Notes from Geospatial/GIS Meetup
January 14, 2025

Zoom

Attendees: Janet Reyes, facilitator

Via Zoom: Adriana Murguia, Akshit Sharma, Alex Reed, Bennie McGhee, Chunyu Lin, Kylie Jordan, Lara Gardellini, Lynn Sweet, Mike Cohen, Ray Uzwyshyn, Ryan Bruellman

Announcements

This meeting was recorded; video is available here. The passcode to view is 5WZ%Ve&9

UCR affiliates who'd like to participate in small group discussions regarding **GIS learning resources** the UC libraries could provide are invited to indicate their available times by January 22. Groups will meet in late February and late in Finals Week. Participants will be compensated with a $25 gift card.

Janet will be offering an **Introduction to QGIS** on Tuesday, January 28 at 2:00 pm in Orbach Library, Room 122 and on Zoom.

Esri's GIS in Higher Education Chat on February 4 at 9:00 will be on **teaching accessibility in GIS applications**.

UC Love Data Week takes place February 10-14. Sessions of particular interest include:

GIS & Mapping: Where to Start	Feb 11, 11:00-11:50
Historical Maps as Data	Feb 11, 1:00-1:50
Finding Geospatial Data	Feb 14, 10:00-11:50

Learn how to discover **detailed historical maps of California cities** in the Find Insurance Maps with FIMo workshop on February 18.

The **Los Angeles Geospatial Summit** takes place at the USC Hotel on February 28.

Shared links

How New York City was mapped by air in 1924:
https://www.bloomberg.com/news/features/2024-06-29/how-new-york-city-was-mapped-by-air-in-1924

Comparing scale on old maps: https://blogs.loc.gov/maps/2024/12/ohio-for-scale/

Brief Tony Grubesic interview on ZIP Codes:
https://www.npr.org/2025/01/03/nx-s1-5230268-e1/the-planet-money-team-examines-where-zip-codes-came-from#

Planet Money podcast on ZIP Codes: https://www.npr.org/2025/01/08/1223466587/zip-code-history

Alex Reed, a project manager for Mapping Black California (MBC), presented on **Combating Racism as a Public Health Crisis**. Mapping Black California is a mapping, data visualization and analysis outlet attached to Black Voice News.

A need was recognized for a centralized platform for the declarations of racism as a public health crisis that came out in the aftermath of the murder of George Floyd in 2020. Accountability was a concern, in terms of documenting what the declarations actually covered and whether there was observable positive action being taken as a result of the declarations' content.

The project started by responding to a request in early 2021 to make a map of the communities in California that had issued such declarations or resolutions. MBC responded by creating a dashboard that included a map. In addition to municipalities, entities such as health commissions, associations of government, and nursing boards were also issuing declarations; they saw the need to coordinate with municipalities to truly effect change.

The next step was to add an element of accountability, and clarity as to who was responsible for the promises made, in a single accessible platform. The Starling Lab at Stanford, a Web3 technologies lab, was brought in to provide provenance and authentication tools. Such tools allow for point-in-time captures of a website, social media post, etc. that are verifiable as being unaltered.

The project took a verifiable point-in-time look at each California-based declaration and related online documentation and published them to the map. The project also ran the declarations through a rubric to grade the commitments they contained across nine general categories: Data & Accountability, Community Engagement, Policies & Programs, Funding, Organizational capacity/training, Economic Opportunities, Education, Housing / basic amenities / environment, and Public Safety/Policing. Subcategories of possible strategic actions to address the inequalities were created for a more detailed analysis. This allowed for assessing the promises made in context of community needs as supported by data. Progress made in addressing the equity and justice needs was also assessed. In several cases, the categories and scope of the promises in the declarations did not rise to the level of need in the community. In such cases, the Combating Racism platform could provide data to empower local policymakers and nonprofits to advocate for more impactful action.

In building the platform, ArcGIS Maps SDK for JavaScript and Sync from ArcGIS were used to integrate a map navigator into Wordpress. The Starling Lab developed a custom plugin to retrieve archive information for each publication from blockchain storage. The map was created in ArcGIS, but analysis is done outside the ArcGIS environment. Data was synced from community vulnerabilities tables, which were organized by topic and compared to a statewide average metric. Journalists from Black Voice News and affiliates were enabled to write articles reflectting real-time progress tracking regarding the needs of the communities they cover.

Alex gave an overview of authenticated web archives. WACZ (pronounced "waxy") is a (zip) file type for web archives, which are interactive and contain code, media content, linked content, and an index of the information needed to recreate a website as it was captured. Using WACZ web archives in journalism is a

way to guard against public mistrust and concern about tampered documents or images. An immutable "hash" (similar to a passcode) is created for each WACZ; the hash is published to a storage network, and participants in multiple blockchains verify the information in the WACZ is authentic. Each peer has a piece of the whole webpage; only when the unaltered pieces are reassembled (via a transaction ID) can the webpage be recreated. This constitutes the provenance of the web archive.

At last count, there were 44 declarations documented in the project, with more to come this spring. The four-part series of articles by Breanna Reeves of Black Voice News that took a deep dive into this topic can be found at bit.ly/rphcpart1.

Alex ended by giving a tour of the platform, found at CombatingRacism.com. Clicking on a municipality on the map provides access to the authenticated web archive created for the declaration issued by that entity. For the selected municipality, a different section of the platform shows a comparison of indicators for the nine categories mentioned earlier (e.g., data for a selected county compared to California as a whole).

Discussion

Janet asked if the project has a strategy for representing possible future efforts of a municipality to walk back or nullify their declaration. Alex noted that sometimes the dashboard struggles with keeping current with local changes across the state. For instance, the City of Oakland issued a second declaration that was much stronger than their initial one had been, but the project hadn't learned of the update until several months had passed.

Mapping Black California originated to inform California's black population about the 2020 Census and the importance of being counted. MBC was later subsumed into Black Voice News to provide data analysis and visualization, and now serves organizations throughout the state. Voice Media Ventures is a multimedia company (including Black Voice News) and a strategic communications firm.

Web3 technology is most familiar to the public in terms of cryptocurrency and NFTs, but Alex thinks the Combating Racism project is one of the first to use Web3 technology (peer networks) as a way to provide provenance to a web archive.

The project has attracted attention from other entities outside of California interested in using a similar approach.

Contact

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