

Helping FEMA Assist Victims of Disaster Quickly, Accurately and Securely

How EmergeTek helps FEMA utilize technology to prevent, mitigate, respond and recover from a disaster



FEMA

We at EmergeTek recognize that disaster can be unpredictable, unavoidable, and complex—not just for the immediate risk they pose to life and property, but for the long-term challenge they present to management and recovery for individuals, businesses and communities. For nearly 20 years, EmergeTek has been delivering full life-cycle system engineering capabilities to support the Federal Emergency Management Agency (FEMA). Modernizing, operating, and sustaining more than 70 mission critical systems across the agency, EmergeTek’s primary focus is to support FEMA’s mission of “helping people before, during and after disasters.” EmergeTek has successfully delivered over 500 software releases as part of FEMA IT programs that support the life cycle of FEMA’s roles, and which include:

- National Emergency Management Information System (NEMIS)
- Emergency Management Mission Integrated Environment (EMMIE)
- Non-Disaster Grants system (ND-Grants)
- Assistance to Firefighters Grant system (AFG)
- Pre-Disaster Mitigation and Flood Mitigation Assistance systems (MT eGrants)
- Enterprise Application Development, Integration and Sustainment (EADIS)

“The team’s work is nothing short of a blessing for FEMA. The top-quality work efficacy, high efficiency, customer intimacy, and excellent communication skills are appreciated by me and many others at FEMA.”

Former FEMA PM for EMMIE

Through these programs, and other initiatives, EmergeTek’s partnership with FEMA has strengthened the Agency’s ability to deliver disaster support for State and Local Governments, Tribal entities, and Territories. We have particularly focused on improving user experience for

grant recipients as well as IT system users employed by FEMA. At the same time, we remain mindful and passionate about FEMA's mission priorities around mitigation, response and recovery.



CHALLENGE:

Administer Grants Quickly to Support People and Organizations that Prepare for and Face a Disaster

EmergeTek recognizes that the nature of FEMA's work requires it to administer grants more quickly than any other agency in government —speedy action is needed to help Americans when they are at their most vulnerable as disaster victims. At the same time, FEMA's work is particularly challenging because some victims may have lost documentation that provides evidence of their eligibility to meet grant criteria. Thus, while pressure on FEMA is heightened to move quickly, the Agency also faces greater risks of grantee ineligibility, non-compliance or misused funding than if the timeframe were more relaxed to permit additional data and judgment.

SOLUTION:

Reliable, Stable and Proven Technologies, Efficiently Operated and Maintained

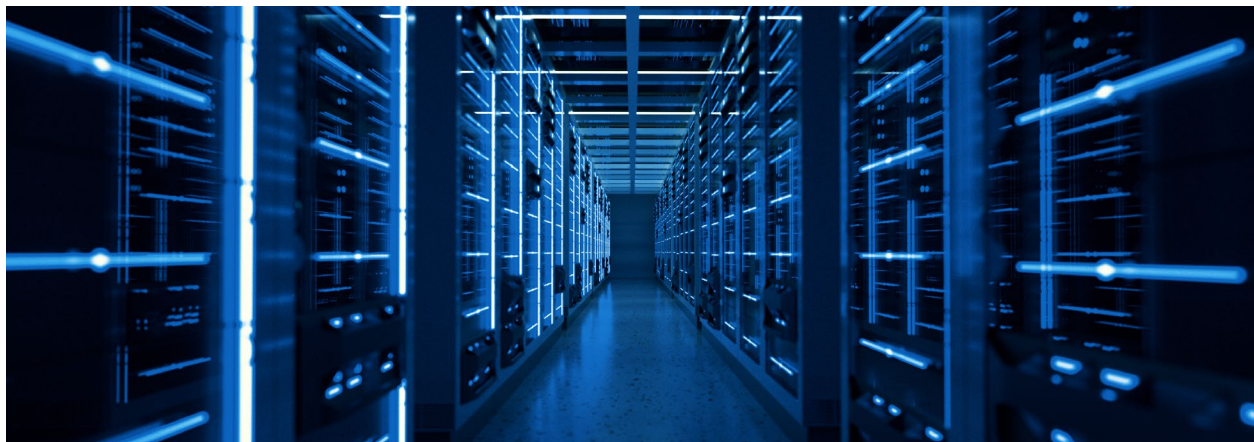
EmergeTek developed and helped pilot test the **FEMA Data Exchange (FEMADex)** to apply cutting-edge Artificial Intelligence (AI) and Machine Learning (ML) technologies to shape data-driven decision-making by making data from multiple systems and sources available across FEMA and its state, local, tribal and territorial partners (SLTTs). FEMADex uses a multi-cloud platform to deliver insightful reports and dashboards in diverse geographies across America. Instead of information remaining siloed, offices and programs across headquarters, regions, and the field will be able to share their data with one another, working off the same information and a common operating picture. The FEMADex prototype and pilot phase laid out the critical functionalities groundwork upon which the system depends:

- Integrated AI/ML into the DevSecOps pipeline to identify legacy issues slowing down FEMA analysts to spin-up a team workspace on-demand, including cloud-based tools and services
- Make data more secure, accessible, and resilient via cloud computing by using the secure FedRAMP-certified Amazon Web Services and Azure Government cloud
- Provide a centralized hub for FEMA data using Lakehouse data architecture and intelligent search tools, so that information, dashboards, and reports are easy to find and share
- Share information quickly and easily with SLTTs to help disaster responders save lives
- Serve as a key enabler of the FEMA administrator's initiative to analyze Agency operations for equitable mission delivery and outcomes

EmergeTek is proud to have efficiently **developed, enhanced, and maintained NEMIS**, which FEMA uses to officially declare emergencies and disasters. NEMIS also includes the Hazard Mitigation Grants Program, which helps reduce risk and impact of disasters before they happen. FEMA relies on NEMIS to support planning, development, and implementation services in support of emergency coordination and incident management mission requirements. The NEMIS system also interfaces with FEMA's Integrated Financial Management Information System (IFMIS) to obligate and award grant funding. And those roles, of course, mean that NEMIS is a key source for data that FEMA uses to track incidents across states and territories, such as COVID-19 response and management. As with many FEMA systems, NEMIS is used throughout FEMA HQ, regional and disaster field offices. But REI also supports NEMIS' use by emergency management officials at State, local, territorial and tribal offices—the full range of FEMA stakeholders and partners.

In helping to **develop, modernize and sustain EMMIE**, EmergeTek has supported FEMA with its current core, enterprise-wide grant system. EMMIE reliably and stably accommodates more than two dozen disaster-focused grants programs in one web-based application—easing the burden for state, local, territorial, and tribal government (SLTT) partners and FEMA staff who often work across multiple grant programs. We are proud to have enhanced EMMIE to automate many business processes across both non-disaster and disaster grant programs. We have also supported FEMA to standardize financial grant procedures across the agency by implementing an e-grants program.

To **develop the ND Grants system**, EmergeTek analyzed FEMA's policies and procedures across many grant programs to create a reusable grants management framework. This flexibility allows FEMA to accommodate changes in law, policy, and customer needs by quickly and efficiently implementing dozens of grant programs, as well as changed business rules—all with a minimum number of software releases. This flexible design also minimizes the need to change processes or re-train staff and ensures that grant management systems integrate seamlessly into other enterprise systems, e.g., for finance and analytics.



By **operating, maintaining and providing user support for the AFG system and MT eGrants**, EmergeTek helps FEMA satisfy customers, and has gained deep understanding of system users both in and outside FEMA.

In addition to front-end applications, EmergeTek has helped FEMA to strengthen and **modernize IT platforms, services and infrastructure through the Agency's EADIS program**. EADIS has transformed FEMA's IT infrastructure from a set of siloed applications that use multiple platforms, standards, and hosting environments into one unified IT architecture. EmergeTek has provided program and project management in a complex multi-vendor environment. We have also delivered applications development, network and infrastructure support to FEMA, as well as major successful efforts to migrate applications and technology platforms to a more efficient and stable data center. EmergeTek contributed significantly to the reliability and efficiency of FEMA's overall IT, by helping provide:

- Infrastructure, Configuration and Database Management
- Security and Process management
- Functional/Requirements development
- Design, Development and System Testing
- Technical Leadership for sustainment and modernization activities

Together, EmergeTek's experience in supporting FEMA for so many years means that EmergeTek understands FEMA and its mission, the functions FEMA needs from its technology, and the strengths of FEMA's current IT as well as opportunities to improve both the structure and operation of IT that FEMA needs to continue and increase its success in helping people before, during, and after disasters.



PARTNERSHIP IMPACT:

A Clear Roadmap for Modernization, Reliable Management and Enhancement of FEMA's Most Essential Technologies

The benefits and impact of EmergeTek's partnership with FEMA include:

- Definition and implementation of an IT modernization roadmap for multiple FEMA lines of business (e.g. Grants, Preparedness)
- Successful delivery of over 500 software releases for FEMA mission systems
- A stable, controlled, and predictable application development environment
- Implementation of a CMMI Level 3 approach to software engineering
- Application release management that follows DHS' Systems Engineering Life Cycle and CMMI 3 processes
- Development and implementation of an enterprise data warehouse solution
- Automated system & security testing efforts
- Support Americans with Disabilities Act (section 508) compliance
- Effective collaboration in a multi-team environment on EADIS
- Partnerships with key FEMA offices such as OCIO/IT, OCFO, Mitigation, Public Assistance, Grants Program Directorate, Community Information System, and the Information Sharing and Analysis Center

ABOUT EMERGETEK

EmergeTek, a Joint Venture established by REI Systems and ADG Tech Consulting, seamlessly combines their unique capabilities to deliver transformative technology solutions. With over 13 years of partnership between REI Systems and ADG Tech Consulting, Emerge Tek has established a strong track record and delivered substantial cost savings to federal agencies, surpassing \$70 million and continuing to grow. Our mission is to leverage our decade-long expertise and extensive resources to serve the federal government with high-quality, efficient, and reliable services. Guided by our shared vision and values, EmergeTek is committed to driving growth, fostering innovation, and creating a lasting impact within the federal sector. Learn more at [EmergeTek.com](https://emerge-tek.com).

CONTACT US

contact@emerge-tek.com
703.825.1210

Copyright © 2023 EmergeTek. All rights reserved.