

**Application for Federal Assistance SF-424**

Version 02

<b>* 1. Type of Submission:</b> <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	<b>* 2. Type of Application:</b> <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	<b>* If Revision, select appropriate letter(s):</b> _____ <b>* Other (Specify)</b> _____
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<b>* 3. Date Received:</b> Completed by Grants.gov upon submission. _____	<b>4. Applicant Identifier:</b> _____
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<b>5a. Federal Entity Identifier:</b> _____	<b>* 5b. Federal Award Identifier:</b> _____
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**State Use Only:**

<b>6. Date Received by State:</b> 02/06/2013	<b>7. State Application Identifier:</b> MISLIGP
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**8. APPLICANT INFORMATION:**

<b>* a. Legal Name:</b> Michigan State Police - State 911 Administrative Section
_____ _____

**d. Address:**

<b>* Street1:</b> P.O. 30634
<b>Street2:</b> 333 S Grand Ave
<b>* City:</b> Lansing
<b>County:</b> _____
<b>* State:</b> MI: Michigan
<b>Province:</b> _____
<b>* Country:</b> USA: UNITED STATES
<b>* Zip / Postal Code:</b> 48909-0634

**e. Organizational Unit:**

<b>Department Name:</b> Michigan State Police	<b>Division Name:</b> State 911 Administration
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**f. Name and contact information of person to be contacted on matters involving this application:**

<b>Prefix:</b> _____	<b>* First Name:</b> Harriet
<b>Middle Name:</b> _____	
<b>* Last Name:</b> Miller-Brown	
<b>Suffix:</b> _____	
<b>Title:</b> State 911 Administrator	
<b>Organizational Affiliation:</b> Michigan State Police	
<b>* Telephone Number:</b> 517-241-0080	<b>Fax Number:</b> 517-241-0387
<b>* Email:</b> miller-brownh@michigan.gov	

FORM 424 (02-01-09)

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

Application for Federal Assistance SF-424

Version 02

16. Congressional Districts Of:

\* a. Applicant

\* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

\* a. Start Date:

\* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text" value="3,347,017.00"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="837,574.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text"/>
* g. TOTAL	<input type="text" value="4,184,591.00"/>

\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?

- 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

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:  \* First Name:

Middle Name:

\* Last Name:

Suffix:

\* Title:

\* Telephone Number:  Fax Number:

\* Email:

\* Signature of Authorized Representative:  \* Date Signed:  7-26-13



BUDGET INFORMATION - Non-Construction Programs

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

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. State and Local Implementation Grant Program	11.549	\$	\$	\$ 3,347,017.00	\$ 837,574.00	\$ 4,184,591.00
2.						
3.						
4.						
5. Totals		\$	\$	\$ 3,347,017.00	\$ 837,574.00	\$ 4,184,591.00

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) State and Local Implementation Grant Program	(2)	(3)	(4)	
<b>a. Personnel</b>	\$ 793,042.00	\$ 442,167.00	\$	\$	\$ 1,235,209.00
<b>b. Fringe Benefits</b>	604,423.00	298,997.00			903,420.00
<b>c. Travel</b>	469,368.00				469,368.00
<b>d. Equipment</b>					
<b>e. Supplies</b>	11,918.00	14,600.00			26,518.00
<b>f. Contractual</b>	1,418,136.00	56,160.00			1,474,296.00
<b>g. Construction</b>					
<b>h. Other</b>	50,130.00	25,650.00			75,780.00
<b>i. Total Direct Charges (sum of 6a-6h)</b>	3,347,017.00	837,574.00			\$ 4,184,591.00
<b>j. Indirect Charges</b>					\$
<b>k. TOTALS (sum of 6i and 6j)</b>	\$ 3,347,017.00	\$ 837,574.00	\$	\$	\$ 4,184,591.00
<b>7. Program Income</b>	\$	\$	\$	\$	\$

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SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8. State and Local Implementation Grant Program	\$ 837,574.00	\$	\$	\$ 837,574.00	
9.					
10.					
11.					
12. TOTAL (sum of lines 8-11)	\$ 837,574.00	\$	\$	\$ 837,574.00	
SECTION D - FORECASTED CASH NEEDS					
	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 FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16.	\$	\$	\$	\$	
17.					
18.					
19.					
20. TOTAL (sum of lines 16 - 19)	\$	\$	\$	\$	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges: 4184591	22. Indirect Charges: 0				
23. Remarks: Revision date 07-25-2103					



*NTIA Funding Opportunity: 2013-NTIA-SLIGP-01*

*State and Local Implementation Grant Program (SLIGP)*

*Michigan Department of Technology, Management and Budget –*

*Office of Michigan's Public Safety Communications System*

*Supplemental Application Narrative Response Submission*

*V2.0 031713*



## 1. Existing Governance Body

***(1a) 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.***

### **Response:**

The State of Michigan has had a State Interoperable Governance Board, the *Michigan Public Safety Communications Interoperability Board* since 2003. The membership consists of sixteen members, nine of which are appointed by the governor and represent emergency First Responders. The current board was established by an Executive Order (EO) in 2003, with subsequent Executive Order in 2005 which renamed the board and expanded the Board's responsibilities and renaming of the board occurred within Executive Order in 2005 and in 2009 and consists of a chair and vice chair roles. Here is a summary of the current membership of the Michigan Public Safety Communications Interoperability Board:

- The employee within the Department of Technology, Management, and Budget with principal administrative responsibilities for the Michigan Public Safety Communications System (MPSCS), as designated by the Director of the Department.
- The officer or employee within the Department of State Police with principal responsibility for this state's emergency management operations, as designated by the Director of the Department of State Police.
- The State Fire Marshal.
- The Director of the Department of Community Health, or his or her designee from within the Department of Community Health.
- The Adjutant General or his or her designee from within the Department of Military and Veterans Affairs.
- The Director of the Department of Natural Resources and Environment, or his or her designee from within the Department of Natural Resources and Environment.
- The Director of the Department of Transportation, or his or her designee from within the Department of Transportation.
- Nine members from local first responders which represent fraternal organizations of: Michigan Association of Fire Chiefs, Michigan Association of Chiefs of Police, Michigan Sheriffs Association; and also local representatives for: emergency management, homeland security, Emergency Management Services (EMS), local law enforcement and firefighters.

The Public Safety Communications Interoperability Board is authorized to establish Technical Advisory Committees or task forces composed of persons representing law enforcement or other governmental or tribal public safety agencies or organizations that operate or utilize public safety communications systems in this state, including, but not limited to, a task force on communications interoperability. The Interoperability Board also may invite the participation of federal homeland security, law enforcement, emergency management, or communications





agency officials and personnel, including, but not limited to, federal officials or personnel serving as liaisons to the Interoperability Board. The Interoperability Board may adopt, reject, or modify any recommendations proposed by an advisory workgroup or task force.

The Public Safety Communications Interoperability Board also recommends best practices and oversight mechanisms for the implementation of consistent and effective interoperable public safety communications systems and standards across the State of Michigan.

***(1b) Describe the SIGB’s authority to make decisions regarding public safety communications and how these decisions are implemented.***

**Response:**

The current Michigan Public Safety Communications Interoperability Board is advisory in nature and advises the Governor and the Department of Technology, Management and Budget on the following:

- Best practices for implementing interoperability of wireless public safety communications, including data, in Michigan on a local, regional, and statewide basis.
- Identifying future trends in public and private sectors relating to public safety wireless communication, interoperability standards, and technology in support of providing public safety wireless services in the most effective and efficient manner.
- Opportunities for effectively using the MPSCS as part of local, regional and statewide mutual-aid agreements, 9–1–1 dispatch operations, and incident command systems.
- Best practices for using interoperability training on a local, regional and statewide basis.
- Development and implementation of Michigan’s statewide Communications Interoperability Communications plan (SCIP).
- The Board shall provide other information, recommendations, or advice as directed by the Governor or the Director of the Department of Technology, Management and Budget.
- The Board may, as appropriate, make inquiries, studies, investigations, hold hearings, and receive comments from the public. The Board may, as appropriate, designate as liaisons to the Board individuals from groups representing MPSCS users who do not have Board representation. The Board may also consult with outside experts in order to perform its duties, including but not limited to, experts in the private sector, organized labor, government agencies, and at institutions of higher education.



***(1c) 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.***

**Response:**

As identified in the Executive Orders (EO) that created the Board, the charter of the board is to advise the governor on 1) Best practices for implementing interoperability of wireless public safety communications, including data, in Michigan on a local, regional, and statewide basis; and 2) Identifying future trends in public and private sectors relating to public safety wireless communication, interoperability standards, and technology in support of providing public safety wireless services in the most effective and efficient manner. The State of Michigan has begun preparing stakeholder development activities that will enable the existing governance body to fully engage in the consultation and coordination with FirstNet in support of the implementation of the nationwide Public Safety Broadband Network. In this way, Michigan's Interoperability Board will be fully leveraged for their experience and expertise in public safety.

***(1d) 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?***

**Response:**

The state initiated a workgroup following the release of the Middle Class Tax Relief and Jobs Act of 2012 to review the existing governance of parallel groups in the state (911 and Interoperability) with a focus to include Public Safety Broadband as part of the overall review. A hybrid of representative stakeholders were assembled to develop a plan for Next Gen 911 and throughout the effort a forward thinking solution to bring all of the currently separated but long term integrated foundations of 911, Interoperability, and Public Safety Broadband together under a single governance group responsible for setting the strategic direction at all levels within the state. This planned approach is also intended to address the convergence of these solutions and enhance Michigan's strategic planning from policy through technology with the stakeholders within the state setting that strategic direction. Currently this work effort is still in progress with the intentions of bringing together work areas and efforts across multiple agencies under a single independent authority that is focused towards public safety. Emergency Communications Commission – Revised SIGB support structure, but given that this is still a work effort underway there may be changes to the final outcomes for the model. The Interoperability/Public Safety Broadband Office will coordinate the activities and the membership of the working group and given some of the unknowns with FirstNet it is believed that the working group may initially be a mix of public safety stakeholders and technologists with expertise in wireless broadband and LTE. Long term, the committee may need to evolve and "morph" based on the continued working activities with FirstNet and the need for expertise that may not be part of the membership of the working group. A preliminary view of the proposed governance structure is shown in Figure 1.



Figure 1. Emergency Communications Commission – Revised SIGB support structure

The proposed make-up of the new State Interoperable Governance Board (SIGB) will include thirteen members as identified in Figure 2. As this new governance strategy is under current development, the inclusion of tribal representation within the new proposed model is a continuing activity defining the role and placement within the appropriate function of the new model. The final governance strategy will include a tribal nation representative member. The relationship between the existing Michigan Public Safety Communications Interoperability Board (existing SIGB) and that of the planned Emergency Communications Commission (revised SIGB), can be identified as one as a current defined and functioning group, and that of one that will be a future planned replacement of the current SIGB. Although the ECC is in a planning phase, it is not to deter any current work activities of the Michigan Public Safety Communications Interoperability Board, whether they be related to land mobile radio efforts or any public safety broadband efforts such as the SLIGP. To expand and clarify, it is planned and envisioned that the SLIGP efforts will continue under the direction of the current board and SIGB until the ECC is formally in place and any transition that will need to occur, will be facilitated by many of the members that will be members of both SIGBs current and future. It is not expected nor anticipated that this governance recommendation and possible change will have any effect in Michigan’s ability to successfully implement the SLIGP. It is anticipated that when the ECC is established that it will gain rule making authority, which is not a capability of the current Michigan Public Safety Communications Interoperability Board as it is an advisory board for/to the governor focused on interoperability. The planned ECC will have the rule making authority across the areas of 911, interoperability (land mobile radio), and public safety broadband so the influence across public safety under a single group of stakeholders becomes broader yet focused to ensure integration across the traditionally “disparate” areas.



**13 Members:**

- Department of Technology Management and Budget (DTMB)
- EMS / Community Health
- Public Safety Appointee from the Governor’s Office
- Michigan Association of Chiefs Police (MACP)
- Michigan Association of Counties (MAC)
- Fire Representative
- Michigan Department of Transportation (MDOT)
- Emergency Management Representative
- Michigan Sheriffs Association (MSA)
- Michigan State Police (MSP)
- Representative from the 911 Board under the ECC
- Representative from the Public Safety Broadband Board under the ECC
- Representative from Interoperability Board under the ECC

*Appointments are a mix of statutorily defined positions, appointed positions and ECC advisory board selections.*

*Figure 2. Membership of Emergency Communications Commission – Suggested Model for revised SIGB*

***(1e) 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.***

**Response:**

The support of the current SIGB is the responsibility of the Department of Technology, Management and Budget (DTMB). The budget is dependent upon existing General Fund budget from the funded program of the Office of the MPSCS, which is the statewide interoperable radio system. No state funding is dedicated directly towards the support of the SIGB. The state provides the meeting facility, and develops the quarterly agendas while the Director of the MPSCS facilitates and supports the meeting in coordination with the chair, vice chair, and secretary. In the revised SIGB, funding to support the SIGB will be dependent on the two peer offices of the 911 office, and that of the Public Safety Broadband/Interop office both with an associated relationship with the proposed Emergency Communications Commission.

SLIGP budget funds will be utilized to support travel, outreach, and administration expenses for FirstNet activities by SIGB membership, and appropriate working committees associated with the newly developed SIGB membership. These funds are identified as SLIGP anticipated costs to support the grant activities.



## 2. Statewide Communications Interoperability Plan (SCIP)

*(2a) Are there existing strategic goals and initiatives in your SCIP focused on public safety wireless broadband? If so, what are they?*

**Response:**

Although there are not specific goals and initiatives in the SCIP that are focused on public safety wireless broadband, there are goals that were written with the intention to review wireless data capabilities statewide. The State has not updated the SCIP since prior to the law that defined FirstNet, and prior to that the language focused on technologies in place within Michigan. The new State Wide Interoperability Coordinator (SWIC) has been involved with the public safety broadband efforts and also with Department of Homeland Security's Office of Emergency Communications in redefining the SCIP template. Over the past year the state has continued to formalize programs and initiatives, and updating the SCIP on an annual basis is an effort that has been identified and committed for 2013.

The goals currently in Michigan's SCIP that are broad enough to cover FirstNet yet will be revised to specifically identify Public Safety Broadband and FirstNet are:

- ***Expand Statewide Data Capabilities*** - The objective of being able to support interoperable mobile data between an expanded subscriber base is a priority with the availability of advanced applications being critical. Interoperability of data is essential to first responders to allow them to maintain situational awareness and access vital information.
- ***Strengthen Fixed Data Resources*** - By supporting advanced technologies, continuously updated information can be provided to critical locations, such as Emergency Operating Centers (EOC) and Emergency Coordination Centers (ECC).

*(2b) 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.*

**Response:**

The State has been conducting outreach and education prior to FirstNet's definition in law to ensure local government (911 directors, law enforcement, fire service, EMS and local non-public safety staff), state government (Executive Branch, Legislative Branch, and Judicial Branch) and tribal nation(s) were aware of the impending opportunities that public safety broadband could provide and to start identifying business requirements and technology that may improve or alter their operations. These outreach and education efforts were performed during quarterly and annual statewide Homeland Security Conferences, State Public Safety Interoperability meetings and forums, 911 forums and during monthly/quarterly or annual fraternal organization forums



and meetings. Since FirstNet has been signed into law, those same outreach and education efforts have continued, but with the altered focus to include current events with FirstNet and NTIA.

Although there have been efforts to stimulate the thoughts of use of the network for public safety, we understand that the information has not been presented and understood by all organizations from rural local, to our partners in the tribal nations. The efforts of the SLIGP outreach will address these missed opportunities to ensure the information and knowledge has made it to all levels of and partners across public safety and non-public safety.

As identified in the response for supplemental question in 1d above, tribal representation will be included in the new SIGB model, but efforts to include tribal nations will continue in parallel to ensure all possible partners have been contacted for inclusion in the statewide planning.

***(2c) 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.***

**Response:**

The state is scheduled for a SCIP update workshop in October 2013 and it is expected to use SLIGP funds to cover travel and administrative costs of state, local agency, and tribal nation representatives to attend the multi-day session. The SLIGP will provide the means to bring a wider audience to participate in the strategic event. The goal of the session is to update and rewrite the SCIP to address changes in priorities of interoperability in Michigan and target the planning efforts of public safety broadband. A follow-on meeting is planned to allow for the validation and feedback of the updated document from the SIGB. Based on past state efforts and those that Michigan has learned from peer states, this is estimated to be between 15 and 30 people participating.

### **3. State-level Involvement**

***(3a) 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?***

**Response:**

The State Wide Interoperability Coordinator (SWIC) in Michigan is aligned like that in many other states with the role corresponding to the state director of the statewide radio system with a focused vision of the big picture view of interoperability across the state and region. Michigan has implemented a SWIC and Deputy SWIC in prior years and due to the Interoperable



Emergency Communications Grant Program (IECGP) funding ending, and no longer helping support the SWIC positions, the SWIC is funded with General Fund dollars are part of agency budget. Although the responsibilities of the SWIC is full-time, the job itself is combined with the duties of running the statewide radio communications system as interoperability is a foundation of both roles. Although both roles may appear separate, the State has been successful in integrating the role of SWIC as part of an existing effort that performed many of the same parallel functions. This model allows division staff reporting to the Division Director for the statewide radio system, to take on some functional components to ensure limited impact and maximized benefit to the SWIC and the state. Given the fact that statewide radio system is comprised of local, state, federal, tribal, and private public safety agencies over 1400 agencies utilize the 83 county system, the SWIC utilizes Division staff to help support the role of the SWIC. The current SWIC has been involved with Department of Homeland Security (DHS) Office of Emergency Communications as a Deputy SWIC over the past four years. The current SWIC also has been a member of many national organizations in helping frame Public safety Broadband and associated requirements from organizations such as Association of Public-Safety Communications Officials (APCO), National Public Safety Telecommunications Council (NPSTC), FCC Emergency Response Interoperability Committee (ERIC), National Governors Association (NGA), FEMA Region 5 Regional Communications Committee Working Group (RECCWG), and regional border state collaboration with Indiana and Ohio.

The past and current SWIC has lead the efforts for Michigan relating to interoperability and public safety broadband and will continue to do so in coordinating meetings with stakeholders and outreach and education opportunities around the state and region.

The SWIC has been the conduit of past outreach internal and external to Michigan and will be the strategic resource supporting the grant and coordinating with the governor's identified Point of Contact (POC) for FirstNet, the stakeholder authority and contractual and shared resources.

Michigan's CIO currently interacts with the SIGB through the staff member responsible for the statewide public safety communications system, who is a member of the SIGB. There are monthly meetings where the CIO and the chair of the SIGB are provided updates from the SWIC (that is also the responsible member for the statewide public safety communications system and deputy lead for all public safety broadband efforts) and key members of the SIGB. These meetings are a way to bridge the CIO into the SIGB's efforts, and the SIGB into the CIO's leadership as the single POC for FirstNet, in Michigan. The CIO, under the prior administration, was a member of the Michigan Public Safety Communications Interoperability Board, and under the current administration that appointment can be of the same role. Given the amount of tasks that the CIO is responsible for around the State of Michigan, it was felt that the current involvement of the individual responsible for the statewide communications system would suffice at the time. Given the ramp up of public safety broadband efforts, this will be revisited. It is envisioned that with the planned ECC as the new SIGB, the CIO will be a member of the makeup of the ECC.



***(3b) How will the State’s Chief Information Officer/Chief Technology Officer (CIO) be involved with SLIGP and with activities related to the implementation of the nationwide public safety broadband network?***

**Response:**

The SWIC works closely in coordination with the State CIO with all efforts to date relating to the public safety broadband network. The state CIO, which has been identified by the Governor as the FirstNet Point of Contact (POC), has been involved with FirstNet planning efforts within Michigan since being named and will coordinate with the SWIC and stakeholders those activities and functions that will be addressed in the SLIGP. The state CIO is also responsible for the Statewide Broadband Initiative (SBI) and there is a correlation of efforts to date from that prior NTIA initiative and that of the new NTIA initiative, the SLIGP. The state CIO is also responsible for the statewide public safety communications system, so the knowledge and experience of the CIO office will carry forward to the implementation efforts the public safety broadband network based on past experiences and processes of constructing a statewide system, building users across public safety and non-public safety disciplines, and public-private partnerships. The CIO and the SWIC work collaboratively together on current public safety activities support such as the statewide land mobile radio system, and data projects for the Michigan State Police. As the CIO is responsible for all state agency IT efforts, the SWIC runs the statewide land mobile radio system and coordinates the interoperability efforts of each of the seven homeland security regions in the state rolled up into a statewide interoperability vision. The working relationship continues as the SWIC is responsible for advising the CIO on all Public Safety Broadband activities around the nation and with all FirstNet efforts.

***(3c) What other State-level organizations or agencies will be involved with SLIGP?***

**Response:**

Currently, the state level organizations participating are the Michigan Department of Technology, Management and Budget (DTMB) and the Michigan State Police (MSP). It is envisioned that with the current SIGB and the anticipated replacement SIGB, those state agency stakeholders represented under both will be involved as well as that of the Michigan Public Service Commission. State agencies that will be involved with SLIGP activities ongoing will include the following:

- Department of Technology Management and Budget
- Michigan State Police
- Department of Military and Veterans Affairs
- Department of Natural Resources
- Department of Community Health
- Department of Transportation
- Department of Licensing and Regulatory Affairs





***(3d) 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 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.***

**Response:**

The SLIGP program will leverage the existing and planned governance structures (see response 1d). Existing staff resources within the Office of MPSCS, State 911 Office, Office of the CIO supporting the governance structures will be utilized to support the SLIGP. Contractual support will be required to support areas where government staff are not available or don't have the expertise in areas to address the requirements of the deliverables.

The additional funding required for state and contractual staffing is based on anticipated work activities and skillsets that may require contractual staff with knowledge and skills to advise the state on technical and non-technical approaches and contributions. The anticipated request to cover the state and contractual resources is \$1,631,300.

- Specialized Attorney(s) – to support legal aspects that state attorneys may need
- LTE Expertise and Planners – focused on analysis and coverage modeling
- Project Management – manage deliverables of the grant
- Outreach and Marketing – development of materials and coordination of activities

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

**Response:**

Michigan has strong relationships within the private industry which include carriers, backhaul providers, utilities and product manufacturers. The SWIC has had discussions with carriers determining partnering opportunities prior to FirstNet and identified areas of the state where public-private partnerships could address current difficulties with broadband capabilities. Michigan has also conducted meetings with utility companies that included a proposed partnership that was identified in a waiver filed with the FCC to attempt a trial opportunity with the Public Safety Spectrum Trust (PSST) spectrum. Utilities can be defined as secondary users during events and disasters, and technology reuse provides opportunities for greater interoperability and coordination during events and disasters.

Private industry, some of which can be identified as secondary users of FirstNet have attended past education and outreach events held around the state.



## 4. Coordination with Local Government Jurisdictions

*(4a) 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?*

**Response:**

The State has 83 counties, 277 cities, 1240 townships, 1517 Minor Civil Divisions (Cities + Townships) and 256 villages.

*(4b) Describe how your State will involve these local jurisdictions to ensure there is adequate representation of their interests in the FirstNet consultation and in the planning and governance for SLIGP.*

**Response:**

Given the multitude of public safety entities across the state, and for a truly interoperable network to be successful, outreach, education and involvement of these local agencies as well as local government leaders will be critical. In Michigan, as somewhat of a mirror of FirstNet's own organization, we will establish a state Public Safety Broadband Network Committee as the embodiment of a broad coalition of public safety sector stakeholders who have varying interests in the success of the PSBN. This committee will be responsible for advising the SIGB and FirstNet POC, State CIO, on the recommendations the work group will develop.

This workgroup will be based on a public-private partnership model where this group serves as the framework for SLIGP planning efforts and will include a broad representation of public safety stakeholders, including local government leaders, public safety officials, private sector partners, and other key decision makers from across the state. This group will meet at least monthly, or more often as needed, and will establish strategic priorities and involve Connect Michigan, the state's SBI broadband grantee, to leverage existing, localized broadband community outreach and planning work where applicable.

The state Public Safety Broadband Network Committee will derive a solution for local feedback to be heard and accounted for in a unified vision for the PSBN in Michigan. Additionally, the SWIC and CIO will partner for this effort with state-level associations representing local government agencies and will continue to leverage selected in-state conferences as well as make use of teleconferencing and online meetings to engage directly with local government officials as needed.

The Public Safety Broadband Network Committee was initiated by the CIO initially to provide a small subset of key state executives from Department of Technology, Management and Budget



the Michigan State Police and the Governor's office with a background from the SWIC in the current events and activities happening with Public Safety Broadband Network (PSBN) and FirstNet. This committee was a separate activity initially from that of the Michigan Public Safety Communications Interoperability Board, and three members from the Board were also participating with the committee efforts. It was proposed to the CIO and the chair of the Board (SIGB), that these efforts be integrated under the direction of the Board (SIGB) going forward and it is expected that the committee will be moved as a committee established and supported by the Board (SIGB). It is also envisioned that the membership of the committee will transition when and if the previously identified ECC is established.

The current makeup of the Public Safety Broadband Network Committee is as follows:

- State CIO
- SWIC
- Chair of SIGB (or his or her designee) – who is also the State Homeland Security Director and Director of the State Police
- State Deputy Director for Emergency Management
- State Director for Michigan Intelligence Operations Center
- State Director for Shared Services
- Governor's Public Safety Policy lead
- State Attorney General's Office
- State 911 Director

The future makeup will include the members identified above and will include the following intended local representatives that are members of the interoperability board, or represent the public safety disciplines within the interoperability board.

- Local 911 Director
- Law Enforcement (Chiefs of Police and/or Sheriffs)
- Local EMS
- Fire Discipline (Chiefs and/or Firefighters)
- Local Emergency Management
- State Natural Resources (law and/or fire)
- Local IT representative
- LTE consultant

This will not be the all-inclusive membership as tribal public safety members and members from industry are still being identified for active roles. The state level associations, which are identified as the fraternal organizations representing law enforcement, fire, EMS, counties, etc. are all comprised of membership from the appropriate disciplines from the local and state level. These associations are neither affiliated nor supported by state government, but are supported and managed by the disciplines that define them. I would anticipate that greater than 90% of the membership makeup of these fraternal organizations is representative of local public safety.



These fraternal organizations are state organizations, such as Michigan Association of Chiefs of Police can be compared to that of International Association of Chiefs of Police.

***(4c) Describe past methods the State has used to successfully coordinate state-wide projects or activities with local government jurisdictions.***

**Response:**

Several significant examples of statewide projects have been identified and are facilitators for the success of FirstNet network in Michigan. The first example is of the statewide MPSCS that was initiated as a state-level multi agency mission critical radio communications network that would replace a series of separate state agency networks. As multiple state agency partners focused on a single statewide solution, the Michigan State Police initiated the efforts for local use of the state system. The marketing and utilization of the MPSCS has grown from three state agencies to more than 1413 agencies across government agencies representing public safety of local, state, and federal while also including private and tribal public safety agencies. This project has shown continued success over the past fifteen years the network has been in place and many of the lessons learned through this effort will carry over to FirstNet efforts.

The MPSCS project started in 1995 and was completed in four phases over a period of seven years. In the fall of 2002, the original, construction of the system was completed by providing 800 MHz digital radio coverage to the entire Upper Peninsula, an area with the most rural aspect in the state, yet two thirds of the overall MPSCS infrastructure exists across fifteen counties that make up the Upper Peninsula.

The MPSCS was the first Project 25 (P25) compliant system in the nation and still remains the largest trunked interoperable public safety system in North America. The MPSCS has continued to evolve from the initial design to facilitate expansion of interoperable communications in accordance with Michigan's State-wide Communications Interoperable Plan (SCIP) while striving for the greatest level of interoperability following the Interoperability Continuum. The MPSCS has been the corner-stone of interoperable communications success across local, state, and federal public safety agencies during planned and unplanned events in and around Michigan. As public safety demands continue to expand, the MPSCS continues to be the leveraged investment to facilitate more robust interoperable voice and data communications. The maturity of Michigan's statewide communications system has established the non-technical aspects of managing the business with the development and utilization of user subscriber agreements, integration agreements, use of partner credits, and the policies required to manage the statewide system in a consistent manner.

Since the initial implementation of the MPSCS, the system continues to grow exponentially. In partnership with local communities the MPSCS has integrated nine simulcast city/county subsystems into the MPSCS system. This is a win-win for the new local users who experience the benefits of MPSCS system interoperability and core system management without the required costs of separate yet parallel backend processing infrastructure. The MPSCS works co-



operatively with Canadian and adjoining state's agencies to provide cross-jurisdictional communications in border areas to ensure true interoperability across national and international boundaries. Today, the MPSCS consists of 244 towers (an increase of 36%) and 64,000 radios (an increase of 700%) with an agency partnership of 1,413 federal, state and local agencies (an increase of 829%). A representation of the agency user base as identified in Figure 3.

From disasters (Blackout of 2003) to planned events (Super Bowl XL, World Series, and NCAA events) and daily public safety activities the MPSCS has provided robust primary and secondary patched interoperable communications for first responders spanning:

All Branches of State Government: Executive, Judicial, and Legislative

- MSP, DNR, MDOT, DOC, DHS, DCH, Courts, Legislative Security, etc.

Local Public Safety Agencies:

- Township, City and County
- Police, Fire, EMS, Emergency Management, Road Commission, etc.

Federal Public Safety Agencies:

- ATF, Border Patrol, Coast Guard, DHS, FBI, Forest Service, US Marshall, etc.

Tribal Nations:

- Bay Mills Indian Community, Grand Traverse Band of Ottawa and Chippewa Indians, Keweenaw Bay Indian Community, Saginaw Chippewa Indian Tribe, etc.

Private Emergency Responder:

- Red Cross, EMS, Transit Authority, University Security, Rail Road Police, Utility Companies, Energy Plants

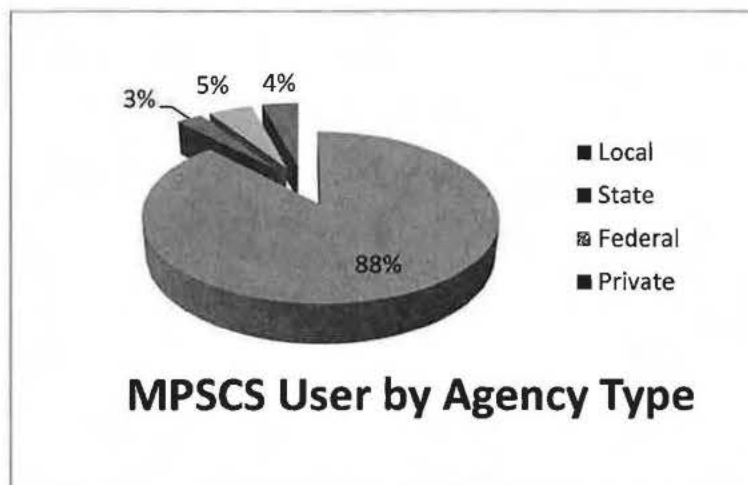


Figure 3. MPSCS Agency Breakdown Chart



The second successful example is the development and implementation of the 911 GIS Data Repository. This project was funded through a joint National Highway Traffic Safety Administration (NHTSA) and National Telecommunication and Information Administration (NTIA) Ensuring Needed Help Arrives Near Callers Employing 9-1-1 (ENHANCE 9-1-1) grant with a match from the Michigan State Legislature.

The 911 GIS Data Repository increases the ability for neighboring Public Safety Answering Points (PSAP) to handle emergency calls that occur on the fringe of their service area. Additionally, in case of a major episode, the availability of this data will allow for any PSAP to become a backup for an area in need. Continual maintenance and upkeep of GIS data will also allow for quicker response times and result in safer communities. It provides a standard data model and store allowing GIS data interoperability between PSAP.

In order to complete the project successfully, the State of Michigan pulled together a Technical Advisory Committee (TAC) comprised of local and state government, representing the tactical areas of IT, GIS and Public Safety. The TAC consists of at least 3 members from each of the aforementioned areas of interest. This TAC is responsible for strategic decisions and support, to help drive user acceptance and adoption. In this regard, the TAC has been instrumental in developing a communications and marketing strategy, to ensure that a consistent message is shared at all speaking engagements.

In addition, the project had senior management support from the Michigan State Police and the Michigan Department of Technology, Management, and Budget (DBTM), which greatly aided funding, critical decisions and alignment of resources.

Memorandums of agreement were established between each participating entity and the State of Michigan. This ensures that all parties understand the restrictions of the data and protects the 9-1-1 GIS data from misuse and inappropriate distribution. This project ended with more than 80% of Michigan Counties participating.

Another successful example is the Michigan Geographic Framework (MGF). The MGF is a product and a program serving as the digital base map for state government and is used by many local agencies. It provides basic reference information that users can associate and locate attribute data for purposes of comparison or geographical correlation. The MGF is the mechanism for maintaining the State of Michigan's core enterprise spatial assets. Map data is continuously updated in order to keep it current and relevant. Managed as a statewide integrated base map, it includes a complete transportation network, railroad and rail-crossing, hydrological, bridge structures, and civil boundaries.

The MGF is designed to promote cross-boundary collaborative partnerships among all levels of government to allow highly efficient and effective data maintenance. The MGF provides a centralized place to store and maintain the transportation network. This reduces duplicated efforts and thus provides significant cost savings. In addition, it creates common, standardized, product-enabling, data-sharing and communications within the Geographic Information



Standards (GIS) community. This includes the establishment of formal and informal inter-governmental partnerships.

A final successful example is also a statewide coordinated effort of collaboration around technology and broadband in our state, has been with rural broadband with a partnership with Connect Michigan. This partnership has established local broadband planning initiatives in 24 communities across the state, with participation interest from an additional 24 communities. In partnership with the Michigan Collaborative Broadband Committee, and funded by NTIA's SBI grant, this partnership has developed the "Connected" program in Michigan, a best practices model for community broadband planning that connects to larger state priorities.

The Michigan SBI project has established state-level support from various agencies, associations, non-profits, and others for technology expansion through education, outreach, and capacity building. The following list is a sample of statewide support agencies with which the SBI initiative has developed relationships as part of the project.

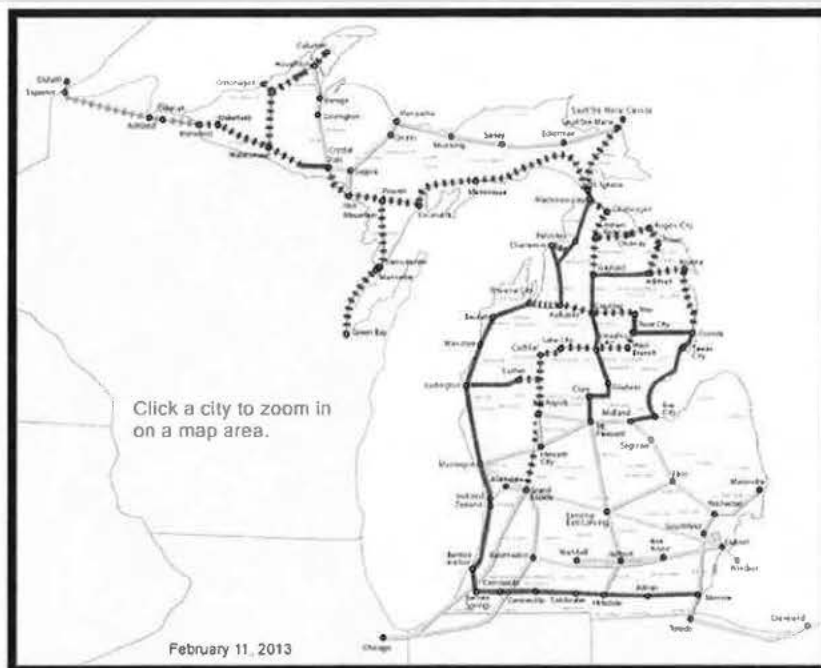
- Michigan Public Service Commission
- Michigan Economic Development Corporation
- Michigan Department of Agriculture and Rural Development
- Community Economic Development Association of Michigan
- Michigan Association of Planning
- Michigan Farm Bureau
- Library of Michigan
- Telecommunications Association of Michigan
- Michigan Cable Telecommunications Association
- Michigan Internet and Telecommunications Alliance
- Michigan Association of United Ways
- Michigan Association of Regions
- Small Business Association of Michigan
- Michigan Municipal League
- Michigan State University Center for Community and Economic Development
- Michigan State University Land Policy Institute

Each of these recent, yet tenured examples have demonstrated that continued outreach, education, communication, and capacity building with statewide organizations will strengthen and support local success.

The Merit Network's REACH-3MC project is another successful example of a NTIA SBI grant project in Michigan. In 2010, Merit Network, Inc. was awarded federal stimulus funding for two broadband projects in Michigan. In January 2010, Merit's REACH-3MC project was awarded a \$33.3 million federal grant from funds allocated through the American Recovery and Reinvestment Act (ARRA) of 2009 to create a 1,017-mile open-access fiber network in Michigan's Lower Peninsula. Seven months later, Merit was awarded \$69.6 million in funding to build 1,270 miles of fiber-optic infrastructure in the Northern Lower and Upper Peninsulas of Michigan. Both stimulus grants were awarded through a program funded by the National Telecommunications and Information Administration (NTIA).



REACH-3MC is a Public-Private Collaboration that will benefit Michigan communities. The fiber network built by Merit and its partners will touch every county in Michigan, Figure 4. Merit will connect Community Anchor Institutions, such as libraries, education, government and healthcare. Commercial Sub-recipients will provide service to homes and businesses.



**Figure 4. Merit and Merit Partner Network**

In 2010, the DTMB Center for Shared Solutions' Office of Technology Partnerships sponsored several state-local government collaboration pilot projects to share fiber network construction and operations. These projects brought together the fiber network operators from state and local government to build additional network links to benefit both state government and local government sites with secure high capacity connectivity.

***(4d) 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?***

**Response:**

Successful cross-boundary collaborations require trust, communication, and commitment throughout the business relationship. This can be achieved through the implementation of a strong governance model that structures legal authority, decision-making processes, and participation expectations.





One specific strategy that will be short turn benefit for the SLIGP but a long term benefit for the State will be a review and development of best practice comparisons from other states. There are very structured and successful regional committees/working groups in Michigan, but the level of participation varies by region. The development of a baseline regional model to facilitate upward and downward communication for strategies and requirements will be imperative for FirstNet planning efforts to ensure success.

## 5. Regional Coordination

***(5a) 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.***

**Response:**

The state has seven emergency management regions within the state and each region has an established Interoperability Committee which is made up of the county representatives representing the multiple disciplines of public safety services including 9-1-1 dispatch centers, Law Enforcement, Fire Service, EMS, and technology support/IT from each respective region. A map of Michigan's Emergency Management Regions is provided below, Figure 5. The regional interoperability committees all have at least one representative that participates in a subcommittee of the Michigan Public Safety Communications Interoperability Board, the current SIGB. It is expected that the same sub-committee will transition to the new ECC, revised SIGB if and when it is formally established. The regional interoperability committees serve as leads and liaisons to the counties and regions they represent and in parallel homeland security and emergency management representatives also have active roles in each of the regions. It is anticipated that the individuals active in the regions for interoperability will advise the SIGB and peer Public Safety Broadband Network Committee on local items for input. It is anticipated that the regional committees will be the trusted means of engaging local jurisdictions for which they represent.



Figure 5. – Map of the State of Michigan's Emergency Management Regions

***(5b) Describe any interstate regional bodies in which your State participates that are involved with public safety communications in the State.***

**Response:**

The state is involved in two separate interstate regional bodies focused on public safety communications and information sharing. Initially, a smaller group of Indiana, Ohio, and Michigan's SWICs, that are also responsible for each states' respective statewide communications systems, were meeting to collaborate on 800 MHz rebanding and other multi-state public safety interoperability opportunities. The meetings are quarterly and have grown to include discussions surrounding planning and coordination opportunities for Public Safety Broadband amongst the bordering states.

The other interstate regional body is formal in nature and is the FEMA Region V Regional Emergency Communications Coordination Working Group (RECCWG), which represents Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin. The RECCWG is focused on multiple communications strategies and broadband is just one of the committees that are in place for multistate collaboration and planning. The Region V RECCWG jointly filed comments in response to the NTIA's RFI for the Development of the State SLIGP June 2012 (docket # 120509050-1050-01). Michigan will continue to collaborate with the RECCWG to address interstate issues as they arise throughout executing SLIGP.



The SWIC in Michigan is the Vice Chair of the RECCWG and the Chair of the Broadband Committee of the RECCWG and also formulated questions from amongst the RECCWG broadband committee members to submit from the FEMA Region V RECCWG to the National Governor’s Association (NGA).

***(5c) How does the State plan to engage and leverage these existing regional coordination efforts in the nationwide public safety broadband network planning?***

**Response:**

The state intends to continue to leverage the success of the interstate regional activities with the bordering states and those also participating as an expanded group within the RECCWG. The interstate model has allowed Michigan to see perspectives and success that may not have been common place within our own state yet successful in other states participating in the RECCWG.

The intrastate regional efforts will be leveraged and in those areas where participation at the local level has been disparate, the state and other regions will identify to ways to help foster greater participation in those regions that may be stretched thin or have less participation across the region. Greater participation will naturally occur as separate silos of activities will be joined with a new state governance model and that will naturally morph the separated efforts into a single strategic approach. The recent success that has been garnered with 9-1-1 GIS Data Repository efforts have demonstrated capabilities for greater local participation for those activities that span the entire state. The same model that has been used for 9-1-1 GIS Data Repository will be reviewed for utilization for FirstNet activities.

***(5d) 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.***

**Response:**

The State had the opportunity to review the draft supplemental narrative materials from Oregon, Arizona and Minnesota’s and also participated in a FEMA Region VI call that all of the participants discussed the sections with the supplemental. The primary source of information and guidance has been the direction from Region V RECCWG Broadband Committee which has been collaborating public safety broadband is an extension of the interoperability planning currently underway, as described in the previous responses.



## 6. Tribal Nations

***(6a) How many federally recognized tribes are located within the State boundaries? (If the answer is zero, please skip to question #7.) Information on federally recognized tribes may be located at the Department of Interior, Bureau of Indian Affairs website:***

***<http://www.bia.gov/WhoWeAre/BIA/OIS/TribalGovernmentServices/TribalDirectory/index.html>***

**Response:**

Michigan has 12 federally recognized tribes which are listed below and headquarters for each tribe are identified in Figure 6.

- Bay Mills Indian Community
- Grand Traverse Band of Ottawa and Chippewa Indians
- Hannahville Potawatomi Indian Community
- Keweenaw Bay Indian Community
- Lac Vieux Desert Band of Lake Superior Chippewa Indians
- Little River Band of Ottawa Indians
- Little Traverse Bay Bands of Odawa Indians
- Match-E-Be-Nash-She-Wish Band of Band of Pottawatomi Indians of Michigan (Gun Lake)
- Nottawaseppi Huron Band of Potawatomi
- Pokagon Band of Potawatomi
- Saginaw Chippewa Indian Tribe
- Sault Ste. Marie Tribe of Chippewa Indians

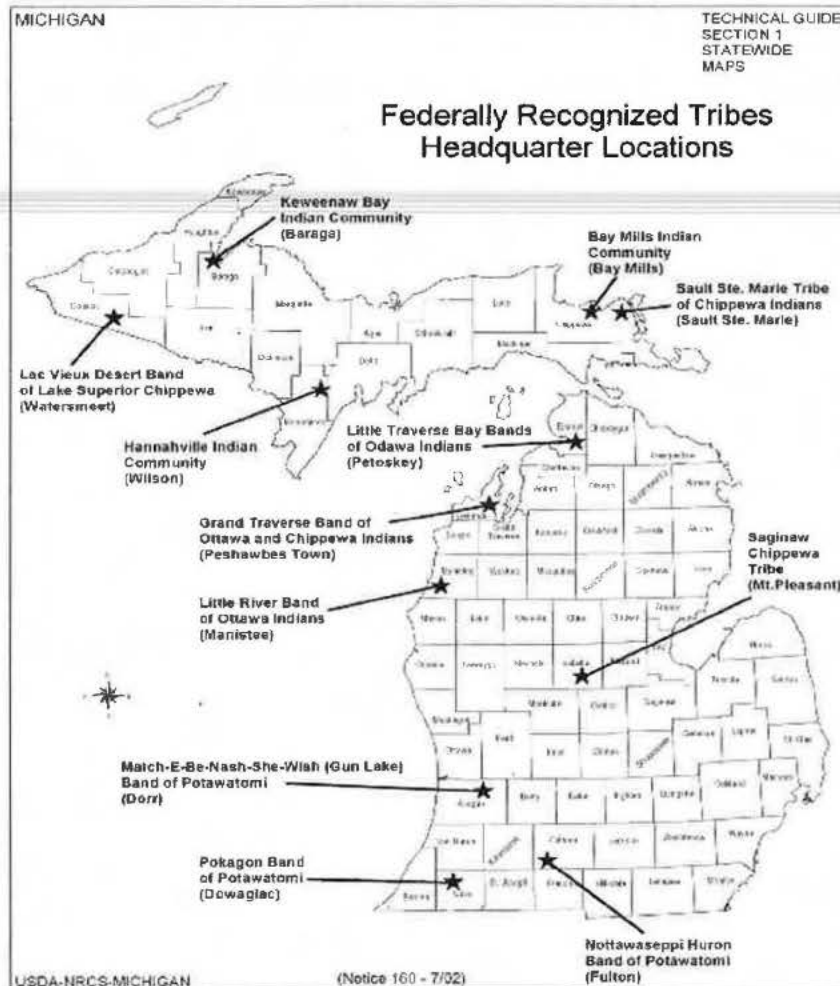


Figure 6. Map of federally recognized Tribes headquarter locations

*(6b) Describe how the State will involve the tribal nations to ensure there is adequate representation of their interests in the FirstNet consultation and in the planning/governance for the grant program. Does the State have a process for consulting with the tribes located within State boundaries? If so, please provide a description of that process.*

**Response:**

The state will follow the defined process outlined in Executive Directive 2003-04 and 2004-5 that defines how state agencies will work with and consult federally recognized tribal nations in Michigan. Following the same process for coordination of requirements for other governmental entities across Michigan, invitation to the tribal nations to participate in regional and state governance efforts to frame in the inclusive requirements and anticipated outcomes at all levels. The state does not have a single entity such as an Office of Indian Affairs, yet each state agency has a tribal coordinator identified. The current efforts have been coordinated through the



agencies that may have had specific efforts and/or partnerships with tribal nations, as there is no central coordination point across all agencies. It was identified that the tremendous opportunity that could be had was leveraging the public safety representatives from the tribes that have been involved in interoperability within their respective geographic region, and those relationship in place with the tribal public safety representatives will be the conduit for inclusion in public safety broadband efforts. By engaging the tribal public safety representatives, the SIGB and/or sub-committee activities will include the appropriate identified representatives for the efforts for public safety broadband and the SLIGP.

The revised SIGB support structure will include tribal nation representatives within the appropriate committee efforts of interoperability and broadband. At this time it is not known if all will be represented individually or if one will represent all. The SWIC is currently working on coordination efforts to meet with tribal nation contacts to conduct the basis of a recommendation for the efforts. The SLIGP will afford the opportunity to engage with each tribal nation for an effort that only parallels that of the state land mobile radio network where most of the tribal nations have leveraged the system for radio interoperability.

***(6c) Describe past methods the State has used to successfully coordinate with tribal nations.***

**Response:**

A past method of coordination with tribal nations that looked at solutions from a broad statewide perspective was when the State worked with Tribal Technical Assistance Program to identify the tribal roads as defined by the Bureau of Indian Affairs to be integrated into the Michigan Geographic Framework Transportation Network

***(6d) Are there tribal representatives who regularly attend your SIGB meetings? If so, please identify the tribes represented.***

**Response:**

The State has struggled to engage tribal representatives in SIGB meetings. However, Michigan's Homeland Security Advisory Council (HSAC) has enjoyed tribal representation participation in interoperability presentations, updates, and discussions. The State sees a tremendous opportunity to engage tribal leaders with the promise and opportunity Public Safety Broadband benefits could provide to the citizens of Indian Nations

***(6e) What have been some of the State's primary challenges when engaging with tribal nations? What are some of the strategies that the State will employ to overcome these challenges during implementation of SLIGP?***

**Response:**



Referencing interoperability challenges, the state has addressed interoperability challenges by promoting use of the statewide land mobile radio system, MPSCS and in those areas of the state that have existing interoperable solutions, state and local agencies have established interoperability patches to mitigate the challenges of interoperability. The same successful approaches that have been used promoting interoperability at the state and local level with the tribal nations will be used to promote and share the use and benefits of the FirstNet network. This will entail outreach to each of the tribes, following the examples of promoting interoperability to date. The SIGB, as identified in response 1d, will engage tribal nation participation. Also as a function of the Michigan SBI project, the strategies that have been used in those efforts will also be considered for use focused on Public Safety Broadband. Leveraging local success of participation and planning with tribal nations will be an opportunity that can be brought forward for statewide planning efforts.

## **7. Rural Coverage**

*(7a) Please classify your local jurisdictions into rural and non-rural areas and identify the criteria used in making these rural and non-rural determinations.*

**Response:**

The local and foundational jurisdictional entity for this analysis is a County. This defined component will aide Michigan by leveraging county-level data sources.

The Census Bureau Population Per Square Mile by County, is defined into two population density categories: Rural and Non-Rural (Urban). The counties which meet the criteria Rural are identified in Figure 7. A Rural County for the purposes of this analysis, is defined as a County with a calculated county population density less than 150 persons per square mile. A Non-Rural county is a county with a population density greater than 150 persons per square mile. According to this definition only this category is defined as Non-Rural, and therefore will be prioritized differently, all other categories are classified as Rural and will be prioritized differently given the makeup of the counties.



**Figure 7. Rural and Non-Rural Identified Counties**

The criteria used to make this determination include:

- Consideration of existing US Census Bureau data and current Rural Definitions
- Utilization of highly detailed county-level data available from a variety of sources

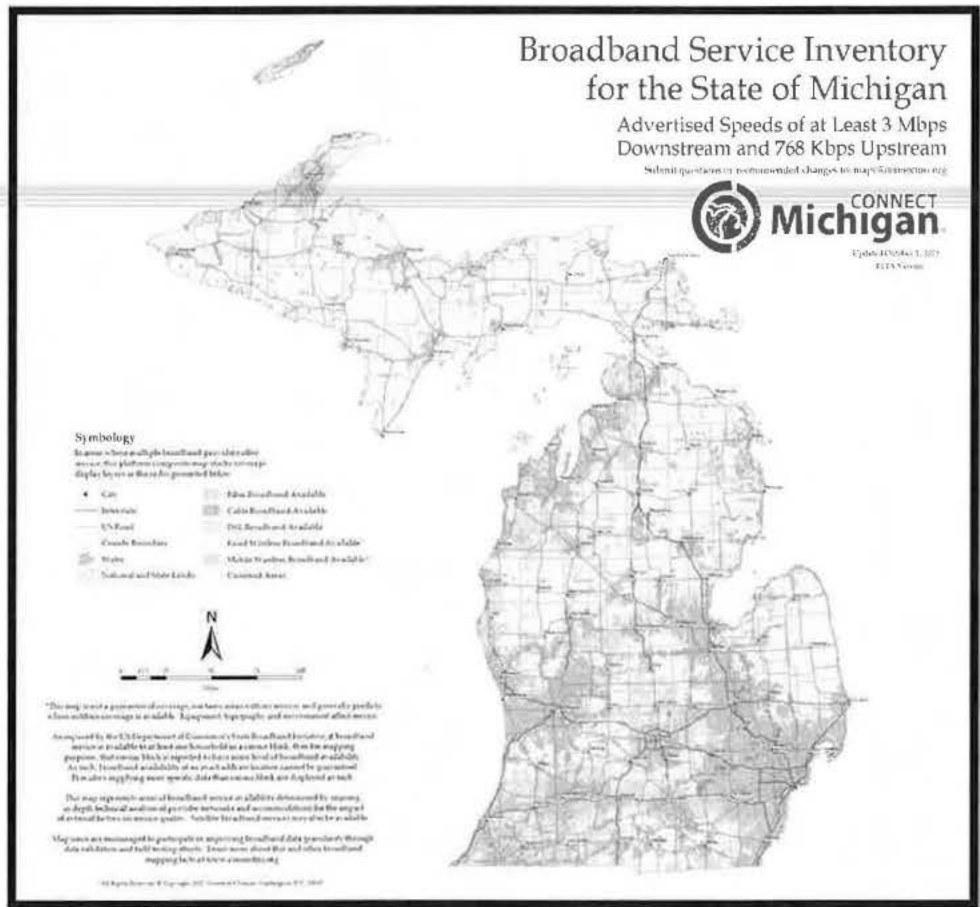
***(7b) Please describe the coverage area and availability of broadband service and LTE technology in the rural areas of the State as defined in response to 7.a.***

**Response:**





The following map and table include the latest estimates for broadband availability across Michigan, based on the SBI mapping program managed by Connect Michigan. The data included in the table below, “ESTIMATE OF BROADBAND SERVICE AVAILABILITY IN THE STATE OF MICHIGAN“, are broken down into statewide and “rural” categories, where “rural” is defined by NTIA in the regulations that govern the SBI grant program. Accordingly, a rural area is defined as any area, as confirmed by the latest decennial census of the Bureau



of the Census, which is not located within: (i) a city, town, or incorporated area that has a population of greater than 20,000 inhabitants; or (ii) an urbanized area contiguous and adjacent to a city or town that has a population of greater than 50,000 inhabitants. For purposes of the definition of rural area (see 7a response). An urbanized area means a densely populated territory as defined in the latest decennial census of the U.S. Census Bureau. Connect Michigan, works closely with each of the state's broadband providers to create maps of broadband coverage and conduct surveys to assess the current landscape of broadband availability and adoption across the state. The data behind these maps are updated every six months and offer the most current public information regarding the availability of broadband service across the state. The map shown reflects broadband availability at 3Mps Downlink / 768 Kbps Uplink speeds across the state.

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**ESTIMATE OF BROADBAND SERVICE AVAILABILITY IN THE  
STATE OF Michigan  
By Speed Tier - As of October 2012**

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<b>State Broadband Initiative Download/Upload Speed Tiers</b>	<b>Percent Households Served by FIXED Broadband</b>	<b>Percent Geographic Area Served by FIXED Broadband</b>	<b>Percent Households Served by MOBILE Broadband</b>	<b>Percent Geographic Area Served by MOBILE Broadband</b>
STATEWIDE				
At Least 768 Kbps/200 Kbps	98.71	74.04	99.61	86.60
At Least 1.5 Mbps/200 Kbps	98.38	68.91	90.40	45.68
At Least 3 Mbps/768 Kbps	96.45	55.61	85.03	35.70
At Least 6 Mbps/1.5 Mbps	91.77	37.01	74.04	18.88
At Least 10 Mbps/1.5 Mbps	91.16	35.41	72.05	18.40
At Least 25 Mbps/1.5 Mbps	86.22	25.87	0.00	0.00
At Least 50 Mbps/1.5 Mbps	83.15	25.01	0.00	0.00
At Least 100 Mbps/1.5 Mbps	83.12	24.97	0.00	0.00
At Least 1 Gbps/1.5 Mbps	0.00	0.00	0.00	0.00
ACROSS RURAL AREAS				
At Least 768 Kbps/200 Kbps	97.80	73.70	99.14	86.40
At Least 1.5 Mbps/200 Kbps	97.22	68.42	83.46	43.81
At Least 3 Mbps/768 Kbps	93.95	54.74	75.02	33.56
At Least 6 Mbps/1.5 Mbps	84.04	35.67	57.41	16.50
At Least 10 Mbps/1.5 Mbps	85.30	34.10	55.70	16.08
At Least 25 Mbps/1.5 Mbps	78.16	24.38	0.00	0.00
At Least 50 Mbps/1.5 Mbps	77.15	23.67	0.00	0.00
At Least 100 Mbps/1.5 Mbps	77.10	23.63	0.00	0.00
At Least 1 Gbps/1.5 Mbps	0.00	0.00	0.00	0.00
<b>Source: Connect Michigan.</b>				



LTE, the mobile broadband standard selected for use in the national PSBN, is still in the relative early stages of its commercial rollout in the US. Verified download and upload speeds offered by the competing commercial carriers on their LTE networks are wide-ranging. Hence, at this time we do not have reliable information regarding the extent of the LTE network in the state, other than as reported by commercial providers. While Connect Michigan collects data on commercial mobile service availability by speed tier, it does not collect information on what specific mobile platform technology is in use in a given area (e.g., LTE, 3G, 4G, 4G LTE).

This map indicates there are specific regions of the state where wireless broadband speeds reach at least reach 3 Mbps down/768 kbps up (by areas shaded in light blue). Such speeds, however, are not generally considered comparable to speeds achieved by carriers that are rolling out LTE technology on their networks, which is generally regarded as much faster.

Further information about the Michigan broadband inventory, including county-level broadband maps can be found online at <http://www.connectmi.org/mapping/state>.

***(7c) Please describe how the State plans to prioritize the grant activities to ensure coverage in, and participation by, rural areas. Please include specific plans, milestones, and metrics to demonstrate how you will achieve these requirements.***

The State plans to develop data-driven method of prioritizing PS LTE coverage in a manner which will optimize the return on investment (RoI) of Public Safety Broadband deployments—for FirstNet, the state and the county and regional jurisdictions.

The recommended approach is to develop a simple tool which would use data-driven rankings and assessments and combine them into an overall “Priority Ranking.” When complete this value assessment could be used to inform policy making and prioritization since it would be an objective and balanced assessment of multiple factors which must be considered.

This common framework would assess and rank counties in a state by established criteria, or categories of criteria. Development of these tools, processes and methodologies according to a stated list of objectives and requirements with the stakeholder involvement will ensure fair validation across the state.

Identify existing data-driven analysis tools which will output an objective public safety broadband assessment of the value of deployment for public safety and non-public safety users.

- Use County based data
- Consider a variety of factors and develop consensus around the tool and mechanisms used to prioritize various aspects

The factors pay special attention to tribal, rural areas and regions which may not have access to commercial solutions for public safety data capabilities.



Proposed Methodology and Assessment Factors: This approach uses a common practice of using credible and detailed data sets to establish objective ranking and prioritization criteria. The criteria should identify:

- **Percentage of County which is Tribal Lands**
- **Population Density by County**
- **Intended Public Safety Use** – A combined ranking which attempt to cover a combined assessment of ranked needs (see below)
- **Ease of Implementation** – These factors would capture aspects which will speed deployments by identifying readiness and opportunities for quick, low cost deployments. Detailed factors could include level of planning maturity, funding, and overall “PS LTE Readiness” factors, proximity to backhaul resources, and level of regional planning.
- **Public Safety Need/Readiness Assessment** – How prepared are the public safety agencies to take advantage of the public safety broadband, from an application and funding perspective.
  - **Population Density** – This factor would capture the higher number of PS users as driven by population density
  - **Crime Rate** – Counties with historically higher crime rates should be ranked as a higher priority
  - **Critical Infrastructure** – This factor captures the presence of critical infrastructure elements, such as stadiums, prisons, nuclear power plants and water, transportation (airports, interstates) or natural gas infrastructures.
  - **Borders** – Managing coastal, international and state borders creates specialized interoperability needs such as coordination with Coast Guard, federal border protection or coordination with neighboring states.
  - **Disaster vulnerabilities** – These factors would capture vulnerabilities to natural disasters or wildfires.
- **Critical Infrastructure (all)** – Power stations, oil refineries, racetracks, stadiums, airports, military bases, PS locations, PSAP locations, nuclear power plants
- **Crime Rate** – Per capita by county
- **Other risks** – wild fire risk, hurricane risk areas, water hazards,
- **EMS/Hospital/Air Evac Operations** – Capture EMS needs
- **Federal Ops** – DEA, DoJ, crime task force operations, ICE, CBP, prisoner transport routes



- **State Operations** – State Patrol, DoT, Parks & Wildlife, CSIs, Rangers,
- **Other** – Aircraft operations, Evacuation centers, federal evacuation routes

## 8. Existing Infrastructure

**(8a) What, if any, databases exist that collect data on government-owned wireless and/or communications infrastructure for the state, local, and/or tribal governments?**

**Response:**

The MPSCS uses Communication Assets Survey and Mapping (CASM) Tool sponsored by the DHS Office of Emergency Communications (OEC) to collect State, local and tribal government information regarding wireless and communications infrastructure, Figure 8. Resources other than CASM are also leveraged from the [http://www.publicsafetytools.info/start\\_index.php](http://www.publicsafetytools.info/start_index.php) website provided by DHS OEC, Figure 9.

Radio System Name	Frequency Band	Owning Agency	View/Edit/Delete
Montmorency VHF	VHF High-Band (150-174MHz)	Montmorency County Central Dispatch	[View/Edit/Delete]
Mount Clemens Department of Public Works	VHF High-Band (150-174MHz)	Mount Clemens Department of Public Works	[View/Edit/Delete]
MPSCS	800 (806/851 - 824/869 MHz)	Michigan Public Safety Communication System	[View/Edit/Delete]
Muskegon County 800	800 (806/851 - 824/869 MHz)	Muskegon County Central Dispatch	[View/Edit/Delete]
Muskegon County UHF	UHF (450-512 MHz)	Muskegon County Road Commission	[View/Edit/Delete]
Muskegon County VHF	VHF High-Band (150-174MHz)	Muskegon County Central Dispatch	[View/Edit/Delete]
New Baltimore Department of Public Works	VHF Low-Band (25-50MHz)	New Baltimore Department of Public Works	[View/Edit/Delete]
Hewaygo County UHF	UHF (450-512 MHz)	Hewaygo County Central Dispatch	[View/Edit/Delete]
Hewaygo County VHF	VHF High-Band (150-174MHz)	Hewaygo County Central Dispatch	[View/Edit/Delete]

Figure 8. CASM Screenshot

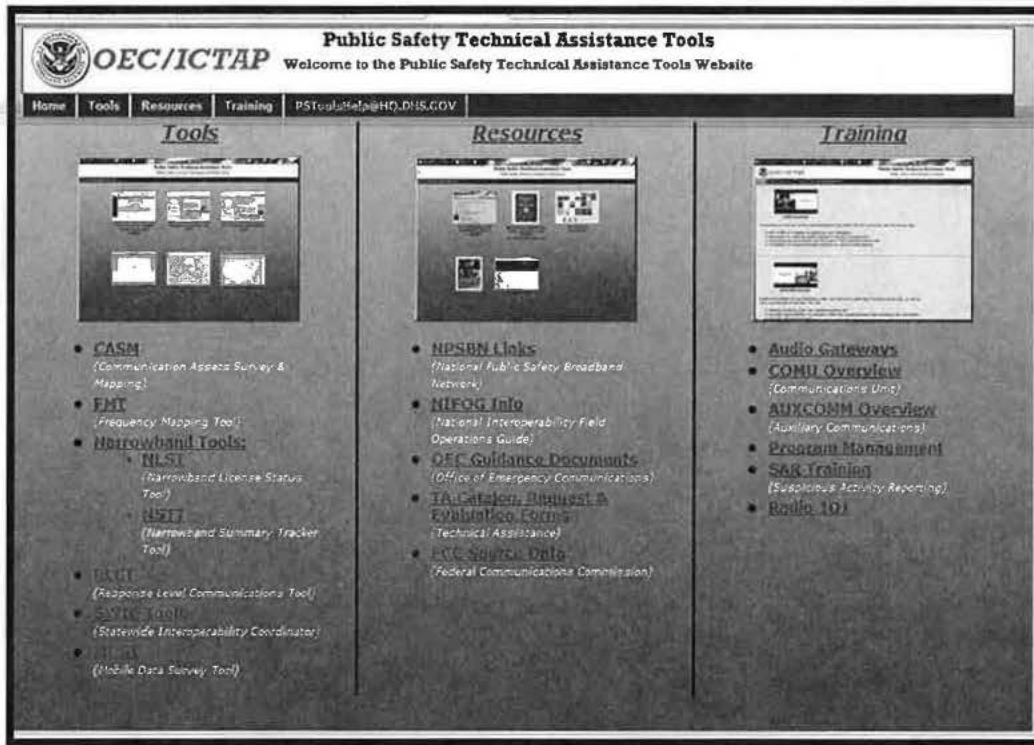


Figure 9. Public Safety Tools

GIS data developed by the Michigan SBI project developed Broadband Maps and coverage/stakeholder related data for broadband coverage in rural and non-rural areas.

Because MPSCS has been operating and maintaining a statewide infrastructure for over 16 years, MPSCS has a variety of infrastructure management and database tools developed. Just a sampling of them is provided here.

An example tool is the MPSCS Operational Management (MOM) system which tracks all MPSCS communications tower sites and relates assets for the statewide land mobile radio system, Figure 10 and Figure 11. The state agency Department of Technology, Management and Budget also tracks a number of wide area network and government owned fiber assets within the state.



Infor10 EAM - Windows Internet Explorer

Infor10 EAM

Production (EMELLO000)

System: 1102.TOWER 1102 - Dimondale - Tower

Organization: 001  
Department: MPSCS  
Status: In Service

Work Custom Reports Materials Equipment Purchasing Operations Administration

List View Record View Comments Events Costs PM Schedules Structure Addresses Metrics

System	Description	Organization	Status	Department	Class	Commission Date	Production	Out of Service	Assigned To
1102.TOWER	1102 - Dimondale - Tower	001	In Service	MPSCS	TOWER	03/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1102.TOWER-LIGHTING	1102 Tower Lighting System	001	In Service	MPSCS		02/19/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1104.TOWER	1104 - Lansing - Tower	001	In Service	MPSCS	TOWER	03/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1104.TOWER-LIGHTING	1104 Tower Lighting System	001	In Service	MPSCS		03/10/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1105.TOWER	1105 - East Lansing - Tower	001	In Service	MPSCS	TOWER	05/04/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1105.TOWER-LIGHTING	1105 Tower Lighting System	001	In Service	MPSCS		05/04/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1106.TOWER	1106 - GOC - Tower	001	In Service	MPSCS	TOWER	05/04/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1106.TOWER-LIGHTING	1106 Tower Lighting System	001	In Service	MPSCS		02/04/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1108.TOWER	1108 - 469 - Tower	001	In Service	MPSCS	TOWER	02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1108.TOWER-LIGHTING	1108 Tower Lighting System	001	In Service	MPSCS		02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1124.TOWER	1124 - Marshall - Tower	001	In Service	MPSCS	TOWER	03/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1124.TOWER-LIGHTING	1124 Tower Lighting System	001	In Service	MPSCS		03/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1205.TOWER	1205 - Livingston Co - Tower	001	In Service	MPSCS	TOWER	03/04/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1402.TOWER	1402 - Maca - Tower	001	In Service	MPSCS	TOWER	03/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1402.TOWER-LIGHTING	1402 Tower Lighting System	001	In Service	MPSCS		02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1502.TOWER	1502 - Orwell - Tower	001	In Service	MPSCS	TOWER	02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1502.TOWER-LIGHTING	1502 Tower Lighting System	001	In Service	MPSCS		02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1702.TOWER	1702 - Stowbridge - Tower	001	In Service	MPSCS	TOWER	02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1702.TOWER-LIGHTING	1702 Tower Lighting System	001	In Service	MPSCS		02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1704.TOWER	1704 - Jackson - Tower	001	In Service	MPSCS	TOWER	02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1704.TOWER-LIGHTING	1704 Tower Lighting System	001	In Service	MPSCS		02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1802.TOWER	1802 - Asken - Tower	001	In Service	MPSCS	TOWER	02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL
1802.TOWER-LIGHTING	1802 Tower Lighting System	001	In Service	MPSCS		02/15/2011	<input type="checkbox"/>	<input type="checkbox"/>	SWL

Records: 26 of 100 - 1/23

Figure 10 MPSCS Operational Management System – asset tracking database

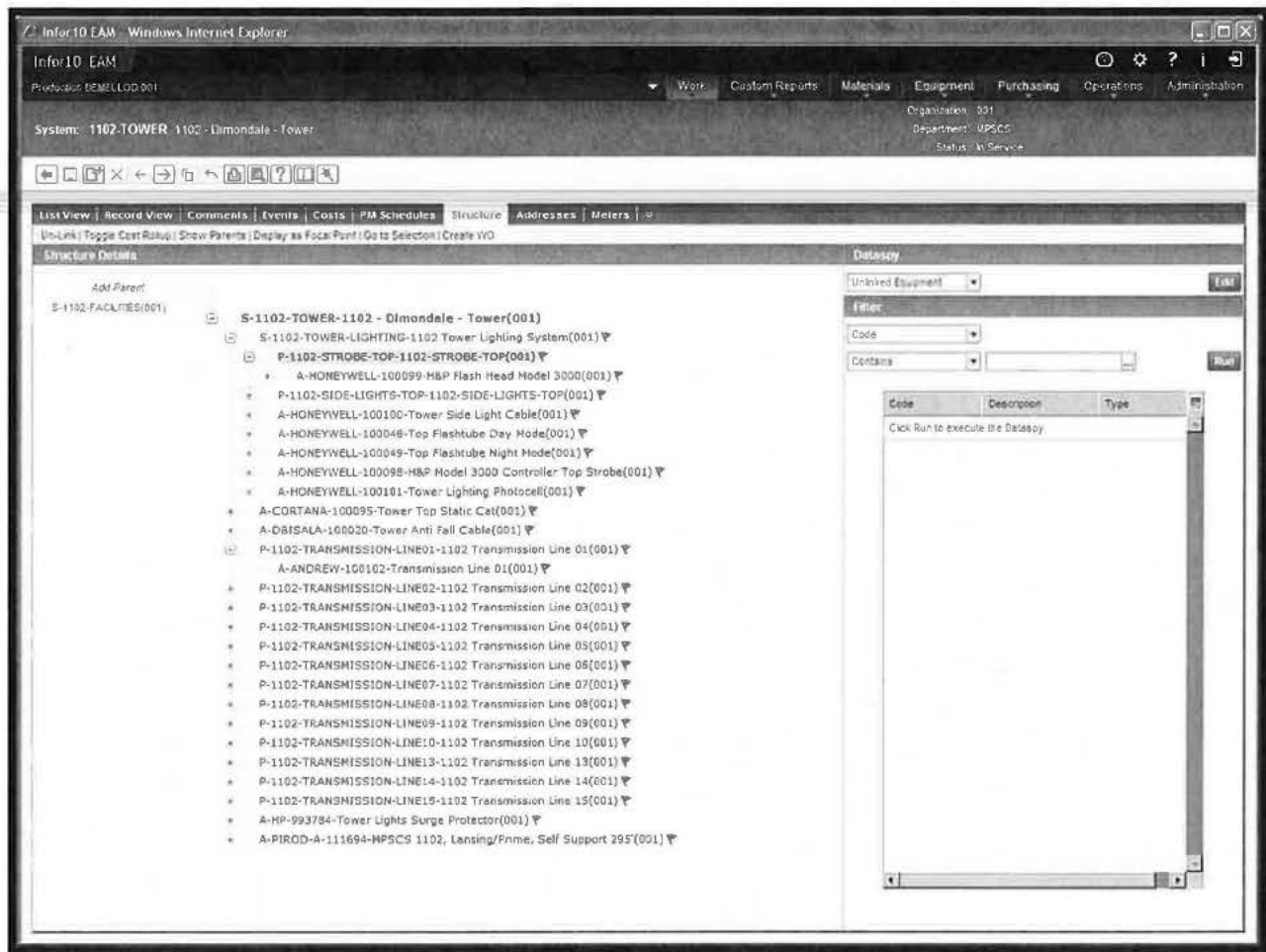


Figure 11. MPSCS Operational Management System showing detailed site equipment screen display

**(8b) If these databases exist, what is the process for updating them and how often do these updates occur?**

**Response:**

The CASM tool is updated by state and local users that are provided access to manage their own respective assets. The current process is facilitated by logging into the online tool and the user was assigned rights to manage their respective area/region/assets. The frequency of updates depends upon the need or desire for the respective agency/entity to make revisions to their data. The CASM database for Michigan is currently going through a significant cleanup and validation in partnership with DHS OEC and a team from Michigan as well as development of standards and naming classification for all regions within the state to follow for future updates and entry.

With respect to the state managed databases there are defined processes for updates and data inclusion and the frequency for updates to these tools depend on the addition or removal of state





assets to each of the database tools. For the MOM system, as each new local sub-system or tower is added to the MPSCS all related asset information is also added to track the related RF and microwave backhaul equipment that has been integrated into the overall MPSCS. There are specific staff personnel that are responsible for updates and revisions to the state tracking databases. The MOM tool is updated and reviewed daily for infrastructure related items and subscriber equipment, yet user agency data are added only once new agencies are added or updates are required for user subscriber data.

MPSCS also uses DHS OEC's Communication Assets Survey and Mapping (CASM) Tool. CASM is an online software tool with defined standardized collection method for emergency response agencies to store and visually display data about their public safety communications assets and how those assets are being used. This tool is used to track state and local assets in Michigan. State and local agency users only update CASM when new infrastructure is added or changed or when infrastructure is no longer in use. This could be monthly, quarterly, or annually based on changes required.

## 9. Existing Government-Owned Networks

*(9a) 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.*

### Response:

Michigan's existing government owned public safety wireless network, MPSCS described in response and in figure 12, which has been designed and deployed with the complete set of hardening, security, reliability and resiliency elements demanded by the public safety communications environment, This ensures the highest level of protection to the public safety users across the state. The state defined standards that must be adhered to for all new sub-systems and additions to the statewide land mobile radio network, and much of those standards and requirements were used by other states as a basis for development of their own respective state, regional, or city systems. Security is as important as resilience and reliability, and the level of protection of the sites is both physical which includes protection to the facilities and shelters and non-physical which protects the electronics and RF equipment.

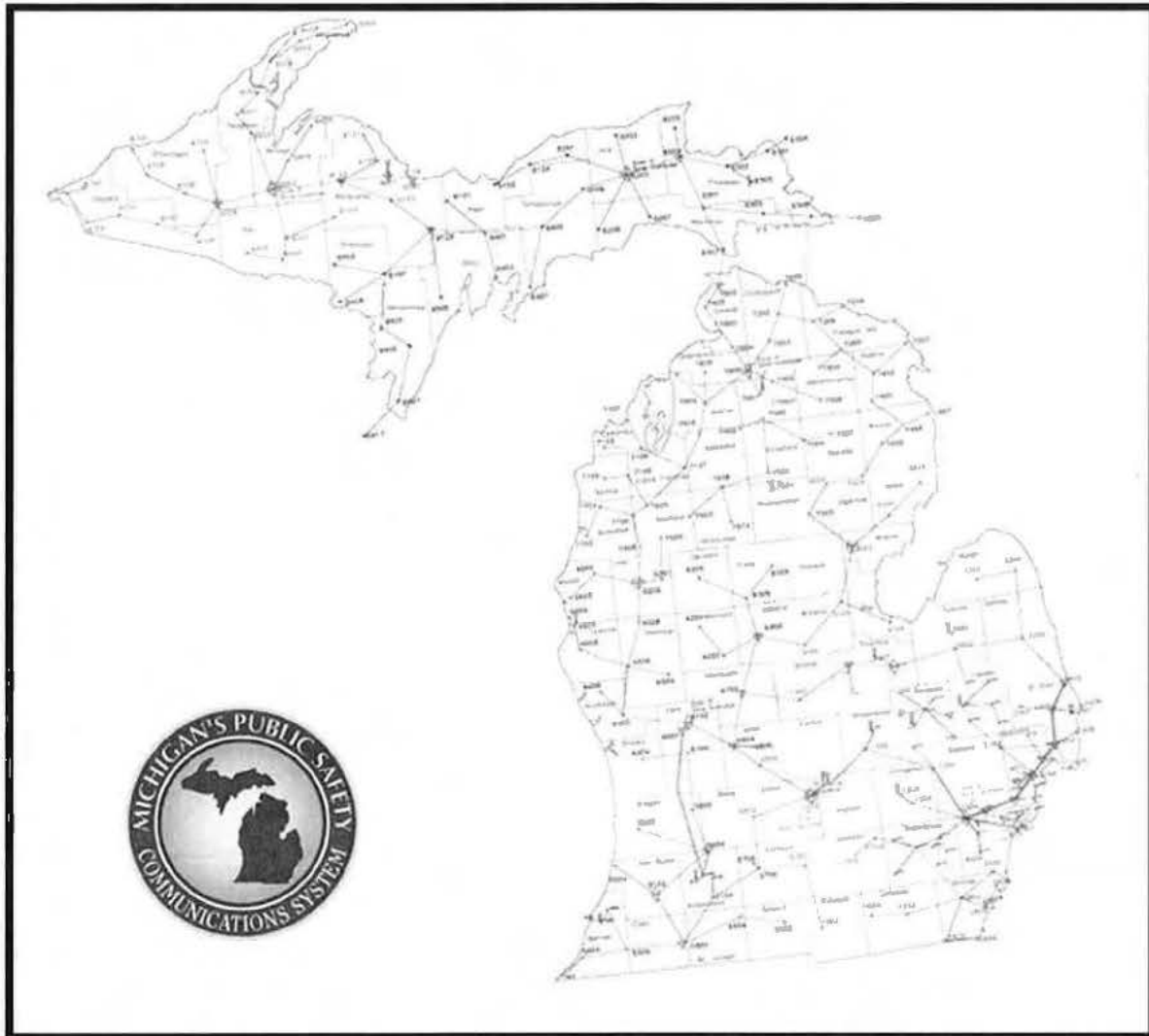
As a baseline, all sites non-public safety sites would be compared to the protections and resilience, and reliability of the MPSCS and many of the non-MPSCS public safety communications sites have equal protections in place.

As a function of the SLIGP effort Michigan will research the government owned networks and sites to develop a baseline grading scale that can be used for all assets for greater determination





of requirements for hardening, security, reliability, or resiliency as they apply to the PS LTE broadband environment. The grading scale will then ease the statewide identification of those assets that are below a baseline requirement and those that are above a baseline requirement for use by public safety.



*Figure 12 – State Wireless MPSCS Network*

The State's Enterprise Wide Area Data Network, Figure 13, is the consolidated platform for carrying all forms of the State's business traffic, including voice, video, data, and enterprise Intranet applications. The state Enterprise Network securely serves all state agencies and the judicial branch of state government. The State Enterprise Network includes the Lansing Metropolitan Area Network (LMAN – a 10Gigabit fiber network connecting all capitol-area agencies to state data centers, the Internet, and the state Wide Area Network), state-owned



and leased fiber, leased private lines, leased broadband connections, and the State's managed Wide Area Network (WAN). The state owns or contracts for these components using existing contracts with Merit Network, CenturyLink, Frontier Communications, Charter Communications, Comcast, and AT&T. AT&T's contract includes management of the WAN.

- The business demands of the State require that the State WAN be available 24x7x365, and have predictable and adaptable characteristics.
- The State WAN serves approximately 1,000 offices throughout the state's 83 counties at network speeds from 1.5Mb to 2.5Gigabits
- WAN network supports local law enforcement access to Michigan's Law Enforcement Information Network (LEIN).



Figure 13 – State Wide Area Network



***(9b) 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.***

**Response:**

Michigan will review the stakeholder requirements, and identify commercial carrier capabilities within Michigan compared to the baseline requirements. It is known that much of the comparison between commercial carrier and public safety networks are constructed differently, where carriers are driven towards commercial opportunities which unlike public safety networks are designed for high reliability (long run generators, backup power, redundant links, and high up-time capabilities) in areas where user base may not be at maximum levels.

Michigan has contracts for the provisioning and management of the state WAN that include state standard requirements for hardening, security, reliability, and resiliency. These standard policies, terms and service level requirements are referenced and replicated for all contracts with commercial carriers, network installers, and IT security contractors. Current contracts with commercial carriers require adherence to state security policies for separation of data, security monitoring, and hardening of IT and network assets. State security policies reference FISMA, COBIT, NIST, and CJIS standards.

## **10. Network Users**

***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.***

**Response:**

An activity of the SLIGP education and outreach program, Michigan will be determining the number of public safety, government agencies and tribal nations to that are in place across the state. A baseline of unique users derived from the outreach effort will be utilized for research and analysis that will facilitate activities such as surveys or online collection forms. Communities and regions that users of public safety and non-public safety solutions that are leveraging carrier based options or private solutions will also be identified to determine priority of use and factors that drove mobile solutions. This effort will also leverage state and local forums to determine basis for new growth given the opportunity for new coverage or expanded access for wireless broadband activities.

Michigan has in place a precursor model of FirstNet with it's leading solution for statewide land mobile radio communications. MPSCS was the first statewide P25 system in the country and because of this many large public safety systems across the country used the MPSCS as a model for development and adoption in their respective states. The MPSCS has been in place the past



16 years and through that time frame the state has learned a great deal of repeatable processes that will be used in the education and outreach for FirstNet, especially in the area of recruiting additional Network Users.

The approaches and relationships that have been developed by the MPSCS team have been the basis for growth and adoption of standards based communications solutions which will be the basis of outreach to the existing user community of the MPSCS as potential users for their willingness to partner and leverage assets.

## **11. Education and Outreach**

***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.***

### **Response:**

Michigan will leverage multiple means to educate public safety and prospective secondary users across the state. As identified in 10a, The state has had the success of being a leader in a statewide land mobile radio system and with such leadership had to develop many of the processes, policies, and legal agreements that are in place to manage the system and empower the user community. Successful models of training will be adopted from the land mobile radio and other current public safety mobile wireless solutions that will transcend the new capabilities of public safety broadband. Training has been an identified key function is the safety for the end user and the success of the system and as such those same training fundamentals and requirements for users should be enforced as we continue forward with public safety broadband. Multiple methods have been used from classroom style, train-the-trainer, and required retraining but other successful methods that warrant developed concepts within the SLIGP, are technology advancements of online, and social media (such as YouTube videos) to ensure the entire population of users and prospective users can be covered.

For the purposes of supporting and recruiting potential FirstNet users, the State will utilize and enhance existing outreach efforts to identify potential users for FirstNet. Examples of existing vehicles include the MPSCS website, relationships with fraternal organizations and their regional and annual conferences, statewide conferences, regional and county meetings, and general outreach via social media, websites and the *MPSCS Newsletter*.

The technology aspects that will be leveraged to promote Michigan’s activities surrounding Public Safety Broadband activities will start with the development of a website that will contain all up to date public correspondence (PowerPoint’s, letters, etc.) for Michigan’s efforts and links to YouTube recorded sessions, FirstNet materials, and a calendar of scheduled events around the state. It is intended that a member(s) of the Michigan’s committee leading the efforts for public safety broadband will attend each regional meeting at least twice a year, and more as requested by the regions. County meetings will be scheduled based on support information and requests



from the regional meeting participants. As Michigan has 83 counties, meeting with the regional committees may prove a greater opportunity to meet with the public safety stakeholders. Regional informational meetings will also be scheduled to ensure adequate coverage across the state for public safety broadband information sharing and information collection. The existing relationships with the fraternal organizations include governor appointed members that participate with the Michigan Public Safety Communications Interoperability Board that are representing their fraternal organization with public safety interoperable communications efforts across the state. It is intended that the existing appointed members will be the conduit within their fraternal organizations to share information and glean the organizations expectations of the network for Michigan. The SWIC has working relationships with some of the fraternal organizations currently, and for those fraternal organizations that relationships or representatives are not currently in place, key members of the Michigan public safety broadband committee will be responsible for establishing a relationship to include their respective organizations in the outreach and education efforts.

As identified previously, the outreach to the tribal nations exists currently through the public safety representatives, but to ensure adequate information sharing and information collection, contact will be made with each tribal nation. The contact will include meetings with the appropriate public safety and non-public safety personnel to establish strong partnership relationships to ensure the needs and expectations of the tribal nations will be collected in reference to the public safety broadband network. Through the meetings, identification of the interest, participation and inclusion of the tribal nations with the state and local teams to develop Michigan's collective plan for public safety broadband will be identified and included in the efforts. With each of the contacts with the tribal nations, information will be provided for the website and other online materials that will not only provide background on public safety broadband activities in Michigan but also links to FirstNet information and updates.

## **12. Memorandum of Agreements**

***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.***

### **Response:**

The State of Michigan Attorney General's office has identified a list of potential obstacles and challenges associated with deployment and implementation of a FirstNet PSBN. These include asset transfer issues, tower sharing constraints and procurement limitations. Unfortunately, these issues are of sufficient complexity that a final and definitive dispensation of these items could not be prepared in time for this grant submission. Because of the State's extensive experience in managing a large Public Safety communications network, the Michigan legal teams are well-versed and experienced in these matters. It is the State's intention to supplement the current legal resources with incremental funding so that the Michigan attorneys can devote sufficient time and



attention to fully researching and exploring the obstacles and opportunities identified. This effort is captured in the Staffing Plan.

## 13. Tools

***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?***

**Response:**

The state has utilized online survey tools, such as Survey Monkey for data collection and have also used Microsoft Project to manage small and large scale projects for deliverables, milestones, and tracking of tasks required for successful deliverable completions.

The Microsoft Suite of Office tools (Word, Excel, and Visio) have been used extensively through a myriad of past and present projects and would be expected to be used again as a function to support SLIGP efforts.

As identified previously, the CASM application will continue to be leveraged. GIS tools, wireless propagation and analysis tools will also be used for detailed mapping for both technical utilization and for basic understanding of for non-technical users.

The Michigan Department of Information Technology, through the Center for Shared Solutions and Technology Partnerships (CSSTP), has invested in and already put into place many of the components required for the data driven tool. Current investments in technology will be leveraged to introduce cost savings for the planning of FirstNet. This gives the project a solid starting foundation and will allow efforts to focus in support of this project.

### **Imagery Program**

Since 2004, the State Of Michigan has been working to acquire high resolution digital aerial photography to assist in the geo-spatial data needs of State employees and to provide high quality images as a backdrop for State Of Michigan internet applications that contain a mapping component.

During this time, a variety of State, Local, and Federal partnership initiatives have been put in place that have increased the availability of high resolution digital aerial photography and increased the desire to continue to add to the available data.

The State of Michigan (SOM) has entered into a contract with Sanborn Map Co. to offer consistent high resolution statewide digital aerial photography, LiDAR acquisition and products, and a data hosting solution. With this contract the State intends to accomplish the following goals:

- Add to the SOM repository of high resolution digital aerial photography acquired during the period of 2004-2012.



- Create an avenue for State, Local, and Federal government entities to acquire high quality imagery and LiDAR data.
- Create a data hosting environment to efficiently manage and serve the large amounts of data now available and future data to be collected.

Access to good digital aerial photography has created a demand for more data at better resolution collected in a timely manner. This next generation digital aerial photography program is a major step toward reaching SOM goals. The SOM's intent is to acquire digital aerial photography for approximately 20% of the State each year over the next 5 years. It is also the SOM's intent to extend the services and pricing established by this contract to State Partners, which may include, but not be limited to, Local and Federal Government entities.

### **Spatial Data Warehouse (Infrastructure)**

The Spatial Data Warehouse (SDW) is the Enterprise Spatial Database Engine (SDE) and ArcGIS Server application development platform. The SDW provides the agencies with the ability leverage State of Michigan personnel with specialized geospatial and geographic information systems skillsets to create or purchase geospatial data assets, as well as augmentation to agency resources when large geospatial data projects occur. Geospatial data is data (event or object) that includes location as an attribute such as physical address, X/Y coordinate, or geometry. This environment supports the web-mapping applications and geo-web services.

In addition, CSS has created a Center of Excellence for Geospatial web development. The highly experienced web development team creates web application enabling GIS and map functions and software needed to collect asset information and analysis needed during the planning for First Net.

### **Extract Transform Load (ETL) Technologies**

CSSTP has established the infrastructure to provide Extract Transform Load (ETL) services to State of Michigan departments. This service utilizes the IBM WebSphere DataStage, QualityStage and Information Analyzer toolset. These tools provide the ability to design data flows that extract information from multiple source systems, transform it in ways that make it more valuable, and then deliver it to one or more target databases or applications. CSSTP can use these tools to develop the processes to upload local data in the state's systems, including the centralized GIS database. The system consists of development, testing, and production environments. In addition, CSSTP has failover and redundant servers with a complete disaster recovery plan as part of the overall CMMI business continuity.





***(13b) Is the State aware of additional tools that could be useful for implementing allowable grant activities?***

**Response:**

Toolsets that may be accessible by the Michigan Public Service Commission for known commercial backhaul and related assets would be of benefit for FirstNet, if the capability for FirstNet to gain access to those collection tools would be allowed. Same may be true for asset tracking tools used by school districts and transportation throughout the state that identify fiber and other assets that could be reutilized for FirstNet uses.

There may also be toolsets that DHS OEC may be finalizing that would be useful to states in the efforts of the grant.

## **14. Phase Two Funding**

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

**Response:**

Michigan plans to continue the efforts identified in Phase 1 until FirstNet defines the requirements that will aid the state in consultation.

## **15. Other**

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

**Response:**

The application was developed by State of Michigan staff with assistance from the Connect Michigan team in respective areas where current consumer broadband activity is underway. Peer SWICs from across the nation and within the FEMA Region V RECCWG broadband committee also shared insightful ideas or background content that was used for consideration as Michigan developed the application.

# MICHIGAN SLIGP Detailed Budget Spreadsheet

14-Jun-13

v8.3

Category	Detailed Description of Budget (for full grant period)			Breakdown of Costs	
	Quantity	Unit Cost	Total Cost	Federal	Non-Federal
<b>a. Personnel</b>					
<b>SWIC</b> The SWIC will spend 50% of the time on SLIGP grant activities for 3 years. The SWIC's annual salary is \$112,309.	3 years	\$56,154	\$168,463	\$168,463	\$0
<b>CIO/ FirstNet Point of Contact</b> The CIO PoC will spend 10% of the time for 3 years. The annual salary is \$136,390.	3 years	\$13,639	\$40,917	\$20,458	\$20,458
<b>Shared Services Director</b> The SSD will spend 10% of the time for 3 years. The annual salary is \$136,390.	3 years	\$13,639	\$40,917	\$20,458	\$20,458
<b>SLIGP Program Manager</b> Fully dedicated, 100% for 3 years. The annual salary is \$105,353.	3 years	\$105,353	\$316,060	\$158,030	\$158,030
<b>Legal Advisors</b> State attorneys are internally billed an hourly rate of \$150/hour, budgeted at 105 hours per year for 3 years for a total of 315 hours. Fringe benefits costs do not apply.	315 hours	\$150	\$47,250	\$0	\$47,250
<b>Outreach Support Staff - 1</b> Web and electronic media, outreach content specialist dedicated at 100%. The annual salary is \$65,323.	3 years	\$65,323	\$195,969	\$195,969	\$0
<b>Outreach Support Staff - 2</b> Support staff will be dedicated at 100%. The annual salary is \$65,323.	3 years	\$65,323	\$195,969	\$97,985	\$97,985
<b>Outreach Support Staff - 3</b> Support staff will be dedicated at 100%. The annual salary is \$65,323.	3 years	\$65,323	\$195,969	\$97,985	\$97,985
<b>Grant Director</b> One grant director will spend 10% of the time on the project for 3 years. The annual salary is \$112,309.	3 years	\$11,231	\$33,693	\$33,693	\$0
<b>Total Personnel</b>			<b>\$1,235,208</b>	<b>\$793,042</b>	<b>\$442,167</b>
<b>b. Fringe Benefits</b> Fringe is calculated at percent of salary, for the portion of time spent on SLIGP activities.		<b>% of Salary</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
<b>SWIC</b>	\$168,463	79%	\$133,745	\$133,745	\$0
<b>CIO/ FirstNet Point of Contact</b>	\$40,917	65%	\$26,749	\$13,374	\$13,374
<b>Shared Services Director</b>	\$40,917	65%	\$26,749	\$13,374	\$13,374
<b>Program Manager/Project Manager</b>	\$316,060	81%	\$254,632	\$127,316	\$127,316

<b>Outreach Support Staff - 1</b>	\$195,969	74%	\$144,932	\$144,932	\$0
<b>Outreach Support Staff - 2</b>	\$195,969	74%	\$144,932	\$72,466	\$72,466
<b>Outreach Support Staff - 3</b>	\$195,969	74%	\$144,932	\$72,466	\$72,466
<b>Grant Director</b>	\$33,693	79%	\$26,749	\$26,749	\$0
<b>Total Fringe Benefits</b>			<b>\$903,420</b>	<b>\$604,423</b>	<b>\$298,997</b>
<b>TOTAL SALARY + FRINGE</b>			<b>\$2,138,629</b>	<b>\$1,397,465</b>	<b>\$741,164</b>

<b>c. Travel</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
<b>Intra-State SLIGP Support Travel</b> Calculated based on \$330/day per person for meals, 300 miles round trip and lodging, single night stay, one trip per year, no air. 98 trips per year planned	294	\$330	\$97,020	\$97,020	
<b>Out of State/Other SLIGP Support Travel</b> Includes multi-night events, conferences, \$250 per person per day, average of \$600 for air travel in support of regional, FirstNet, national conferences and unplanned events. Amount adjusted based upon estimate of PSBN content per category.	<i>see narrative</i>	<i>see narrative</i>	\$266,580	\$266,580	
<b>Mileage for MI PSBN Meetings</b> Average of 8 individuals traveling average of 300 miles roundtrip for 26 meetings/year; cost per mile is based on state mileage rates.	187200	\$0.565	\$105,768	\$105,768	
<b>Total Travel</b>			<b>\$469,368</b>	<b>\$469,368</b>	<b>\$0</b>
<b>d. Equipment</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
N/A	0	\$0	\$0	\$0	
<b>Total Equipment</b>			<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>e. Supplies</b>	<b>Quantity (units)</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
<b>Color Printer</b>	1	\$1,578	\$1,578	\$1,578	
<b>Portable Projectors</b>	3	\$1,300	\$3,900	\$3,900	
<b>LTE Devices</b> Portable hotspots, SmartPhones for (7) staffers	14	\$350	\$4,900	\$4,900	
<b>Office Supplies</b> budgeted at \$70/month for 3 years	36 (months)	\$70	\$2,520		\$2,520
<b>Tablets (6)</b> Two tablets will be provided by Federal funds, the other four provided as a non-federal match.	6	\$770	\$4,620	\$1,540	\$3,080
<b>Laptops (6)</b> Six laptops will be provided as a non-federal match.	6	\$1,500	\$9,000		\$9,000
<b>Total Supplies</b>			<b>\$26,518</b>	<b>\$11,918</b>	<b>\$14,600</b>
<b>f. Contractual</b>	<b>Quantity (hours)</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
<b>Senior PS LTE Advisors</b> Support all areas of strategic planning, informational, governance and FirstNet consultations as directed by Michigan PSBB program leadership team. Primary emphasis on directing governance development, supporting PMO, and executive staff SLIGP support augmentation.	3172	\$156	\$494,832	\$494,832	\$0

<b>Governance Development Managers</b> Support regional governance development through coordination, outreach and organizational development activities.	1227	\$132	\$161,964	\$161,964	\$0
<b>PS LTE General Program Support</b> This category includes delivery of overview information, facilitating meetings, meeting preparation, grant support, reporting and overall coordination.	1800	\$156	\$280,800	\$224,640	\$56,160

<b>Outreach &amp; Education Production</b> This category captures effort needed to deliver PS LTE program content, including projects such as website development, newsletters, updates, branding, copy editing production, social media, eLearning/online training programs.	2700	\$84	\$226,800	\$226,800	\$0
<b>LTE Coverage &amp; Planning</b> Rural prioritization project, data gathering, tool/DB development and maintenance.	1348	\$132	\$177,936	\$177,936	\$0
<b>Data Collection &amp; Coordination</b> Rural prioritization project, data gathering, tool/DB development, database entry, includes admin component; assume Tier 3 rate for this category.	1571	\$84	\$131,964	\$131,964	\$0
<b>Total Contractual</b>			<b>\$1,474,296</b>	<b>\$1,418,136</b>	<b>\$56,160</b>
<b>g. Construction</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
N/A			\$0		
<b>Total Construction</b>			<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>h. Other</b>	<b>Quantity (units)</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
<b>Monthly Charges for 4G LTE Devices</b> MI PSBN team account charge of \$80/month per account. SLIGP device acct with selected LTE carrier would then cost \$55/smartphone/month and \$20/hotspot/month for a total of \$605/month for (7) users.	36 months	\$605	\$21,780	\$21,780	
<b>Webinar Hosting Service</b> \$150/month	36 months	\$150	\$5,400	\$0	\$5,400
<b>Conference Expenses</b> Non-State Facilities, A/V, other conference expenses calculated at \$3,150 average, (3) per year	9 confefences	\$3,150	\$28,350	\$28,350	
<b>Conference Call Services</b> (5) one-hour conference calls/week average, at .03/per person per minute, 15 participants on average, 50 weeks per year	750 Calls	\$27/call	\$20,250	\$0	\$20,250
<b>Total Other</b>			<b>\$75,780</b>	<b>\$50,130</b>	<b>\$25,650</b>
<b>Total Direct Charges</b>			<b>\$4,184,591</b>	<b>\$3,347,017</b>	<b>\$837,574</b>
<b>i. Indirect Costs</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Federal</b>	<b>Non-Federal</b>
N/A					
<b>Total Indirect</b>			<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTALS</b>			<b>\$4,184,591</b>	<b>\$3,347,017</b>	<b>\$837,574</b>

## 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:

1. 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.
2. 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.
3. 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.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. 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, (j) 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.
8. 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.

9. 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).
12. 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."
18. 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.

<p><b>* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL</b></p> <p>Completed on submission to Grants.gov</p>	<p><b>* TITLE</b></p> <p>State 911 Administrator</p>
<p><b>* APPLICANT ORGANIZATION</b></p> <p>Michigan State Police - State 911 Administrative Section</p>	<p><b>* DATE SUBMITTED</b></p> <p>Completed on submission to Grants.gov</p>



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.

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

**\* NAME OF APPLICANT**

Michigan State Police - State 911 Administrative Section

**\* AWARD NUMBER**

**\* PROJECT NAME**

MISLIGP

<b>Prefix:</b>	<b>* First Name:</b>	<b>Middle Name:</b>
	Harriet	

<b>* Last Name:</b>	<b>Suffix:</b>
Miller-Brown	

**\* Title:** State 911 Administrator

**\* SIGNATURE:**  
Completed by Grants.gov upon submission.

**\* DATE:**  
Completed by Grants.gov upon submission.



STATE OF MICHIGAN  
EXECUTIVE OFFICE  
LANSING

BRIAN CALLEY  
LT. GOVERNOR

March 25, 2013

Net  
it of Commerce  
on Ave., NW

20230

ling  
tary, National Telecommunications and Information Administration  
it of Commerce  
on Ave., NW

20230

nd Assistant Secretary Strickling:

esignated Michigan's State Chief Information Officer (CIO), David Behen  
FirstNet in Michigan. He is the single entity authorized to negotiate  
stNet on Michigan's behalf. Mr. Behen will coordinate activities with the  
Safety Communications Interoperability Board and the Statewide  
Coordinator (SWIC) to ensure the stakeholders are well informed and  
ants as Michigan prepares for the National Public Safety Broadband  
N).

Sincerely,

A handwritten signature in blue ink that reads 'Rick Snyder'.

Rick Snyder  
Governor