New Ventures Fund
NVF-PITU-Pepperdine University-Subgrant-013112-2020-12-16
Final Report

1. Narrative Report

a. Goals and objectives, with results achieved

The stated goal of the "SALUS GIS Workshops & Learning Community" is to continue to expand an existing program to build a learning community of Geographic Information Systems (GIS) practitioners in local governments throughout Southern California with four/quarterly workshops in 2021. The project aimed to engage 100-125 GIS professionals in 2021 with program evaluations displaying deeper awareness of the uses for GIS to respond to a number of policy issues at the local government level. In addition, to attract 25-50 non-GIS public sector staff to "fishbowl" these Workshops to better understand (and eventually support) the growth of this work in their communities.

The stated objective of the project is to continue and expand the impact of these training and networking seminars in Southern California, building a community of practice among public sector GIS practitioners, and those who seek to be in the field through a series of 4 quarterly workshops. The target participants include public sector GIS professionals (from public safety to homelessness to planning) along with senior and junior-level public sector staff who seek to learn more about the capacities of GIS to make data-informed decisions in a variety of policy areas.

The increased use of GIS technology by local governments is helping to make data-informed and equitable decisions about the deployment of public resources. The seminars provided by this grant sought to continue to build a learning community of current and new practitioners of this technology in Southern California via four quarterly workshops offered in 2021. These workshops were an expansion of the three workshops held in the previous two years. These four workshops targeted public sector GIS professionals from various fields as well as public sector staff who are interested in learning more about GIS technology. These fields included: public safety; crisis management executives; operations; and GIS/technology managers. The content of the session focused on the capacities of GIS to assist in making data-informed decisions in various policy areas, specifically focusing on the following five areas:

1) Configuring situation awareness viewer switch real time data feeds
2) Developing an incident map and event plans,
3) Identifying potentially impacted critical infrastructure and at-risk populations;
4) Implementing mobile GIS capabilities to share information from the field;
5) Managing and sustaining crisis management technology programs.

Each workshop was 2.5 hours in length and virtual, consisting of presentations and demonstrations along with lessons learned through case studies. Attendee profiles among the nearly 300

registrants ranged from Crisis Managers, Operations Personnel, GIS technicians and responders. Attendees included the public sector and the private sector, from a broad range of industries – emergency management, transportation, utilities, first responders, commercial business continuity personnel, health care, courts and justice, and others (attendees, and their organizations are available if required). Twenty-nine states, the District of Columbia, and Portugal were represented by the attendees.

We used two months for program development and promotion, and the remaining time to host the four workshops. Our goal was to engage between 100-125 GIS professionals in 2021 with program evaluations displaying deeper awareness of the uses for GIS to respond to a number of policy issues at the local government level. Additionally, we sought to broaden the base to include non-experts to learn more about GIS mapping technology and how it can provide better situational awareness, including impacts of policies on underserved communities. The dates were 5/26, 8/5, 11/17, and 1/19/22 with the following, respective, attendee numbers: 94, 71, 85, 129. In total, across all four workshops. we had 379 attendees.

The success of this program was evaluated through Workshop questionnaires, and through understanding of our participants' backgrounds and communities

b. Challenges encountered; lessons learned

Each session was presented by an experienced crisis manager and a GIS technical professional. This combination of expertise spoke to both the technical and operational attendees while also adding credibility to the content.

During the first event, it became apparent that there is confusion over the capabilities of a "modern GIS platform" versus a technology solution or "product" designed expressly for crisis management. Presentations were adjusted to explain, clarify, and demonstrate how GIS with broad capabilities can be configured to meet specific requirements. The intent being to reference technology that is already present in government and the private sector and to encourage the attendees to utilize the tools they are already own rather than endorse any particular solution.

Attendee participation and sharing added to the quality and interactive participation.

When the technology demonstrations began, the attendee interest and participation increased. Having observed that in the initial offerings, this caused the presenters to adjust and begin demonstrations earlier in the webinars. By sharing technology demonstrations that target various crisis management problems, leveraging actual incidents and real problems, and showing and how GIS was used the audience was captivated and even shared their own use cases. Other important elements of the presentation (management considerations, system architectures, data resources, technology governance) were segmented and inserted throughout the overall presentation to ensure attendees had the tools necessary to implement lessons learned.

Going forward, there is substantial interest and appetite to learn how to use (in many cases already owned) technology to help to predict, mitigate, and manage complex crises. Considering the

widespread interest, there might be an opportunity to offer multiple, shorter webinars that culminate in or compliment a certificate program. The certificate program, in addition to providing more detail, could extend beyond "what is possible" (current webinars) to "how it can be achieved".

c. Publications generated as a result of the project

n/a

d. Certification as stated in Section Vll(B) of the Agreement:

All Pepperdine University activities were and are consistent with charitable purposes under Section 501(c)(3) and 509(a) (1), (2) or (3) of the Internal Revenue Code, and Pepperdine University complied with all provisions and restrictions contained in this Agreement, including, for example and without limitation, those provisions related to lobbying and political activity.

Optional Content on Objectives if we would like to expand

The series was informed by four objectives:

- Present how existing GIS technology (which most organizations already own and underutilize) can be employed on daily basis, and throughout crisis and post-disaster recovery to improve situational awareness, real-time decision making, and information sharing—internally, between agencies, and with the public.
- Present and demonstrate how modern GIS interoperates with and enhances the capabilities of existing crisis management solutions and other legacy technology systems.
- Present and discuss the importance of establishing a governance framework, standard operating procedures, and training to optimize and effectively sustain modern GIS and related technologies.
- Engage/inform the attendees and encourage discussion by providing demonstrations illustrating how modern GIS provides real-time situational awareness and supports decision making for a wide variety of emergencies, and disruptions. Some of the key crisis management challenges and GIS capabilities demonstrated included:

    - Modeling and monitoring weather-related events
    - Identifying and tracking the status of the supply chain
    - Evacuation routing and shelter management
    - Monitoring civil disturbances
    - Damage assessment status and recovery tracking
    - Detecting threats
    - Identifying potentially impacted critical infrastructure and at-risk populations

- Developing mobile GIS capabilities to share information from the field
- Tracking and display of real-time locations of key staff, assets, and resources
- Creating electronic briefings with dynamic maps and dashboards
- Configuring various real-time situational awareness views unique to an organization's needs
- Developing incident and event action plans.

2. Financial Report

Please see attached document for the financial report.
Financial report detailing final accounting of budgeted vs. actual expenditures of all grant funding, including the entire project budget and all sources of revenue and expenditures (including grassroots and direct lobbying expenditures, if applicable), in addition to this Grant.

3. List of all intellectual property and assets purchased or created with the Grant.