



The Polis Center Annual Report

# **About The Polis Center**

Through collaboration, civic engagement, and innovative technology, The Polis Center builds capacity, creates actionable information, and develops knowledge platforms and place-based solutions that lead to healthier and more resilient communities.

A unit of the IUPUI School of Liberal Arts

## Contents

Overview4
Key Initiatives6
Collaborations8
Community8
Resiliency13
Health17
Education
Spatial Humanities20
Culture22
Other Center Activities24
Organizational Structure24
Sustainability25

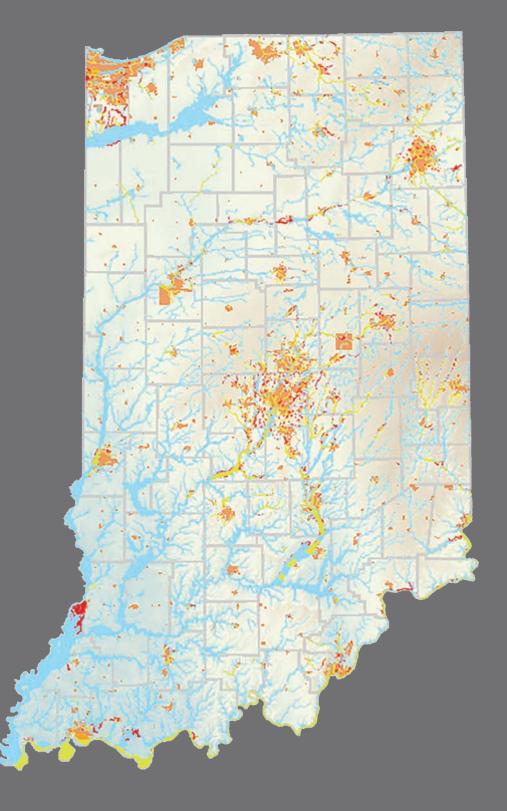
## **Overview**

The Polis Center collaborates to create innovative place-based solutions that lead to healthier and more resilient communities. We do this by creating actionable information, developing creative collaborations, doing place-based research, and employing technology effectively to enhance the capacity of communities to respond meaningfully to change.

We often serve as the nexus among diverse communitybased organizations, government agencies, educational institutions, arts and cultural organizations, businesses, charitable endowments, and faith-based organizations. We are committed to linking university and community expertise and to the smart use of advanced technologies to help solve problems and help communities take advantage of opportunities. Geospatial technologies, especially GIS, are our preferred tools because of their unique ability to integrate and visualize information by location. We use these tools to develop and analyze data for communities and then involve local experts and residents to help understand what the results mean. In doing so, we help communities develop practical solutions for the issues that concern them.

The Polis Center is engaged in ground-breaking work in a variety of activities important to Indiana communities and beyond. We managed more than 89 projects in FY2018 within our areas of emphasis; 54 percent of these projects were new grants or contracts. The following descriptions highlight our major accomplishments in each sphere of collaboration and in a major civic enterprise, the Spirit & Place Festival, which we launched in 1995 and now direct on behalf of IUPUI and the IU School of Liberal Arts.





# **Key Initiatives**

The Indiana Data Partnership (IDP). We are working collaboratively with state government's Management Performance Hub and three other IU centers—the IU Public Policy Institute, the IU Network Sciences Institute, and the Indiana Business Research Center—to develop a scalable, integrated data and decision-making framework for the State of Indiana. Our aim is to increase the availability and usefulness of data-sharing among state agencies and between the state and various local government and nonprofit organizations. The first phase of this work will create cluster maps of data, services, and networks related to opioid/substance abuse and education/workforce development that will help inform Indiana's efforts to address these issues effectively. *IU Grand Challenge "Prepared for Environmental Change.*" This IU Grand Challenge initiative focuses on helping the state and its citizens develop Indianaspecific projections of environmental change to equip governments, businesses, farmers, and communities to respond with the right investments in agriculture, industry, infrastructure, and public health and safety. We are building an integrated knowledge platform for six research clusters which features a set of research and visualization tools that address: dashboards, data mining, statistical analysis, regional modeling/simulation, machine learning algorithms, image classification tools, land use/cover change/modeling, economic modeling, semantic and text entity extraction tools, 3D visualization/immersive environments and more.





Community Health Needs Assessments (CHNAs). We are working collaboratively with the Fairbanks School of Public Health to support the development of community health needs assessments for hospital systems across Indiana. The Indiana Partnership for Health Communities (IN-PHC), which Polis launched with Fairbanks and the Clinical Translational Research Initiative of the IU School of Medicine, recently completed the second phase of a major assessment for Parkview Health, a nonprofit health system in northeast Indiana that consists of nine hospitals serving about 800,000 people across seven counties. We began a new CHNA process with Community Health Network in October 2017, working in partnership with the Richard M. Fairbanks School of Public Health Center for Health Policy (CHP).

## **Collaborations**



## COMMUNITY

We work in partnership with nonprofit and community-based organizations to develop information that helps them be more strategic and effective in their programs and services. We use local, state, and national sources to develop and analyze communitylevel indicators to understand social issues and how they impact communities; create online data dashboards and decision-support tools to make the data and information accessible in meaningful formats; create actionable information; foster data literacy; and build capacity in organizations to use data and information to achieve greater impact.

## **Key Accomplishments**

We have worked collaboratively with leading area nonprofits to enhance their capacity to serve the needs of Central Indiana.

• United Way of Central Indiana's Data Integration Plan. We are combining data from 89 nonprofit agencies with SAVI and other sources to inform programming, funding allocations, and strategy alignment.

• Great Families 2020, a major Social Innovation Fund grant (Corporation for National and Community Service) awarded to United Way of Central Indiana. We are working with partners to develop evaluation metrics to help improve family stability for four high-risk neighborhoods in Indianapolis.

• We are working with Domestic Violence Network in the third phase of a project to link and analyze data from the legal system with data from SAVI to understand domestic violence in Marion County.

• In collaboration with IU Public Policy Institute (PPI) and the Indiana Business Research Center, we are evaluating the impact of a four-year transformational grant for Indianapolis Neighborhood Housing Partnership.

• We have established a formal collaboration with Indiana 211 Partnership, Inc. to extend its capacity beyond a referral and helpline call network. Our partnership will help Indiana 211 improve the quality and content of its reporting and gain a better understanding of the human services landscape in Indiana.

Developed new technology infrastructure for better data security

• We began implementing a new data security infrastructure, which will also bolster our capacity for data analytics, data and text mining, and predictive analytics. Improved access to SAVI's data with online dashboards and decision support tools

• We redesigned the SAVI website (savi.org) to provide easier access to reports, case studies, and other content about issues relevant to Central Indiana communities such as health, education, public safety, and transportation.

• We created and launched a beta version of a new Community Profile tool, making it easier than ever to explore SAVI data. Users can easily choose a custom area, view dozens of indicators, save profiles for ready access, design a custom dashboard, and return to see updates to the data.

- We refreshed the data in several online tools:
  - Community Assessment & Planning Tool (http:// assessment.savi.org/), Created in collaboration with United Way, this tool allows nonprofits to define a custom geographic boundary and access a wealth of data describing the health, basic needs, income, and education needs of its residents and the existing resources to support those needs.
  - o *IndyVitals* (http://indyvitals.org), Created in partnership with Plan 2020 and the City of Indianapolis, *IndyVitals* provides quick access to SAVI's neighborhood-level data through a dashboard for tracking neighborhood progress on several neighborhood health and sustainability indicators.
  - Indianalmpact (http://Indianalmpact.org) provides access to a community dashboard for each county in Indiana that describes the health, education, income, and basic needs of residents.

Increased data literacy and built capacity to use data

• We trained over 300 representatives from 90 nonprofit organizations and supported nearly 100 individuals in their use of community data.

• We designed a 20-hour data literacy training curriculum, including nine hands-on modules that teach participants basic skills to find, analyze, and interpret data to make informed decisions. Participants can earn continuing education units.

• We published actionable information, such as reports on public transit ridership and neighborhood change/gentrification and the SAVI Online Magazine, which features case studies on how area organizations have used SAVI for strategic planning, grant writing, and other purposes.

• We convened 140 people for *SAVI Talks*, a series designed to gather multiple sectors for public conversation on important topics in the Indianapolis MSA. Events included reports on transit ridership in Marion County and neighborhood change/ gentrification from 1970-2016 across the Indianapolis region.

Created online data visualization tools to support partner needs

• We began developing a dashboard for Domestic Violence Network, which summarizes the state of domestic violence in Marion County, trends, and patterns.

• In partnership with IU Lilly School of Philanthropy, we created a set of online data visualization tools to disseminate information about philanthropic giving patterns across the US. Tools include a Give-o-meter, Generosity Maps, and Generosity Reports. We published the final version of these tools with the *GenerosityforLife.org* website on October 11, 2017.

## Hosted National Conference

• In October, we hosted the semi-annual meeting of the National Neighborhood Indicators Partnership (NNIP), a network of independent data intermediaries in US cities that have a shared mission to help community stakeholders use neighborhood-level data for better decision-making. Eighty people representing 34 cities, along with other national leaders in community information, gathered in Indianapolis to learn how data are being used to improve the quality of life for residents in Indianapolis and other partner cities. Polis has been a member of NNIP since 1999.

## Awarded Welcoming Campus Innovation Fund Grant

• In partnership with IUPUI's Office of Community Engagement, we received an IUPUI Welcoming Campus Fund award for a project called "Building a Data-Informed Approach to Community Engagement." Through this grant, we will build a key technical and institutional infrastructure that will result in better data to inform decisions about how community engagement efforts can be more strategic, coordinated, effective, and responsive to community issues.

## Recognition for Community Informatics work

• The *IndyVitals* tool earned the Urban and Regional Information System Association's (URISA) Exemplary Systems in Government (ESIG) award, which recognizes extraordinary achievements in the use of geospatial information technology that have improved the delivery and quality of government services. URISA is an international association of geospatial professionals.

• We received nearly 20 media mentions for our reports and new online data tools. Coverage included *WFYI's No Limits*, several local television and radio news outlets, Apolitical (a global network), Urban Institute, and GovLab.

• Sharon Kandris received the Network Steward of the Year Award from the National Neighborhood Indicators Partnership (NNIP), Urban Institute, Washington, D.C.

## Associations/Presentations

• United Way of Central Indiana, Community Impact Committee, Member

• National Neighborhood Indicators Partnership, Urban Institute, Washington, DC, Member

American Planning Association, Member

• "Who Rides the Bus: Examining Transit Ridership in Marion County?" Kelly Davila and Matt Nowlin with panelists Matt Shafer Powell (WFYI), Karissa Hulse (IndyHub), James Taylor (John H. Boner Community Center), and Michael Twyman (InExcelsis Consulting), *SAVI Talks* Public Forum, Indianapolis, IN. September 14, 2017. • "Building a Culture of Data Use." Kelly Davila. Neighborhood Indicators Partnership Conference, Indianapolis, IN. October 11, 2017.

• "Four Neighborhood Histories in Five Minutes." Matt Nowlin. National Neighborhood Indicators Partnership Conference, Indianapolis, IN. October 11, 2017.

• "Measuring Community Impact: Creating and Using Neighborhood Dashboards." Sharon Kandris, with Brad Beaubien (City of Indianapolis). 2017 National Assessment Institute, Indianapolis, IN. October 24, 2017.

• "IndyVitals: Measuring Health and Sustainability of Neighborhoods." Sharon Kandris. Urban and Regional Systems Association (URISA) GIS Pro Conference, Jacksonville, Florida. October 25, 2017.

• "Who Rides the Bus: Examining Transit Ridership in Marion County?" Kelly Davila and Matt Nowlin. Insights and Innovations Webinar Series, Indianapolis, IN. December 1, 2017.

• "Servant Leaders Working with Urban Data: SAVI." Matt Nowlin. Urban Servant Leadership Unconference, Indianapolis, IN. January 27, 2018.

• "Spatial Statistics." Kelly Davila. Carmel High School Statistics Day. Carmel, IN. March 19, 2018.

• "Effective Data for Mitigating Poverty." Sharon Kandris with Kathy Davis and Mike Simmons. Faith & Action Conference, Indianapolis, IN. April 26, 2018.

• "Practical Applications of Geospatial Statistics." Kelly Davila. Indiana GIS Conference, Fort Wayne, IN. May 9, 2018.

• "SAVI Community Profiles: Design, Results, and Challenges." Matt Nowlin. National Neighborhood Indicators Partnership Conference, Atlanta, GA. May 11, 2018.

• "Neighborhood Change since 1970: Suburbanization, Gentrification, and Suburban Redevelopment." Matt Nowlin and Unai Miguel Andres with panelists Imhotep Adisa (Kephrw Institute), Jeff Bennett (City of Indianapolis), Meredith Brickell (DePauw University and House of Life Project), and Chris Pryor (Metropolitan Indianapolis Board of Realtors). *SAVI Talks* Public Forum, Indianapolis, IN. June 14, 2018.



## **Advisory Board/Committee Members**

Our project diversity requires that we operate several advisory boards to achieve the best and most relevant advice for work. These boards meet regularly, as indicated.

Advisory Committee for Domestic Violence Data Dashboard (in collaboration with Domestic Violence Network)

Paul Babcock, Director of Public Health and Safety,

City of Indianapolis

Kelsey Gurganus, Director of Research and Evaluation, Domestic Violence Network

Kelly McBride, Executive Director, Domestic Violence Network Jennifer Reister, Director of Non- Residential Services,

The Julian Center

Mark Rice, Domestic Violence Branch Commander, Indianapolis Metropolitan Police Dept.

Taylor Schaffer, Deputy Chief of Staff, City of Indianapolis Officer Tyneka Sperry, Indianapolis Metropolitan Police Dept.

SAVI Education Program Steering Committee

- Tiffany Hatfield, Director of Foundation and Corporate Giving, YMCA of Greater Indianapolis
- Denise Luster, Vice President, Impact Research and Analytics, United Way of Central Indiana
- Breanca Merritt, Senior Research Analyst, PPI
- Khaula Murtahda, Associate Vice Chancellor, IUPUI Office of Community Engagement

Maury Plambeck, Training & Curriculum Development Specialist, Indianapolis Neighborhood Resource Center

Mike Simmons, Director, Advocacy and Professional Relations, Eli Lilly

Sarah Zike, Manager, Capacity Building, United Way of Central Indiana

Marsha Williams, Quality Assurance Analyst, EmployIndy

## Community Profiles Advisory Committee

Eden Bezy, Director, Office of Public Health Performance Management, Indiana State Department of Health Anthony Bridgeman, Director of Community Initiatives,

Indianapolis Children's Museum

Karen Comer, Director of Collaborative Research and Health Geoinformatics, The Polis Center

Tricia Frye, Planning Supervisor, Indianapolis Public Schools Joe Hanson, CFO and EVP of Strategic Initiatives, INHP Chris Hartley, Data Manager, Renew Indianapolis Jeff Hasser, CDBG Manager, Department of Metropolitan

Development

Tawnya McCrary, Operations Director, Edna Martin (Center for Working Families)

Kelli Mirgeaux, Consultant, Polyphonic

Welcoming Campus Initiative Community Engagement Map Advisory Committee (in collaboration with Office of Community Engagement)

Jennifer Boehm, Assistant Vice Chancellor, Office of Community Engagement, IUPUI

David B. Burr, PhD Associate Vice Chancellor for Research

- Robert Comer, Research Associate, Media Arts and Science
- Carole Kacius, Associate Dean for Education and Training, Richard M. Fairbanks School of Public Health
- Brad Ray, Assistant Professor, School of Public and Environmental Affairs

Sarah Wiehe, Associate Professor, Indiana Children's Health Service Research

# Flood

## RESILIENCY

Our disaster informatics initiatives combine geospatial analysis, modeling, and outreach activities to address problems faced by planners, engineers, and government officials. The majority of our FY2018 grants and contracts supported activities to prevent or reduce significant losses from natural disasters.

## **Key Accomplishments**

• FEMA Cooperating Technical Partner

The Federal Emergency Management Agency (FEMA) has noted the substantial challenge of keeping flood hazard maps current for over 20,000 communities that are in the National Flood Insurance Program (NFIP) and has created the innovative Cooperating Technical Partners Program in response. In FY2018, The Polis Center qualified to partner with FEMA through its Cooperating Technical Partner (CTP) program, thereby allowing Polis to collaborate with FEMA, participating NFIP communities, regional and state agencies, and others to maintain up-to-date flood hazard maps and other flood hazard information. Under this program, The Polis Center will continue to work closely with the Indiana Department of Natural Resources (IDNR), which is also a CTP, to update Indiana's flood hazard maps and data.

• Senior Management Appointment Jim Sparks as director of geoinformatics

## State Projects

• Indiana Department of Homeland Security (IDHS). We partnered with IDHS and FEMA Region 5 to create hazard mitigation plans for the following counties: Allen, Decatur, Dubois, Fountain, Franklin, Henry, Huntington, Madison, Miami, Monroe, and Ohio.

- Indiana Department of Natural Resources
  - Risk MAP. We continue a nine-year partnership with IDNR to expand the geographic extent of FEMA's Risk MAP program which is aimed at assisting local communities with their mitigation efforts.

- o Indiana Floodplain Information Web Portal. The Polis Center assists IDNR in maintaining and improving its GIS data used in INFIP.
- South Carolina Emergency Management Division. We developed a Multihazard Mitigation Platform for the South Carolina Division of Emergency Management, which will launch soon. Through an innovative map interface, the platform provides historic hazard data, information about buildings and populations exposed to hazards, and other types of critical data resources to support multihazard mitigation plan development. It also collects and manages plan submissions and visually tracks and analyzes mitigation strategies and funded projects. Administering mitigation plan components in this fashion is a significant advancement for South Carolina and is expected to serve as a best practice for other states.
- Georgia Department of Natural Resources. We worked collaboratively with the University of Wisconsin Space Science Center and the Georgia Department of Natural Resources on a National Oceanic and Atmospheric Administration (NOAA) funded study of the 11 Georgia coastal counties. This study gave a regional assessment for probable storm-scenarios for coastal communities and generated innovative simulations of the potential predicted effects of a warming climate, such as sea-level rise and more intense coastal storms. We also received additional NOAA funding through the Georgia Department of Natural Resources that supports a more detailed assessment of the current and potential future impacts of hurricanes as well as riverine and coastal flooding in Liberty County and Tybee Island, Georgia. Furthermore, we will be evaluating the effectiveness of green infrastructure and other types of mitigation on reducing those impacts.

## Federal Projects:

- US Army Corps of Engineers (USACE)
  - o We continued analyzing vulnerabilities to transportation assets in Indiana in partnership with the United States Geological Survey and the Center for Earth and

Environmental Science at IUPUI. The Transportation Asset Vulnerabilities Analysis for the Sugar Creek Watershed plan is part of phase three of the Fluvial Erosion Hazards (FEH III) project. The Polis Center gathered information necessary to define the user needs and functionality requirement of an Indiana Flood Mitigation Planner website that we will develop to hold local and state flood mitigation information and data for partners within all levels of government and the public.

## Associations/Presentations

- Association of American Geographers, Member
- American Society for Photogrammetry and Remote Sensing, Member
- Association of State Floodplain Managers, Member
- Indiana Association for Floodplain and Stormwater Management, Member
- Indiana Geographic Information Council (IGIC), Member
- National States Geographic Information Council, Member
- "Developing a Resiliency Index" expert workshop. David Bodenhamer, panelist. National Council on Science and Environment , Washington, DC. January 24, 2018.
- "Responding to Environmental Change: Research Collaborations, Integrated Data Systems, and Deep Mapping." David Bodenhamer. Invited presentation, International Symposium on Grids and Clouds, Taipei. March 23, 2018.
- "The Practice of GIS in Indiana." Kavya Beerval Ravichandra and Jim Sparks. IndyPy group, Indianapolis, IN. April 10, 2018.
- "Leading for a Win-Win-Win." Jim Sparks. Keynote presentation, 2018 GIS Conference, State College, PA. May 15, 2018.

## Advisory Board/Committee Members

We use the Indiana Silver Jackets, a federal-state coordinating body, as a de facto advisory group for our work in geoinformatics. It meets monthly.

Bob Barr, Staff Scientist and Fundamentals of Engineering (FEH) Community Liaison, Center for Earth and **Environmental Science** David Bausman, Director of Policy and Regulatory Affairs, Indiana State Department of Agriculture Siavash Beik, Vice President, Principal Engineer, Christopher B. Burke Engineering, Ltd. and ASFPM Representative Brandon Brummett, Outreach Coordinator, US Army Corps of Engineers Jane Frankenberger, Professor, Agricultural and Biological Engineering, Purdue University Jeff Frey, Deputy Director, US Geological Survey Steven Greene, Hazard Mitigation Community Planner, Federal Emergency Management Agency Manuela Johnson, State Disaster Recovery Program Administrator, Indiana Department of Homeland Security David Knipe, Engineering Section Manager, Indiana Department of Natural Resources Ben Knowles, US Air Force Master Sgt., 181st Intelligence Wing, Indiana Air National Guard Mary Moran, Mitigation Program Director, Indiana Department of Homeland Security Rodney Renkenberger, Executive Director, Maumee River **Basin Commission** Marylou Renshaw, Chief, Watershed Assessment and Planning Branch, Indiana Department of Environmental Management Chris Ritz, Civil Engineer, Natural Resource Conservation Service Al Shipe, Service Hydrologist, National Weather Service Kent Wamsley, Upper Wabash Project Director, The Nature Center Kathleen Weissenberger, Founding Member of KW Consultants, LLC and Former Director of Grant Services and State Community Development Block Grant (CDBG) Director, Office of Community and Rural Affairs Phil Worrall, Executive Director, Indiana Geographic Information Council





## HEALTH

The scope of our work in this sector supports the growing disciplines of public health and population health management for improved community health planning and intervention and public health and patient-centered decision-making. We combine and analyze clinical and community data and create assessment and decision-making tools and community engagement platforms.

## Key Accomplishments:

## Community Health Needs Assessments

• Parkview Health System, a seven-hospital system in Northeast Indiana. We provided an Assessment of 2017 Community Health Improvement Strategy, an addendum to its 2015-2016 Community Health Needs Assessment, to evaluate the effectiveness, feasibility, and community acceptance of the effort.

• Community Health Network, a five-hospital system in Central and Northern Indiana. We are collaborating with network and regional executive leadership teams on a 2018 Community Health Needs Assessment and 2019-2021 Implementation Plan.

## Bowen Health Information Workforce Information Portal

• We developed an online portal that features interactive mapping, a map gallery, and data download capability; built a Report Generator Component; added four additional health professions; and introduced the project during the 2017 Indiana Health Workforce Summit.

## "Precision Health," IU Grand Challenge,

• Polis is collaborating with the IU School of Medicine to transform biomedical research, health care innovations, and the delivery of health interventions in Indiana. We developed a proofof-concept Exposome API that provides access to a subset of the SAVI database for the initiative's Health Data Commons. The Health Data Commons will help clinical researchers and health care providers consider patient environmental conditions in care and treatment decisions.

#### "Responding to Addictions Crisis," IU Grand Challenge

• Polis, in partnership with Regenstrief Institute, the IU School of Medicine, the Management Performance Hub, and the Indiana Business Research Center is developing the Indiana Addictions Data Commons, a decision-support framework for sharing and integrating data and information pertinent to the state's opioid epidemic.

#### Diabetes Intervention Project Indianapolis (DIP-IN)

• Polis is working with the Richard M. Fairbanks School of Public Health and the Marion County Public Health Department on a pilot project funded by Lilly Global Health to assess current approaches of diabetes intervention and recommend new methods. We will use SAVI to select three Indianapolis neighborhoods based on need, then collect and analyze rigorous clinical and non-clinical outcome data.

## Asthma Pay for Success

• Polis is partnering with The Indiana Neighborhood Housing Partnership (INHP) and Community Health Network on a pilot initiative to develop and test a pay-for-success, housing-based, asthma intervention. Our role is to identify asthma hot spots based on hospital discharge data and, after targeted mold remediation by INHP, analyze cost savings (reduction of ER visits).

#### Research Proposals

• Mothers as Community Health Advocates. We developed a joint National Institutes of Health (NIH) R-01 proposal in partnership with the Nurse Family Partnership (Goodwill Industries), the IU Dept. of Sociology, and the IU School of Medicine.

• Evaluating Post-Rehabilitation Health and Psycho-Social Outcomes of Veterans with War-Related Traumatic Amputations. Polis collaborated with the University of Michigan on a proposal to the US Department of Defense (DOD), The proposed research will be built upon our previous research on amputee veterans from the Vietnam War, conducted from 2007-2011 via the DOD-funded Indiana-Ohio Center for Traumatic Amputation Rehabilitation Research.

• IGNITE 2. In partnership with Dr. Kenneth Levy, IU School of Medicine, and Regenstrief Institute, we contributed spatial visualizations for a National Institutes of Health proposal on applying research findings about the economic and clinical impact of pharmacogenomics to the opioid epidemic, with special consideration of medically underserved and diverse demographic populations.

#### Associations/Presentations

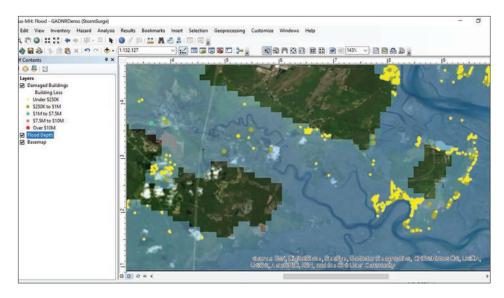
• "Fostering Community Maternal-Child Health Advocates," part of a panel discussion titled "Nursing Redefined: Meeting the World's Greatest Needs" and "Eighty Percent by 2020: Monitoring Indiana's Progress with New Data Tools," which described Bowen Health Workforce Information Portal Polis developed. Karen Comer. Indiana Nursing Summit: One Voice Conference, Indianapolis, IN. November 6, 2017.

## **Advisory Board/Committee Members**

Indiana Population Health Working Group (This group aims to identify opportunities to assist policymakers, health providers, researchers, and Hoosiers in achieving desired health outcomes and address barriers to efficiently integrate and share data among participating organizations.)

Angela Boyer, Indiana Primary Care Association Mike Brady, Indiana State Medical Association Matt Brooks, Indiana Council on CMHC's Zach Cattel, Indiana Health Care Association Karen Comer, The Polis Center at IUPUI Shaun Grannis, Regenstrief Institute Doug Huntsinger, Commission on Substance Abuse Keith Kelly, Indiana Health Information Exchange Don Kelso, Indiana Rural Health Association Jared Linder, Family and Social Services Administration Chris Mickens, State Department of Health Waldo Mikels-Carrasco, Michiana Health Information Network Mike Rinebold, LeadingAge Gloria Sachdev, Employers Forum Darshan Shah, Management Performance Hub Kara Slusser, Professional Licensing (INSPECT) Andy VanZee, Indiana Hospital Association Josh Vest, IUPUI School of Public Health

Family Social Service Administration (FSSA) Social Determinants of Health Working Group Brent Anderson, Indiana State Department of Health Stephanie Anderson, Indiana Department of Correction Lindsey Bouza, Indiana State Department of Health Rebecca Buhner, FSSA Laura Chavez, Indiana State Department of Health Karen Comer. The Polis Center at IUPUI Benjamin Evans, FSSA Pamela Fisher, Indiana Department of Transportation Michael Gargano, FSSA William Habig, FSSA Shane Hatchett, FSSA Rachel Lane, FSSA Jared Linder, FSSA Waldo Mikels-Carrasco, Michiana Health Information Network Connor Norwood, FSSA Matt Rayburn, Indiana Housing & Community Development Drew Richardson, Indiana Health Information Exchange Adrienne Shields, FSSA Jacob Sipe, Indiana Housing & Community Development Jennifer Walthall, FSSA Peggy Welch, FSSA



## **EDUCATION**

Our training and education program has delivered workshops, presentations, and related services in more than 100 cities in 40 states and multiple countries since its inception. While this program serves a wide range of audiences, this past fiscal year we focused on the application of geospatial technologies to reduce social and economic impacts from natural hazards.

## Key Accomplishments:

## Disaster Management Courses

• Polis is a leader in curriculum development and instruction on the use of geospatial technologies to identify and analyze natural hazard risk. We have expertise in FEMA's Hazus-MH technology. During FY2018, we offered customized GIS and Hazus-MH workshops in Florida, South Carolina, Washington, Texas, Maryland, and Georgia. We continued to support FEMA's Emergency Management Higher Education Program, conducting workshops at the annual Higher Education Conference on the use of GIS within academia to support service, research, and teaching. We presented on the strategic use of geospatial technologies for emergency management at FEMA's Executive Academy which

convenes senior emergency management executives to explore contemporary and emerging 21st century challenges. We also lead a FEMA focus group on identifying geographic and scientific competencies required for emergency management practitioners.

## Associations/Presentations

Kevin Mickey, Director of Professional Development and Geospatial Technologies Education, presented at five national conferences and the Indiana GIS conference on topics related to modeling disasters, data management and incentivizing disaster mitigation. These and others include:

• Indiana Geographic Information Council, Board of Directors Member and Co-chair and Education Committee, Member (which is tasked with facilitating education opportunities for the Indiana GIS community and stakeholders that benefit from GIS technologies and resources.)

 National Institute of Building Sciences Multihazard Mitigation Council (MMC), Immediate past-chair. In January, the MMC published the Natural Hazard Mitigation Saves: 2017 Interim Report. The Institute's project team looked at the results of 23 years of federally-funded mitigation grants provided by FEMA, US Economic Development Administration (EDA) and US Department of Housing and Urban Development (HUD) and found mitigation funding can save the nation \$6 in future disaster costs for every \$1 spent on hazard mitigation. In addition, the project team looked at scenarios that focus on designing new buildings to exceed provisions of the 2015 model building codes. The 2017 Interim Report demonstrates that investing in hazard mitigation measures to exceed select requirements of the 2015 International Codes (I-Codes), the model building codes developed by the International Code Council (ICC), can save the nation \$4 for every \$1 spent. Mickey, along with Dr. Tarek Rashed (former GIS director), served as lead investigators on the riverine flood hazard portion of this study.

• Urban and Regional Information Systems Association (URISA), Professional Education Committee, Chair. (This committee has oversight and facilitation responsibilities for the majority of professional workshops and publications produced by the Association.) • "Using CAMA and Parcel Data to Support Emergency Management." Kevin Mickey. 2018 GIS/CAMA Technologies Conference, Houston, Texas. March 19, 2018.

• "Dollars and Common Sense: The Path to Mitigating Natural Hazard Risk." Kevin Mickey. Urban and Regional Information Systems GIS Pro Conference, October 24, 2017.

• "The GISP Portfolio Application: Planning, Documenting, and Demonstrating Your Experience and Skills." Kevin Mickey, with Tripp Corbin, Keri Brennan, and Linda Wayne. Urban and Regional Information Systems GIS Pro Conference, Jacksonville, FL. October 24, 2017.

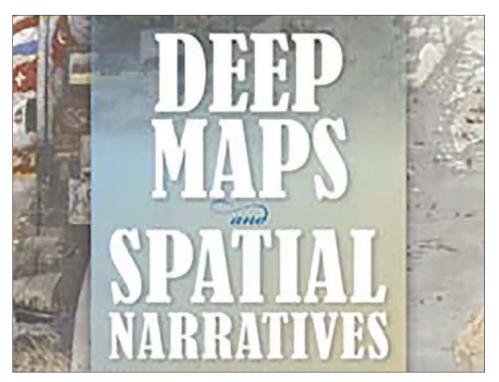
• "Indiana Flood Mitigation Planner (IFMP) Platform: A Silver Jackets Initiative." Kevin Mickey. Esri International Users Conference, San Diego, CA. July 13, 2017.

• "Understanding Risk though Geospatial Tools." Kevin Mickey. Federal Emergency Management Agency Executive Academy, Emmitsburg, MD. June 18, 2018.

• "Incentivizing Resilience: Moving from Ideas to Impact." Kevin Mickey. National Institute of Building Sciences Building Innovation Conference, Washington, DC. January 12, 2017.

• "Current Trends in the Use of GIS for the Analysis and Communication of Natural Hazard Risk." Kevin Mickey. Indiana State GIS Conference, Bloomington, IN. May 10, 2017.

• "Dollars and (Common) Sense: The Path to Mitigating Natural Hazard Risk." Kevin Mickey. Indiana State GIS Conference, Bloomington, IN. May 10, 2017.



## **SPATIAL HUMANITIES**

We serve an international community of humanities scholars interested in applying geospatial technologies to the disciplines within the humanities to explore new questions about the relationship of space to human behavior and social, economic, political, and cultural development.

## Key Accomplishments:

• We continued our work on developing deep mapping as an important method and toolkit for the IU Grand Challenge, "Prepared for Environmental Change."

• We collaborated with two British universities, Lancaster University and Leeds University, to form an expert network of computer scientists, geographers, and humanists to explore the use of Qualitative Spatial Representation in humanities research, supported by an Arts and Humanities Research Council (UK) grant. The first meeting was in Lancaster April 26-2 and the second was held at Polis in late August 2018. A third will be hosted by Leeds University in spring 2019.

## Presentations/Publications

• "Deep Mapping and the Spatial Humanities: Connecting Matter and Meaning." David Bodenhamer. Invited lecture, Leiden University, Leiden, Netherlands. October 5, 2017.

• "Mapping Matter, Meaning, and Experience." David Bodenhamer. Invited lecture, School of Architecture, Technical University of Delft. January 16, 2018.

• "Deep Mapping for the Spatial Humanities," European Social Science History Association, Belfast, April 6, 2018.

• "Building a Research Infrastructure for the Spatial Humanities" expert workshops. David Bodenhamer, co-leader. University of Passau, Germany. November 2017

• "Qualitative Spatial Representation for Spatial Humanities." David Bodenhamer, co-leader. Lancaster University, UK. April 2018.

• *Making Deep Maps: Foundations, Approaches, and Methods.* David Bodenhamer in association with John Corrigan, Florida State University, and Trevor Harris, West Virginia University, submitted this book manuscript to the Indiana University Press Series on Spatial Humanities.

## **Advisory Board Members**

Virtual Center for Spatial Humanities (VCSH) Executive Committee. (VCSH is a collaboration among The Polis Center at IUPUI, Florida State University, and West Virginia University to set an agenda and develop projects and technology for spatial humanities.)

Ed Ayers, Tucker-Boatwright Professor in the Humanities,

Department of History and President Emeritus, University of Richmond, USA

Peter Bol, Vice Provost for Advances in Learning and Charles H. Carswell Professor of East Asian Languages and Civilizations, Office of the Provost, Harvard University, USA David Bodenhamer, Executive Director, The Polis Center at IUPUI

John Corrigan, Lucius Moody Bristol Distinguished Professor of Religion and Professor of History, Department of Religion, Florida State University

Peter Doorn, Director, Dutch Archives and Networking Service (DANS), Netherlands

I-chun Fan, Research Fellow, Institute of History and Philology and Executive Director, Center for Geographic Information Science, Academia Sinica, Taiwan

Michael Goodchild, Emeritus Professor of Geography, University of California-Santa Barbara, USA

Trevor Harris, Professor of Geography, Department of Geology and Geography, West Virginia University

Yuzuru Isoda, Associate Professor, College of Asia Pacific Studies, Ritsumeikan Asia Pacific University, Japan

Kim Knott, Professor of Religious Studies, University of Leeds, UK

Anne Knowles, Professor of History, University of Maine; formerly Professor of Geography, Middlebury College, USA

Andreas Kunz, Economic Historian and Sr. Researcher, Institute of European History (Mainz), Germany

Lew Lancaster, Professor Emeritus, Department of East Asian Languages and Cultures, University of California-Berkeley, USA

Gary Lock, Emeritus Fellow, Professor of Archaeology, Department for Continuing Education, University of Oxford, UK

Barney Warf, Professor of Geography and Atmospheric Science, Department of Geography and Atmospheric Science, Kansas University, USA

May Yuan, Ashbel Smith Professor of Geospatial Information Sciences, Geospatial Information Sciences, University of Texas-Dallas, USA

## CULTURE

Spirit & Place is a community initiative managed by The Polis Center at IUPUI that grew out of our Project on Religion and Urban Culture which looked at how religion and community have shaped our city and region. Its mission since 1995 is to be a catalyst for civic engagement and enduring change through creative collaborations among the arts, humanities, and religion. Through its annual November festival, people-centered community engagement, and year-round activities, Spirit & Place fosters cross-sector collaborations, training sessions, and public events that spark connections and build bridges between people, ideas, organizations, and places. The 2017 theme of POWER offered an opportunity to explore subjects ranging from racism and civility to printmaking and singing, experience original artwork, and participate in community together.

## Key Accomplishments:

## 22nd Annual Spirit & Place Festival

• We featured 35 events (59 occurrences) including exhibits, performances, conversations, screenings, and family events appealing to diverse audiences and interests.

- Festival highlights:
  - o Our 22rd Annual Public Conversation offered a new format that blended the arts, humanities, and religion in a powerful presentation that included historic documents, images, the hymn "Amazing Grace," and public dialogue to help the community reflect on the history of race.
  - We presented a \$1,000 Award of Awesomeness for exemplary festival event partner, the Kheprw Institute, for "Break the Chains Off! History of Hip Hop in Power & Resistance," the festival's first hip hop event.
  - Festival demography: Among the 5,909 festival attendees, 46.6 percent were new (a 15 percent increase). Attendees represented 24 Indiana counties and 13 states. Audience demographics were 75.72 percent white, 10.65 percent



African American (a 28 percent increase), 4.51 percent Other, 4.32 percent preferred not to answer, with remainder representing Latinx, Asian/Pacific Islander, and American Indian; 29.5 percent were age 65+, 38.14 percent were 41-64, and 19.74 percent were 25-40 (53 percent increase).

 Some festival events transform projects into long-term community benefit. For example, The Sapphire Theatre Company has been able to leverage festival participation in 2016 and 2017 into funded programs that continue to benefit the community. They have raised a total of \$14,000 to support these efforts, which includes taking "The Power of Consent," a 2017 festival event on sexual consent, into college campuses and high schools.

## Select Year-Round Activities & Special Initiatives

• Community Innovation Lab. Spirit & Place, Kheprw Institute, and Groundwork Indy, received funding for a national pilot project by EmcArts (New York) to create a Community Innovation Lab that uses arts-based processes and practices to spark innovation. The local team is using the lab to explore how to create economic inclusion for formerly incarcerated individuals and young adults aging out of foster care. The work is supported by numerous local partners including the Eccles Family Charitable Fund (an affiliate of CICF) Second Presbyterian Church, and Eskenazi Health, among others.

• Powerful Conversations on Race. This monthly conversation series on the history of race in the US is anchored around the book, *The Charleston Syllabus: Race, Racism, and Racial Violence in the U.S.*, and a facilitation strategy called the Civic Reflect Dialogue method. This methodology creates a shared experience through a humanities text or artwork, followed by reflection and conversation. Led by trained volunteer facilitators, the series is underwritten by Indiana Humanities with support from the National Endowment for the Humanities, The Indianapolis Foundation (a CICF affiliate), and the MLK Center.

• From the Ground Up. We partnered with Indiana Arts Commission, Harrison Center, Big Car, School of Public and Environmental Affairs-IUPUI, and Indiana Association for Community Economic Development on a statewide place-making symposium.

## Budget and Funders

The operating budget for the festival was \$480,817, including in-kind services valued at \$73,500. Major funders included Lilly Endowment Inc.; Allen Whitehall Clowes Charitable Trust, Inc.; Bohlsen Group; The Indianapolis Foundation; Christel DeHaan Family Foundation; Christian Theological Seminary; and IUPUI, among others.

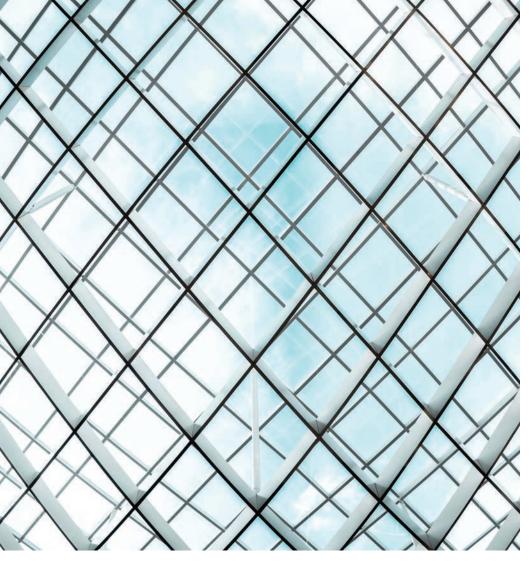
## Advisory Board/Committee Members

Steering Committee (advises on policy, themes, strategic planning)

Ken Honeywell, Chair, Partner/Creative Director, Well Done Marketing Keira Amstutz, President & CEO, Indiana Humanities David Bodenhamer, Executive Director, The Polis Center at IUPUI (ex-officio) Elizabeth Goodfellow, Major Gift Officer, IU School of Liberal Arts at IUPUI (Ex-officio) Hope Hampton, CEO, Indescribable Gift Charlie Hyde, President & CEO, Benjamin Harrison Presidential Site Venetta Keefe, Community Volunteer Pegg Kennedy, Sales Associates, Tucker Realty Leslie Kidwell, Major Gift Officer, American Red Cross David Kosene, President, Kosene and Kosene, Development & Management Co., Inc. Fred Lewis, Senior Minister, First Baptist Church of Indianapolis Beth Perdue Outland, Vice President, Community Engagement & Strategic Innovation, Indianapolis Symphony Orchestra Sr. Norma Rocklage, Executive Director, Education Formation Outreach, Marian University Gail Thomas Strong, Vice President, Community Engagement, WFYI Public Media Robin Thoman, Principal, Paradox Dental Care Sally Zweig, Attorney at Law, Katz & Korin, PC

## Emeritus Members

Kevin Armstrong, CEO, Methodist Health Foundation Vicki Bohlsen, CEO, Bohlsen Group Jane Henegar, Executive Director, ACLU-Indiana Bruce Hetrick, Principal, Powerful Appeals Sandy Sasso, Rabbi Emerita, Congregation Beth El Zedeck Joyce Sommers, Emeritus President, Indianapolis Art Center David Wantz, CEO, Independent Colleges of Indiana Karen Whitney, President, Clarion University Lynn Youngblood, Provost Emeritus, University of Indianapolis



# **OTHER CENTER ACTIVITIES**

- Polis received a grant from the Allen Whitehill Clowes Foundation to plan for a digital *Encyclopedia of Indianapolis*.
- We are collaborating with University Archives, the Public History Program, and the School of Informatics on a Welcoming Campus Innovation Fund grant to create an interactive timeline of IUPUI history for the 50th anniversary of the campus in 2019.

• We developed a Story Map of recent Carmel history for the Carmel Historical Society.

• The MacArthur Foundation selected the center's "LIFE2030" proposal as one of the twelve proposals (out of 1900+ submissions) to be featured as a high-impact project by the Center for High Impact Philanthropy at the University of Pennsylvania.

• The Polis Center is mentioned in an article on the NiemanLab website, "The Times in Person: Indianapolis," (https://bit. ly/2PAb1qM) for its partnership with WFYI in developing a program on the effects of the Rexnord Corporation plant closing on workers. The story was one of six by the *Times* in a series examining the impact of policies adopted by the Trump administration.

# **ORGANIZATIONAL STRUCTURE**

The Polis Center at IUPUI operates as a matrix organization, with directors for each area of emphasis who draw from a common pool of technical support staff for specific project needs. We also staff a communications function that supports our major areas of work.

## Administration

- David Bodenhamer, Executive Director (also directs the Spatial Humanities area) Sharon Kandris, Associate Director (also directs the Community Informatics Area) Melissa Gona, Business Manager
- Gloria Hastings, Financial Assistant
- Lou Ann Glidden, Administrative Assistant

## Geoinformatics

Jim Sparks, Director (as of Feb. 2018; Tarek Rashed served in this role until Feb. 2018) Matthew Riggs, Senior GIS Analyst Lacey Bannon, GIS Project Coordinator (through April 2018) Richard Ryan Stevens, GIS Analyst (through April 2018) Kavya Urs Beerval Ravichandra, GIS Analyst Kayla Kauffman, GIS Analyst Cassie Fitzwater, Technical Writer *Student:* Melissa Long, Intern (GIS)

## **Health Geoinformatics**

Karen Comer, Director *Students:* 

Nimra Nayyar, Fairbanks School of Public Health, MPH Intern Sasha Wilson, Health Information Management Intern Lauren Lancaster, Fairbanks School of Public Health, MPH Intern, Abena Gyasiwa, Health Information Management Intern

## **Community Informatics**

Sharon Kandris, Director Kelly Davila, Senior Research Analyst John Hayes, Data and Quality Assurance Coordinator Deb Hollon, GIS Analyst Matt Nowlin, Research Analyst Kim Sarver, Project Manager Unai Miguel Andres, GIS and Data Analyst James Colbert, Consultant Students: Cameron Hilt, SAVI Agency Outreach and Training Service Learning Assistant Hannah Roper, SAVI Informatics Web Development Service Learning Assistant Henry Dan, SAVI Informatics Web Development Service Learning Assistant Meghann Bowman, SAVI Community and Applied Research Service Learning Assistant

## **Systems Development**

Neil Devadasan, Lead Systems Engineer/Systems Engineering Manager James Dowling, Database Administrator Robert Ferrell, Senior Programmer John Gona, LAN Technician Gautham Bavandla, Research Programmer

## **Professional Education**

Kevin Mickey, Director

## **Spirit and Place**

Pam Blevins Hinkle, Director LaShawnda Crowe Storm, Community Engagement Director Erin Kelley, Program Director Janna Thomas, Fundraising Assistant Karen Lynch, Service Learning Assistant

## Communications

Allegra East, Manager Norma Erickson, Writer/Researcher *Students:* Aspen Christian, Intern (Social Media) Taylor Moore, Intern (Social Media) Griffin Brown (Social Media) Ryan McElroy, Intern (Event Management)

# SUSTAINABILITY

Our goal is to enter each fiscal year with at least of 75 percent of required income under contract. Our experience as a selfsupporting center suggests we will be able to develop enough new projects during the fiscal year to maintain a healthy working margin of eight to twelve months of fully-funded work. We met this goal for FY2018 and enter FY2019 with contracted income sufficient to meet our obligations for the next year.



The Polis Center at IUPUI 1200 Waterway Blvd. #100 | Indianapolis, IN 46202 317.274.2455 | polis.iupui.edu