

## Broadband USA Applications Database

**Applicant Name:** National Emergency Number Association

**Project Title:** Unleashing Broadband Demand Through Next Generation Emergency Response, Training, and Education

**Project Type:** Sustainable Adoption

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### Executive Summary

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Public safety systems should be, but are not, fully connected to broadband and drivers of broadband use. The Next Generation Safety Consortium (“Consortium”) knows that opening broadband opportunities to tens of thousands of public safety and emergency health agencies across the United States will transform our quality of life, making us safer, healthier, and more secure – and generate a major source of broadband demand in every community. The Consortium’s proposal addresses key barriers to broadband adoption for emergency response, allowing NTIA to jumpstart America’s emergency broadband use nationwide by enabling sustainable next generation emergency communications with a handful of highly leveraged investments. The very nature of the safety and healthcare communities is the largest barrier. There are more than 100,000 independent organizations. They record data about their actions, but seldom share it. Past policy has focused on upgrading individual organizations. No single state or federal entity has responsibility for the overall safety ecosystem/enterprise, or the “commons” (the center). No agency is responsible for those changes that should be resolved once at the national level, and replicated, rather than being resolved over and over again - differently. Tactically this balkanized structure no longer even works when addressing the needs of the endpoints in the chain of response (9-1-1, police, fire, EMS, hospitals, etc.). Strategically, it overlooks what is needed in the middle (the organizational and technological meeting points of all these entities) that will allow them to interconnect and securely share information across professions, sectors, and geographic areas. This proposal addresses this “middle” by providing facilitating and incentivizing the development of common, network-centric services that enable interoperability. It creates a replicable model for secure information exchange that will be validated through state demonstrations in at least six states/regions: Alabama, Texas, Minnesota, Washington, Connecticut, and Southern Illinois.

Initially spanning 2 ½ years, our project will create specific designs for state shared emergency services backbone networks and for a national “internetwork” to connect them. But, physical connections alone have little value. We will facilitate the deployment of core software services that will help responders navigate the internetwork just like users need domain name servers to navigate the Internet. These core services, registries of agencies and identity management/access control utilities, will allow participating organizations to register once for the information they need, enforcing policy-based rules to ensure that those sending and receiving information are allowed to do so – and “are who they say they are electronically”.

To vault thousands of small, suburban and rural agencies into the future and significantly increase broadband use very quickly, we will incentivize the creation of shared, network-centric hosted subscription services for emergency response, representing applications traditionally procured and hosted locally by each individual agency. We will accelerate the adoption of existing messaging standards so that high profile use cases, such as alerts and warnings and emergency medical response, can be trialed to demonstrate broadband value.

Our work will ignite public safety broadband use beyond this project by eliminating barriers to instantaneous exchange of incident data, medical information, alerts/warnings, and situational reports via voice, text, image and video. It will enable vulnerable populations, such as people with disabilities and the elderly, to more effectively communicate with responders.

Our proposal directly addresses three BTOP statutory purposes and will significantly advance the remaining two. Our efforts will profoundly improve use of broadband by safety and related organizations. We will provide education, awareness, broadband-based training and support to community anchor institutions. Safety agencies exist in all communities, so our demand creation will help support the provision of broadband to unserved areas and improve the quality of broadband in underserved areas. This is not just a safety proposal. We have also partnered with leading media and training organizations like PBS, NPR, and the Federation of American Scientists to create innovative digital teaching systems, for multiple education purposes, including STEM courses and some responder training. We have carefully coordinated our plan with a wide range of existing state and federal programs.

A very diverse consortium has come together in a matter of weeks and continues to grow. Long term, our innovative approach will build broadband demand in all fifty states, serving the country's full population. Our primary targets for outreach and unleashing demand for broadband include: 30,000 fire departments with 1.1 million firefighters, 17,161 law enforcement agencies with 860,000 officers, 15,000 emergency medical agencies with 201,000 emergency medical technicians and paramedics, 6,181 9-1-1 centers with 99,900 staffers in more than 5,600 counties, 5,708 registered hospitals with associated physicians, nurses.

The Consortium project team is very well qualified to lead this effort. A formal Consortium will oversee the project. The National Emergency Number Association along with Kimball Technology will be the project managers using their extensive experience successfully managing projects of this kind.

The total cost for this project is \$53,866,886. That includes requested BTOP funds of \$18,880,383, and a nearly 200 percent match from states, multi-county regions, and others who will be working on the project.

America's emergency response teams are eager to put broadband power to work – for far more informed emergency response. Our innovative approach enables uses that will make Americans safer while fueling broadband growth.