MnFCP

Minnesota-FirstNet Consultation Project

MINNESOTA DEPARTMENT OF PUBLIC SAFETY – DIVISION OF EMERGENCY COMMUNICATION NETWORKS

Project News   November 2015

The State of Minnesota FirstNet Consultation Project (MnFCP) was initiated in January 2014 to help the state prepare for the coming of the Nationwide Public Safety Broadband Network (NPSBN). The NPSBN will be operated by FirstNet and designed to meet your requirements.

The MnFCP project team is leading the State's effort to collect stakeholder requirements to support the State's consultation with FirstNet regarding the rollout of the National Public Safety Broadband Network (NPSBN) within the State. The team is responsible for the assembling and reporting of these requirements to FirstNet. Their mandate stretches across the following subject areas:

- Education & Outreach
- User Population
- Device Types
- Applications
- Usage Requirements
- Governance Implications
- Strategic Plans
- FirstNet-State Consultation Support
- Tribal Outreach

Stakeholder Requirements Delivered!

On September 30, Emergency Communication Networks (ECN) and the Statewide Emergency Communications Board (SECB) delivered to FirstNet a comprehensive suite of data designed to identify Minnesota's requirements. The suite of data was designed to reflect the requirements of the public safety agencies in Minnesota and to influence FirstNet's Request for Proposal (RFP) for the implementation of the Nationwide Public Safety Broadband Network (NPSBN). The data submitted includes the State's phased deployment strategy (summarized below) and the coverage objectives (pictured on the next page). The state also provided user population data for each public safety entity; device counts and types; heat maps representing calls for service; application usage; data usage; wireless provider and expenditure information; and barriers to mobile data adoption.

Table 1: Bookends Build-Out Approach

"Bookends" Strategy	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Critical Service Areas (incident density)	✓	✓			
Extended Service Areas (incident density)	✓	✓	✓	✓	✓
Interstates (with buffer, road count)	✓	✓			
US & State Roads (with buffer, road counts)			✓	✓	✓
Required Service Area (incident density)			✓	✓	✓

The strategy chosen by the SECB's Interoperable Data Committee (IDC) for the Phased Deployment is referred to as the "Bookends" Strategy. The "Bookends" Strategy prioritizes the build of the network in areas where it is needed the most: in dense urban areas commercial network become congested and in underserved or unserved rural areas where commercial wireless broadband service does not exit. Areas of the state that already have adequate commercial service will be pushed towards the end. This method achieves FirstNet's goal by prioritizing the build-out in the most populated areas, and the SECB's goal of improving available broadband coverage for rural public safety agencies. It is important to note that **the Bookends Strategy is premised on there being a commercial carrier roaming agreement and service availability throughout the required service area equivalent to the commercial carrier footprint used by the local stakeholder agency.**

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The project team was only able to compile the data due to the extraordinary participation of local, county, and state public safety stakeholders over the course of data collection effort. The project team would like to take this opportunity to thank everyone for their valiant efforts and support!

Thank you!

We could not have made this milestone without you.

Wireless Broadband Pilot Project

We are proud to announce that we will be completing the Minnesota Public Safety Wireless Broadband Pilot Project by the end of the year. With the extraordinary help of our partners, Elk River Fire Department, New Core Wireless and Great River Energy, we have built the first Band Class 14 (FirstNet spectrum) LTE site in Elk River, Minnesota. This pilot network is a single site, fully functioning LTE network including a hosted core at New Core's headquarters in St. Cloud, Minnesota. This project gives us incredible insight into the challenges that we will face during the implementation of the FirstNet Network. The network also gives us a unique ability to test user scenarios to better plan how this new technology can be best integrated into public safety operations.

This project has been executed with ***zero capital cost to taxpayers*** with site and user equipment donated by Motorola Solutions, Sonim, OnCall, Physical Sciences, Teradek and others.

This pilot project will culminate in a technical exercise on November 24th at the Elk River Public Works facility where public safety agencies will have the opportunity to experience incident video from body-worn cameras and an aerial surveillance drone, field incident command, and public safety-grade mission critical handheld devices with push-to-talk over LTE all on a dedicated Band 14 network. Additional information will be published in the next newsletter.

This project demonstrates that public-private partnerships for the nationwide public safety broadband network are possible in Minnesota and that there is tremendous interest among industry partners in our state to make public safety broadband a reality.
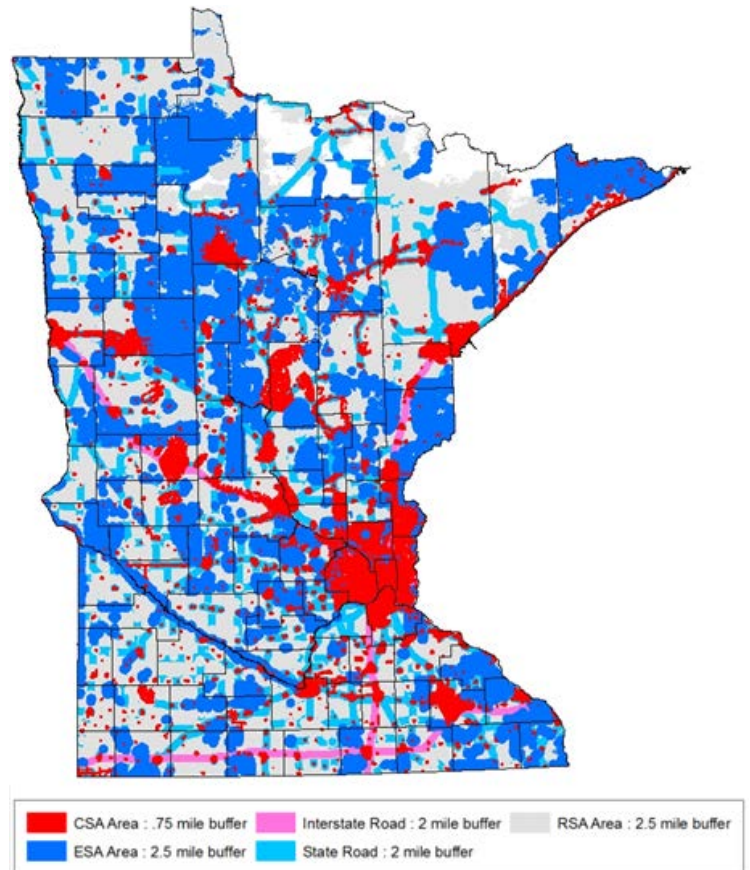

| Color	Area
Red	CSA Area : .75 mile buffer
Blue	ESA Area : 2.5 mile buffer
Pink	Interstate Road : 2 mile buffer
Cyan	State Road : 2 mile buffer
Gray	RSA Area : 2.5 mile buffer

Figure 1: Elk River Pilot Site

Operational Areas

The MnFCP Project Team is working with the State of Minnesota's GIS Services (MNGEO) to map operational areas for the public safety entities in the State. This data will be merged with the agency population data to provide FirstNet an estimated distribution of public safety users across Minnesota. MNGEO will be reaching out to Public Safety Answering

Points (PSAPs) to collect operational areas and verify user population counts on an ongoing basis prior to delivery to FirstNet.

Data Usage/Traffic Profiles – Computer Aided Dispatch (CAD) Data Manipulation

Prior to conducting Coverage Review Meetings, the Project Team worked with counties and tribal entities to obtain three-years of CAD data, which was used to support the analysis of high-priority areas and provided justification for the counties' and tribes' NPSBN broadband coverage needs. The Project Team will continue analyzing the data to assess data usage requirements, establish traffic profiles per public safety discipline and perform trends analysis to predict usage into the future. We will soon resume collecting CAD data on a limited basis from specific PSAPs that best represent each region in terms of typical broadband usage and incident distribution.
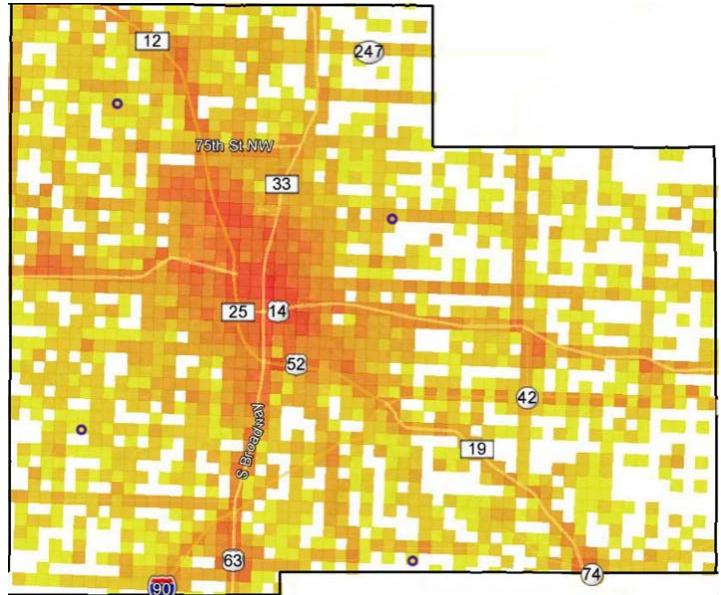
Tribal Consultation and Outreach

We continue our active tribal outreach in the state. Our goal is meet with tribal leaders to further ensure that we capture tribal requirements and that tribes are fully integrated into the process leading up to the Opt-in / Opt-out decision expected sometime in 2016 or 2017. The first of three regional meetings was hosted by the Shakopee Mdewakanton Sioux Community on November 12th with an invite to the Upper and Lower Sioux and Prairie Island tribal communities.

YOUR PROJECT TEAM:

You are encouraged to contact the project team at any time! We are happy to answer questions or hear your concerns.

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For more information on the MnFCP, the NPSBN and FirstNet, please visit ECN's website for all project news and access to in-depth training modules on this subject and others: https://dps.mn.gov/divisions/ecn/Pages/broadband.aspx