

# **WhereCOVID-19: Mapping Multi-Scale Spread and Impacts of COVID-19 for Spatial Decision Support**

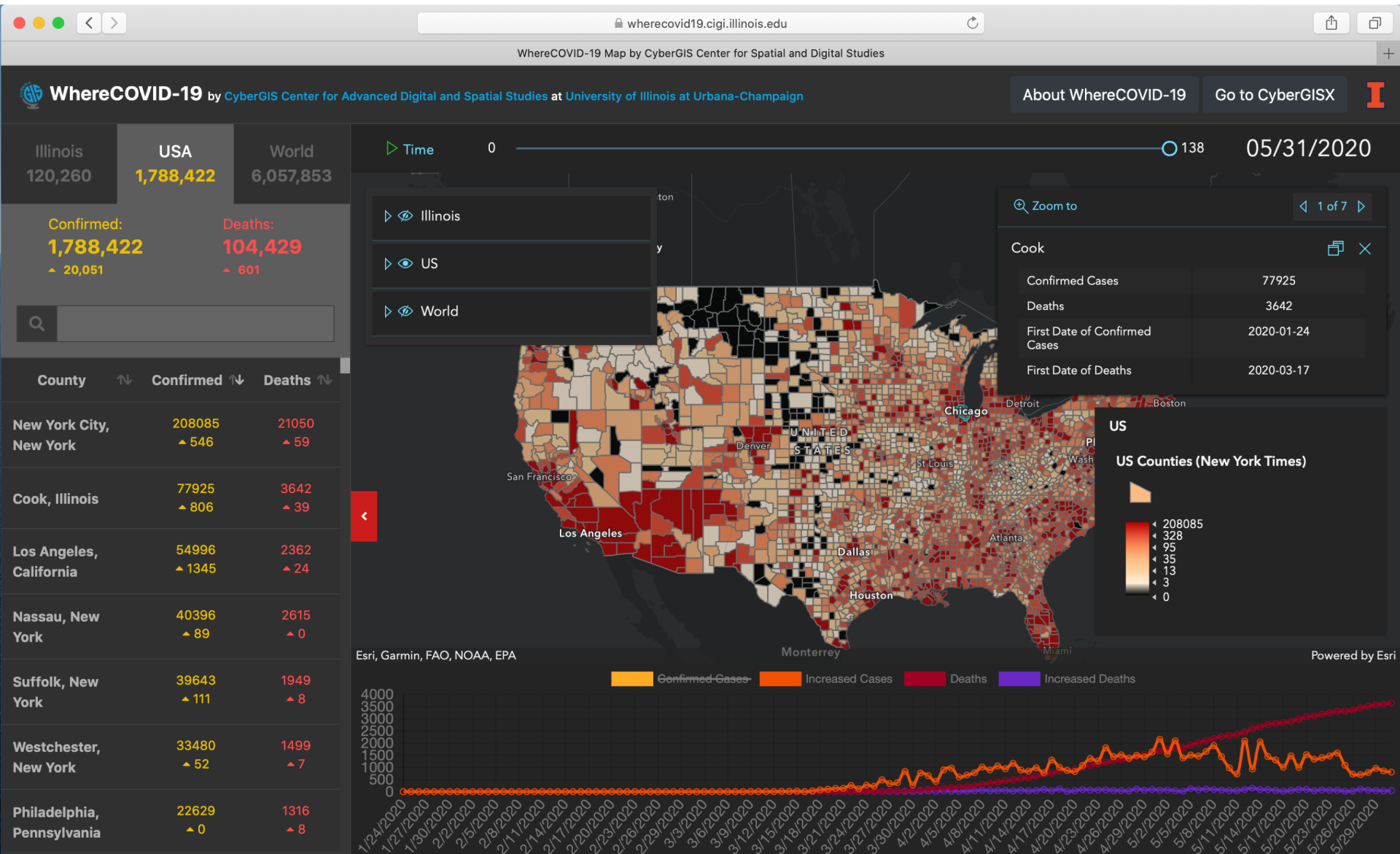
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*UCGIS GIScience & COVID-19 Panel*  
*UCGIS 2020 Symposium*  
*June 1, 2020*

# CyberGIS Center for Advanced Digital and Spatial Studies

<https://wherCOVID19.cigi.illinois.edu>



# Many Where Questions!

- Where COVID-19 cases are and will likely be
- Where vulnerable populations are
- Where containment and mitigation measures (e.g., social distancing) should be applied
- Where health services might be overwhelmed
- Where additional healthcare resources should be deployed
- Etc.

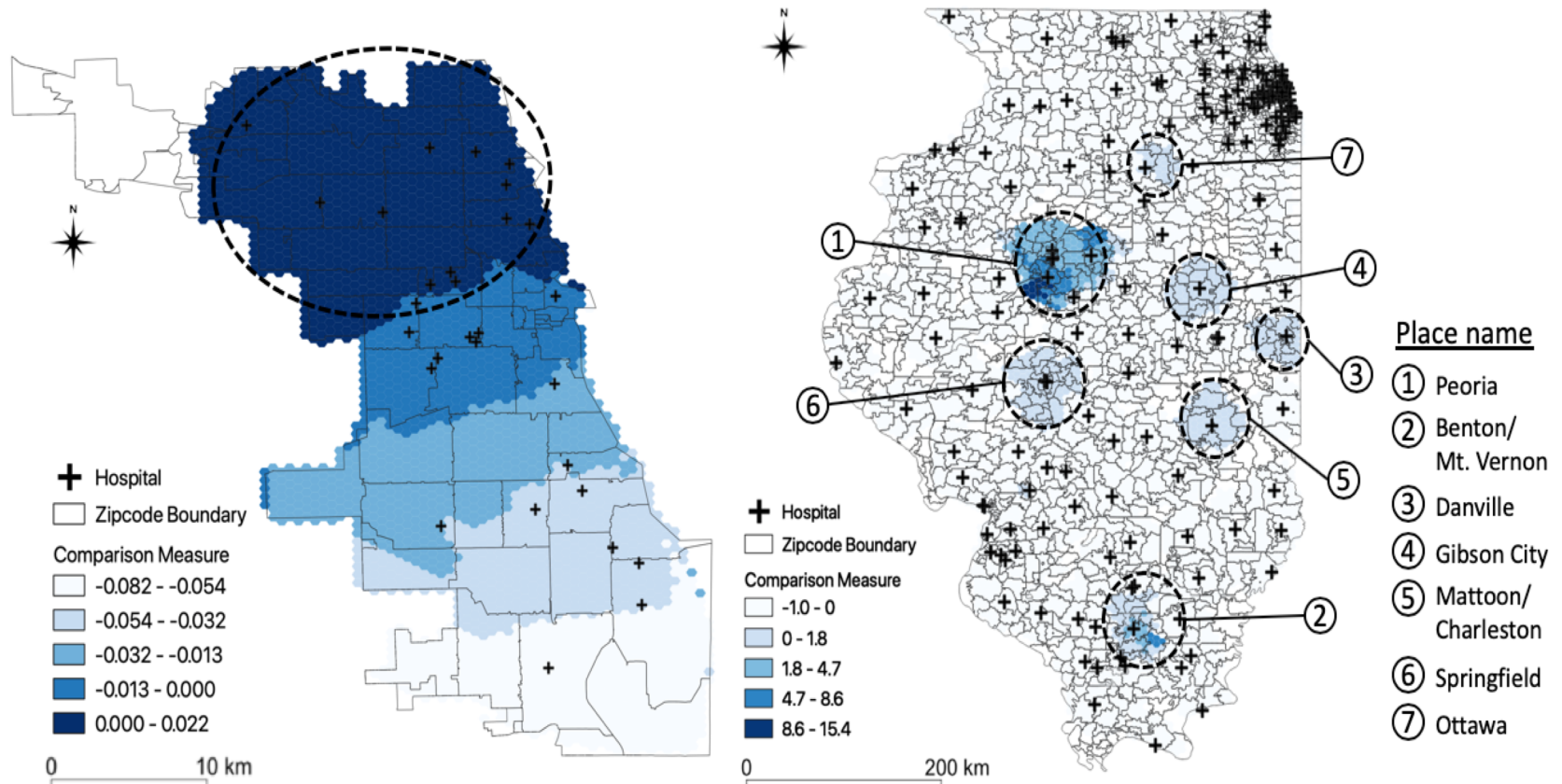
# Case Study

- Rapidly Measuring Spatial Accessibility of COVID-19 Healthcare Resources
  - <https://medrxiv.org/cgi/content/short/2020.05.06.20093534v1>

# Research Questions

- To what extent Illinois residents have access to healthcare resources (e.g., healthcare personnel, hospital beds, testing resources, and ventilators) during the COVID-19 pandemic?
- Which geographic areas have resource surplus and which areas have resource shortage?

# Comparison of Spatial Accessibility Measure



# WhereCOVID-19 Platform

- CyberGIS App
  - Dynamic maps for exploring and discovering spatiotemporal patterns of pandemic spread and impacts
- CyberGISX notebooks
  - Reproducible geospatial analyses and models

# Acknowledgements

- National Science Foundation
  - 1443080
  - 1743184
- Illinois Department of Public Health
- The University of Illinois President's Office
- UIUC
  - CyberGIS center for Advanced Digital and Spatial Studies
  - School of Earth, Society and Environment



# Thanks !

- **Comments / Questions?**
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