

History

The First Responders Emerging Technologies program (FirstTech) was formed in mid-2018 as an evolution of North Carolina's engagement with the federal government's First Responder Network Authority (FirstNet Authority). The FirstNet Authority is responsible for building, operating, and maintaining the Nationwide Public Safety Broadband Network, also known as the FirstNet Network. The FirstTech program is housed under the N.C. Department of Information Technology's Division of Broadband and Digital Equity and continues to focus on the FirstNet project with a broader scope to encompass technologies and policies related to public safety's use of data connectivity and technologies. The FirstTech program director serves as the point of contact between the FirstNet Authority and its private partner (AT&T) and the state of North Carolina. This role has been referred to as the Single Point of Contact (SPOC) in the past. FirstTech also serves as the subject matter expert in public safety broadband. This calendar-year strategic plan outlines guiding principles for the FirstTech program. It is FirstTech's goal to serve first responders at all levels of government so they can focus on their mission of protecting the public.

Vision

A connected North Carolina where all first responder agencies can access, afford, and effectively use technologies necessary to protect life and property.

Mission

Serve the North Carolina first responder community through thought leadership, direct experience, and unbiased information to increase technological literacy and support agencies' understanding, adoption, and usage of the best technologies available.

Guiding Principles

Equity · Collaboration · Innovation · Transparency · Accountability · Fiscal Responsibility

Overview

Technology is accelerating at an exponential rate, and new technologies have recently been advanced by the work being done by the FirstNet Authority. First responders, like many in the public sector, are slow to adopt new technologies and are often exploring solutions within the scope of their own discipline or agency. FirstTech is an additional resource available to agencies exploring technologies and can act as a "free consultant," unbiased by vendor influence. FirstTech facilitates collaboration between multiple disciplines (emergency management, law enforcement, 911, fire, emergency medical services and other responders) that use similar technologies. FirstTech also brings a broader depth of knowledge by reviewing the impact of a new technology, which can occur at the operational, financial, and technological levels.

The FirstTech program has three main pillars with associated goals – 1) Responder engagement, 2) Industry engagement and 3) Partner engagement. FirstTech will work to promote North Carolina as a technology hub for public safety technologies and will prioritize engagements with organizations that highlight the North Carolina workforce, such as RIoT and the Wireless Research Center of North Carolina. The FirstTech program will maintain accountability over state-appropriated funds and managed federal grants to remain within budget parameters. The following goals provide programmatic guidance, though it is not an exhaustive list as new technologies quickly emerge.

Pillar #1: Responder Engagement

- 1.1. Investigate and research technology impacts on budgets, public policy, operational and other non-technical implications.
- 1.2. Serve on the State Interoperability Executive Committee (SIEC) as an identified member¹ and support the Statewide Communications Interoperability Plan (SCIP) as published by the SIEC.²
 - 1.2.1. “Promote data sharing to improve situational awareness and remain network neutral from a data interoperability standpoint.”
 - 1.2.2. “Identify mission critical voice and mission critical data public safety communications interoperability gaps and develop solutions for current and emerging technologies.”
- 1.3. Provide information technology support and services to state and local agencies as required by North Carolina legislation³. Work with responder agencies by invite to identify problems where technology can provide a solution.
- 1.4. Provide training to users within state agencies in telecommunications technology and systems.⁴
- 1.5. Work with all public safety and first responder agencies to continue eliminating silos and encourage sharing networks as identified in the State Broadband Plan.⁵
- 1.6. Serve as State Emergency Response Team (SERT) partner for North Carolina Emergency Management (NCEM) as identified in the Emergency Operations Plan⁶
- 1.7. Support the operations of the N.C. Departments of Public Safety, Health and Human Services – Office of EMS and Office of Rural Health, and Insurance – Office of State Fire Marshall, as well as the Criminal Justice Information Network (CJIN), the N.C. 911 Board⁷, and the many public safety agencies throughout the state. Additional support will be provided to smaller entities with limited staff to explore emerging technologies and identifying areas where cost savings can be achieved.
- 1.8. Support the concept of an emerging technology lending library to allow first responder agencies to use technology for an extended period to evaluate if it would benefit the agency. This also allows FirstTech to receive direct feedback on such technology.
- 1.9. Provide subject matter expertise to NCEM and other response agencies as requested during disasters, emergencies or planning activities for large scale events. This is referred to as a Detail Assignment to work under that agency’s direction for a temporary assignment of limited duration for an experience that is mutually beneficial, allowing for FirstTech staff to remain current in response operations.

¹ N.C. Department of Public Safety. Statewide Interoperability Executive Committee. [Web page]. Retrieved from

<https://www.ncdps.gov/emergency-management/emergency-communications/interoperability/statewide-interoperability-exec-committee>

² N.C. Department of Public Safety. (2018, April). *NCEM Statewide Communications Interoperability Plan*. Retrieved from

<https://files.nc.gov/ncdps/2018%20North%20Carolina%20SCIP%20%28Final%20%20-%204.20.18%29.pdf>

³ Executive Organization Act of 1973, Powers and duties of the Department; cost-sharing with exempt entities, Sections (§§) 143B-1321(a)(1 & 2). Retrieved from https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/ByChapter/Chapter_143B.html

⁴ Executive Organization Act of 1973, Communications services, Sections (§§) 143B-1370(a)(13) Retrieved from

https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/ByChapter/Chapter_143B.html

⁵ N.C. Department of Information Technology Broadband Infrastructure Office. (2018). *State Broadband Plan - Public Safety*. Retrieved from <https://www.ncbroadband.gov/connectingnc/public-safety/>

⁶ N.C. Department of Public Safety. (2020). *NCEM 2020 North Carolina Emergency Operations Plan*. Retrieved from

https://files.nc.gov/ncdps/documents/files/Divisions/EM/EOP/NCEOP_2020_FINAL-Entire-Plan-488-Pages.pdf

⁷ Executive Organization Act of 1973, Powers and duties of the Department; cost-sharing with exempt entities, Sections (§§) 143B-1321(a)(22 & 30) Retrieved from https://www.ncleg.gov/EnactedLegislation/Statutes/HTML/ByChapter/Chapter_143B.html

Pillar #2: Industry Engagement

- 2.1. Engage with the technology industry to understand the latest hardware and software being developed for responders such as:
 - 2.1.1. Network advancements to include cellular (5G, 6G, etc.) and others (Wi-Fi, satellite, mobile ad-hoc networks [MANET], etc.).
 - 2.1.2. End-user specific hardware appropriate for first responder operating environments.
 - 2.1.3. Software applications appropriate for first responders' desktop and mobile operating systems.
- 2.2. Collaborate with industry subject-matter experts to create opportunities for evaluating new and emerging technologies within the first responder market.
- 2.3. Provide input and feedback to industry, helping to develop meaningful products and offerings.
- 2.4. Execute the standard NCDIT non-disclosure agreement to allow sharing of confidential information in support of activities as needed.

Pillar #3: Partner Engagement

- 3.1. Continue to forge strong partnerships with local governments and build awareness of available NCDIT resources, including IT procurement, shared services, and cybersecurity tools.
- 3.2. Monitor FirstNet's rollout and provide support and information to local governments that subscribe or are deciding whether to subscribe to the oversight service as identified in the Program Evaluation Division report.⁸ Conduct regular meetings with the federal FirstNet Authority and their contractor.
- 3.3. Actively serve on national efforts to further technology projects that will impact North Carolina responders, such as projects led by the U.S. Department of Homeland Security, Federal Communications Commission, National Telecommunications & Information Agency and others.

⁸ N.C. General Assembly Program Evaluation Division. (2018, April 9). *VIPER and FirstNet are Vital for Public Safety Interoperability, but VIPER Requires Upgrades*. Retrieved from <https://ncleg.net/PED/Reports/2018/VIPER-FirstNet.html>

Measuring Success

The strategic plan provides guidance to program staff during the calendar year and is used to drive budget discussions and formulate requests for the state's July 1 – June 30 fiscal year. The following metrics will be used for the annual report to show the impacts and successes of the FirstTech program:

1. Be a good steward of public resources by finishing each fiscal year at or under budget.
2. Conduct at least two speaking engagements at national events per year to demonstrate recognized thought leadership.
3. Participate in at least six emergency, disaster, or planned events per year to keep current on technology used within the first responder community by accepting a Detail Assignment to serve as supplemental staff to a response agency.
4. Bring the North Carolina voice to national efforts by being an active member of at least three working groups, task forces committees, or other efforts related to policies, governance, or trainings relevant to the first responder community.
5. Serve North Carolina efforts to advance first responder technologies by being an active member of at least two working groups, task forces, committees or other efforts related to policies, governance, or trainings relevant to the first responder community at the state or local levels, such as membership on the SIEC and the N.C. 911 Board Technical Subcommittee.
6. Conduct two trainings related to telecommunications to end users within North Carolina per year.
7. Attend at least 75 percent of the NCEM ESF2 SERT calls and briefings per year as scheduled by the NCEM Communications Branch.
8. Attend at least 50 percent of the CJIN board meetings per year.
9. Conduct at least 12 update meetings per year with the FirstNet Authority or their contractor, AT&T, to get an update on the FirstNet project and provide feedback.
10. Attend at least two conferences, expos, forums, or such events per year related to first responder technologies.