping programs that contribute information to the National Broadband Map project (www.broadbandmap.gov). Reporting protocols have been in place for several years under NTIA guidance.

(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?
States will match the momentum of FirstNet, especially in waiver jurisdictions where there is energy to support public safety broadband deployments, as long as grant money can support required consultants and agency staff. A six- to nine- month minimum would be required to have a productive consultation with FirstNet, and for most states, a year to 18 months is more realistic.

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?
In Oregon, the existing SIEC is actively working on broadband for public safety. As FirstNet develops, we anticipate expanding the role of our SIEC to accommodate the needs of the public safety broadband network within Oregon.

(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?
Oregon's SWIC is the lead on our broadband planning to date in conjunction with the SIEC and local government stakeholders. Oregon, through the SIEC, applied for and received a 700 MHz waiver from the FCC to operate an LTE Public Safety Broadband system. The SWIC and the Oregon Department of Transportation's Major Projects Branch have been working with the Oregon Office of Emergency Communications to conduct a broadband survey of more than 25 stakeholder agencies in Oregon to develop metrics on how we use broadband today and what will be needed by these agencies in the future. This work will provide a platform to develop Oregon's work product for the FirstNet consultation. We are leveraging resources from our state CIO's Office, the Oregon Public Utilities Commission, SWIC, SIEC, ODOT and stakeholders from local jurisdictions to collaborate on the PSBN project.

(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?

Planning structures are basically in place today, but there is a need to integrate current work efforts among different agencies and establish a working public safety broadband office for governance and data compilation. The SIEC has recognized the need to change some roles and responsibilities to support the PSBN. In addition, the ODOT Office of Innovative Partnerships and Alternative Funding will assist with the development of creative partnerships within the state to aid in the PSBN development. Another alternative is enlisting the help of state Broadband Advisory Councils and the Broadband Data Collection and Mapping Programs that already exist in many states, including Oregon.

(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?

SCIPs should provide the overall guidance for governing the implementation of a nationwide PSBN within a given state. All state SCIP plans should reflect the impact the PSBN will have on the state and its interoperability goals and objectives, including gaps mitigated by the use of broadband technologies.

(e). What actions do the states need to take to update the SCIPs 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. Right now, it may be too early to update SCIP plans beyond planning efforts until we have a better understanding of what the PSBN will be for Oregon. In general:

(a) FirstNet requirements will need to be received and analyzed by state SCIP planners;
(b) That analysis should then inform changes to the SCIP so that broadband service provision can be included in the SCIP;
(c) Any changes to the SCIP will need to be approved by the SIEC or other appropriate governance bodies; and
(d) The newly adopted SCIP will then need to be made available to all stakeholders (including FirstNet).

(f). Should the costs to change or evolve existing governance and statewide plans be eligible in the new program?

Yes, the costs to change or evolve existing governance and statewide plans should be eligible in the new program. These changes should be a byproduct of the work that is completed for the consultation, and then the statewide plans should become a living document to reflect what gets built and used within the state. The SCIP can also provide guidance on the governance and operating procedures of the PSBN for its end users.

(g). Should the maintenance of those existing governance bodies and plans be eligible in the State and Local Implementation grant program?
Existing governance bodies and statewide plans are already funded by other sources. Since this is a time-limited grant program, we cannot expect to be able to maintain governance and planning functions beyond the grant term. Funding for the planning and implementation of FirstNet should be the highest priority for grant program resources. However, if funding is available to support governance and planning that extends beyond FirstNet, then this would be of short-term benefit to the states to be able to access those funds.

Leveraging Existing Infrastructure

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

(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 communicate its requirements and strategy for building out the PSBN to aid states in planning. Only then will states be able to determine the suitability of existing infrastructure and equipment for integrating with the NPSBN and plan for the use of that existing infrastructure and equipment. To be sure, there are a series of inter-jurisdictional agreements and private-public partnerships that will need to be reviewed and enhanced. 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 (depending upon how far funding will stretch), states can aid carriers with backhaul support through the use of microwave systems.

In Oregon, relying on commercial carrier sites and infrastructure may be reasonable for the urban areas; however, this may not be a good course of action for the rural parts of our state.

(b). What technical resources do states have available to assist with deployment of the nationwide public safety broadband network?
In Oregon, this effort is currently being worked in a virtual environment using resources when needed. Dedicated funding and staffing for this project in a broadband public safety office is an absolute necessity. Oregon currently has network staffs at the state and local government level and wireless technicians who are more familiar with LMR-type technologies. However, these resources are scarce and are for the most part dedicated full-time to other projects and operational work. Application development is a mixture of in-house and outsourcing, with a majority of public safety agencies using Netmotion to manage their mobile computing networks. As a state, we desire to be involved with the contracting of work at the local level as the PSBN is built out.

(c). How will states include utilities or other interested third parties in their planning activities?
At minimum, each grant recipient should provide a listing of all relevant utility operators and interested third parties to NTIA and provide an outreach plan to engage those entities in the FirstNet planning process.

In addition, where feasible and allowable, we could open up the D-Block portion of the spectrum for use by public-private utility organizations for remote monitoring and mobile data solutions for their operational staff. Several Oregon utilities have expressed interest in using LTE for their remote monitoring solution, and within an urban environment this solution would work. In addition, in Oregon, use of ODOT's Office of Innovative Partnerships and Alternate Funding will enable us to have quick-strike capability working partnerships with the private sector and utility organizations. ODOT's Major Projects Branch currently has active partnerships with the Bonneville Power Administration, Eugene Water and Electric Board, and Pacific Power. These partnerships are aligned through the state's ongoing LMR efforts.

(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, NTIA should encourage planning for the formation and use of public-private partnerships for the PSBN. 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, it would need some type of relief from the federal procurement regulations to ensure FirstNet can act swiftly and efficiently with the private sector. Both Oregon and Washington have created innovative partnership offices within their transportation agencies to form private-public partnerships. These offices have

flexibility with the procurement rules and have been successful with high-dollar ($1 billion or more) project implementations. ODOT's Major Projects Branch in Oregon specializes in high-dollar projects and will be working in unison with our Office of Innovative Partnerships and Alternative Funding. The Major Projects Branch is where Oregon's public safety broadband effort currently resides.

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

Where components of existing LMR or infrastructure systems are today could be used to support the PSBN implementation. As a whole, the existing LMR networks will not transition to LTE very well. Most LMR systems use microwave, LTE will need fiber and our LMR systems are placed at great distances to leverage coverage in rural areas, which does not facilitate the build-out of PSBN in general. Where commercial systems are not available to support the PSBN, then high value will be placed on federal, state, tribal and local infrastructure. In metropolitan areas, and in some cases rural settings, local fiber consortiums may be able to provide FirstNet with backhaul capabilities. In Oregon, the City of Portland operates a CLEC with robust fiber connectivity throughout the region, and the City of Eugene and Lane County have similar capabilities. Working with private-public partnerships on fiber infrastructure can add significant value to the PSBN.

FirstNet RFPs could specify that the contractor incorporate and use available and known federal, state, tribal and local infrastructure in their proposed network deployment, as practicable.

(a). How would states plan for this integration?
States should begin (or continue) to gather data on federal, local, tribal and state infrastructure resources, and analyze that data in the context of the business and technical requirements that FirstNet is expected to present during its consultations with states. Initially, states will use the data they gather to see what the most complete infrastructure inventory looks like. Planning for integration would follow or complement discussions with FirstNet.

(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?

From a state standpoint, we would rather assist in resolving clearinghouse issues. Local and state control of towers and backhaul networks is often dependent upon third-party controls. Where a state owns towers and networks outright, we believe that it would be appropriate to work in a clearinghouse capacity. We like the concept of the prime contractor that FirstNet hires acting as the clearinghouse, with support from state and local governments.

(c). Should setting up a clearinghouse be an eligible cost of the grant program? Yes, but it is not clear that a clearinghouse would be needed until due diligence in preparation for the FirstNet consultation has taken place. It may make sense to include funding in the engineering or project cost associated with the FirstNet RFP.

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?

From a user perspective, modeling the grant after the Interoperable Emergency Communications Grant Program (IECGP) and/or the SBI would be beneficial. The IECGP is an established grant program that most state SWICs have worked with in the past, and based on the money allocations should be able to support $1.5 million to $3 million request. Similarly, the SBI is an established program specifically oriented toward commercial broadband infrastructure data collection and reporting, and it has a direct connection to many states' broadband governance bodies. The experiences with SBI also provide insights into a multiphase funding process and a state-oriented data collection and management operation. Enabling pull-down windows with defined grant activities will help standardize the process.

Best practices from SBI include the creation of a standards-based data collection and reporting model, limiting grant applicants to one state agent (directly selected by the state governor), and the creation of a shared Web resource for all grantees to use for information sharing and communal problem-solving.

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

Planning and engineering activities to determine gaps that exist in desired broadband coverage in the state based on current commercial cell carrier

coverage and state and local system coverage should be allowable. Program and project management activities related to preparation of state material for the FirstNet consultation should also be allowed.

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)?

The following costs should be eligible for funding:

- Data gathering/creation/compilation to support the FirstNet planning processes,
- Salaries for FTE employees to establish a public safety broadband office as a stand-alone capability or to augment the focus of existing state broadband programs on public safety broadband,
- Use of consultants as an engineering team or on an individual requirements basis,
- Travel and meeting expenses for local, state, tribal and federal employees,
- Consultants required to align efforts from a business perspective,
- Consultants to conduct engineering studies and analyses to determine existing private and public infrastructure,
- Marketing and outreach efforts associated with helping stakeholders understand LTE and
- Expenses associated 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?

Public safety systems are built to support the largest geographic area possible, and commercial systems are designed to support the largest population areas. In Oregon it may be cost prohibitive to ensure rural coverage, but we would support grant priorities that recognize rural PSBN build-outs. There should be a private-public partnership analysis of coverage in rural areas and a cost-benefit calculation done related to the risk/impacts /likelihood for the PSBN build-out. Consideration should be given to the development of a site plan to build the system in a planned, phased way that would not preclude test areas if funding or partners were available out of sequence.

In our view, when setting investment priorities NTIA should consider, among other factors:

(1) Non-resident, temporary uses of certain geographies (e.g., Smith Rock State Park, Crater Lake National Park, Mount Bachelor Ski Area, etc.)
(2) Key transportation corridors (e.g., U.S. 97, Interstate 84, the Columbia River)
(3) Commercial zones that are in rural areas (data centers, coastal fisheries, etc.)
(4) Western states public land ties to the U.S. Forest Service and increasing need to provide communications support for forest fires

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 the USDA in the form of loans may provide some best practices to be included 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?
Yes, Oregon anticipates leveraging the expertise and data gathered under the SBI in this new State and Local Implementation grant program. However, it may be necessary to revisit the non-disclosure allowances that underpin the SBI's data collection, compilation and reporting requirements (in collaboration with broadband providers) in order to allow that to happen at anything other than an anecdotal level. SBI (http://www2.ntia.doc.gov/SBDD) led to the Oregon Broadband Mapping Project and the National Broadband Mapping Project, which can significantly contribute to this effort.

We think there will be participation with rural areas that implemented fiber networks. In addition, one of our tribal organizations is working on the implementation of a broadband network through the BIP grant program and may be able to support the FirstNet project.

(b.) How can the SBI state-designated entities work with states in planning for the nationwide public safety broadband network?
Upon provision of the technical and business requirements that must be satisfied by the FirstNet initiative, each state-designated entity should be directed to

collaborate with the goals and objectives of the NPSBN/FirstNet. This will entail, at minimum, the sharing of legal restrictions on data exchange (and working to alleviate those restrictions), the provision of metadata on existing data stores related to the SBI project, and cooperation on the enhancement of existing data collection and reporting activities that might support shared SBI and NPSBN goals and objectives. In Oregon, the state-designated entity is the Oregon Public Utilities Commission, and its subrecipient/internal contractor is the Office of the State CIO's Geospatial Enterprise Office.

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

The State and Local Implementation grant program should provide states with the opportunity to develop business plans in support of the PSBN. States should engage local governments to foster collaboration and to form and extend working relationships that will strengthen the states' ability to work with FirstNet.

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

Yes. In addition to any business plans and documentation of a state's consultation with FirstNet — and spatial data funded by the grant describing the current extent of broadband networks, their capacities (and limitations) and the ownership of those networks — should be provided to NTIA/FirstNet. A lot of data exists relative to LMR development and traditional network support throughout the state. But this network is possibly going to rely on commercial carrier sites and backhaul services, so identifying those would be a critical data requirement.

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

Data should be measured by completeness of spatial coverage for PSBN in a given state, completeness of network capacities and ability to satisfy PSBN requirements (at this point, unknown), timeliness of infrastructure ownership and contact information, and whether the business planning documents in the context of state approval (legislative/budgetary and policy) for PSBN deployment in that state are satisfactory. State requirements should be measured against current capabilities identified to operate the PSBN within the state. In an ideal situation, FirstNet and the states would work together to determine the best method of filling broadband network gaps or leveraging the most opportunity for dollars spent.

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

Information should be collected by the authority appointed by the Governor's Office of each state, in collaboration with existing state broadband data collection and mapping programs, or within a newly formed and dedicated Public Safety Broadband Office. National and state standards for mapping GIS data and engineering drawings should be followed unless FirstNet specifies a different standardization. The format of the information should be sufficiently open to allow it to be consumed by a variety of applications (perhaps an XML specification).

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

Existing data show the major fiber networks in the state as well as information related to local and state LMR communications systems. The LMR information would need to be repackaged to reflect regional operations throughout the state, in some cases developed dependent upon the size of the public safety jurisdiction and their capabilities. Getting site locations for all the cell carriers will improve our data resources. Much of this may already be provided through the SBI mapping initiative, and broadband providers have already been fully engaged through the SBI effort. However, we may need to review existing non-disclosure agreements and language to ensure that data sharing is allowable, and this could be facilitated by NTIA via the NOFA for this new grant program. A lot of this effort will be getting access to the data across several fronts, including utility districts, the Public Utility Commission, state CIO's office and CIO offices within local government.

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.publicsafeteytolls.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. In Oregon, we have

conducted a SCIP update using the broadband planning tool with our primary SIEC audience and expanded stakeholders throughout the state. Oregon is currently working with the Oregon Office of Emergency Communications on the Mobile Data Usage and Survey Tool.

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?

We would prefer to have the funds made available upfront vs. a reimbursable transaction.

(a.) Should NTIA consider allocating the grant funds based on population?
Oregon does not support using population as the main criteria. NTIA should consider, at minimum, weighting the grant funding based on geographic extent and population together. Other factors may include the extent to which the state's broadband network is complete (some states already have complete coverage, while others are quite incomplete) and access constraints such as a lack of road networks and existing utility rights-of-way.

(b.) What other targeted allocation methods might be appropriate to use?
Again, it might be appropriate to use geographic size of the state and population density factors to help target grant allocations. Other factors may include the extent to which the state's broadband network is complete (some states already have complete coverage, while others are quite incomplete) and access constraints such as a lack of road networks and existing utility rights-of-way. In addition, using a distribution based on the degree of difficulty should also be considered. Building a system in mountainous terrain vs. relative flat terrain provides for an exponential cost factor.

(c.) Should NTIA consider phasing the distribution of grant funds in the new program?
We are comfortable with a phased distribution of grant funds, but to the extent possible it would be good to know the full amount of the grant at the beginning of the project to be able to plan for staffing and budgeting given state's legislative approval processes. A three year limitation on the use of the grant funding may be appropriate.

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 CIO and the State Data Center Administrator should play a role in the planning and development of network infrastructure to support the PSBN and should be a part of the team dedicated to providing this information to the governor of each state.

(a.) How will these different positions interact and work with public safety officials under the State and Local Implementation grant program?
The State CIO can provide planning assistance and input that involves both GIS capabilities and broadband capabilities. The State CIO's role on the Oregon Broadband Advisory Council policy and planning for enterprise IT projects gives this office a unique enterprise perspective. The State CIO is also an appointed member of the Oregon SIEC. Staff in the Office of the State CIO has been involved in the SBI grant and are knowledgeable resources for this grant opportunity as well. The State CIO can readily extend the Office of the State CIO's commitment to broadband by including public safety requirements into the broadband planning activities undertaken by SBI. The State Data Center Administrator operates the state data and telecommunications network and can provide insight and assistance in network operations and planning. Both will help leverage existing infrastructure investments to produce improved outcomes in collaboration with the OBAC, SIEC and other appropriate bodies and public safety officials.

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?

Factors that should be considered include in-kind match opportunities such as the cost of existing state-owned fiber capabilities, the costs related to maintenance and provision of existing telecommunications sites, the costs associated with established private-public partnerships, and the salaries and compensation of state and local government employees/FTE that will support the FirstNet planning activities.

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?

The primary factor that NTIA should consider when reviewing waiver requests is the financial investment a state has already contributed to the development of a public safety broadband system. In Oregon, more than $100,000 has been invested in the development of our BTOP grant and consecutive lease payments for spectrum use to the Public Safety Spectrum Trust. In addition, the state of Oregon has invested much more in in-kind match for its broadband planning, data collection and mapping activities under the SBI. The information that was gathered and used in the BTOP grant and SBI will help Oregon build its implementation strategy, and the money spent on initial development should be considered a public interest factor.

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 response.