

Acknowledgements

- ▶ University of Minnesota Office of Information Technology Faculty Fellowship Program, M. Kerr
- ▶ U-Spatial help desk, M. Wynia. U-Spatial networks data, equipment, and expertise to benefit all researchers working with spatial science and systems at the University of Minnesota. They offer several free GIS courses: <http://uspatial.umn.edu/training>



Purpose

- ▶ To spatialize student Omaha System documentation of community assessments using a geographic information system



Background

- ▶ A community-level modifier in the Omaha System Problem Classification Scheme allows for documentation of community-level assessments, interventions and outcomes.
- ▶ Data visualization through geographic information systems (GIS) is a promising method to add value to student community assessments.



What is GIS?

- ▶ Geographic information systems (GIS) are computer-based systems for the integration and analysis of spatial data (Comley & McLafferty, 2012).



Cromley, E.K. & McLafferty, S.L. (2012). GIS and Public Health. New York: Guilford Press.

Methods: Prototype mapping tool

- ▶ ESRI ArcGIS Explorer Online
<http://www.esri.com/software/arcgis/explorer-online>
- ▶ System for collaborative mapping and analysis
 - ▶ Cloud-based service
 - ▶ Easy way to add, store, and visualize data
 - ▶ Built around open sharing/collaboration "Web 2.0 model"
 - ▶ User has control of security and data ownership
 - ▶ Personal and subscription versions exist



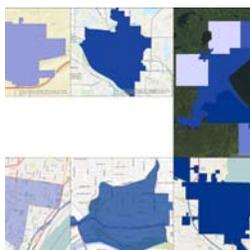
Methods

- ▶ A faculty-created interactive layer enables students to enter community assessment data using Omaha System problems, signs/symptoms, and strengths.
- ▶ Desktop and mobile versions are available.
- ▶ Students will experience data visualization of their assessment data on the map and can pursue analyses using other layers such as population data.

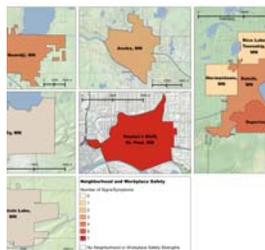


Results: Neighborhood/Workplace Safety Problem and Strengths

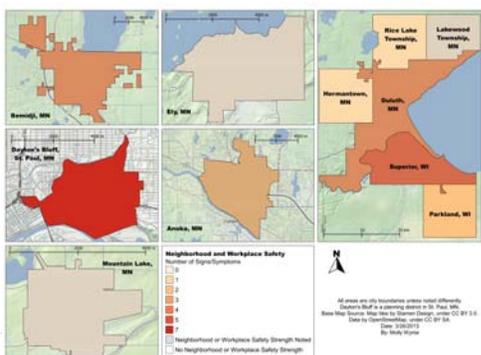
Early versions of map



Improved symbology



Final map



Conclusion

- ▶ New hypotheses can be generated through the use of spatial data accessible through GIS.
- ▶ Students can contribute new assessment data to existing geo-spatial and population data in order to do more comprehensive community assessment and analysis.
- ▶ This type of undergraduate GIS activity can be the gateway to future public health nursing local/global knowledge development through Geographic Information Science.



Questions?

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<http://www.geogreeting.com/view.html?yDrkxuUlyEaU975>