Attendees: Janet Reyes, facilitator;

In person: David Blumberg, Megan Hoff
Via Zoom: Bart Kats, Bennie McGhee, Canserina Kurnia, Luciane Musa, Mary A, Muhammad
Mahadi Isa, Sanjana Senthilkumar

Announcements

This meeting was recorded; video is available [here](). The passcode to view is   &e4NLG$0

The **UC GIS Week** website now features videos of the presentations made at this event in November.

The next Esri [GIS in Higher Education chat](), on Tuesday January 3 at 9:00 am PST, will provide a "**Sneak
peak of Analysis in the new ArcGIS Online Map Viewer.**" The actual rollout of these capabilities will be
in February 2023.

The December Higher Education Chat featured a **comparison of three Esri field tools**: Survey123, Field
Maps, and QuickCapture. A story map that summarizes the content of the presentation can be found
[here]().

Recordings and supporting materials for the **Introduction to Planet** workshops held in October will be
made available soon in a Google Drive.

Our **Geospatial/GIS meetups in Winter Quarter** will be held on the second Thursdays of the month:
January 12, February 9, and March 9. In January, a UCR faculty member who is learning GIS will be asking
for input on how best to approach a particular research problem.

First-time Attendees

David Blumberg (co-presenter) is a GIS Technical Lead with the Southwest GeoReadiness Center, Naval
Facilities (NAVFAC) Engineering Systems Command.

Megan Hoff (co-presenter) is a GIS Analyst, also with NAVFAC's Southwest GeoReadiness Center.

Presentation

Megan Hoff, GISP and David Blumberg, GISP traveled from San Diego to give their presentation on **Using
GIS to Support Navy Installations.** Megan and David work in the Southwest GeoReadiness Center, Naval
Facilities (NAVFAC) Engineering Systems Command.

NAVFAC is in essence the Navy's engineering and property management division. In maintaining the Navy's land-based infrastructure, it uses GIS for planning, maintaining, operating, and protecting Navy installations. The Southwest GeoReadiness Center serves ten installations across six states. Megan and David work to fulfill GIS requirements at the regional level. They also provide support for installation-based programs and facilitate GIS-related internal communication up and down the chain.

The GIS Team provides standards, processes and tools to support different requirements, adhering to the Navy's goals of promoting reliability, agility, and innovation. Many of the tools and processes are shared among installations while being adapted to local requirements. There's been a shift over the last decade from making maps for others to becoming facilitators for those who can now make the geospatial products they need themselves.

To ensure consistency, the Modeling Standards and Metrics Team develops and enforces geospatial data standards for Navy installations. The Navy Data Model (NDM) is the enterprise geodatabase, with a schema that defines the set of features, attribution, and metadata for geospatial data collection. The NDM can be modified based on user feedback. The Navy also creates Data Collection Guides, which provide a standard for GIS users (including contractors) and others to refer to when collecting and extracting geospatial data.

The GeoReadiness Explorer (GRX), a customized version of ArcGIS Portal, has provided data and tools to internal Navy users since around 2018. GRX will soon enable users to interact more with data, such as using Survey123 and building dashboards. Apps have been built and customized for use at each organizational level.

One product the GeoReadiness Center created using Experience Builder is the Utility Technical Handbook. By providing a standard overview of an installation's utilities systems, the online handbook helps leadership stay aware of existing issues and future challenges. It also allows them to export maps and reports.

A one-time project-based example on the GeoReadiness Center's work was Megan's support of the master plan for a naval air station in Nevada. She incorporated geospatial data from external sources as well as creating layers specific to the installation, all in response to requests from the master planner.

David mentioned he's in the process of formulating a drone program, which includes standardizing how mission plans can be created and shared with others, and reporting statistics about all drone missions.

The advances in GIS have enabled more information sharing among Navy personnel and have enabled them to streamline their processes. At the same time, new GIS capabilities allow the GIS team to focus more on data accuracy, currency, and completeness.

Discussion

Sanjana asked whether data is used for disaster relief efforts. David said there is an emergency management team that plans for recovery from disasters that impact an installation. The Navy does

partner with counties to prepare responses to disasters such as tsunami hazards. For example, could civilians have the option of entering naval bases to escape rapidly advancing tsunami floodwaters?

Canserina was curious whether NAVFAC has internships for college students. David said an internship program exists. Reach out to him or Megan to establish connections with the program. Students wouldn't necessarily have to relocate to San Diego; they could work at their closest naval installation.

Janet asked if they had advice for students who might be interested in a GIS career serving the Navy. Megan suggested that students avoid getting too narrowly focused, because the positions utilize a broad range of skills and knowledge. David pointed out that GIS professionals in the Navy can essentially write their own job descriptions, and can also move around geographically and organizationally. New hires can come in as generalists, then find their niche. David said NAVFAC often looks for individuals with backgrounds that fill gaps in their current team, such as data science or solid skills in Python. There's less of a need for programmers or cartographers. Other sought-after qualities are self-starters who have imagination to see beyond current conditions.

Sanjana asked if there's scope in NAVFAC for computer science majors interested in spatial tech. The answer was "absolutely."

Janet asked if they could share something they liked about their current positions, and something that is less than ideal. Megan enjoys the versatility and research in her role. What she regrets is the necessity of restrictions on sharing their data with civilians. David enjoys meeting with customers to learn about their needs, and then building solutions for them.

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