



# THE POLIS CENTER ANNUAL REPORT FY2021







## Mission

The Polis Center works with our partners to define, measure, and improve community health, well-being, and resilience.



A photograph of a man and a young girl in a garden. The man, wearing a blue shirt and khaki shorts, is bent over, using red-handled shears to trim a bush. The girl, wearing a white shirt and a floral skirt, stands next to him, looking at the plants. In the background, there is a wooden dining table with chairs, a green lawn, and a house with a gabled roof and white trim. The scene is set in a sunny, outdoor environment with lush greenery.

## **WE BRING THINGS INTO PERSPECTIVE**

**Helping organizations understand gaps in service, trends, assets, and ways to build capacity.**

**Tackling specific problems that impact daily lives.**

**Making a difference through collaboration, developing creative solutions to real-world problems, accountability, integrity, respect, and stewardship.**

## **What we do**

The Polis Center supports community development and quality-of-life efforts , resiliency, and population health management using geospatial technologies to integrate, manage, and visualize the rapidly growing information on the places where we live and work.

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## Contents

Executive Summary.....	6
Emphasis Area Activities.....	9
Geoinformatics .....	9
Community Informatics. ....	15
Community Health Informatics .....	25
Spatial Humanities. ....	31
Other Center Activities. ....	35
Organizational Structure.....	35
Sustainability.....	38
Appendix A. ....	40
Appendix B. ....	43

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## EXECUTIVE SUMMARY

The Polis Center had another productive year in FY2021, the global pandemic notwithstanding. Not only did the staff continue to meet existing project milestones while working remotely, but the Center received new grants and contracts for a total of \$3,395,141.

The Center's place-based information and its analytical capabilities proved exceptionally useful to our partners, as well as to our various constituencies, as seen most clearly in two information resources—the SAVI COVID-19 Data and Information Hub and the SAVI Equity Data and Information Hub. Both hubs were created in response to the national and local health and racial equity crises.

We provided a data-informed response to current issues with these data hubs and developed an equitable funding allocation model for the Indianapolis City-County Council. Data from the SAVI community information system highlighted key community trends, enhancing policy and decision-making in meaningful ways. Polis continued its series of community trends reports and SAVI Talks public presentations that use SAVI data to analyze topics of concern to the Indianapolis community. Partnering with WFYI Public Media, the reports and events in FY21 addressed the health and economic impacts of COVID-19 on neighborhoods, equity in economic opportunity, and equity in aging. Articles examined police used force on Black residents, Indy evictions in 2020, and the lasting impacts of segregation and redlining.

Other highlights include the Center's work as a Federal Emergency Management Agency (FEMA) Cooperative Technical Partner (CTP) in developing Indiana's portion of Risk Mapping, Assessment, and Planning (Risk MAP), a national effort to modernize flood risk assessments. Working with the Indiana Department of Natural Resources (IDNR), we determined floods risk for structures with statewide building footprints from LIDAR point clouds.

In related projects, we used machine learning in a national project to detect low-head dams, and led the efforts of the state's Geographic Information Office (GIO) to collect and manage spatial data from all 92 Indiana counties.

In collaboration with the Central Indiana Senior Fund, a fund of the Central Indiana Community Foundation, we conducted a major study of needs and vulnerabilities of senior adults in Central Indiana, which resulted in the State of Aging in Central Indiana Report, briefs, and associated portal. With older adults the fastest growing demographic in Central Indiana, it is important to understand the population trends, notable changes, and basis needs of this growing demographic. These premier





sources of data related to aging in Central Indiana provide community leaders, decision-makers, older adult-serving entities, and philanthropic organizations place-based information to identify needed programs, funding, and policies (<https://bit.ly/3E9LHAF>).

We continued work with the IU School of Medicine on novel drug detection technology for a Chemical Surveillance System for the Synthetic Drug Crisis. We partnered with the Regenstrief Institute to link our community data with the clinical data from the Indiana Network of Patient Care, thus enhancing IU's capacity to conduct leading research on the social determinants of health.

We also worked with leading heritage and cultural institutions to create the digital Encyclopedia of Indianapolis, an innovative knowledge platform that is a legacy project of the Indianapolis bicentennial. As lead partner, Polis is responsible for the design and technical development, and the Center's executive director serves as editor-in-chief, a role he played in the 1994 print edition. We secured over \$1 million in new grants for this work, which were made through the Indianapolis Public Library Foundation. Indianapolis Public Library will own and sustain the digital encyclopedia once Polis completes its development at the end of 2021.

Funded by Lilly Endowment, Polis is examining how Indianapolis congregations have responded to social and economic changes since the Center's pioneering project on Religion and Urban Culture (1996-2002). Partners include the IUPUI Center for the Study of Religion and American Culture, the IU School of Liberal Arts, the IU School of Informatics and Computing—IUPUI, the Center for Congregations, and the Center for Pastoral Excellence at Christian Theological Seminary.

Finally, the Center made its physical move to the facilities of the IU School of Informatics and Computing—IUPUI (SolC), thus completing its integration into its new home school. In the process, we have reaffirmed our commitment to remain a nexus between the university and community, a goal and mission shared by our new SolC colleagues.







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## EMPHASIS AREA ACTIVITIES

The Polis Center programs occur under three rubrics—Geoinformatics, Community Informatics, and Community Health Informatics—and a special research area, Spatial Humanities. Each emphasis area is responsible for generating funding for its programs, and all three work together to enhance the capacity and resiliency of Indiana communities.

### GEOINFORMATICS

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 crisis informatics initiatives support disaster preparedness, mitigation, response, and recovery activities. We design and develop open source as well as Esri 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.

#### Key Accomplishments

Polis contracted with the State of Indiana for the County Data Harvesting Project (<https://bit.ly/3EbTs9x>) to manage the integration and improvement of geographic information from all 92 counties. Although the state led the effort since 2008, this was the first time Polis was a key supporter. We are working in partnership with the State GIO and the Indiana Office of Technology. We coordinated with local data stewards; performed data collection, standardization, quality review, and data augmentation; and helped merge the final data sets into the state's internal databases. We developed a new statewide geocoder, finalized documentation, and made the data available to the public for download. The project aim is a seamless set of data layers that include land parcels, road centerlines, address points, and local administrative boundaries. The four data layers are very valuable. This resource is used for a variety of applications, such as permitting activities, validating taxing locations, and providing an accurate and detailed base map. It is critical for the successful implementation of Indiana's next generation 911 system, NG911. The datasets are available at (<https://bit.ly/32MWJye>).

The Indiana Geographic Information Council (IGIC) presented the Data Harvest project the 2021 Special Achievement award. This award recognizes special geospatial projects developed through teamwork that demonstrate commitment to working with others in the Indiana GIS community toward a common goal, while performing important, often pioneering work, to create an outstanding information resource.



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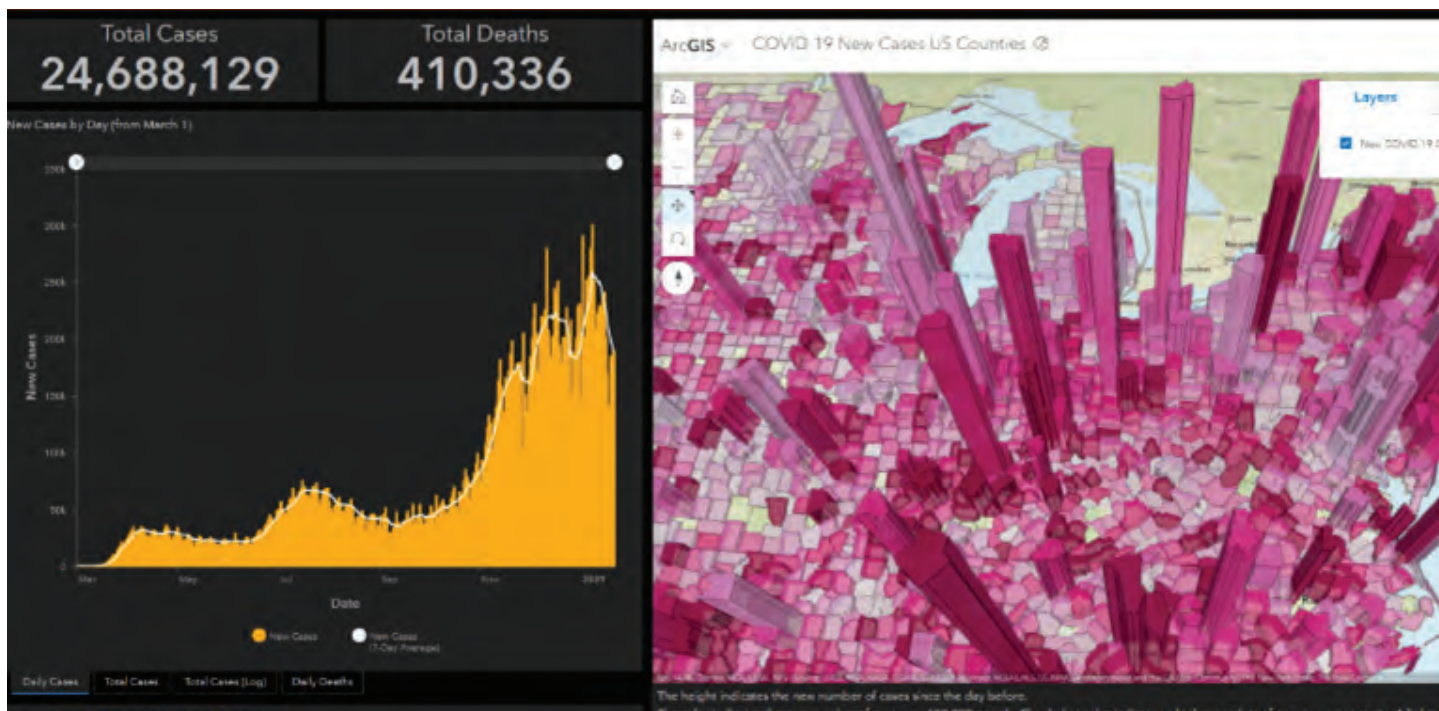
*We supported community disaster efforts for several states*

- Concluded a multi-year project with the South Carolina Emergency Management Division that led to the development of an open-source GIS platform for collecting, displaying, and managing hazard mitigation information.
- Concluded the outreach portion of a multi-year collaboration with the University of Wisconsin for the Georgia Department of Natural Resources, modeling current and potential future impacts of climate change in selected Georgia coastal communities.
- Our Geoinformatics team worked with IUPUI Data Science graduate students on a project to locate low-head dams to improve the database inventory of these structures. The project goal was to automate the detection process. Low-head dams are used to divert water from streams for agricultural and recreational purposes. They pose a danger to kayakers, rafters, and swimmers because the hydraulics during high water can swamp vessels and keep the swimmer pulled under at the base of the dam. The team looked at the feasibility of using orthoimagery data to detect the presence of those structures. The collaboration resulted in a 90% success rate in detecting the potential presence of a low head dam in the provided test images. Recommended future research includes achieving a way for the model to differentiate between low- and high-head dams and obtaining the location of the dams (latitude and longitude). The students presented their efforts to the Polis geoinformatics team and again to their class instructor and other students as their final capstone project. A representative from the Indiana Department of Homeland Security (IDHS) observed the presentation to the geoinformatics team and was impressed with the results. The project team later shared their results with others from Brigham Young University and Utah State University.
- Polis launched a project in partnership with the University of Wisconsin Space Science and Engineering Center to produce an economic and social impact assessment of flood risk for all Wisconsin counties in support of the Wisconsin State Emergency Management Agency's State Hazard Mitigation Plan Update. This project will leverage a variety of data resources and produce reports on risk specific to each county as well as a state level summary. We collaborated with IDHS and FEMA Region V to create multi-hazard mitigation plans for the following counties: Benton, Blackford, Clinton, Crawford, Daviess, Decatur, Franklin, Jay, Gibson, Martin, Spencer, Steuben, Warren, Wells, and White.

*We supported meaningful community projects outside the area of natural disasters*

- The International Association of Fire Chiefs awarded The Polis Center and the IU School of Informatics and Computing—IUPUI's BioHealth Informatics Research Center a grant to support a study on volunteer fire fighter recruitment and retention.
- Developed multiple web applications for the SAVI Coronavirus Data Hub. One dashboard, updated daily, showed the latest information on COVID-19 cases, tests, and deaths in Indiana by county, ZIP code, and school (<https://bit.ly/31g293U>). A second dashboard, also updated daily, showed the latest information on COVID-19 cases and deaths for each U.S. County (<https://bit.ly/3G1CpYd>). An animated map was developed showing COVID-19 hot spots in the continental United States (<https://bit.ly/3xH28SB>). Finally, a study was conducted looking at the impact of COVID-19 on Indiana businesses (<https://bit.ly/3I5dpRD>).





SAVI Coronavirus Data Hub dashboard

### *Education and Capacity Building*

- Developed and taught disaster resiliency practitioner courses and workshops that build competencies in the identification of natural hazards, analysis of their potential economic and social impacts, and solutions in mitigating those impacts. Highlights include:
  - » Initiated development of a suite of courses to be taught within a graduate specialization in Crisis Informatics in SolC's Master of Science program in Applied Data Science. The Crisis Informatics specialization will expand the career opportunities of students and degree holders from both technical and nontechnical disciplines by enabling them to apply data science skills specifically to addressing crises and more generally to other domains. We continue exploring the feasibility, viability, and sustainability of this area of study.
  - » Marianne Cardwell and Kevin Mickey co-taught a course for the IU O'Neil School of Public & Environmental Affairs (SPEA). The course runs under three separate sections taught in the same class: SPEA-J 520 Mapping and Analysis for Public Safety; SPEA-E 529 Application of Geographic Information Systems; and SPEA-V 550 Topics in Public Affairs: Geographic Information Systems.
  - » Developed and piloted a series of multi-day virtual workshops for FEMA Region X. The workshops provided guidance on applying current research, methods, and spatial technologies toward understanding and mitigating social and economic hazards related to earthquakes as well as riverine and coastal flood hazards. We also delivered multiple on-site and virtual workshops on behalf of FEMA's Emergency Management Institute.
- Education delivery for multiple partners (Florida Emergency Management Division, Georgia Department of Natural Resources, FEMA, and others):
  - » "Findings of study that evaluated over 100 scenarios of present and future hurricane-induced wind and flood risk in selected Georgia coastal communities." Kevin Mickey.



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Virtual workshop, Georgia Department of Natural Resources, and the University of Wisconsin. August 27, 2020.

- » “Building Professional Success through Engagement.” Kevin Mickey. URISA GIS-Pro Conference (virtual). October 2, 2020.
- » “Current and potential future impacts of hurricane winds and flooding in Georgia coastal communities.” Kevin Mickey and Dr. Shane Hubbard, University of Wisconsin Space Science and Engineering Center (SSEC). Virtual workshops, Georgia Department of Natural Resources. October 22, 23, 27, and 28, 2020.
- » “Using GIS to Describe and Measure Risks and Vulnerabilities from Flood and Earthquake Hazards.” Kevin Mickey and Dr. Shane Hubbard, University of Wisconsin. Virtual workshop, FEMA Region X (includes Washington, Oregon, Idaho, and Alaska). February 2, 2021.
- » “Advanced Hazus-MH Applications.” Kevin Mickey. Emergency Management Institute, Emmitsburg, Maryland. April 26-29, 2021.
- » “Modeling, Visualizing and Communicating Riverine and Coastal Flood Risk with Hazus-MH and Beyond.” Kevin Mickey and Dr. Shane Hubbard, University of Wisconsin. Virtual workshops, FEMA Region X (includes Washington, Oregon, Idaho, and Alaska). May 17 to 20, 2021.
- » “Survey of Geographic Information Systems for Disaster Management Research, Teaching and Service.” Kevin Mickey. Webinar, 23rd Annual FEMA Emergency Management Higher Education Symposium. May 21, 2021.
- » “Using Geospatial Technologies to Describe and Measure Risks and Vulnerabilities from Florida Hurricanes.” Kevin Mickey. Florida Division of Emergency Management. Tallahassee, Florida. May 25-27, 2021.

#### *Other Notable Achievements*

- The Board of Directors of the Indiana Geographic Information Council (IGIC) elected Marianne Cardwell to serve as President.
- Kevin Mickey became President of the Urban and Regional Information Systems Association (URISA) on Oct. 2, 2020 for a term of one year followed by a one-year term on the board as Immediate Past President. URISA is an international association dedicated to growing and supporting geospatial professionals.

#### **Presentations**

- “ArcGIS Capabilities for Mitigation Planning: State of Indiana 2019 Mitigation Plan Story Map and Other Advancing Technologies.” Marianne Cardwell, Shelby Hines, and Ryan Lanclos. Making Mitigation Work Webinar Series, Natural Hazards Center and FEMA. September 8, 2020.
- “ArcGIS Solutions, Capabilities, and Best Practices for Supporting a Mitigation Planning Process.” Marianne Cardwell. Making Mitigation Work Webinar Series, Natural Hazards Center and FEMA. September 8, 2020.
- “2020 Indiana Data Harvest.” Marianne Cardwell and Megan Compton, Indiana GIO. Webinar, Indiana Geographic Information Council. April 13, 2021.

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- “Structure Level Floodplain Analysis and Flood Elevation Points in Indiana.” Marianne Cardwell and Dave Knipe, Indiana Department of Natural Resources (DNR). Association of State Floodplain Management (ASFPM) annual conference (virtual). May 11, 2021.
  - “Indiana Data Harvest – Lessons Learned.” Marianne Cardwell and Megan Compton, Indiana GIO. Indiana Geographic Information Council (IGIC) conference (virtual). May 26, 2021.
  - “Generating Building Footprints from Indiana’s Lidar Using Arc, GIS Pro.” Marianne Cardwell. Indiana Geographic Information Council (IGIC) conference (virtual). May 26, 2021.
  - “Low Head Dam Project.” Jim Sparks, Sunandan Chakraborty, IU School of Informatics and Computing-IUPUI (SolC), and Manuela Johnson, Indiana Department of Homeland Security. Indiana Geographic Information Council (IGIC) annual conference (virtual). May 24-26, 2021.
  - “Strategic Planning Project.” Jim Sparks; Bill Johnson, AppGeo; and Kate Hickey, AppGeo. Indiana Geographic Information Council (IGIC) annual conference (virtual). May 24-26, 2021.
  - “2021 Data Harvest requirements.” Marianne Cardwell and Megan Compton, Indiana CIO. Data Harvest Webinar. June 16, 2021.

## Associations

- Indiana Geographic Information Council, Member and Marianne Cardwell, President
- Indiana Math and Science Academy, Jim Sparks, Vice Chair of Board of Directors
- URISA, Kevin Mickey, President (October 2020 through September 2021); President-Elect (through Sept 2020); Chair, Professional Education Committee (through Sept. 2019); and Chair Community Resilience Task Force (through Sept. 2020)
- Indiana Geographic Information Council, Kevin Mickey, Board of Directors (Feb. 2018 through Feb. 2020.)
- National Institute of Building Sciences Multihazard Mitigation Council, Kevin Mickey, Past President
- North American Alliance of Hazards and Disaster Research Institutes, Member
- Association of State Floodplain Managers, Member
- Indiana Association for Floodplain and Stormwater Management, Member
- National States Geographic Information Council, Member
- Indiana Silver Jackets, member (a federal state coordinating body). Through this group, we coordinate and facilitate activities related to mitigation of flooding in Indiana. Member organizations in addition to Polis include: Indiana Department of Homeland Security; Indiana Department of Natural Resources; Indiana Department of Transportation; Indiana Geographic Information Office; Indiana Finance Authority; Indiana Office of Community and Rural Affairs; U.S. Army Corps of Engineers Louisville; U.S. Geological Survey; National Weather Service; FEMA Region V; Center for Earth and Environmental Science; IUPUI; Indiana Geological and Waters Survey; Association of State Floodplain Managers; and Christopher B. Burke Engineering.







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## COMMUNITY INFORMATICS

We create community intelligence to support the decision-making process with and for nonprofits, community-based organizations, and government. We build solutions grounded in data, research, and community process. Our work includes building community information systems and decision-support tools; transforming data to extend its utility; developing and analyzing community data to understand social issues and how they affect communities; bringing academic research to practical applications; fostering data literacy; and building capacity in others to use information for decision-making.

### Key Accomplishments

The Polis Center collaborated to support policies, funding allocation, and program planning to address important community issues such as the COVID-19 pandemic, equity, access to basic needs, city policymaking, family financial stability, inclusion in quality education, and more.

We continue to update and maintain one of the nation's largest community information systems. SAVI is entering its 26th year serving nonprofit and community-based organizations in Central Indiana by 1) providing reliable data about communities; 2) creating actionable information; 3) developing tools for data analysis; and 4) building capacity of nonprofit and community-based organizations to use data effectively. This year we made significant progress on the strategic planning for SAVI.

Our key partnerships included WFYI Public Media, United Way of Central Indiana (UWCI), Indianapolis City-County Council, City of Indianapolis Department of Metropolitan Development (DMD), Indianapolis Public Library, Fay Bickard Glick Crooked Creek Neighborhood Center, Martin Luther King Community Center, Fair Housing Center of Central Indiana, IU Public Policy Institute, Marion County Public Health Department, Flanner House, Englewood Community Development Corporation (CDC), Glick Philanthropies, Indiana Management Performance Hub (MPH), and Urban Institute in Washington, DC.

*Increased data literacy and built capacity in the nonprofit community to use data operationally and strategically. This year using SAVI we:*

- Trained over 225 representatives from more than 95 nonprofit organizations and supported over 65 individuals in their use of community data.
- Conducted 29 data literacy workshops as part of a 20-hour training curriculum, including nine hands-on modules that teach participants basic skills to find, analyze, and interpret data to make informed decisions.
- Hosted "Building Community During Crisis" workshops to help organizations use findings from COVID-19 analysis to inform programming and action in areas most impacted by increasing poverty, COVID-19, and inequities. The workshops were made possible by the Glick Fund, a fund of the Central Indiana Community Foundation.

*Partnered with WFYI to host community conversations and provide meaningful insights on key issues*

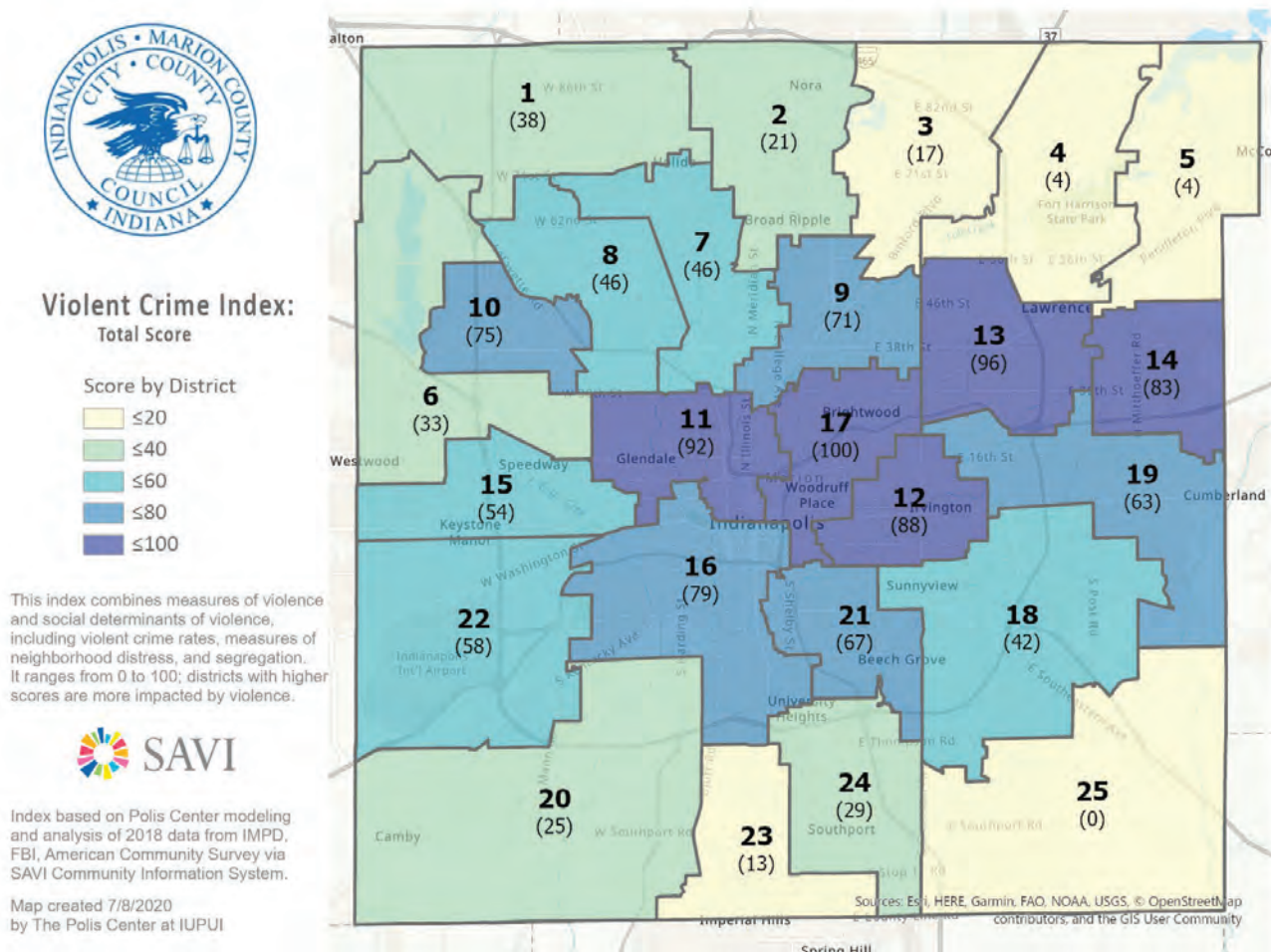
- Convened 424 people in three SAVI Talks events, which are data-informed, cross-sector conversations about the most pressing issues in our community. Topics included the health and economic impacts of COVID-19, equity in economic opportunity, and equity in aging.
- In partnership with WFYI and Indianapolis Public Library, we convened 132 people at two virtual Data & Drafts events aimed at sparking data informed community conversations after



hours around topics affecting the Central Indiana region. These events were funded through a Civic Switchboard grant given to the University of Pittsburgh by the U.S. Institute of Museum and Library Services.

*Partnered with the City of Indianapolis to address inequities across neighborhoods*

- Polis participates in the City's Government Alliance on Race and Equity, providing data and analysis support.
- Developed an equitable funding allocation model for the Indianapolis City-County Council. The model measured violence, social vulnerability, and the impacts of the coronavirus pandemic to show the disproportionate impacts of crime and inequitable access to opportunities. Funding was apportioned based on the model. The analysis also informed a new Council District Crime Prevention Grant program started in April 2021 by The Central Indiana Community Foundation (CICF), the City of Indianapolis Office of Public Safety, and the Indianapolis City-County Council.
- Polis supported the City of Indianapolis' effort to address racial equity. In six workshops hosted by the city during its budgeting process, we presented equity data from SAVI demonstrating how data can be used to inform and measure equitable budgeting and service delivery. There were 71 participants from 30 departments.
- Helped the City of Indianapolis Department of Metropolitan Development (DMD) target grant funds in low-income communities most impacted by COVID-19. We provided online spatial information about recent unemployment claims and COVID-19 cases by ZIP code to support the Lift Indy Program, a multiyear community development program promoting neighborhood revitalization, affordable housing, and placemaking. (<https://bit.ly/31k9QGj>)



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### *Supported teaching, learning, and research at IUPUI*

- Provided training to over 60 IUPUI students from two schools.
- 11 faculty, staff, and students attended SAVI's community data literacy courses.
- Seven faculty, staff, and students from five IUPUI units received data/analysis support.
- Engaged dozens of students annually through coursework, assistantships, service-learning scholarships, and hourly employment. Students collaborate to develop and apply research and informatics solutions to solve pressing community challenges.
- Polis piloted a system for "scraping" Google maps for religious congregations for researchers in the IU O'Neil School of Public and Environmental Affairs and Lilly Family School of Philanthropy. The resulting data will be used by the researchers to create a sampling frame and generate a random sample of organizations for research studies. We created an interface to allow the process to be easily applied to a specified geography (state, region) using a dropdown list. This template also can be modified for use with other entity types beyond religious congregations. We tested the process for Marion County, Indiana, began running the program across the entire United States, and compiled a database that includes every religious congregation on Google Maps.

### *Continued to grow the SAVI COVID-19 Data Hub resources to support the data and research needs of community stakeholders responding to the COVID-19 pandemic*

- Created to provide practitioners and policymakers access critical data resources, this year we grew the hub and supported its use with partners such as United Way of Central Indiana and the Indianapolis City-County Council. (<https://bit.ly/3FZE7cu>)
- Geo-located and provided access to near real-time data to support timely decisions, including monthly 2-1-1 call data, weekly unemployment data, rental assistance applications, COVID-19 counts through direct feed from Indiana Department of Health, and summaries of case-level COVID-19 data by record from Marion County Public Health Department.
- Through our analysis and engagement, we:
  - » Deepened the community's understanding of issues related to poverty, COVID-19, racial equity, and disparities to inform urgent and emerging funding and programmatic decisions.
  - » Identified the areas in Indianapolis most affected by COVID-19, particularly those already disproportionately affected by poverty.
  - » Helped decision and policymakers understand the challenges these areas are facing.
  - » Educated policymakers and agencies on how inequity plays a role in the risk, outcomes, impact, and solutions for recovery.
  - » Anticipated the surge in need for government and human services in these areas during this recovery period and provided relevant, dynamic dashboards to address the need.
  - » Increased the number of people and organizations exposed to research about important community needs.
  - » Built capacity in two neighborhoods experiencing growing poverty and a disproportionate impact of COVID-19 and worked with stakeholders to develop action plans.
- This work earned Polis official nominee recognition in the Community Impact category of The Mira Awards, the state's largest and longest-running technology excellence and innovation recognition program by TechPoint. The Community Impact award celebrates people or organizations that have helped to push Indiana's tech community forward and is making a difference, especially relating to diversity, equity, and inclusion.
- We also received the Special Achievement in GIS award from the Indiana Geographic Information Council for the COVID-19 Data Hub demonstrating the power of teamwork, collaboration, and GIS to address pressing community challenges.





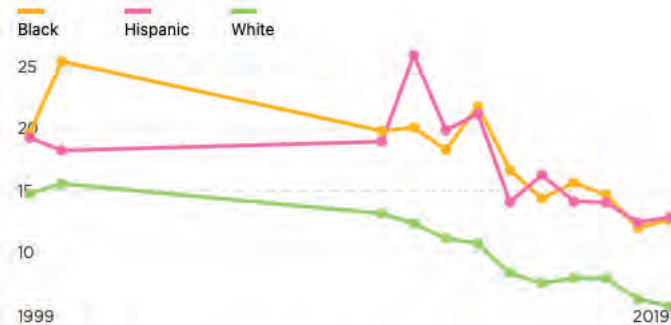
## Measures of Equity

Our equity research agenda will incorporate a community conversation on the key indicators of equity. Until then, here are just a few examples of community-level measures of equity across race, gender, and neighborhoods. For more equity data, visit the SAVI Equity Profile.

[Explore Equity Data Profile](#)

### Racial Equity

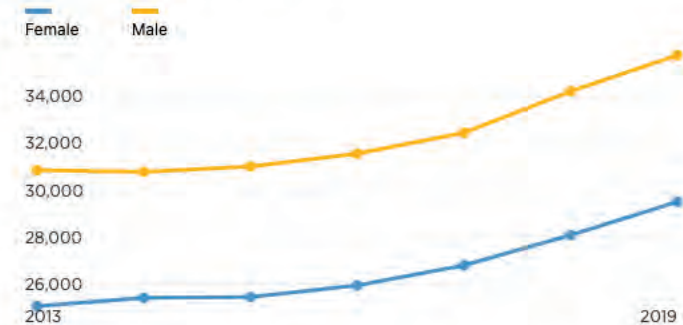
#### Mortgage denial rate by race




 SAVI Source: SAVI Community Information Systems: [View Source](#)

### Gender Equity

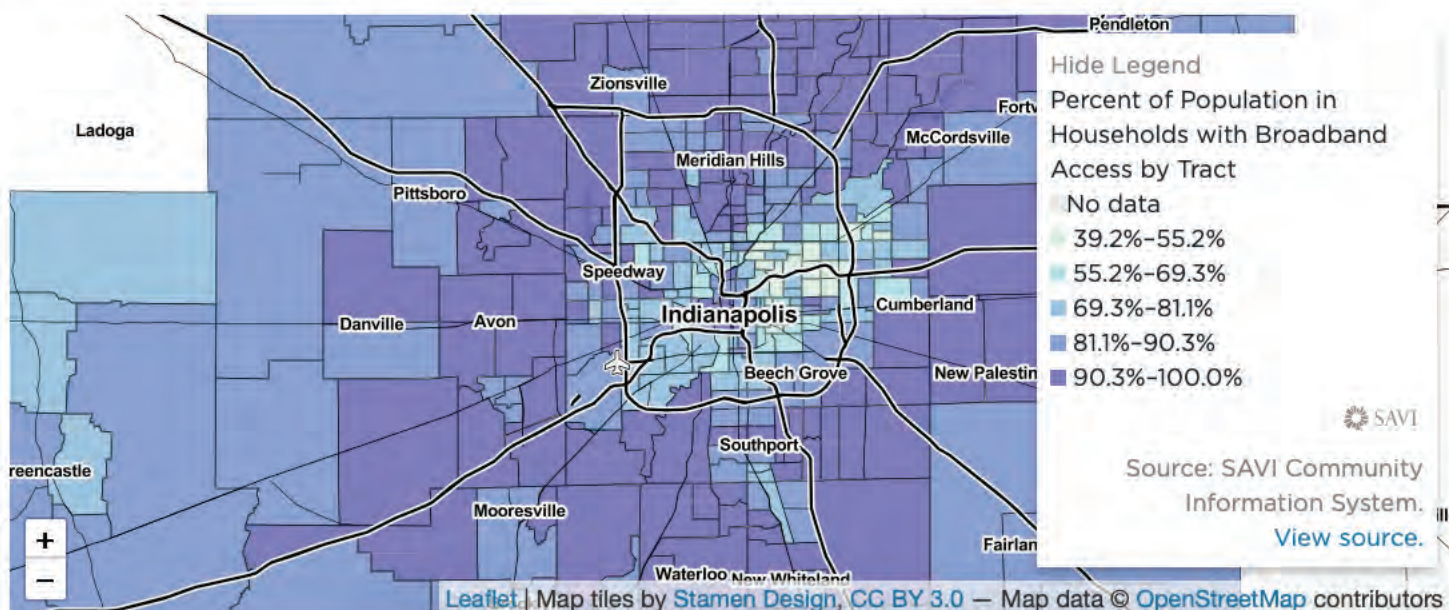
#### Median earnings by gender



 SAVI Source: SAVI Community Information Systems: [View Source](#)

### Neighborhood Equity

#### Broadband access by census tract



## Developed an Equity Data & Information Hub

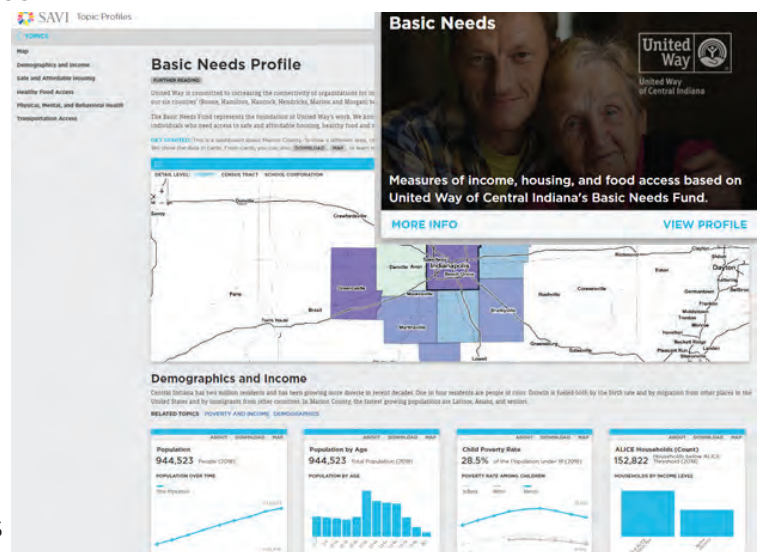
- In early 2021, we started developing the SAVI Equity Data and Information Hub (<https://bit.ly/3DbiTGH>) with input from community stakeholders. It houses content related to Central Indiana's equity in economic opportunity, environment, health, and more. The hub includes information from recent and future SAVI Talks events and reports, an equity data profile for Central Indiana, equity measures, and previous research on equity.

## Supported two major community evaluation efforts

- Completed the Great Families 2020 (GF2020) evaluation. A four-year United Way of Central Indiana (UWCI) program, GF2020 aimed to improve financial stability among families in Indianapolis by using a two-generational approach to service delivery. Polis partnered with the IU Public Policy Institute to provide evaluation and capacity building for the initiative. Polis also summarized findings for project stakeholders and public audiences through a data dashboard, which houses the aggregate results for the program across all neighborhood sites, along with data stories summarizing program outcomes for each of the five areas/neighborhoods: Far Eastside, Near Eastside, Near Westside, Northeast side, and Northwest/Midtown. (<https://bit.ly/3lrpXJf>)
- The Polis Center is part of the Cultivating Communities Support initiative, one of 28 programs funded by Lilly Endowment's Economic Opportunity Initiative. The team, led by Englewood Community Development Corporation, will build capacity in faith communities to participate in the economic and community renewal and reconciliation that is taking place within their neighborhoods. Polis is providing data and capacity building support to project stakeholders in their effort to target resources, inform neighborhood-level strategy and implementation, monitor progress, and measure impact.

## Continued to support the data and information needs of several community partners through research, analysis, and online data tools

- Published a series of blogs, articles, and trend reports in SAVI with compelling visuals and user-friendly language accessible to those who are not data experts. Topics included racial disparities, health, and economic impacts of COVID-19 on communities, emerging needs for human services, and access to food resources.
- Created a new Basic Needs data profile to support United Way of Central Indiana and community-based organizations.
- Updated SAVI's Topic Profiles and Population Profile tools with a simpler, easier interface. (<https://bit.ly/3E9azbX>)
- Updated data for several online tools:
  - » *IndyVitals.org* provides planners, community organizers, and decision makers data about health and sustainability of neighborhoods in Indianapolis.
  - » *IndianImpact.org* supports United Ways and nonprofit organizations across Indiana.



New SAVI Basic Needs profile supports the data needs of United Way of Central Indiana and community-based organizations.



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- » SAVI-United Way Community Assessment Tool supports nonprofit and community-based organizations in Central Indiana.
  - » *GenerosityforLife.org* is a nationwide resource on giving and was created in partnership with Lilly Family School of Philanthropy
  - » Polis continues to partner with Office of Community Engagement to update the IUPUI Community Engagement Map with data from SAVI and the Collaboratory. (<https://bit.ly/3D8Fcgd>)
  - » Leading Indicators for Excellence (LIFE) Study ([foxcitieslifestudy.org](http://foxcitieslifestudy.org)) is updated in collaboration with United Way Fox Cities and provides a data-focused overview of the quality of life in the Fox Cities area of Wisconsin and offers priorities for community action.
  - » Created a dynamic link between two important information systems for Indianapolis—the soon-to-be launched digital Encyclopedia of Indianapolis and the SAVI Community Information System. The linkage creates a richer set of information about communities in Indianapolis. The encyclopedia’s historical and cultural information are fed into to SAVI’s statistical profile, and SAVI’s demographic and socioeconomic data are fed directly into online encyclopedia entries.

## Articles

- “Police Used Force on 1.3 Percent of Black Residents since 2015.” July 19, 2020 (<https://bit.ly/3xJscMX>).
- “Indy Evictions May Reach 34,000 or More in 2020.” August 19, 2020 (<https://bit.ly/3dbZpaq>).
- “The Lasting Impacts of Segregation and Redlining.” June 24, 2021 (<https://bit.ly/3ocOhk7>).

## Reports

- “Health and Economic Impacts of COVID-19 on Neighborhoods.” September 29, 2020 (<https://bit.ly/3licGM0>).
- “Equity in Economic Opportunity: How Race, Place, and Class Impact Economic Mobility in Indianapolis.” March 19, 2021 (<https://bit.ly/3rwdnML>).

## Presentations

- “Ranking City-County Council Districts for Public Safety Funding.” Indianapolis City-County Council’s Public Safety and Criminal Justice Committee meeting, Indianapolis, IN. Sharon Kandris, Jeramy Townsley, and Jay Colbert. July 15, 2020.
- “SAVI.” Unai Miguel Andres. University of Indianapolis Urban Sociology class, Indianapolis, IN. September 25, 2020.
- “Living the Legacy: Making it Local.” Unai Miguel Andres. Indiana Historical Society, Indianapolis, IN. Sept. 29, 2020.
- “Health and Economic Impact of COVID-19 on Neighborhoods.” All IN, WFYI Public Radio program. Patrice Duckett, Ashley Gurvitz, and Matt Nowlin. October 21, 2020 (<https://bit.ly/3pkX0zU>).
- “Developing a neighborhood COVID-19 impact index to inform local planning, policy, and action.” Indiana Pandemic Information Collaborative, Indianapolis, IN. Sharon Kandris, Jay Colbert, and Jeramy Townsley. October 27, 2020.
- “The COVID-19 Impact Index: Informing Policy, Planning, and Action.” Sharon Kandris, Matt Nowlin, and Jay Colbert. Data & Drafts, Indianapolis Public Library, Indianapolis. October 29, 2020.

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- “The Root Causes of Violent Crime.” All IN, WFYI Public Radio program. Unai Miguel Andres, Derris Ross, and Kelsie Strigham Marquis. January 12, 2021.
  - “SAVI Community Assessment Tool.” Jay Colbert. Health Problems in the Community class, IU School of Health, Physical Education, and Recreation, Indianapolis, IN. February 12, 2021.
  - “Equity and Economic Opportunity.” Matt Nowlin and Unai Miguel Andres. Building Community During Crisis Workshop, Indianapolis, IN. March 11, 2021.
  - “Equity and Economic Opportunity.” SAVI Talks, Indianapolis, IN. March 25, 2021. Rebecca Nannery, Erik Steiner (Standford), Matt Nowlin, Jill Sheridan (WFYI).
  - “Using Data to Design Solutions and Measure Impact.” Sharon Kandris and Rebecca Nannery. Christian Theological Seminary’s Faith & Action granting program, Indianapolis, IN. April 6, 2021.
  - Data Governance Panel. Sharon Kandris (Polis), Bob Davis (Indiana), Lena Hackett (Community Solutions), Josh Martin (MPH), Carl McKinley (Regenstrief Institute). Social Determinants of Health Workshop, Indiana Clinical and Translational Sciences Institute (CTSI) and Regenstrief Institute, Indianapolis, IN. April 29, 2021.
  - “Measuring 2Gen - Building a Framework.” Rebecca Nannery (Polis) and Denise Luster, Stephanie Fritz, and Roxy Lawrence from United Way of Central Indiana. Two Generations One Future: 2GEN Summit, Indianapolis, IN. April 29, 2021.

## **Associations**

- American Association of Geographers, Member
- American Planning Association, Member; Environment, Natural Resources and Energy Division, Communications Chair
- Environment, Natural Resources, and Energy Division of the American Planning Association, Unai Miguel Andres, Secretary/Treasurer
- Indiana United Ways, Asset Limited, Income Constrained, Employed (ALICE) Research Advisory Committee
- City of Indianapolis Government Alliance on Race and Equity
- Indy Women in Tech
- IUPUI Diversity Enrichment & Achievement Program (DEAP)
- IUPUI Black Faculty and Staff Council
- National Neighborhood Indicators Partnership (NNIP, Urban Institute, Washington, DC)
- Women & Hi Tech

## **Community Advisors**

Our project diversity requires that we operate several advisory boards to achieve the best and most relevant advice for work. Below is a list of our advisors.

### **Advisory Committee for SAVI Basic Needs Profiles**

- Denise Luster, Vice President of Impact Research and Analytics, United Way of Central Indiana
- Purbasha Dasgupta, Research & Evaluation Manager, United Way of Central Indiana
- Stephanie Fritz, Strategic Research and Analytics Senior Director, United Way of Central Indiana

### **Advisory Committee on SAVI Poverty Research**

- Ryan Brady, Vice President, Glick Philanthropies
- Cheryl Crane, Assistant Professor, Franklin College



- Sheila Dennis, Senior Lecturer, IUPUI
- Emily Hardwick, Operations Director, Indiana CTSI Monon Collaborative
- Jeff Hasser, Administrator of Real Estate and Economic Development, Department of Metropolitan Development, City of Indianapolis
- Michael Howe, Chief Executive Officer, CAFÉ
- Breanca Merrit, Founding Director, Center for Research on Inclusion and Social Policy, IU Public Policy Institute; Chief Health Equity and ADA Officer, Indiana Family & Social Services Administration
- Ian Nicolini, Vice President of Indianapolis Economic Development, Indy Chamber
- Joe Palus, Director of Programs and Evaluation, Fathers and Families Center
- Maury Plambeck, Neighborhood Development Director, Indianapolis Neighborhood Resource Center
- Lindsey Rabinowitch, Program Director, Faith in Action, Christian Theological Seminary
- Jordan Rodriguez, Director of International and Latino Affairs, City of Indianapolis
- Robin Turner, Associate Professor of Political Science, Butler University











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## COMMUNITY HEALTH INFORMATICS

We collaborate with the public health, healthcare, social service, government, and academic sectors to enhance the use of place-based information for improving health and resiliency in Indiana and beyond. We build local capacity to understand and address population health and its social and environmental determinants through community research and analysis, collaboration, and application of advanced information technologies. Our research supports and advances community health improvement planning, population health management, public health intervention, and patient-centered decision-support.

### Key Accomplishments

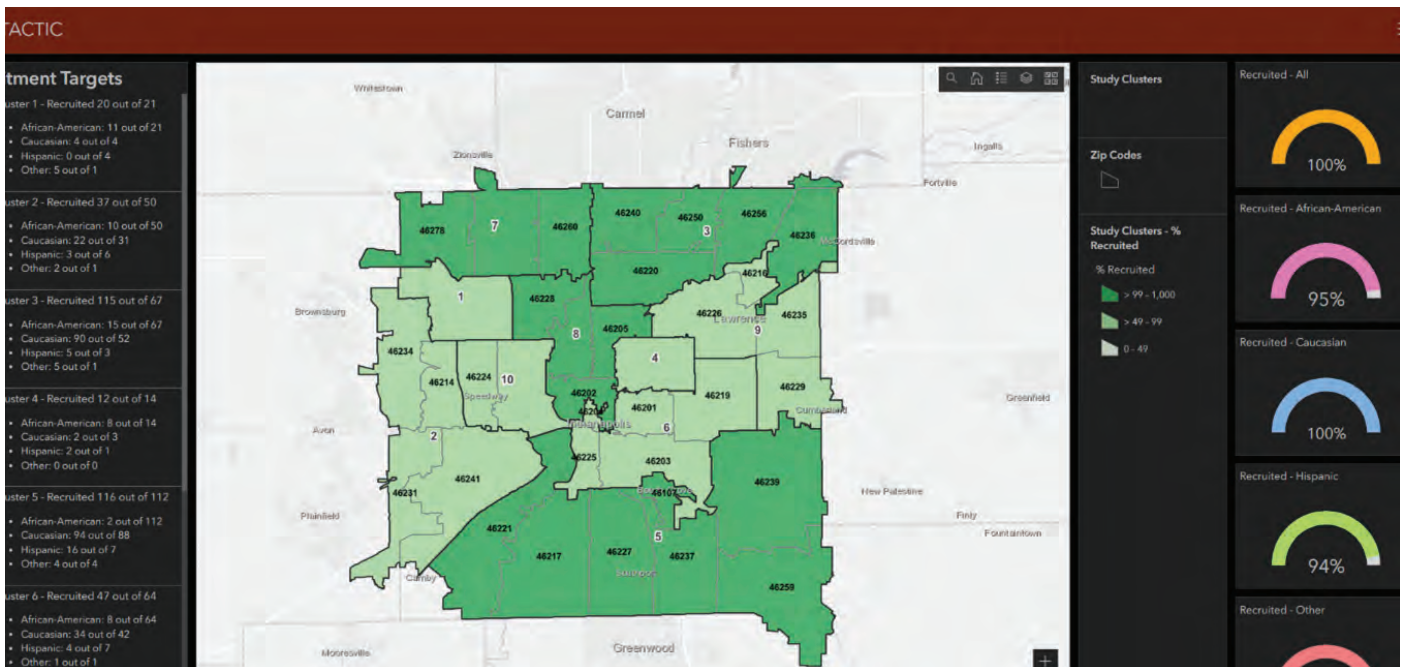
Key accomplishments during FY21 include production of the second edition of the State of Aging in Central Indiana Report, providing a comprehensive assessment of the issues facing older adults in Central Indiana, including those related to their basic needs, living in the community, and health and well-being; initiating the State of Aging in Central Indiana Interactive Information Portal; launching the Diabetes Impact Project (DIP-IN) Community Profile dashboards; developing an online portal for the Chemical Surveillance System (CSS) for the Synthetic Drug Crisis to assist public health agencies and legislators in monitoring and responding to the drug crisis and allow emergency responders and public safety officers to view drug use trends; and supporting COVID-19 pandemic planning and response.

Our key partnerships involved the Central Indiana Senior Fund, a fund of the Central Indiana Community Foundation; the Regenstrief Institute; the Indiana Clinical and Translational Sciences Institute (I-CTSI); the IU School of Medicine; the Center for Research on Inclusion and Social Policy (CRISP) in the IU Public Policy Institute (PPI); the University of Indianapolis Center for Aging and Community; CICOA Aging & In-Home Solution; and the Richard M. Fairbanks School of Public Health.

- Wrote the entry about The Polis Center for BioCrossroads' Book of Data and Organizations, a directory of health data assets in Indiana that will be useful for health and health-related data organizations, community-based organizations, academic scientists, and industry partners. The book features profiles on numerous organizations from the government, nonprofit/academia, and for-profit sectors that manage data assets and social determinants of health data. BioCrossroads collaborates and connects Indiana's research institutions, global companies, philanthropic organizations, and government to promote and grow Indiana's life sciences community and work for the economic health of Indiana.
- Polis launched The Diabetes Impact Project (DIP-IN) Community Profiles about the three focus neighborhoods involved in this project: Northeast, Northwest, and Near West. These community dashboards empower communities and community health workers to understand the context of their neighborhood. Data in the dashboards relate to the DIP-IN project goals of examining community-level risk factors, access to care, and the physical and social environment. This initiative, led by the Richard M. Fairbanks School of Public Health and funded by Lilly Global Health, builds resources and connections within communities of Indianapolis with the goal of preventing diabetes or better managing it so that people can live long and healthy lives.
- In partnership with Regenstrief Institute, the University of Indianapolis Center for Aging and Community, and CICOA Aging & In-Home Solutions, we developed a concept proposal for an \$8.5 million Lilly Endowment Inc. (LEI) Enhancing Opportunities in Indianapolis initiative, "Our Community Cares: Enhancing Economic Opportunities for At-Risk Older Adults and their Families through Community-Based Care Coordination."



- In partnership with the Central Indiana Senior Fund, the Regenstrief Institute; the Center for Aging Research at Regenstrief Institute, and the Center for Research on Inclusion and Social Policy (CRISP) in the IU Public Policy Institute, we presented “Equity in Aging” as part of the SAVI Talks Equity community forum series. This featured findings from the State of Aging in Central Indiana Report, published April 15, 2021.
- Collaborated with Indiana Family and Social Services Administration (FSSA) and Indiana’s Management Performance Hub (MPH) to establish access to the MPH’s Enhanced Research Environment (ERE). Via ERE, we accessed individual-level Supplemental Nutrition Assistance Program (SNAP) data for an analysis of the impact of Indiana’s SNAP program changes on food access.



TACTIC dashboard of targeted ZIP codes

- Researchers at the IU School of Medicine needed representative samples of several Indianapolis-area ZIP codes for its study of COVID-19, “Tracking Asymptomatic COVID-19 through Indianapolis Communities (TACTIC).” We provided demographic analyses of the relevant ZIP codes and created an online dashboard to measure how well volunteer pools mirrored the demographics of those ZIP codes.
- At the request of the FSSA, we conceptualized and analyzed the impact of the changes made to Indiana’s Supplemental Nutrition Assistance Program (SNAP) in response to increased need for food assistance during the COVID-19 pandemic. This was the first project conducted as part of WISE Indiana (Wellbeing Informed by Science and Evidence in Indiana), a partnership between the Indiana Clinical and Translational Sciences Institute and the Indiana Family and Social Services Administration to engage Indiana’s nationally recognized academic experts to evaluate and inform Indiana practices, programs, and policies.
- Polis and the IU School of Medicine (IUSOM) received a \$30,000 Racial Justice Research Fund award for preliminary analysis of racial disparities in cancer incidence and survivability. The preliminary findings will inform a 2022 National Institute of Health (NIH) research grant application. Polis is partnering with faculty from IUSOM’s “Precision Health” Grand Challenge initiative.
- Polis is collaborating with the Regenstrief Institute on the development of the data platform, COVID-19 Research Data Commons (CoRDaCo+SAVI) to facilitate research related to the social determinants of COVID-19 health risk and outcomes. Polis has tagged CoRDaCo clinical data with ~20 custom SAVI variables for use by researchers and community partners.

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## Presentations

- “Health Equity and Data,” Karen Comer and Matt Nowlin. Connections IN Health, Leveraging Connections to Address Health Equity program, Indiana Clinical and Translational Sciences Institute (CTSI), Indianapolis, IN. October 1, 2020.
- “Ongoing work on the Chemical Surveillance System for the Synthetic Drug Crisis,” Karen Comer and Neil Devadasan. IUPUI School of Informatics and Computing’ BioHealth Informatics Department Colloquium, Indianapolis, IN. October 23, 2020.
- “State of Aging in Central Indiana Portal,” Karen Comer and Matt Nowlin. IUPUI School of Informatics and Computing’ BioHealth Informatics Department Colloquium, Indianapolis, IN. October 23, 2020.
- “Polis’ expertise and resources for examining social determinants of health,” Karen Comer. Social Determinants of Health (SDOH) workshop committee, Indiana Clinical and Translational Sciences Institute (CTSI) and Regenstrief Institute (RI), Indianapolis, IN. October 27 – 28, 2020.
- “Identifying Health Disparities,” Karen Comer, Sharon Kandris, and Matt Nowlin. Indiana Youth Institute’s speaker series, Indianapolis, IN. November 12, 2020.
- “Socioeconomic Structural Predictors of 1st Wave COVID-19 in New York City (Spatial Regression Model).” Jeramy Townsley. IU School of Informatics and Computing BioHealth Informatics Colloquia Series, Indianapolis, IN. January 22, 2021.
- “Polis’ vision for the next three-year phase of the State of Aging Report (SoAR),” Karen Comer. Central Indiana Senior Fund (CISF) Advisory Board, Indianapolis, IN. June 10, 2021.
- “Equity & Aging”, Rebecca Nannery, SAVI Talks Indianapolis, April 22, 2021.
- “CoRDaCo+SAVI,” Umberto Tachinardi (Regenstrief Institute) and Karen Comer. Social Determinants of Health (SDOH) Workshop, CTSI and Regenstrief Institute, Indianapolis, IN. April 28, 2021.

## Reports

- State of Aging in Central Indiana Report (Second Edition), Indianapolis, IN. April 15, 2021 (<https://bit.ly/3E9LHAF>).
- “Health and Economic Impacts of COVID-19 on Neighborhoods,” Indianapolis, IN (<https://bit.ly/3rwdnML>).

## Associations

- Indiana Clinical and Translational Science Institute Social and Structural Determinants of Health (SSDOH) Project Development Team, Member
- American Public Health Association, Member
- Indiana Addictions Data Commons Advisory Committee, Member
- Indiana Pandemic Information Consortium, Member
- Modeling Working Group of the Indiana Pandemic Information Consortium, Member
- Community Working Group of the Indiana Pandemic Information Consortium

## Community Advisors

### I-CTSI SSDOH Project Development Team (PDT)

- Nitesh Chawla, PhD, Lucy Family Institute for Data and Society, University of Notre Dame (ND)
- Jessica Brookshire, MS, ND
- Brownsyne Tucker Edmonds, MD, IU School of Medicine (IUSM)
- Carolina Avendano, PhD, Children’s Environmental Health Initiative, ND
- Eneida A. Mendonca, MD, Regenstrief Institute, IUSM



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- Heather A Eicher-Miller, PhD, College of Health and Human Sciences, Purdue University (PU)
  - Kun Huang, MD, IUSM
  - Kristin Valentino, PhD, ND
  - Mohammad Adibuzzaman, PhD, Regenstrief Center for Healthcare Engineering, PU
  - Mark Fox, MD, MPH, PhD, IUSM, ND
  - Bernice A. Pescosolido, PhD, College of Arts & Sciences, IU
  - Sylk M Sotto, EdD, IUSM
  - Tess D Weathers, MPH, Fairbanks School of Public Health
  - Vania Smith Oka, PhD, ND
  - Lane Coffee, MD, IUSM

### **Central Indiana Senior Fund (CISF) Advisory Board**

- Ken Bennett, Executive Director, Center for At-Risk Elders
- Andrew Class, M.D., St. Vincent Stress Center
- Keesha Dixon, Executive Director, Asante Art Institute of Indianapolis
- Susan Guyett, Retired Heather Hershberger, Consultant/former Executive Director of Alzheimer's Association
- Kim Jacobs, Consultant
- James Leich, Retired President, LeadingAge Indiana
- Jane Malkoff, Scout Advocacy
- Ellen Miller, Executive Director, UIndy Center for Aging & Community
- Candace Preston, Veterans Health Administration
- Julie Koegel, Grants Officer, CISF
- Robin Elmerick, Director of Effective Philanthropy, CISF

### **State of Aging in Central Indiana Advisory Committee**

- Gerald Ardis, Flanner House
- Duane Etienne, President Emeritus, CICOA Aging & In-Home Solutions
- Pat Healey, Ascension Health
- Kathryn McEntire, RCI
- Ellen Miller, UIndy Center for Agency and Community
- Michelle Niemier, Center for At-Risk Elders
- Todd Wagoner, Community Health Network
- Carolyn Watts, Retired, Indiana Department of Child Services
- Ruth Williams, Edna Martin Christian Center
- Dustin Ziegler, CICOA Aging & In-Home Solutions Inc.
- Steven Counsell, IU Center for Aging Research

### **Indiana Pandemic Information Consortium National Collaboration**

#### *National Collaboration*

- Peter Embi, Regenstrief Institute
- Nir Menachemi, Richard M. Fairbanks School of Public Health

#### *Biosciences Industry*

- Darshan Shah, BioCrossroads

#### *Modeling*

- Patrick McGill, Community Health Network
- Brian Dixon, Richard M. Fairbanks School of Public Health

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### *Dashboarding*

- Shaun Grannis, Regenstrief Institute
- Tim Tarnowski, IU Health

### *Universities*

- Kosali Simon, IU Bloomington School of Public Health
- Paul Griffin, Purdue Community
- Sarah Wiehe, IU School of Medicine

### *Nonprofit*

- Jackie Dowd, Lilly Endowment Inc.

### *State*

- Connor Norwood, Family Social Service Administration
- Pamela Pontones, Indiana State Department of Health
- Joshua Martin, Indiana Management Performance Hub
- Data Standards and Exchange
- John Kansky, Indiana Health Information Exchange
- John Roach, KSM Consulting

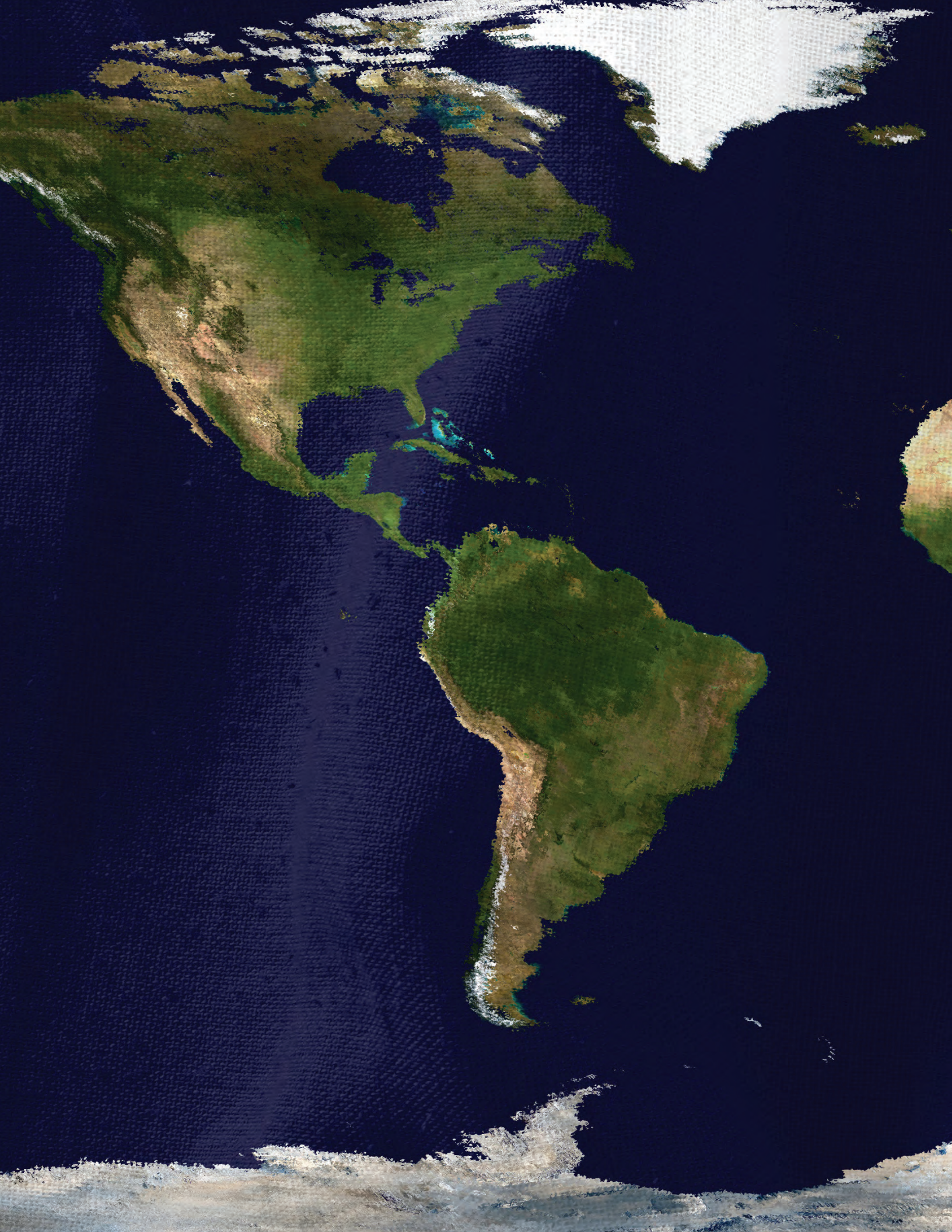
### *Hospitals and Healthcare Systems*

- Andrew VanZee, Indiana Hospital Association
- Matt Browning, Indiana Hospital Association
- Tory Castor, IU Health
- Rebecca Adkins, Ascension Health
- David Kim, Franciscan Alliance
- Jeff Wells, OurHealth
- Craig Wilson, Suburban Health Organization
- Tammy Toscos, Mirro Center for Research and Innovation, Parkview Health

### **Indiana Addictions Data Commons (IADC) Governance Committee**

- Kaitlyn Boller, Indiana Hospital Association
- Charlie Clarke, HC1.com
- Karen Comer, The Polis Center at IUPUI
- Stanley Crosley, Crosley Law Offices
- Brian Dixon, Regenstrief Institute
- Peter Embi, Regenstrief Institute
- Joe Gibson, Marion County Public Health Department
- Shaun Grannis, Regenstrief Institute
- Rachel Lane, Family and Social Services Administration
- Joshua Martin, Indiana Management Performance Hub
- Carl Dean McKinley, Regenstrief
- Carol Rogers, Indiana Business Research Center
- Kosali Simon, IU Bloomington School of Public Health
- Brian Tabor, Indiana Hospital Association
- Nicolas Terry, IU School of Law
- Joshua Vest, Richard M. Fairbanks School of Public Health
- Sarah Wiehe, IU School of Medicine







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## **SPATIAL HUMANITIES**

Spatial Humanities relies upon powerful geospatial technologies and methods to explore new questions about the relationship of space to human behavior and social, economic, political, and cultural development. We partner with an international community of scholars in the humanities, geo-sciences, and computing who are interested in applying geospatial technologies to the disciplines within the humanities to explore new questions in this field. We have collaborated with researchers around the world to explore spatial narratives, advanced visualization, dynamic context, and immersive environments.

### **Key Accomplishments**

The Polis Center continued work with United Kingdom (UK) partners at Lancaster University, University of Leeds, and University of Bristol and U.S. partners at Florida State University, West Virginia University, and Stanford University on issues ranging from Qualitative and Temporal Spatial Representation (QSTR) to deep mapping. As part of this group, we submitted an Economic and Social Research Council (ESRC, UK)-National Science Foundation (NSF, U.S.) proposal to integrate QSTR with natural language processing (NLP) and advanced visualizations to test the relationships among perceptual and geographic space. The proposal received strongly positive reviews and, as of October 2021, had advanced to the final round of review in this highly competitive international competition. We also maintained an ongoing relationship with Academia Sinica, Taiwan's premier research institute, on the role spatial technologies can play in helping researchers to understand humanities problems.

We negotiated with Routledge, part of the Taylor & Francis Group, to move the Series of Spatial Humanities from IU Press. Routledge is a multinational publisher headquartered in the UK and offers a strong global marketing presence and publishes titles that are more compatible with the focus of the series, which now has published eleven titles. Four additional titles are in the queue for publication within the next 18 months.

### **Presentations**

- "From Historical GIS to Deep Mapping: Toward a Robust Spatial Humanities." Spatial Humanities and Urban Experiences in the Long Fifteenth Century, Tours, France, August 2020 (virtual).
- "The Promise of Deep Mapping." Seminar in Advanced Spatial Science, University of Southern California, October 2020 (virtual)

### **Publications**

- "Deep Mapping of Lost Worlds," *Peregrinations: Journal of Medieval Art and Architecture* 7, 4 (2021): 1-4. <https://bit.ly/3l49Gnk>.

### **Associations**

- Virtual Center for Spatial Humanities (VCSH). A collaboration among IUPUI (Polis Center), Florida State University, and West Virginia University.
- Routledge Series on Spatial Humanities. David Bodenhamer, series general editor.
- IJHAC: A Journal of the Digital Humanities (Edinburgh University Press), David Bodenhamer, co-editor.



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## Community Advisors

- **Advisory Board Members Virtual Center for Spatial Humanities**
- John Corrigan, Lucius Moody Bristol Distinguished Professor of Religion and Professor of History, Department of Religion, Florida State University
- Trevor Harris, Professor of Geography, Department of Geology and Geography, West Virginia University
- David Bodenhamer, Executive Director, Polis Center at IUPUI
- Ed Ayers, Tucker-Boatwright Professor in the Humanities, Department of History and President Emeritus, University of Richmond
- 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
- 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
- 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
- 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
- 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
- May Yuan, Ashbel Smith Professor of Geospatial Information Sciences, Geospatial Information Sciences, University of Texas- Dallas









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## OTHER CENTER ACTIVITIES

The Polis Center collaborated with TechPoint's "SOS Challenge," which aimed to help 500 Indiana students who lost summer internships due to the pandemic. Students received a five-week work experience project. There were 90 teams of five to seven students each. Polis staff served as subject matter experts and team coaches. TechPoint is part of the Central Indiana Corporate Partnership (CICP), which brings together chief executives from Central Indiana's prominent corporations, foundations, and university in an effort dedicated to the region's continued prosperity and growth.

Polis worked with SolC graduate students in HCC-Human-Computer Interaction (HCI), BioHealth Informatics (BHI), Clinical Information System (CIS), Health Information Management (HIM), and HCC Department-Data Science disciplines on several Polis projects. These assignments included database design for the Chemical Surveillance System for the Synthetic Drug Crisis (CSS); eliciting and documenting requirements for CSS portal design and implementation of CSS user testing; reviewing the beta version of the State of Aging in Central Indiana portal, conducting user testing, helping development of a short report on the impact of COVID-19 on older adults, recommending best options to present findings online, assessing methods to automate data collection, and quality assurance; UX design and user testing for the digital Encyclopedia of Indianapolis; and looking at the feasibility of using orthoimagery and or LiDAR data to help with a national effort to locate as many low-head dams as possible to improve the database inventory of these structures.

## 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
- Tabitha Campbell, Administrative Assistant

### Geoinformatics

- Jim Sparks, Director
- Marianne Cardwell, GIS Project Coordinator
- Matthew Riggs, Senior GIS Analyst
- Kavya Urs Beerval Ravichandra, GIS Analyst
- Kayla Kauffman, GIS Analyst
- Kari Leer, GIS Analyst

### *Graduate students, Data Science program, SolC*

- Taraka Srikrishna Kantipudi
- Yamini Sri Vandana Penamakuru
- Rajeni Nagarajan
- Sindhuja Madishetty



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## **Community Informatics**

- Sharon Kandris, Director
- Jay Colbert, Data Manager
- John Hayes, Data and Quality Assurance Coordinator
- Deb Hollon, GIS Analyst
- Unai Miguel Andres, GIS and Data Analyst
- Rebecca Nannery, Senior Research Analyst
- Matt Nowlin, Data and Research Analyst and User Experience Designer
- Kim Sarver, Senior Project Manager
- Jeramy Townsley, Research Analyst

### *Contracted Partner*

- Erik Steiner, Co-director, Spatial History Project, Center for Spatial and Textual Analysis, Stanford University

### *Students*

- Jabari Artis, Research Assistant
- Daniel Asefa, Data Analytics Intern, IUPUI Fairbanks School of Public Health (FSPH)
- Jonah Butler, Data Analytics Intern, Ball State University
- Amrita Datta, Design Intern, IUPUI Herron School of Art
- Mandeep Dhillon, Informatics Intern, SoIC
- Christian Dietmeyer, Informatics Intern
- Meenal Jakatdar, Informatics Intern
- Vijay Mittal, ETL Intern, SoIC
- Zachary Null, Data Analytics Intern
- Neha Patil, Informatics Intern, SoIC
- Amadou Sylla, Data Analytics Intern, FSPH
- Saket Talware, Informatics Intern, SoIC
- Ross Tepe, Graduate Research Assistant, Ball State University
- Rashi Tyagi, Programming Intern, IUPUI Computer Science
- Sai Vuppala, Informatics Intern, SoIC
- Akshay Yelmar, UI/UX Intern, SoIC

## **Community Health Informatics**

- Karen Comer, Director

### *Research Associates*

- Unai Andres Miguel, MURP
- Amnah Anwar, MPH, MBBS
- Patrick Lai, PhD ABD
- Rebecca Nannery, MA
- Matt Nowlin, MURP
- Jeramy Townsley, MA

### *Research Assistants*

- Daniel Asefa, SoIC scholarship student, State of Aging Report and Multiple Myeloma
- Sai Duddukuri, Computer Science Intern, Chemical Surveillance System (CSS)

- 
- Anudeep Reddy Inukollu, Computer Science Intern, CSS
  - Akhil Joseph, SolC Health Informatics Capstone intern, Multiple Myeloma
  - Tom Loftus, Public Health intern, Multiple Myeloma
  - Regina Merine, SolC Health Informatics Capstone intern, Multiple Myeloma
  - Amadou Sylla, School of Public Health scholarship intern, State of Aging report and Multiple Myeloma
  - Rashmi Tyagi, School of Science student, State of Aging report
  - Sai Vuppala, SolC scholarship student, State of Aging Report and Multiple Myeloma
  - Basil Wilson, SolC Health Informatics Capstone intern, Multiple Myeloma

#### *Consultants*

- Bart Caylor, Caylor Solutions
- Mariana Lopez-Owens, MPH, La Plaza
- Naomi Penny, PhD, consultant
- Tess Weathers, MPH, Richard M. Fairbanks School of Public Health

#### *Contracted Partners*

- Steve Counsell, MD, IU Center for Aging Research (IU CAR)
- Nicole Keith, PhD, IUCAR
- Breanca Merritt, PhD, Center for Research on Inclusion and Social Policy (CRISP), IU Public Policy Institute (PPI)
- Katie Rukes, MA, CRISP, PPI
- Melissa Sherman, MPH, IUCAR
- Kelsie Stringham-Marquis, MA, CRISP, PPI

### **Systems Development**

- Neil Devadasan, Director of Information Systems and Lead Systems Engineer
- Jay Colbert, Data Manager
- James Dowling, Database Administrator
- Robert Ferrell, Senior Programmer
- John Gona, LAN Technician
- John Hayes, Data and Quality Assurance Coordinator

#### *Students*

- Jason Croddy, Computer Science Intern, DEOI
- Sai Duddukuri, Computer Science Intern, Chemical Surveillance System (CSS)
- Anudeep Reddy Inukollu, Computer Science Intern, CSS
- Lakshmi Shivaram Ponallaghi, Computer Science Intern, DEOI
- Sailesh Vemula, Computer Science Intern, DEOI

### **Professional Education**

- Kevin Mickey, Director

### **Communications**

- Allegra East, Manager



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### *Students*

- Victor Creed, Social Media Coordinator
- Todd Madison, Social Media Coordinator Intern
- Harshal Naik, Social Media Coordinator Intern
- Vibhuti Sharma, Social Media Coordinator Intern

### **Digital Encyclopedia of Indianapolis Students**

- Rio Santos, Design Intern, IUPUI Herron School of Art
- Bhushan Prakash, UI/UX Intern, SolC
- Divya Desabhotla, UX and Quality Control Intern, SolC
- Vaishnavi Chityala, Quality Control Intern, SolC
- Priyanjali Mittal, Quality Control Intern, SolC

## **SUSTAINABILITY**

Our goal is to enter each fiscal year with sufficient income under contract to fund our work for the year. We met this goal for FY21 and entered FY22 with contracted income sufficient to meet our obligations for the next year.





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## Appendix A

### Encyclopedia of Indianapolis Advisors

#### Steering Committee

- David Bodenhamer, Polis
- Jackie Nytes, Indianapolis Public Library
- Sharon Kandris, Polis
- Beth Van Allen, Indianapolis Public Library
- Allegra East, Polis
- Matt Nowlin, Polis
- Suzanne Hahn, Indiana Historical Society
- Keira Amstutz, Indiana Humanities
- George Hanlin, Indiana Humanities
- Chandler Lighty, Indiana State Archives and Records Commission
- Kristi Palmer, University Library at IUPUI
- Ted Frantz, University of Indianapolis Institute for Civic Leadership & Mayoral Archives
- Justin Clark, Indiana State Library
- Sally Childs-Helton, Butler University
- Suzanne Stanis, Indiana Landmarks
- Casey Pfeiffer, Indiana Historical Bureau/Indiana State Library
- Nicole Poletika, Indiana Historical Bureau/Indiana State Library

#### Civic Advisory Committee Members

##### *Co-Chairs*

- Sarah Evans Barker, Sr. U.S. District Judge, U.S. District Court for the Southern District of Indiana
- Lacy Johnson, Senior Partner, Ice Miller
- Rick Fuson, President, Pacers Sports & Entertainment

##### *Members*

- Ellen Annala, previously United Way
- Dan Appel, Gregory & Appel
- Kevin Armstrong, IU Health
- Charles Bantz, IUPUI
- Phil Bayt, Ice Miller
- Jerry Bepko, Chancellor Emeritus, IUPUI
- Phil Borst, Southside veterinarian
- Brian Bosma, former Speaker of the House
- Bill Browne, Ratio Architects
- Tiffany Browne, Historic Indianapolis
- A'Lelia Bundles, Author and Public Speaker
- Moira Carlstedt, Indiana Neighborhood Housing Partnership
- Brad Chambers, Buckingham Companies
- Molly Chavers, Central Indiana Community Foundation
- Murray Clark, Faegre Baker Daniels
- William Enright, Retired, Second Presbyterian and Lake Institute
- David Eskenazi, Sandor

- 
- Dan Evans, formerly IU Health
  - Greg Fehribach, The Fehribach Group
  - Nate Feltman, Indianapolis Business Journal
  - Claudia Fuentes, Marion County Treasurer
  - Charlie Garcia, C. Garcia and Associate
  - Marianne Glick, Glick Philanthropies
  - Lena Hackett, Community Solutions
  - Michael Huber, Indy Chamber
  - Rebecca Hutton, Leadership Indianapolis
  - Martha Lamkin, Women4Change BOD
  - Maggie Lewis, City County Council
  - Karen Lloyd, Community Health Network
  - Teresa Lubbers, Indiana Commission for Higher Education
  - Rose Mays, Professor Emerita, IUPUI
  - Mark Miles, Penske Entertainment Corp.
  - Doran Moreland, Ivy Tech
  - Jim Morris, Pacers Sports & Entertainment
  - John Myrland, Old National Bank
  - Jackie Nytes, Indianapolis Public Library
  - Vop Osili, President-City County Council
  - William Plater, Chancellor's Professor emeritus
  - Greg Porter, State Representative
  - Cherrish Pryor, State Representative
  - Maria Quintana, Q2U Strategic Advisory Group
  - David Resnick, Katz, Sapper & Miller
  - Brent Rockwood, Butler University
  - Joyce Rogers, VP for Development and External Relations, IU
  - Mikal Saahir, Nur-Allah Islamic Center
  - Sandy Sasso, Women4Change BOD
  - Jerry Semler, Retired, One America
  - Yvonne Shaheen, Retired, Long Electric
  - Rachel Simon, Herbert Simon Family Foundation
  - K.P. Singh, KP Singh Designs
  - Adrienne Slash, Community Health Network
  - Joe Slash, Retired
  - Maribeth Smith, Maribeth Smith & Associates
  - Joanna Taft, Harrison Center
  - James Taylor, John Boner Neighborhood Center
  - Gene Tempel, IUPUI
  - Michael Twyman, InExcelsis
  - Ryan Vaughn, Indiana Sports Corp.
  - David Wantz, Independent Colleges Indiana
  - Mike Wells, REI Investments, Inc.
  - Susan Williams, Retired, Indiana Sports Corp.



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## Appendix B

### Religion and Urban Culture Indianapolis Advisors



#### Clergy Advisory Committee

- Bishop Jennifer Baskerville-Burrows, Episcopal Diocese of Indianapolis
- Lori Bievenour, Senior Pastor, St. Peters United Church of Christ
- David Coats, Former Vicar General Archdiocese of Indianapolis
- Rob Fuquay, Senior Pastor, St. Luke's United Methodist Church
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- David Hampton, Deputy Mayor, City of Indianapolis (formerly Senior Pastor, Light of the World Christian Church)
- Chris Henry, Senior Pastor, Second Presbyterian Church
- Brett Krichiver, Senior Rabbi, Indianapolis Hebrew Congregation
- Clarence Moore, Senior Pastor, New Era Church
- Derek Nelson, Director, Wabash Pastoral Leadership Seminar
- Rob Saler, Director, Center for Pastoral Excellence (CTS)
- Tim Shapiro, President & CEO, Center for Congregations
- Martin Wright, Pastor, Ogilville Christian Church

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- Rev. Patrick B Eidelman, St. Mary's Catholic Church
- Rev. Ronnie Bell, Cumberland United Methodist Church
- Lori Bievenour, St. Peter's United Church of Christ
- Aaron Brockett, Traders Point Christian Church
- Luther Brunette, Cornerstone Lutheran
- Shane Fuller, Dwelling Place Nora
- Rob Fuquay, St. Luke's United Methodist Church
- Rev. Bere Gil Soto, Iglesia Hermandad Cristiana
- John Girton, Jr., Christ Missionary Baptist Church
- Rev. Robert Heimach, Irvington Presbyterian Church
- Rev. Chris Henry, Second Presbyterian Church
- Rob Hock, Southport Presbyterian Church
- Rev. Dr. Stephen Hre Kio, Chin Baptist Church Southport
- Dr. James Anthony Jackson, New Beginnings Church
- Rev. Dr. Phillip Karl James, Mt. Zion Baptist Church
- Jeffrey A. Johnson, Eastern Star
- Rabbi Brett Krichiver, Indianapolis Hebrew Congregation
- Dr. Gray Lesesne, Good Samaritan Episcopal
- Chet Martin, Avon Light and Life Free Methodist Church
- Linda McCrae, Central Christian Church
- Melissa Millis, Trinity Church
- Clarence Moore, New Era Church
- Chris Philbeck, Mt. Pleasant Christian Church
- Janae Pitts-Murdock, Light of the World Christian Church
- Steve Poe, Northview Church
- Father Todd Riebe, Christ the King



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- Rev. Theodore Rothrock, St. Elizabeth Seton Catholic Church
  - Father Dennis Schafer, St. Patrick's
  - Kenneth Sullivan, New Direction Church
  - Erik Thein, Common Ground
  - Rev. Zhigang Zang, Chinese Community Church
  - St. Monica Catholic Church
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The Polis Center  
IU School of Informatics and Computing-IUPUI  
535 W. Michigan Street | Indianapolis, IN 46202  
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