



IUPUI

# Collaborative and Creative Solutions for Healthier and More Resilient Communities



The Polis Center | IU Luddy School of Informatics, Computing, and Engineering at Indianapolis  
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Polis (pōlēs): City; a state or society especially when characterized by a sense of community (Greek)  
— Merriam-Webster Dictionary



### **Who We Are**

The Polis Center is an applied research unit at IUPUI committed to linking university and community knowledge. By combining data and information technologies effectively across a variety of domains, we support research and analysis for better decision-making and to help improve policy and practice for the greater good of communities in Indiana.

### **What We Do**

Our motto is “We bring things into perspective.” Our primary service is to build understanding of issues from a variety of perspectives. We help others create a vision of the common good and realize their vision with practical tools and

methods. We have experience in community development, population health, social services and nonprofits, government, arts and culture, religion, information management, data analysis, and dynamic mapping.

We have a unique capability in managing large complex projects involving numerous participating organizations, and in gathering, organizing, and analyzing data collected from multiple sources.

» We analyze local, state, and national data sources to understand social issues and how they impact communities. We build solutions that are grounded in data, research, and community

process. We create online dashboards, profiles, maps, and decision-support tools to make data accessible and actionable. We provide strategic consulting and data analysis to guide decision-making, needs assessments, and planning.



» Our work with the health sector advances community wellness and supports the growing discipline of population health management. We combine and analyze clinical, social, and environmental data and create assessment and decision-making tools. In our collaboration with the public health and health care sectors, we curate an extensive collection of datasets on the social determinants of community health and resilience.



» We perform an important function in assessing different types of vulnerabilities and needs for local, state, tribal and federal

government, the private sector, and nonprofits. We reinforce community efforts to prevent or reduce losses from natural disasters by combining geospatial analysis, modeling, and outreach activities. Our disaster (or crisis) informatics initiatives support disaster preparedness, mitigation, response, and recovery activities.

We design and develop open source as well as Esri technology-driven information systems through which to explore the interconnectedness of people, place, community, information, and technology. We also design and implement research to assess the physical, social and economic impacts of hazards.



### How We Do it

We use our expertise and relationships to develop partnerships that multiply the value of what we offer. We have developed a comprehensive community research infrastructure that includes a large information system, staff, technical skills, project management experience, and a long record of attracting external funding. Geospatial technologies are our preferred tools because of their unique ability to integrate and visualize information by location.



*Progress occurs when people work together  
toward the same goals.*

## Key Initiatives

**SAVI Community Information System.** SAVI ([savi.org](http://savi.org)) is the nation's largest and most comprehensive community information system, developed to help people and organizations make data-informed decisions. Communities use this information to plan, to secure and target resources, and to measure progress. Our goal is to provide all organizations with access to data analysis that improves the quality-of-life in the communities they serve. Created in partnership with United Way of Central Indiana.

» **Polis consults** in cities around the nation on how to build sustainable community information systems to democratize data.

» **IndyVitals.** Winner of state and national awards of excellence, *IndyVitals* uses SAVI to measure the health and stability of neighborhoods in categories such as education, equity, health, and safety. Created in partnership with the City of Indianapolis and Greater Indianapolis Progress Committee, *IndyVitals* provides information on community improvement initiatives.

» **Domestic Violence Dashboard.** Created in partnership with the Domestic Violence Network, we use special algorithms to integrate data from several sources to present data about domestic violence victims, perpetrators, and incidents. This access to data and trends about domestic violence has never before been available for Marion County, giving advocates and program planners information they need to improve outcomes.

**Indiana Data Partnership (IDP).** We collaborate with the State of Indiana's Management Performance Hub (MPH), the IU Public Policy Institute (PPI), and the Indiana Business Research Center (IBRC) to increase the availability and usefulness of data for state and various local government and nonprofit organizations. IDP empowers collaboration among government, nonprofit and private sector entities to drive positive change in key challenges impacting Hoosiers.

**Grand Challenges.** We participate in two of Indiana University's Grand Challenges--*Precision Health* and *Responding to the Addictions Crisis*--to address the economic, social, and environmental problems affecting our state and nation.

» **The Precision Health Initiative.** We collaborated with the IU School of Medicine to develop an Exposome API to provide access to the SAVI database for the initiative's Health Data Commons. This approach will help clinical researchers and health providers consider patient social and environmental conditions in care and treatment decisions.

» **Responding to the Addictions Crisis.** We are working with Regenstrief Institute, the IU School of Medicine, the State of Indiana's MPH, and the IBRC to develop the Indiana Addictions Data Commons, a decision-support framework for sharing and integrating data and information on the state's opioid epidemic.

### State and Federal Government Disaster Informatics.

» **The Polis Center is a Cooperating Technical Partner (CTP)** with the Federal Emergency Management Agency (FEMA), thereby allowing us to collaborate with it, regional, state and tribal agencies, and others to maintain up-to-date flood hazard maps and other flood hazard information. Under this program, we work closely with the Indiana Department of Natural Resources (IDNR) to update Indiana's flood hazard maps and data.

» **Risk MAP.** We have a decade-long partnership with the IDNR to expand the geographic extent of the FEMA's Risk MAP program, which is aimed at assisting local communities with their mitigation efforts.

» **2019 State Hazard Mitigation Plan.** We worked with the Indiana Department of Homeland Security (IDHS) to develop the 2019 State Hazard Mitigation Plan. The Indiana Geographic Information Council recognized The Polis Center and IDHS in 2019 for Special Achievement in GIS for creating "an outstanding information resource." We also work in partnership with many Indiana counties to prepare local mitigation plans.

» **The National Institute of Building Sciences Multihazard Mitigation Council (MMC).** We served as lead investigators on the riverine flood hazard section of the 2017 *Natural Hazard Mitigation Saves* study which analyzed the cost effectiveness of mitigation actions to minimize the nation's vulnerabilities to natural disasters. For more on this report, see <https://polis.iupui.edu/expertise/develop-knowledge-platforms/natural-hazard-mitigation-saves-2017-interim-report/>