#### **JELAPRESENTS ence for Global and Disaster Health Special Interest Group (E4GDH) and Health and Biosciences Libraries Section** (HBS) Joint Webinar



#### LEIAPRESENTSANS Supporting Humanitarian Information Efforts

#### A Look at OpenStreetMap Mapping and the Evidence Aid COVID-19 Evidence Collection

**Bethany McGowan** 

Purdue University

**Jo Wood** Public Health England



### privacy

#### **This event is being recorded, including chat.** Recording will be posted on the HBS and E4GDH publications page.

Microphones have been muted for this event.

#### **Questions or comments?** Please type into the chat or Q&A box.

#### The talk is GDPR-compliant

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**Facebook** IFLA Health and Biosciences Libraries Section (private group)



#### speakers



#### **Bethany McGowan**

Purdue University Assistant Professor of Information Studies and Health Sciences Information Specialist



#### speakers



#### Jo Wood

Public Health England Knowledge and Evidence Specialist

Evidence Aid COVID-19 Project Co-Ordinator



## for your reference

Humanitarian OpenStreetMap Team (HOT) Task Manager: <a href="https://tasks.hotosm.org/">https://tasks.hotosm.org/</a>

Evidence Aid COVID-19 Evidence Collection: <a href="https://evidenceaid.org/evidence/coronavirus-covid-19/">https://evidenceaid.org/evidence/coronavirus-covid-19/</a>



### background

IFLA Journal article library-sponsored data competitions: <a href="https://doi.org/10.1177/0340035219854214">https://doi.org/10.1177/0340035219854214</a>

Portal article on student motivation for participation in extracurricular mapathons: <u>https://preprint.press.jhu.edu/portal/sites/ajm/files/mcgowan.pdf</u> motivations: altruistic—i.e. for the global good, to help; also to boost data sciences skills, resume



### mapathons

Mapathons are coordinated mapping events in which participants use GIS data and satellite imagery to create open-source maps for humanitarian support.

They have been used to improve coverage of under-mapped communities and support disaster relief efforts, economic assessments, and energy management analyses.

Mapping activities offer librarians a learner-centered means to teach data literacy and visual literacy.



### **OpenStreetMar**

The Humanitarian OpenStreetMap Team (HOT) provides free resources and training to prospective mappers and Mapathon hosts. <u>https://www.hotosm.org/</u>

Librarians seeking hands-on mapping experience can visit the HOT site to practice mapping and to learn to host Mapathons. The site also allows Mapathon hosts to advertise public events and allows Mappers to view information about upcoming Mapathons. <u>www.missingmaps.org/events</u>

Examples of how libraries have hosted Mapathons to support disaster relief efforts are highlighted in the news, showcasing the work of librarians at <u>MIT</u> and <u>Columbia</u> <u>University.</u>



# mapping as instructio

Mapping teaches students to validate data sources, observe and question data gathering methods, and question data quality—practices that improve both data literacy and evidence-based decision making.

Maps can also be used as evidence to formulate and support research inquiries.

For example, what can a map tell you about community health needs? What challenges might a community face if the closest freshwater source is 100 miles away or if the community is disconnected from major road infrastructure?



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## mapping as instruction

The ACRL Visual Literacy Competency Standards for Higher Education can help guide the design of learning objectives, activities, and assessments that teach students to critically view and use map data and aerial photos to produce maps. http://www.ala.org/acrl/standards/visualliteracy

Learning objectives for Mapathons can center on one or more of the competencies established for a visually literate individual in higher education, especially understanding the "ethical, legal, social, and economic issues surrounding the creation and use of images and visual media".



## mapping as instructio

*Visual Literacy for Libraries: A Practical, Standards-Based Guide*, a resource that includes worksheets and activities that support discussions on the ethical and social aspects of map creation and trustworthiness, further supports visual literacy instruction.



## mapping in actio

At Purdue, I've hosted 1 to 3 extracurricular Mapathons each semester since Fall 2017, mostly for undergraduate students in health sciences-centered and data sciences-centered Learning Communities.

Learning Communities proved to be an effective learning environment for the Mapathons because most require student participation in extracurricular activities like Mapathons, which offers synergistic opportunities for librarians and learning community stakeholders.







# mapping and COVID-1

Mapathons can be hosted completely virtually, making them an ideal activity for distance learning. Once mappers create an OpenStreetMap account, they can map during planned events and on their own time.



# mapping and COVID-1

"Globally HOT is committed to fighting COVID-19 by providing 3 critical services:

- 1. Helping government agencies and responders with basic data needs: ... providing this through the UN's Humanitarian Data Exchange, among other ways.
- 2. Helping to identify populations living in places most at risk: prioritizing [an] existing queue of mapping projects to get volunteers immediately mapping areas with high proportions of COVID-19 cases, or of greater vulnerability.
- 3. Creating new mapping projects in highest risk places"





IFLA

#### Mapping our world together



#### DESCRIPTION

HOT has been requested by OpenStreetMap Mali and the Mali Red Cross to map areas in Mali susceptible to, or identified as impacted, by the COVID-19 outbreak. Please join our global effort to help control this disease by mapping on this project.

Globally HOT is committed to fighting COVID-19 by providing 3 critical services:

- 1. Helping government agencies and responders with basic data needs: we're providing this through the UN's Humanitarian Data Exchange, among other ways.
- 2. Helping to Identify populations living in places most at risk: prioritizing our existing queue of mapping projects to get volunteers immediately mapping areas with high proportions of COVID-19 cases, or of greater vulnerability.
- 3. Creating new mapping projects in highest risk places; which is what this project does. Every feature you map will help in this objective!

The goal of this project is to digitize the buildings using MAXAR Premium Imagery. Although open to beginner level mappers, the buildings in this project may be quite dense, please split or unlock the task and move on to something you are more comfortable with if needed.

|COVMali













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