NC DIT's FirstTech Annual Review 2020

Executive Summary

North Carolina Department of Information Technology's First Responder Emerging Technologies (FirstTech) program worked to support first responders throughout the state during 2020. This year presented an opportunity to pivot the program to virtual platforms as the COVID-19 pandemic impacted the entire nation. FirstTech was able to still strive in meeting our program goals in 2020 and continues to provide tremendous value to the responders in North Carolina as well as participating in national efforts. FirstTech continued to manage the federal State/Local Implementation Grant Program 2.0 (SLIGP 2.0) and provided valuable programs with the federal money while meeting match requirements using in-kind contributions rather than state funds. While travel restrictions effectively ended the FirstTech Travel Scholarship Program of SLIGP 2.0, work continued on the data-sharing workshops which were delivered using virtual platforms. FirstTech staff was able to support various agencies during planned and unplanned events and disasters, bringing knowledge of advanced technologies to support first responder missions. This annual review is presented to leadership to highlight accomplishments of the prior calendar year.

Vision

To create a North Carolina where all responders can seamlessly and securely communicate using advanced technologies.

Mission

To serve North Carolina's responder community through thought leadership, direct experience, and unbiased information to support responders' understanding, adoption, and usage of the best technologies available.

Accomplishments

The following list is to highlight the work that was accomplished in 2020 and is in no particular order. Several of these items are on-going and more details can be provided upon request.

Responder Engagements

- Laird was voted to serve as the Vice Chair of the State Interoperability Executive Committee (SIEC)
- Grasso represents the greater Broadband Infrastructure Office on the SIEC
- Participation in the SIEC included planning update for the Statewide Communications Interoperability Plan (SCIP), update to the required VIPER template, chairing a working group to establish best practices for new collaboration applications being used
- Continued participation on NC 9-1-1 Board Technology Committee
- Established a limited lending library for some of the latest first responder communication devices

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- Assisted City of Charlotte IT with coverage testing for cellular provider evaluation
- Currently assisting NC Office of State Fire Marshal with evaluation of two-way radio replacements
- Assisted NC State Highway Patrol with evaluation of collaboration application
- 2020.03.10 Facilitated connection with Durham County and FirstNet AT&T to provide support during a ransomware attack that affected Durham City & County governments.
- 2020.08.03 Provided pilot of Bridge platform in support of hurricane response. Feedback was overwhelming positive and may lead to a change in communications during incidents.
- On-going assistance to North Carolina National Guard Aviation unit with radio programming and technologies
- Dual-sim and embedded SIM (eSIM) testing on a smartphone which led to discussions with NC Emergency Management on the pros and cons as well as feedback for the wireless carriers on what worked and what didn't.

Industry Engagements

- Strengthened the on-going relationship with AT&T with regard to the federal FirstNet project. Monthly calls are scheduled to keep up to date on progress and issues.
- Signed NDA with Verizon to give input and feedback about their public safety offering
- Engaged with Motorola Solutions to review and provide feedback on latest products and services
- Investigated, vetted, and assisted with the implementation of the Bridge4PS collaboration application
 - This led to tremendous collaboration efforts among responders during various emergencies, disasters, and events in 2020.
- Participated as a first responder observer in the ETSI MCX Plugtests Event that tested interoperability between MC PTT Vendors

Partnership Engagements/Economic Development

- Chair of Federal Communications Commission (FCC) working group on broadband disaster response, producing two written reports approved by the FCC federal advisory committee
- On-going support for the Paging Project in collaboration with UNC-TV and the US Department of Homeland Security (DHS). This research project is advancing in proof of concept to pilot and has the chance to strengthen the missions of both the first responders and public television nationwide.
- Working with the National Alliance for Public Safety GIS Foundation (NAPSG) on the NIST PSCR project "Indoor Mapping, Tracking, and Navigation" as a first responder SME.
- On-going participation in several efforts with DHS including:
 - Communications Section Task Force, which is a nationwide representative body advancing the Communications needs within the Incident Command System.
 - o P25 Compliance Assessment Program, working to advance digital radio communications
 - o First Responder Resource Group participation
- FirstTech staff presented at several conferences and events, strengthening the program's mission as "thought leaders"
 - o IWCE Panel titled "Who's Got Their Hand on the Dial? Local Control and Network Sharing"

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- IEEE 5G Technologies for First Responder and Tactical Networks "United spectrum, united network"
- DHS SAFECOM and NCSWIC's "Lessons Learned 2020 Virtual Emergency Operations Centers: Lessons Learned from Hurricane Isaias"

Emergency Response

Several requested engagements to support response agencies technology needs:

- March 03, Super Tuesday support to NCEM
- March to September COVID-19 Support to NCEM
- July 31, Hurricane Isaias support to NCEM
- January to August, Republican National Convention support to Charlotte Fire
- October 28, Hurricane Zeta remnants support to NCEM
- November 04, NC Elections support to NCEM
- December 05, Youngsville Christmas Parade support to Youngsville Fire

Program Management

- Met timely reporting requirements for the federal State/Local Implementation Grant Program 2.0 (SLIGP 2.0)
- Assisted with transition of fiscal staff to ensure SLIGP 2.0 continuity and accuracy
- Extended consultant's contract to continue grant work after grant extension was awarded
- Planned and delivered data-sharing workshops
- Updated the Strategic Plan for 2020

Future

The FirstTech program looks to streamline the program goals in 2021 to an alignment of 3 pillars based on Responders, Partners, and Industry. Signs are looking promising for vaccines and lessening the impact of the pandemic during the next year though the pace of technology adoption seems to have accelerated recently. The funding and execution of the federal SLIGP 2.0 grant will be complete in March of 2021. This project is on target to meet timeline and budget goals. The timing of this will coincide with the increased work of the FirstTech program to lead the pilot efforts of the Paging Project in collaboration with UNC-TV and US DHS, which has the potential to become a nationwide model. FirstTech will continue to review technologies, support response agencies, and look to make the most impact as possible.

Contact

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