Application for Federal Assistance SF-424	Version 02
* 1. Type of Submission:  Preapplication  New  Continuation  Continuation  Revision  * If Revision, select appropriate letter(s):  * Other (Specify)  Revision	
* 3. Date Received:  Completed by Grants.gov upon submission.  4. Applicant Identifier:	
5a. Federal Entity Identifier: *5b, Federal Award Identifier:	
State Use Only:	
6, Date Received by State:  7. State Application Identifier:	
8. APPLICANT INFORMATION:	
*a, Legal Name: District of Columbia Government	
* b. Employer/Taxpayer Identification Number (EIN/TIN):  53-6001131  * c. Organizational DUNS: (b) (4)	
d. Address:	
* Street1: 200 I Street, SE  Street2:  * City: Washington	
County:	
*State: DC: District of Columbia	
Province:	
* Country: USA: UNITED STATES	
* Zip / Postal Code: 20003	
e. Organizational Unit:	
Department Name: Division Name:	
ОСТО	
f. Name and contact information of person to be contacted on matters involving this application:	2
Prefix: Mr. * First Name: Tegene	
Middle Name:	
* Last Name: Baharu	
Suffix:	
Title: Deputy Chief Technology Officer	
Organizational Affiliation:	
* Telephone Number: 202-727-7349 Fax Number:	
*Email: tegene.baharu@dc.gov	

Application for Federal Assistance SF-424	Version 02
9. Type of Applicant 1: Select Applicant Type:	i sau
A: State Government	
Type of Applicant 2: Select Applicant Type:	
Type of Applicant 3: Select Applicant Type:	
* Other (specify):	
* 10. Name of Federal Agency:	
National Telecommunications and Information Admini	
11. Catalog of Federal Domestic Assistance Number:	
11.549	
CFDA Title:	
State and Local Implementation Grant Program	
* 12. Funding Opportunity Number:	
2013-NTIA-SLIGP-01	
* Title:	
State and Local Implementation Grant Program (SLIGP)	
13. Competition Identification Number:	
2013-NTIA-SLIGP-01	
Title:	
14. Areas Affected by Project (Cities, Counties, States, etc.):	
District of Columbia	
* 15. Descriptive Title of Applicant's Project:	
DC FirstNet	
Attach supporting documents as specified in agency instructions.	
Add Attachments Delete Attachments View Attachments	

Application for Federal Assistance SF-424 Version	on 02									
6. Congressional Districts Of:										
a. Applicant DC-001 * b. Program/Project DC-001										
Attach an additional list of Program/Project Congressional Districts if needed.										
Add Attachment Delete Attachment View Attachment										
7. Proposed Project:										
a. Start Date: 07/15/2013 * b, End Date: 07/14/2016										
8. Estimated Funding (\$):										
a. Federal 636, 722.00										
b. Applicant 0.00										
c. State 159, 181.00										
d. Local 0 . 00										
e. Other 0 . 00										
f. Program Income 0.00										
g. TOTAL 795, 903.00										
a. This application was made available to the State under the Executive Order 12372 Process for review on  b. Program is subject to E.O. 12372 but has not been selected by the State for review.  c. Program is not covered by E.O. 12372.										
20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.)										
Yes No Explanation  21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)  ** I AGREE  ** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.										
Authorized Representative:										
Prefix: Mr. * First Name: Rob										
Middle Name:										
Last Name: Mancini										
Suffix:										
Title: CTO, District of Columbia										
Telephone Number: 202-729-1343										
Email: rob.mancini@dc.gov										
Signature of Authorized Representative: dompleted by grante groupon submission. * Date Signed: Completed by Grante groupon submission.										

Application for Federal Assistance SF-424	Version 02
* Applicant Federal Debt Delinquency Explanation	
The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.	of
	2

#### **BUDGET INFORMATION - Non-Construction Programs**

OMB Number: 4040-0006 Expiration Date: 06/30/2014

#### **SECTION A - BUDGET SUMMARY**

Grant Program Function or	Catalog of Federal Domestic Assistance	Estimated Unob	ligated Funds			New or Revised Budget	
Activity (a)	Number (b)	Federal (c)	Non-Federal (d)	10	Federal (e)	Non-Federal (f)	Total (g)
1. DC FirstNet/ State and Local Implementation Grant Program - Phase 1	11.549	\$	\$	\$	318,361.00	\$ 79,591.00	\$ 397,952.00
2. DC FirstNet/ State and Local Implementation Grant Program - Phase 2					318,361.00	79,590.00	397,951.00
3. Non-Federal Funds Cash Match							
4.							
5. Totals		\$	\$	\$	636,722.00	\$ 159,181.00	\$ 795,903.00

#### **SECTION B - BUDGET CATEGORIES**

6. Object Class Categories				GRANT PROGRAM, F					Total
	and Impl	FirstNet/ State Local Lementation Grant gram - Phase 1	(2		(3)		(4		(5)
a. Personnel	\$ _	149,880.00	\$	149,880.00	\$		\$	\$[	299,760.00
b. Fringe Benefits						65,947.00			65,947.0
c. Travel		11,850.00		11,850.00		3,812.00			27,512.0
d. Equipment						4			
e. Supplies						1,000.00			1,000.0
f. Contractual		130,039.00		130,039.00		88,422.00			348,500.0
g. Construction		0.00							
h. Other		6,450.00		6,450.00					12,900.0
i. Total Direct Charges (sum of 6a-6h)		298,219.00		298,219.00		159,181.00		\$[	755,619.0
j. Indirect Charges		20,142.00		20,142.00				\$[	40,284.0
k. TOTALS (sum of 6i and 6j)	\$	318,361.00	\$	318,361.00	\$	159,181.00	\$	\$	795,903.0
. Program Income	\$		\$		\$		\$	\$	

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Standard Form 424A (Rev. 7- 97)
Prescribed by OMB (Circular A -102) Page 1A

	SECTION C	- NC	N-FEDERAL RESO	UR	CES				
(a) Grant Program			(b) Applicant		(c) State	1	d) Other Sources		(e)TOTALS
8. DC FirstNet/ State and Local Implementation Gran	t Program	\$		\$	159,181.00	\$		\$ [	159,181.00
9.									
10.							*		
11.									
12. TOTAL (sum of lines 8-11)		\$		\$	159,181.00	\$		\$	159,181.00
		) - FC	RECASTED CASH	NE	EDS	_			
	Total for 1st Year		1st Quarter		2nd Quarter		3rd Quarter		4th Quarter
13. Federal \$		\$		\$		\$		\$_	
14. Non-Federal \$									
15. TOTAL (sum of lines 13 and 14)		\$ _		\$		\$		\$	
SECTION E - BUDGET	ESTIMATES OF FEE	ERA	L FUNDS NEEDED	FO	R BALANCE OF THE	PR	OJECT		
(a) Grant Program				-	<b>FUTURE FUNDING</b>	PE		_	
		-	(b)First	+	(c) Second	<u> </u>	(d) Third		(e) Fourth
16.		\$		\$		\$		\$_	
17.									
18. h				] [					0
19.				] [					
20. TOTAL (sum of lines 16 - 19)		\$		] \$[		\$		\$	
	SECTION F	ОТН	ER BUDGET INFOR	RM/	ATION				
21. Direct Charges: 75,5619.00			22. Indirect	Cha	arges: 40,284.00				
23. Remarks: Revision Date of Form SF 424A, 6/13/1	13,				1				

# State and Local Implementation Grant Program Funding Opportunity Number: 2013-NTIA-SLIGP-01

## **Submitted by the District of Columbia Government**

May 14, 2013

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Figure 2: District of Columbia FirstNet Program Agency Leadership	
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#### **Project Feasibility**

The District of Columbia is a recognized leader in communication infrastructure and interoperability in the U.S. The Statewide Interoperability Executive Council (SIEC), with the consent of the Mayor, has designated the Office of the Chief Technology Officer (OCTO), the Office of Unified Communications (OUC) and the Homeland Security and Emergency Management Agency (HSEMA) to coordinate implementation of FirstNet.

As the service provider and infrastructure owner within the Statewide Interoperability Governmental Body (SIGB), OCTO will take a leading role in data collection, planning, and coordination of communications services to ensure that the Public Safety Broadband Network (PSBN) will integrate with the existing District public safety and communications agencies. OCTO operates DC-Net, a facilities-based high-bandwidth Metropolitan Area Network that spans the District of Columbia, which provides the core communications infrastructure backbone for all District government IT/telecom services and is responsible for maintaining the communications infrastructure, including voice and data connectivity. DC-Net has deployed over 400 miles of fiber and serves over 30,000 users, at 86 agencies, and over 400 locations. DC-Net plays a significant coordination and technical role for public safety communications and can provide fiber optic backhaul between PSBN antenna sites.

Since 2004, OCTO has carried out several public safety wireless broadband projects (both evaluation and demonstration), for which the District has been singled out by NTIA as being a model of cost effectiveness and operations between the District and nearby state and federal agencies.<sup>2</sup> In particular, the District is a member of the Early Builders Advisory Council (EBAC), and has demonstrated abilities in 700 MHz spectrum development.

The OUC, which manages the District's Land Mobile Radio (LMR) system, will manage the outreach to public safety agencies and network users and will provide technical expertise. The OUC consolidates the command-and-control functions of the District's public services, Fire/Emergency Medical Services (FEMS) and police, and provides centralized coordination and management of public safety communications, city services technology, and maintenance of radio and call center technology systems for the District. It also manages and operates the District's E911/311 Telephony, LMR, Computer-Aided Dispatching (CAD), Mobile Data Computing (MDC), and Client Relationship Management (CRM) systems. The agency's technology infrastructure supports over 9,000 radios, over 10 million radio transmissions, 3.3 million 911 and 311 calls, about 800,000 CAD events, and 367,000 service requests annually.<sup>3</sup> Members of OUC participated in a two-day LTE training curriculum presented by Award Solutions and are

<sup>&</sup>lt;sup>1</sup> In 2011 OCTO was awarded a \$17.5 million stimulus grant under the federal Broadband Technology Opportunities Program for the construction and operation of a middle-mile fiber network administered by DC-Net

<sup>&</sup>lt;sup>2</sup> See Interoperability Planning for Wireless Broadband, 2011. U.S. Department of Homeland Security. <a href="http://www.dhses.ny.gov/oiec/technical-resources/documents/2011-Interoperability-Planning-Wireless-Broadband.pdf">http://www.dhses.ny.gov/oiec/technical-resources/documents/2011-Interoperability-Planning-Wireless-Broadband.pdf</a> (accessed March 11, 2013).

<sup>&</sup>lt;sup>3</sup> See <a href="http://ouc.dc.gov">http://ouc.dc.gov</a>

well-positioned, both technically and operationally, to facilitate the District's consultations with FirstNet.

HSEMA supports and coordinates homeland security and emergency management efforts, ensuring that emergency operations in the District of Columbia are prepared to protect against, plan for, respond to, and recover from natural and man-made hazards. The Statewide Interoperability Coordinator (SWIC) works for this agency<sup>4</sup> and will coordinate with other states and regional entities and with federal entities, including DHS for the FirstNet effort.

#### **Staffing Plan**

The District will utilize current staff across OCTO, OUC, and HSEMA to create a program management structure. The SIEC will designate the Program Manager from among the responsible agencies to lead the effort. Staffing resources needed to support the PSBN will require a mix of existing staff, consulting services, and stakeholder involvement. Resources needed to implement FirstNet consultation processes include:

- Program Manager (Current Staff)
- Deputy Program Managers (Current Staff)
- Project Manager (Current Staff, Half-time support)
- Outreach Manager (Current Staff, Half-time support)
- Statewide Interoperability Coordinator (Current Staff, quarter-time support)
- Policy/Legal Support (Contractor, part-time support)
- Technical Experts & Support (Current Staff, Quarter-time support and Contractors, part-time support)

Additionally, the District plans to hire two wireless network engineers, which will be partially funded through the SLIGP. The wireless network engineers will augment the District's consultation and coordination with FirstNet as well as providing analysis, evaluation, configuration and maintenance of existing District infrastructure and operations as they relate to creating and maintaining the PSBN.

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<sup>&</sup>lt;sup>4</sup> See http://hsema.dc.gov/page/about-hsema

#### **Supplemental Application Narrative**

#### 1. Existing Governance Body

a. Describe the organizational structure and membership of the existing Statewide Interoperability Governing Body (SIGB), or its equivalent, that is responsible for public safety communications in the state.

The District of Columbia's Statewide Interoperability Governing Body (SIGB) is the Statewide Interoperability Executive Committee (SIEC).

The following District government agencies comprise the core membership of the SIEC (Figure 1): The SIEC consists of the: Department of Health (DOH); District Department of Transportation (DDOT); Fire/Emergency Medical Services (FEMS); Homeland Security/Emergency Management Agency (HSEMA); Metropolitan Police Department (MPD); Office of the Chief Technology Officer (OCTO); and Office of Unified Communications (OUC). The Department of Corrections (DOC), Department of Public Works (DPW), and Department of Youth Rehabilitation Services (DYRS) were admitted to the SIEC after publication of the 2007 Statewide Communications Interoperability Plan (SCIP).

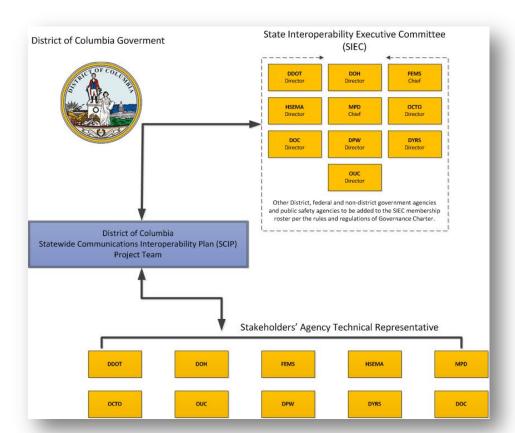


Figure 1: Statewide Interoperability Governing Body (SIGB)

Source: Statewide Communications Interoperability Plan (SCIP), District of Columbia, December 2007, with updated committee members.

The diverse composition of the SIEC ensures that the needs of first responders, as well as those of multi-disciplinary agencies, are addressed as interoperability plans are developed, reviewed, and implemented.

In addition, the SIEC created a technical advisory board known as the Interoperability Communication Committee (ICC), which is supported by the Statewide Interoperability Communication Coordinator (SWIC) and consists of the 10 agency technical representatives that have the authority to implement plans as directed by the SIEC. These governing bodies implement policies and procedures.<sup>5</sup>

b. Describe the SIGB's authority to make decisions regarding public safety communications and how these decisions are implemented.

As a centralized governance structure, the SIEC convenes quarterly to discuss and implement strategies focused on public safety communications. In addition, the SIEC's decisions emphasize improving interoperability in all other areas of communications, including but not limited to voice, data and video. The SIEC is chaired by an executive from each agency (outlined above)

c. Describe how the State will leverage its existing SIGB, or its equivalent to coordinate the implementation of the Public Safety Broadband Network (PSBN) in the State.

As the service provider and infrastructure owner within the SIGB, OCTO will take a leading role in data collection, planning, and coordination of communications services to ensure that the Public Safety Broadband Network (PSBN) will integrate with the existing District public safety and communications agencies. OCTO operates DC-Net, a facilitiesbased high-bandwidth Metropolitan Area Network that spans the District of Columbia, which provides the core communications infrastructure backbone for all District government IT/telecom services and is responsible for maintaining the communications infrastructure, including voice and data connectivity. DC-Net has deployed over 400 miles of fiber and serves over 30,000 users, at 86 agencies, and over 400 locations, providing a full suite of managed, interconnection, and transport services to government and public-services organizations throughout the City. DC-Net plays a significant coordination and technical role for public safety communications and can provide fiber optic backhaul between PSBN antenna sites.

Since 2004, OCTO has carried out several public safety wireless broadband projects (both evaluation and demonstration), for which the District has been singled out by NTIA as being a model of cost effectiveness and operations between the District and nearby state and federal agencies. 6 In particular, the District is a member of the Early Builders

<sup>&</sup>lt;sup>5</sup> Mayor's Order 2012-62, April 27, 2012, Government of the District of Columbia.

<sup>&</sup>lt;sup>6</sup> See Interoperability Planning for Wireless Broadband, 2011. U.S. Department of Homeland Security. http://www.dhses.ny.gov/oiec/technical-resources/documents/2011-Interoperability-Planning-Wireless-Broadband.pdf (accessed March 11, 2013).

Advisory Council (EBAC), and has demonstrated abilities in 700 MHz spectrum development.

OUC, which manages the District's Land Mobile Radio (LMR), will manage the outreach to public safety agencies and network users and provide technical expertise. OUC consolidates the command-and-control functions of the District's public services, FEMS, and police. OUC provides centralized coordination and management of public safety communications, city services technology, and maintenance of radio and call center technology systems for the District. It also manages and operates the District's E911/311 Telephony, LMR, Computer-Aided Dispatching (CAD), Mobile Data Computing (MDC), and Client Relationship Management (CRM) systems. The agency's technology infrastructure supports over 9,000 radios, over 10 million radio transmissions, 3.3 million 911 and 311 calls, about 800,000 CAD events, and 367,000 service requests annually. Members of OUC participated in a two-day LTE training curriculum presented by Award Solutions and are well-positioned, both technically and operationally, to facilitate the District's consultations with FirstNet.

HSEMA will coordinate with other states and regional entities and with federal entities, including DHS.

A Program Manager will be identified within SIEC to lead the effort.

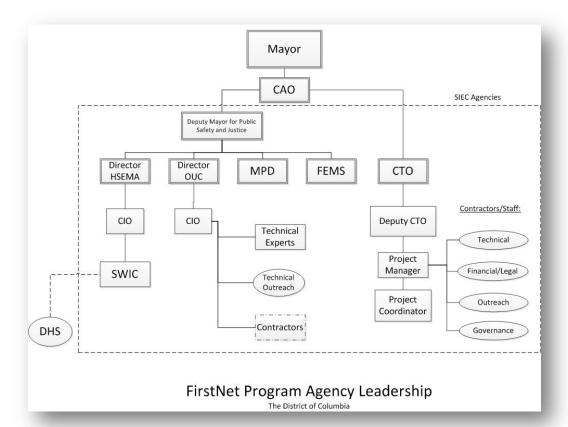


Figure 2: District of Columbia FirstNet Program Agency Leadership

d. How does the State plan to expand its existing SIGB to include representatives with an understanding of wireless broadband and Long Term Evolution (LTE) technology in order to facilitate its consultations with FirstNet?

The District will need to augment its existing LTE technical resources. The current estimate of additional need for technical resources to prepare for consultation with FirstNet is half-time support of an LTE and wireless broadband engineering and technical contractor, managed by OCTO and OUC, in support of education, outreach, and planning efforts with public safety user agencies, as well as technical assistance in developing a uniform Memorandum of Agreement for resource sharing <sup>7</sup>.

Currently, the SIGB has the resources within OUC and OCTO (staff and contractors) with the necessary understanding of wireless broadband and LTE. These individuals were responsible for planning and designing the District's earlier WARN and Regional Wireless Broadband Network (RWBN) networks, providing District representation as one of the Early Builders Advisory Council for urban areas, and applying through the BTOP to deploy a District-wide public safety mobile broadband network. OCTO is currently in the process of hiring two additional wireless network engineers to augment its base staff.

e. Does the State currently dedicate sufficient financial resources to adequately support the SIGB? Does the State intend to invest funds received from SLIGP to financially support the SIGB? If so, provide the amount the State expects to request and describe the SIGB functions that these funds will support.

The District has budgeted sufficient funds to support the current on-going operations and initiatives of the SIGB but will require supplemental funds from the SLIGP to assist in carrying out the FirstNet planning and consultation process. The District intends to invest approximately \$365,000 received from SLIGP to augment the financial support for the SIGB related to FirstNet planning and implementation. Specifically, the District plans to hire additional staff and fund educational outreach to the community and continuing education for current staff. Also, this effort will include continuing support for software and subscriptions needed to maintain essential tools, legal review, and revisions that need to be made to the Statewide Communications Interoperability Plan (SCIP) and development of memoranda of agreement (MOA). We will pay for representatives of the SIGB to attend conferences and training as needed. See the Detailed Budget Justification for further information.

f. What is the plan to educate Statewide Interoperability Executive Committee (SIEC) members to be knowledgeable of public safety long term evolution wireless broadband?

-

<sup>&</sup>lt;sup>7</sup> See Detailed Budget Justification for more detail.

OCTO will participate in the Broadband Stakeholder Conference briefings in Public Safety Communications Research (PSCR)<sup>8</sup> sessions and the initial discussions with the SIGB on the subject will brief the members of the SIEC. As discussed in other sections in this application, OCTO and OUC are regularly attending conferences on the technology including IWCE and APCO and have access to other resources and will regularly provide updates to the SIGB. Further, as discussed in this application, there is already considerable existence of LTE expertise on staff and available via consultants.

g. What is the plan for securing additional District funding for support of the SIEC's efforts concerning wireless broadband?

As discussed later in this application, we are allocating SLIGP and Match funding to support efforts of the SWIC and other essential staff related to the FirstNet process. As for separate unrelated efforts regarding wireless broadband (eg. enhancing broadband to the public or non-public safety government wireless broadband communications), we are not seeking additional funding for those efforts through the SLIGP.

#### 2. Statewide Communications Interoperability Plan

a. Are there existing strategic goals and initiatives in your SCIP focused on public safety wireless broadband? If so, what are they?

The District of Columbia's Statewide Communications Interoperability Plan (SCIP) was developed in 2007 and included a number of strategic goals and initiatives focused on public safety wireless broadband to be completed within a three-year time frame. The SCIP, having met a number of goals laid out by 2010, is currently under review/revision. The SCIP goal focused on public safety wireless broadband, which featured a discussion of the National Capital Region (NCR), was as follows:

"The NCR had been granted the fortune, via generous UASI funding, to deploy the Nation's first Regional Wireless Broadband data Network. The wireless data network is a true broadband wireless network using the most advanced third commercial generation technology (EVDO RevA), but, in a private, public safety only spectrum (700MHz), with a future rollout to span across three separate state entities, i.e. Maryland, Virginia and the District of Columbia. Careful consideration has been made to insure that the Regional Wireless Broadband Network (RWBN) is interconnected using the expanding NCR-NET network of fiber/microwave connections being rolled out across the NCR. This provides the Regional Wireless Broadband Network complete separation from commercial networks and greater accessibility during emergency events."

The RWBN provided city-wide broadband data coverage offering 1.3 Mbps in average throughput to its users throughout the District. It used 12 transceiver sites. The network supported more than 250 users in more than 20 local and federal agencies. More than 20

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<sup>&</sup>lt;sup>8</sup> See http://www.pscr.gov/about\_pscr/highlights/psbb\_062013/psbb\_june\_2013\_stakeholder\_mtg\_info.php

applications were piloted over the network, including several streaming video solutions and a Radio-Over-IP solution interoperable with the District LMR system. The network was used for major events such as the Presidential Inauguration, the 4th of July festivities, and the IMF/World Bank demonstrations, where it facilitated the collaboration of local agencies (MPD, HSEMA, FEMS) and federal agencies (U.S. Park Police, U.S. Secret Service) by enabling them to share video streams and to exchange critical data in a timely manner through interoperable applications such as CapWIN. It also stimulated the region's public safety agencies to develop additional collaborative SOPs to improve the efficiency of their operations through enhanced collaboration and interoperability. As an example, the U.S. Park Police and the DC-FEMS have developed a protocol allowing them to share real-time helicopter video streams over the RWBN during major fire events. Though decommissioned due to lack of spectrum, the RWBN and WARN projects solidified the District as a national leader in public safety communications.

b. Describe how the State has engaged local governments and tribal nations, if applicable, in public safety broadband planning activities that have been completed to date.

Not applicable. The District has no additional local governments or tribal nations.

c. Does the State intend to use SLIGP funding to support efforts to update the SCIP by adding public safety wireless broadband strategic goals and initiatives? If so, provide the amount the State expects to request and describe the activities that these funds will support.

The District will utilize \$25,000 in SLIGP funding to aid in the update of the SCIP through the addition and refinement of new public safety wireless broadband strategic goals.

d. When will the wireless broadband update to the SCIP be completed?

The current revisions to the SCIP are in final stages and are expected to be approved by June 30, 2013.

e. What is the continuing process to update the SCIP as greater knowledge is gained through consultations with FirstNet?

Annually, the SIGB reviews the SCIP and determines if revisions are needed based on the latest developments. If revisions are determined to be needed, the SIGB divides the document by subject matter and creates a work plan. The revisions are passed between the various SIGB offices for comments and feedback and a final document is produced and recommended for approval by the SIGB and then passed on to the Mayor for final approval.

#### 3. State-level Involvement

a. What is the status of the Statewide Interoperability Coordinator (SWIC) for your State? Does this person work full-time in the SWIC capacity? How will this person be involved with SLIGP?

The Statewide Interoperability Coordinator (SWIC) for the District of Columbia works full-time under HSEMA. In addition to standard responsibilities outlined for SWICs by the Department of Homeland Security and the National Council of Statewide Interoperability Coordinators, the District's SWIC will be involved with SLIGP to:

- Serve as a key advisor to Program Management.
- Serve as the District point of contact regarding all statewide interoperability issues and emergency communications needs with DHS, other states, and the National Capital Region.
- Serve as the senior adviser in the coordination of statewide communications interoperability for the District of Columbia thru the SIEC.
- Participate in national and regional committees and working groups.
- Ensure SCIP alignment with the National Emergency Communications Plan (NECP).
- b. How will the State's Chief Information Officer/Chief Technology Officer be involved with SLIGP and with activities related to the implementation of the nationwide public safety broadband network?

As discussed in detail in the response to Question 1.c., the District's Chief Technology Officer will oversee the primary District agency responsible for the implementation of the SLIGP. As such, OCTO will be responsible for:

- Consulting with the Authority concerning the development and operation of FirstNet pursuant to Section 6206 of the Act;
- Entering into agreements to utilize existing District broadband infrastructure for purposes of FirstNet, pursuant to Section 6206 of the Act;
- Receiving grants for activities in connection with the implementation of FirstNet, pursuant to Section 6302 of the Act; and
- Undertaking such other activities as necessary and appropriate to execute the authorities and responsibilities of the District in connection with the development of FirstNet.

OCTO will partner with OUC in the assessement and development of the system requirements. Primary support to OCTO will come from OUC, which is responsible for communications assets (such as radio caches), communications systems (such as 911/311), and policies, directives, and interoperable public safety communications. As such, the OUC will be responsible for:

• Administering the use of FirstNet PBSN.

OCTO and OUC will formalize their responsibilities with a Memorandum of Understanding (MOU).

c. What other State-level organizations or agencies will be involved with SLIGP?

The following District agencies from the SIEC will be involved with this SLIGP:

- Office of the Chief Technology Officer
- Office of Unified Communications
- Homeland Security and Emergency Management Agency
- Department of Health
- Department of Transportation
- Metropolitan Police Department
- Fire and Emergency Medical Services
- Department of Corrections
- Department of Public Works
- Department of Youth Rehabilitation Services

In addition, the following District agencies that are not currently part of the SIEC will also be involved with the SLIGP:

- Department of Employment Services
- Department of Parks and Recreation
- Office of Cable Television and Telecommunications
- Office of Communications, Executive Office of the Mayor
- Department of General Services
- U.S. Military
- National Guard
- d. What are the specific staffing resources the State requires to effectively implement the consultation process with the First Responder Network Authority (FirstNet) and perform the requirements of the SLIGP? If the application requests funding for additional staffing, provide the amount the State expects to request and describe the positions these funds will support.

The District will utilize current staff across OCTO, OUC, and HSEMA to create a program management structure. Staffing resources needed to support the PSBN will require a mix of existing staff, consulting services, and stakeholder involvement. Resources needed to implement FirstNet consultation processes include:

- Program Manager
- Deputy Program Managers
- Project Manager
- Outreach Manager
- Statewide Interoperability Coordinator

- Policy/Legal Support
- Technical Experts & Support

Additionally, the District plans to hire two additional wireless network engineers, which will be partially funded through the SLIGP. The wireless network engineers will support FirstNet through consultation, analysis, evaluation, configuration and maintenance of existing District infrastructure and operations as they relate to creating and maintaining the PSBN.

The District will request \$642,000 in SLIGP funding for this effort.

e. How will tasks be assigned to District agencies related to wireless broadband?

The project manager will be responsible for managing timelines and budgets and will work as necessary with the outreach coordinator to maintain contact with stakeholders. As the project manager defines tasks, he or she will determine the agency responsible for task completion. The project manager and outreach coordinator will track task completion and metrics.

f. How is the State engaging private industry and secondary users (e.g., utilities)?

The District has strong existing relationships with private industry and secondary users and will continue to leverage those relationships in the planning process for FirstNet. The continuity of relationships with Verizon, the Washington Metropolitan Area Transit Authority (WMATA), PEPCO, the DC Water and Sewer Authority (DCWASA), Washington Gas, and the District of Columbia Hospital Association (DCHA) are integral to interoperability of the network and the overall success of FirstNet, especially in a city that is home to the federal government. In particular, Verizon, WMATA, DCWASA, PEPCO, Washington Gas, and DCHA provide situational awareness information and communications assets that can be leveraged for public safety response activities. The Department of Homeland Security (DHS) and other government agencies will be important secondary users.

#### 4. Coordination with Local Government Jurisdictions

a. Describe the local government jurisdictional structure (e.g., municipalities, cities, counties, townships, parishes) located within the boundaries of the State, Commonwealth, Territory or District applying for a grant. How many of these local jurisdictions exist within the State's boundaries?

The District of Columbia is considered a state, city, and federal district. This question is not applicable.

b. Describe how your State will involve these local jurisdictions to ensure there is adequate representation of their interest in the FirstNet consultation and in the planning and governance for SLIGP.

Not applicable.

c. Describe past methods the State has used to successfully coordinate state-wide projects or activities with local government jurisdictions.

Not applicable.

d. What have been some of the State's primary challenges when engaging with local jurisdictions? What are some of the strategies that the State will employ to overcome these challenges during implementation of SLIGP?

Not applicable.

#### **5. Regional Coordination**

a. Does your State have intrastate regional committees that are involved with public safety communications? If so, please describe their organizational structure and membership and how they provide input to the SIGB.

Not applicable.

b. Describe any interstate regional bodies in which your State participates that are involved with public safety communications in the State.

The District takes part in interstate regional committees that are involved with public safety communications. Specifically, as discussed above, the District is at the center of the National Capitol Region (NCR) Interoperable Communications Infrastructure, or NCRnet. The NCR is a regional public safety fiber optic network for coordination and emergency response. The initiative interconnects 22 regional jurisdictions and was funded by federal Urban Area Security Initiative (UASI) and Public Safety Interoperable Communications (PSIC) grants.<sup>9</sup>

NCRnet interconnects existing networks of all NCR jurisdictions and key partner entities and provides dedicated local government-controlled access to critical public safety, emergency management, and law enforcement systems. It also enables real-time cross-jurisdiction communications. Additionally, regional partners of NCRnet have developed specific regional data exchange applications that aid and support the jurisdictions' day-to-day operations and planning.

NCRnet is sponsored and overseen by the Chief Information Officer (CIO) Council of Governments (COG) committee with executive oversight through the Interoperability

.

<sup>&</sup>lt;sup>9</sup> See http://www.ncrnet.us/

Council – a joint COG CIO and Chief Administrative Office (CAO) committee. Overall executive oversight is by the CAO COG board and the COG Senior Policy Group (SPG).

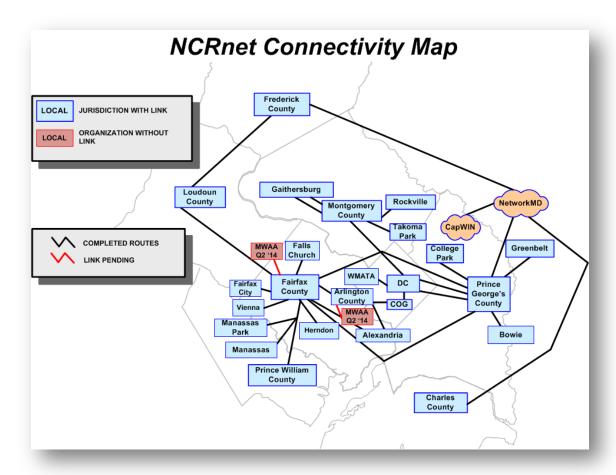


Figure 3: NCRnet

The District participates in the Council of Governments (COG), "an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland and Northern Virginia. COG's membership is comprised of 300 elected officials from 22 local governments, the Maryland and Virginia state legislatures, and U.S. Congress." The OUC participates in the COG communications sub-committee for both Police and Fire agencies. In this committee, the OUC engages in radio system sharing, radio ID sharing, system outage/system upgrade timelines and roll outs, and radio interoperability.

The District has worked on numerous regional spectrum coordination initiatives. It is part of the Region 20 Coordination Group. Spectrum coordination includes wideband spectrum coordination of LMR in the 700 MHz band, coordination of broadband use of the 700 MHz spectrum under a temporary authorization from the FCC.

15

<sup>&</sup>lt;sup>10</sup> See <a href="http://www.mwcog.org/about/">http://www.mwcog.org/about/</a>.

The District has also coordinated with its NCR regional partners for use of the 700 MHz broadband spectrum as part of the RWBN program.

Additionally, the District of Columbia was one of the 25 Major Cities identified for assistance by the Department of Justice (DOJ) for a federal interoperability project known as 25 City Wireless Interoperability. The project addressed Federal-Federal and Federal-State-Local Interoperability radio communications challenges during an emergency incident response in 25 of the largest Metropolitan cities in the U.S. The result is a P25 Integrated Wireless Network (IWN) system that allows for interoperability between jurisdictions in the region. This effort required the participation of several key federal agencies including:

- U.S. Park Police (USPP)
- U.S. Marshals Service (USMS)
- Drug Enforcement Administration (DEA)
- U.S. Coast Guard

- Federal Bureau of Investigation (FBI)
- U.S. Postal Inspection Service
- U.S. Secret Service(USSS)
- Federal Protective Service

The District also takes part in the Federal Partnership for Interoperable Communications (FPIC), which addresses technical and operational activities within the federal wireless communications community. Specifically, FPIC develops recommendations for advisory and regulatory bodies, communicates mission-critical communications issues while coordinating federal operations, and identifies and enhances interoperability capabilities within the Federal government while coordinating with state and local programs. <sup>11</sup>

Finally, the District is a member of the Early Builders Advisory Council (EBAC), an "organization made up of the twenty-one jurisdictions that received waivers from the FCC in May 2010 to build 4G LTE Public Safety Wireless Broadband Networks." <sup>12</sup>

c. How does the State plan to engage and leverage these existing regional coordination efforts in the nationwide public safety broadband network planning?

The District will maintain the current regional collaborations with NCR, COG, Region 20 Coordination Group, DCHA, FPIC and EBAC.

Though we are not certain at this point where our coordinated efforts will focus (each decision of the group requires consensus), we do expect our efforts to be helpful to the FirstNet consultation process. The District intends to work with Maryland, Virginia, and their NCR municipalities through the COG-facilitated bodies to coordinate planning for the PSBN.

d. How will regional bodies be leveraged for FirstNet activities?

<sup>&</sup>lt;sup>11</sup> See http://ipv6.dhs.gov/files/committees/gc 1170097478666.shtm

<sup>&</sup>lt;sup>12</sup> See http://www.ntia.doc.gov/files/ntia/noi-response\_oac\_early\_builders\_11-9-2012.pdf.pdf

The program management will continue discussions with appropriate COG committees to determine current needs (internal and regional response) and will draw on planning from regional exercises. Moving forward, the team will keep in mind these needs for the future and will make sure there is representation from Maryland and Virginia during the planning process.

e. Please identify, if applicable, any other state, territory, or regional entity with which the State collaborated or coordinated in the development and preparation of this application and describe the nature of that collaboration or coordination.

Not applicable.

f. What is the District's relationship with the Mid-Atlantic Consortium of Interoperable Nationwide Advanced Communications (MACINAC)?

The District currently does not participate in MACINAC.

g. Will any SLIGP funding flow to MACINAC? If so, for what activities?

Not applicable.

#### 6. Tribal Nations

There are no Tribal Nations located within the District of Columbia.

#### 7. Rural Coverage

a. Please classify your local jurisdictions into rural and non-rural areas and identify the criteria used in making these rural and non-rural determinations.

The District of Columbia is not considered rural by the United States Census Bureau.<sup>13</sup> Specifically, the Census Bureau defines 'rural' as areas that "encompass all population, housing, and territory not included in an urban area." The Bureau identifies two types of urban areas:

- Urbanized Areas (UAs) of 50,000 or more people;
- Urban Clusters (UCs) of at least 2,500 and less than 50,000 people.

The District is 100% composed of UAs and UCs<sup>14</sup>.

b. Please describe the coverage area and availability of broadband service and LTE technology in the rural areas of the State as defined in response to 7.a.

<sup>&</sup>lt;sup>13</sup> See http://www.census.gov/geo/reference/ua/urban-rural-2010.html

<sup>&</sup>lt;sup>14</sup> See <a href="http://www.census.gov/geo/reference/ua/urban-rural-2010.html">http://www.census.gov/geo/reference/ua/urban-rural-2010.html</a> "Lists of Population, Land Area, and Percent Urban and Rural in 2010 and Changes from 2000 to 2010."

As the District of Columbia is 100% composed of UAs and UCs, this question is not applicable.

c. Please describe how the State plans to prioritize the grant activities to ensure coverage in, and participation by, rural area. Please include specific plans, milestones and metrics to demonstrate how you will achieve these requirements.

As the District of Columbia is 100% composed of UAs and UCs, this question is not applicable.

#### 8. Existing Infrastructure

a. What, if any, databases exist that collect data on government-owned wireless and/or communications infrastructure for the state, local, and/or tribal governments?

The District tracks radios and mobile data assets (MDCs, smartphones) in OCTO's BMC Remedy asset tracking system. Wireless assets such as towers, radios, interoperability policies and procedures, shared systems, spectrum bands, channels, and gateways are stored in the DHS OEC Communications Assets Survey and Mapping (CASM) database managed by SPAWAR Systems Center Pacific in San Diego.

b. If these databases exist, what is the process for updating them and how often do these updates occur?

The CASM database is updated annually through manual data entry. Currently, the District of Columbia is working with the Department of Homeland Security to update and implement the new CASM next-gen application. As part of this upgrade, the District of Columbia is conducting an assessment of its command vehicles, Tactical Interoperable Communication Plan, and Field Operation Guide. This information will allow the District of Columbia a comprehensive look at assets and real-time information sharing.

The BMC Remedy asset tracking system is updated as needed through manual data entry.

#### 9. Existing Government-Owned Networks

a. Describe how you plan to identify any hardening, security, reliability, or resiliency requirements that are currently required for existing government-owned networks within the State, including those networks at the local and tribal governments.

Through many years of operating public safety-grade data and voice networks, the District of Columbia and the SIEC agencies have experience designing and operating numerous examples of robust, hardened infrastructures. As an example, the DC-Net fiber optic network has multiple levels of physical and electronic redundancy (Figure 4).

Services of the Multiprotocol Label Switching (MPLS) network support core public safety and disaster recovery functions. The MPLS network is supported by underlying Synchronous Optical Network (SONET) and Dense Wavelength Division Multiplexing (DWDM) transport networks. The 4 core MPLS routers are interconnected over a DWDM optical transport ring. The Provider Edge (PE) to Provider (P) aggregation is accomplished over the SONET transport network.

While there are standards in place, the District currently does not have a written document relating to the identification of any hardening, security, reliability, or resiliency requirements for its existing radio and wireless government-owned networks. Creation of a formal document will be an important outcome of this planning process.



With the help of SLIGP funding, the District intends, through the SIEC, to survey its public safety entities to collect requirements for the future NPSBN; to inform those requirements, the District intends to include questions regarding requirements for existing networks.

b. Describe how you plan to identify any existing contractual requirements regarding hardening, security, reliability, or resiliency for commercial carriers providing wireless data services within the State, including those at the local and tribal governments.

The District's Office of Unified Communications (OUC) manages the public safety use of commercial wireless broadband services in the District. In this role, OUC is aware of any requirements associated with these services.

#### 10. Network Users

a. Describe how you plan to identify the potential users of the nationwide public safety broadband network within the State, including at the local and tribal governments.

Through outreach and consultation with the SIEC members and agencies noted in answers to question 3 and 5, we will seek agency input in executive input sessions to identify potential users of the NPSBN within the District. Although the District does not have local and tribal governments, there are numerous public safety and critical infrastructure entities within the District that are potential users, including federal agencies, transit agencies, and utilities:

- U.S. Department of Homeland Security
- WMATA
- PEPCO
- DCWASA
- Verizon
- Washington Gas
- b. What is the plan to identify current wireless users or new public safety users outside of the usual user groups? Will the District be involved in identifying potential Federal users?

The consultation process will facilitate the identification of further potential users. Users outside the usual public safety groups include the District Department of Corrections (DDOC), Federal Protective Services, U.S. Park Police, DC Water, Pepco, and Washington Gas and other critical infrastructure partners. Outreach will occur through channels that exist in the DC emergency plan (SCIP). Leadership of the user groups will be included in the kickoff and the introductory programs. Project management will follow up the initial programs with technical and operational leadership of those groups to determine their needs for wireless broadband.

#### 11. Education and Outreach

a. Describe how you plan to educate and train multi-discipline, public-safety and other government users of the nationwide public safety broadband network at your State, local, and tribal levels.

The District will educate leadership in executive input sessions. Phase 1 will address high-level department chairs and directors, including the Office of the Mayor. This phase will need to occur as soon as possible. Phase 2 will include and be designed to address federal agencies, IT/communications and network leadership and as applicable, potential end-users. Phase 3 will include the drafting and consultation process. The District will use the executive input sessions of Phase 1 to organize focus groups, including end users, and also to determine likely needs for education and outreach.

The extent and specifics of PSBN education and training, however, will depend to some extent on FirstNet's decisions as to local control and operational specifications. Prior to FirstNet clarity on these matters, the District intends to provide basic education on the policies and history of the statewide and nationwide public safety broadband initiatives, as well as the basic technology and operational capabilities of LTE for public safety. Hands-on instruction on how to use the network will need to wait for FirstNet input.

b. Please provide a detailed education and outreach plan including proposed meeting timelines and objectives.

The education and outreach plan will generally follow the below schedule:

Phase 1 – High Level Briefings Objectives:

Define schedule
Define goals
Define opportunities
Identify risks
Identify needs:

User needs

Determine current status

Work out strategies

Phase 2 – Technical and Practitioner Briefings

Objectives:

Orientation of stakeholders
Initiate Follow-up of defined goals/opportunities/risks/needs
Gather information/focus groups/brown bag discussions
Analysis of information
Gather Feedback of information

Phase 3 – Complete Draft Plan Objectives:

Define governance:

MOA's

Stakeholder contacts

Define requirements:

Who

What

How

When

Feedback

Consultations

Restructure SCIP

Restructure SIGB

ID	Task Name	Task Name Start		Finish	Duration	20	13	2014				2015				2016	
טו		Start	Duration		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
1	Task 1 – High Level Briefings	7/1/2013	3/31/2014	196d													
2	Task 2 – Technical and Practitioner Breifings	4/1/2014	3/31/2015	261d													
3	Task 3 – Complete Draft Plan	4/1/2015	6/30/2016	327d													

c. Describe outreach to potential users.

Outreach to potential users will include but not be limited to invitations to focus groups and brown bag discussions designed to foster discussion on identifying the needs and obstacles of the project on a regional basis. These programs will include presentations about the program and focused/organized discussion about key features relating to governance, planning, technical needs and obstacles.

#### 12. Memorandum of Agreements

a. Describe any specific obstacles, laws, and/or legal issues that will likely impede your ability to participate fully in the nationwide public safety broadband network or in SLIGP.

The District is unaware of any specific obstacles, laws, and/or legal issues that will likely impede its ability to participate fully in the nationwide public safety broadband network or in SLIGP.

District real property is managed by the Department of General Services (DGS), which oversees tower space and co-location on District property. DGS has standard agreements, but these are likely to need review and revisions.

The District plans to use SLIGP funds to develop a standard MOA based on the existing agreements and arrangements between DGS and commercial carriers.

#### 13. Tools

a. What are some of the software tools that the State has used and could apply to the planning and data collection activities associated with this program?

The District plans to leverage the following existing tools to aid in the planning and data collection activities associated with FirstNet:

- Communication Assets Survey and Mapping (CASM) Tool is a standardized collection method for emergency response agencies to store and visually display data about their public safety communications assets and how those assets are used. CASM allows for a single repository for data about LMR systems, methods of interoperability, and how they are used by public safety entities. Further, the CASM tool aids emergency management personnel by developing accurate situational awareness of their own capabilities while also helping to plan interoperable communications with neighboring jurisdictions, state-level agencies, and federal agencies.<sup>15</sup>
- Geographic Information System (GIS) software allows for the capture, analysis, manipulation, management, and presentation of geographical data for aiding in decision making.
- WIZARD® a full-featured RF modeling software tool, provides "capabilities and terrain-based propagation model analyses for all major wireless technologies (AMPS, CDMA, GSM, TDMA, and SMR)," The software "produces full-color prediction plots to aid network growth planning, interference analysis, and multi-technology deployments. Open interfaces to other applications allow engineers to incorporate RF prediction maps into status reports and marketing presentations." <sup>16</sup>
- b. Is the State aware of additional tools that could be useful for implementing allowable grant activities?

The District would like to augment its current software tool by updating its RF planning software and RF measurement and testing equipment. We do not intend to fund this potential tool through this grant.

#### 14. Phase Two Funding

a. Describe the activities that you expect to undertake with Phase 2 funding when it is made available to the State, Territory, or District.

<sup>&</sup>lt;sup>15</sup> See www.siec.wa.gov/success/files/casm infopaper citycounty.doc

<sup>&</sup>lt;sup>16</sup> See http://www.mindservices.com.au/index.php?option=com\_content&view=article&id=85:rf-planning-toolls&catid=65:library-references&Itemid=61

The following tasks will be included in Phase 2 funding, when made available to the District:

- Collect data requested by FirstNet in the consultations with the District
- Align data collection with the FirstNet business plan and system model
- Continue outreach and education
- Pay for travel for stakeholders to conferences and events
- Develop business plan for District use of FirstNet

#### **15. Other**

a. Please list any consultants, vendors, or other entity that assisted in the preparation of this application.

#### For OCTO:

Andrew Afflerbach, Ph.D., P.E. – CEO and Director of Engineering,
CTC Technology & Energy

Joanne S. Hovis – President, CTC Technology & Energy

Heather D. Mills – Director of Operations and Analyst, CTC Technology & Energy

Ziggy Rivkin-Fish – Principal Analyst, CTC Technology & Energy

Sean Stokes – Baller Herbst Law Group

Jim Baller – Baller Herbst Law Group

#### For OUC:

Guy Jouannelle – Televate, Inc.

#### **Detailed Budget Justification**

The proposed project budget consists of five elements:

- Salaries and benefits of District staff tasked to the project
- Supplies and equipment needed for outreach and analysis of the District's needs in order to develop information for consultation with FirstNet
- Travel to conferences and consultation meetings
- Technical, policy, legal, governance and other specialized contractual support
- Indirect costs

The project will be funded by \$636,722 from the SLIGP grant and \$159,181 from the District in matching funds. The District matching contribution will be in cash, will not come from a Federally funded source and will not be used as cash match for any other Federal grant. This budget narrative allocates \$636,722 from SLIGP grant funds and \$159,181 from the District in matching funds.

NTIA has delineated a three-year performance period. With additional information about the consultation schedule from FirstNet, the District can expand or contract the schedule as needed.

#### Personnel

Federal: \$299,760 Non-Federal: \$0

Total: \$299,760

The project will be overseen by a program manager assigned by the leadership of the SIEC and ICC. The program manager and leadership effort will not be funded under this grant. Day to day, the project will be run by a project manager, who will be funded through this grant and will be responsible for creating and managing the project goals, schedule, milestones, budgets, and outcome metrics. The project manager will be tasked on average one-quarter time over three years to the project and will report to the program manager and project leadership within the SIEC and ICC. The project manager will be responsible for planning the outreach, managing the development of agreements, preparing for consultation with FirstNet, reviewing documents and managing allocation of staff and resources. They will also oversee the work of the policy and legal contractors in the project. The project manager will be a District employee.

The outreach manager will be tasked to the project one-quarter time over three years. He or she will be responsible for identifying the individuals to contact, establishing and maintaining relationships between the project and those individuals, and ensuring that outreach works in a timely and systematic manner. The outreach manager will devise and manage the documentation of the outreach and the information gathered and will act as a point of contact with the people and agencies and organizations in the outreach. As necessary, the outreach manager will assist the project manager with project management roles.

The technical lead will be the technical point of contact both within the District and to FirstNet. He or she will oversee the technical and engineering staff and contractors working on the effort as well as the development of materials to educate leaders, stakeholders and first responder practitioners in the outreach. As necessary, the technical lead will draw on the District's technical expertise and information develop in previous wireless broadband and public safety communications efforts to direct the outreach and gather information. The technical lead will oversee the gathering and analysis of technical requirements from District leadership and first responders and will be responsible for the technical portions of developing memoranda of understanding and the formal documentation of infrastructure hardening and resilience standards. The technical lead will be staffed to the project one-eighth time over the course of the grant.

It will be necessary to assign a senior administrative assistant to manage documentation, schedules and budgets, assist in reporting to NTIA and within the District, and assist the project manager and program manager with their roles. He or she will be staffed to the project one-quarter time over three years.

The SWIC will have significant added responsibilities over the lifetime of the project and will require funding for one-eighth time to support the coordination with the states, NCSWIC and other federal entities, outreach and coordination with the National Capital Region Council of Governments and NCR jurisdictions, the update of the SCIP, and other roles added by this project.

Salary estimates provided for budgeting purposes are prevailing costs for the staffing levels as indicated in D.C. government per current salaries and previous grant applications.

#### **Fringe Benefits**

Federal: \$0 Non-Federal: \$65,947 Total: \$65,947

We have included the cost of fringe benefits in the budget. Fringe benefits are 22% of salary costs and will be paid with matching funds from the District as part of the grant.

#### **Supplies**

Federal: \$0 Non-Federal: \$1,000 Total: \$1,000

We estimate costs for printing of materials needed across the program to be approximately \$1,000 to be paid with matching funds from the District.

Additionally, the District has several tools at its disposal that can document and analyze resources to prepare for the District's consultation with FirstNet which it will utilize for this effort.

#### **Travel**

Federal: \$23,700 Non-Federal: \$3,812 Total: \$27,512

There will be significant local travel for consultation by the planning team with agencies and stakeholders within the District and the National Capital Region. The estimated cost is \$1,906. The District proposes travel for members of the SIGB and the planning group for consultation with FirstNet and NTIA, and for travel by the SWIC to regular interoperability meetings. We estimate a cost of \$1,906 for these regional meetings which we expect will take place in the Washington Metro area. Additionally, members of the project management staff, including the program and deputy program managers, project manager, outreach manager, and technical lead, will also need to travel to and participate in conferences, meetings and training including PSCR, APCO, and IWCE. The estimated cost is \$23,700 and is derived from estimated mileage costs for the Working Group meetings and the Regional and National Meetings with FirstNet as well as travel costs associated with attendance at conferences as noted above. Details are included in the attached budget spreadsheet.

#### **Contractual**

Federal: \$260,078 Non-Federal: \$88,422 Total: \$348,500

The District will need to augment its team with specialist contractors in engineering, policy, governance and legal expertise in order to gather and analyze the District's requirements, educate and respond to the needs and requests of District leadership and FirstNet, and inform the leadership and planning team of national best practices and standards. The District has used contractor support to assist in preparing its response to the SLIGP opportunity.

Technical subject matter experts will be utilized to support FirstNet consultation and phase 2 activities, which may include these examples once phase 2 is determined by FirstNet: public safety applications, RF engineering, public safety end-user equipment, network engineering, LTE protocols, tower infrastructure, fiber optic backhaul, capacity forecasting, security, environmental assessment, geographical information systems and interoperable communications. The estimated cost is \$234,000 based on 10 hours per week of support across various technical roles at \$150/hour for a period of 3 years.

Policy and legal expertise will be needed in many areas including interoperable communications, contracts, agreements with carriers and landowners, telecommunications regulations, governance, business planning, and federal and state policies. The estimated cost is \$107,600 based on approximately 3.5 hours per week of support at \$200/hour for a period of 3 years.

Additionally, in order to better facilitate outreach, the District will need to hire a consultant to develop Web and written materials for outreach and information gathering. These may include

District-specific background information to augment the NTIA and DHS-provided materials, and written and Web surveys. Development of written materials for educational and discussion purposes will cost approximately \$2,000. Development of website, content and website management are estimated to cost approximately \$4,900.

#### Other

Federal: \$12,900 Non-Federal: \$0 Total: \$12,900

Costs associated with attendance at conferences as noted in the Travel section above include conference registration fees for PSCR, APCO, and IWCE. The estimated costs associated with these fees are \$12,900. Details are included in the attached budget spreadsheet.

#### **Indirect Costs**

Federal: \$40,284 Non-Federal: \$0 Total: \$40,284

OCTO does not currently have an Indirect Cost Rate Agreement in place with a Federal cognizant agency. We would like to negotiate the agreement if the grant is awarded. For budgeting purposes we have utilized an 11% indirect cost rate, which is charged on personnel and fringe benefits. However, this rate is subject to change.

## District of Columbia SLIGP Detailed Budget Spreadsheet

Category	Detailed Descrip	of Budget grant period)	(for	Breakdown of Costs				
a. Personnel	Quantity	Unit Cost		Total Cost		Federal		Non-Federa
SWIC The SWIC will spend 1/8th time on SLIGP grant activities over 3 years. The SWIC's annual salary is \$66/hr \$140,000 x .125% = \$17,500	3 years	\$ 17,500	\$	52,500	\$	52,500		
Project Manager The Project Manager will spend 1/4 time on SLIGP grant activities over 3 years. Annual salary for this position averages \$66/hr. \$137,280 x .25 = \$34,320	3 years	\$ 34,320	\$	102,960	\$	102,960		
Outreach Manager The Outreach manager will spend 1/4 time on SLIIGP grant activities over 3 years. Annual salary for this position averages \$55/hr. \$114,400 x .25 = \$28,600	'3 years	\$ 28,600	\$	85,800	s	85,800		
Senior Administrative Assistant The Senior Administrative Assistant will spend 1/4 time on SLIGP grant activities over 3 years. Annual salary for this position averages \$25/hr. \$52000 x .25 = \$13,000	3 years	\$ 13,000	\$	39,000	s	39,000		
Technical Lead The Technical Lead will spend 1/8 time on SLIGP grant activities over 3 years. Annual salary for this position averages \$25/hr. \$52,000 x .125 = \$6,500	3 years	\$ 6,500	\$	19,500	\$	19,500		
Total Personnel			\$	299,760	\$	299,760	\$	
b. Fringe Benefits	Quantity	Unit Cost		Total Cost		Federal		Non-Federa
SWIC Fringe benefits are 22% of Salary	\$52,500	\$ 0	\$	11,550			\$	11,550
Project Manager Fringe benefits are 22% of Salary	\$102,960	0		22,651		lu <sup>*</sup>	\$	22,651
Outreach Manager Fringe benefits are 22% of Salary	\$85,800	\$ 0	\$	18,876			\$	18,876

## District of Columbia SLIGP Detailed Budget Spreadsheet

Category	Detailed Descrip		of Budget grant period)	(for	an a	Breakdown of Costs				
Senior Administrative Assistant Fringe benefits are 22% of Salary	\$39,000	\$	0	\$ 8,580			\$	8,580		
Technical Lead Fringe benefits are 22% of Salary	\$19,500	\$	0	\$ 4,290			\$	4,290		
Total Fringe Benefits		fu!		\$ 65,947	\$		\$	65,947		
c. Travel	Quantity		Unit Cost	Total Cost		Federal		Non-Federa		
Mileage for Working Group Meetings 11 individuals traveling 35 miles roundtrip for 9 meetings; cost per mile is based on federal mileage rates	3,465 miles	\$	0.55	\$ 1,906			\$	1,906		
Travel for Regional and National Meetings with FirstNet 11 individuals will attend 8 meetings; Local travel in Metro DC Area, 35 miles roundtrip; cost per mile is based on federal mileage rates.	3,465 miles	\$	0.55	\$ 1,906			\$	1,906		
Travel to Conferences (PSCR (2 days, 1 night), IWCE (4 days, 3 nights), APCO(8 days, 7 nights)). Airfare = \$520/conference/attendee @ 3 Trips = \$1,560/attendee; Hotel = \$160/night @ 11 nights = \$1760/attendee; Per Diem = \$45/person/day @ 14 days = \$630/person. Total \$3,950/person.	6	\$	3,950	\$ 23,700	\$	23,700				
Total Travel		6	M. S. S. C.	\$ 27,512	\$	23,700	\$	3,812		
d. Equipment	Quantity		Unit Cost	Total Cost	8	Federal		Non-Federa		
N/A	0	\$	*	\$ •	\$					
Total Equipment	19495			\$ 	\$		\$	9.		
e. Supplies	Quantity		Unit Cost	Total Cost	L	Federal		Non-Federa		
Printing @ \$1000	1	\$	1,000	\$ 1,000	7		\$	1,000		
Total Supplies	ET FLEXIBLE	NO TE	All markets	\$ 1,000	\$	-	\$	1,000		
f. Contractual	Quantity		Unit Cost	Total Cost		Federal		Non-Federa		
Technical Subject Matter Experts	1560	\$	150	\$ 234,000	\$	168,004	\$	65,996		

## District of Columbia SLIGP Detailed Budget Spreadsheet

Category	Detailed Descrip		of Budget grant period)	(for	1000	Breakdown of Costs				
Policy & Legal Governance/Planning/MOA's - in hours	538	\$	200	\$	107,600	\$	91,101	\$	16,499	
Development of Educational and Discussion Materials @\$2,000 (20 hrs @ \$100/hr); Web Development and Web Surveys @ \$4,900 (49										
hours @ \$100 per hour)	1	\$	6,900	-	6,900	\$	973	\$	5,927	
Total Contractual	A TALL OF THE PARTY OF			\$	348,500	\$	260,078	\$	88,422	
g. Construction	Quantity		Unit Cost		Total Cost		Federal		Non-Federal	
N/A				\$	-					
Total Construction	英音牌 静志區			\$	-	\$		\$	•	
h. Other	Quantity		Unit Cost		Total Cost		Federal		Non-Federal	
Conference Attendance Fees (PSCR (\$275), IWCE (\$1250), APCO(\$625)).	6	\$	2,150	\$	12,900	\$	12,900			
Total Other				\$	12,900	\$	12,900	\$		
Total Direct Charges		突而		\$	755,619	\$	596,438	\$	159,181	
i. Indirect Costs	Quantity		Unit Cost		Total Cost		Federal		Non-Federal	
Grant Administration Fee - 11%	\$365,707		11%	\$	40,284	\$	40,284			
Total Indirect	Single 488 8		State moves	\$	40,284	\$	40,284	\$		
TOTALS	2001.022 437.000	959		\$	795,903	\$	636,722	\$	159,181	

#### **ASSURANCES - NON-CONSTRUCTION PROGRAMS**

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

### PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE:

Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

- Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
- Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
- Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
- 6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C.§§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation

- Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S.C. §§6101-6107), which prohibits discrimination on the basis of age: (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse: (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (i) the requirements of any other nondiscrimination statute(s) which may apply to the application.
- 7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

- Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
- 10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
- Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

- 13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
- 14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
- 15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
- 16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
- 17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
- Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
- 19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	* TITLE
Completed on submission to Grants.gov	CTO, District of Columbia
* APPLICANT ORGANIZATION	* DATE SUBMITTED 3/19/13
District of Columbia Government	Completed on submission to Grants.gov

#### CERTIFICATION REGARDING LOBBYING

(REV 1-05)

Applicants should also review the instructions for certification included in the regulations before completing this form. Signature on this form provides for compliance with certification requirements under 15 CFR Part 28, 'New Restrictions on Lobbying.' The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of Commerce determines to award the covered transaction, grant, or cooperative agreement.

#### LOBBYING

As required by Section 1352, Title 31 of the U.S. Code, and implemented at 15 CFR Part 28, for persons entering into a grant, cooperative agreement or contract over \$100,000 or a loan or loan guarantee over \$150,000 as defined at 15 CFR Part 28, Sections 28.105 and 28.110, the applicant certifies that to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying.' in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

#### Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

In any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying,' in accordance with its instructions.

Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure occurring on or before October 23, 1996, and of not less than \$11,000 and not more than \$110,000 for each such failure occurring after October 23, 1996.

\* NAME OF APPLICANT District of Columbia Government \* AWARD NUMBER \* PROJECT NAME DC FirstNet Prefix: \* First Name: Middle Name: Mr. Rob \* Last Name: Suffix: Mancini \* Title: CTO, District of Columbia \* DATE: \* SIGNATURE: anain Completed by Grants.gov upon submission Completed by Grants.gov upon submission.

As the duly authorized representative of the applicant, I hereby certify that the applicant will comply with the above applicable certification.

#### GOVERNMENT OF THE DISTRICT OF COLUMBIA



#### ADMINISTRATIVE ISSUANCE SYSTEM

Mayor's Order 2013-056 March 13, 2013

SUBJECT: Designation of Agency for Development of Public Safety Broadband

Network

**ORIGINATING AGENCY:** Office of the Chief Technology Officer and Office

of Unified Communications

By virtue of the authority vested in me as Mayor of the District of Columbia by section 422(4) and (11) of the District of Columbia Home Rule Act, approved December 24, 1973, 87 Stat. 790, Pub. L. 93-198, D.C. Official Code §§ 1-204.22(4) and (11) (2012 Supp.), and consistent with Title VI of the Middle Class Tax Relief and Job Creation Act of 2012, approved February 22, 2012, Pub. L. 112-96, 126 Stat. 156, 47 U.S.C. § 1422 et seq., it is hereby **ORDERED** that:

#### I. PURPOSE AND SCOPE

The purpose of this Order is to designate an agency of the District of Columbia Government to execute the authorities and responsibilities of the District of Columbia pursuant to Title VI of the Middle Class Tax Relief and Job Creation Act.

#### II. REQUIREMENTS FOR DISTRICT AGENCIES

Title VI of the Middle Class Tax Relief and Job Creation Act (the "Act") established the First Responder Network Authority (the "Authority") to ensure the establishment of a nationwide, interoperable public safety broadband network, "FirstNet."

Section 6206 of the Act directs the Authority, among other responsibilities, to:

- "Consult with regional, State, tribal, and local jurisdictions" concerning the development and operation of FirstNet;
- Undertake such consultation with regional, State, tribal, and local jurisdictions by engaging with a "single officer or governmental body designated" by each jurisdiction; and
- "Enter into agreements to utilize, to the maximum extent economically desirable, existing...commercial...and Federal, State, tribal, or local infrastructure."

Section 6302 of the Act authorizes the Authority to award grants to entities, including single jurisdictional entities designated for purposes of Section 6206, for activities in connection with the implementation of FirstNet.

Pursuant to these provisions of the Act, I designate the Office of the Chief Technology Officer ("OCTO") as the "single...governmental body" of the District of Columbia to:

- Consult with the Authority concerning the development and operation of FirstNet pursuant to Section 6206 of the Act;
- Enter into agreements to utilize existing District broadband infrastructure for purposes of FirstNet, pursuant to Section 6206 of the Act;
- Receive grants for activities in connection with the implementation of FirstNet, pursuant to Section 6302 of the Act; and
- Undertake such other activities as necessary and appropriate to execute the authorities and responsibilities of the District in connection with the development of FirstNet. OCTO will partner with the Office of Unified Communications ("OUC") in the assessment and development of the system requirements.
- OUC will be the agency responsible for administrating the use of FirstNet Public Safety Broadband Network.
- OCTO and OUC will formalize their responsibilities with a Memorandum of Understanding.

#### III. INCONSISTENT ORDERS SUPERSEDED

This Order shall supersede all pre-existing Orders to the extent of any inconsistency.

#### IV. EFFECTIVE DATE

This Order shall be effective immediately.

MAYOR

ATTEST:

CVNTHIA BROCK SMITH

SECRETARY OF THE DISTRICT OF COLUMBIA