



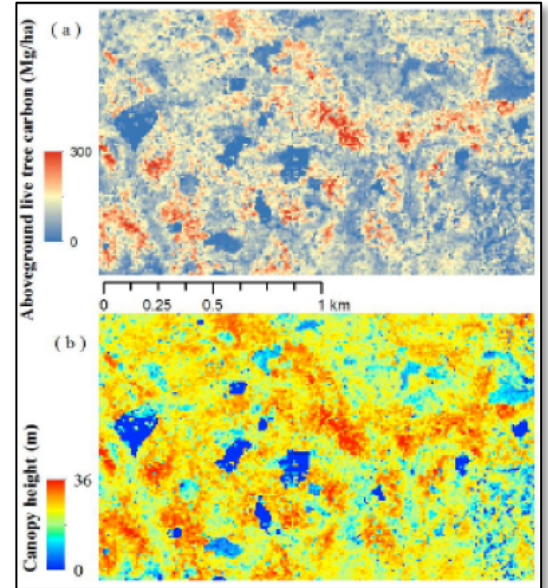
INDIANAVIEW 2018 - 2019



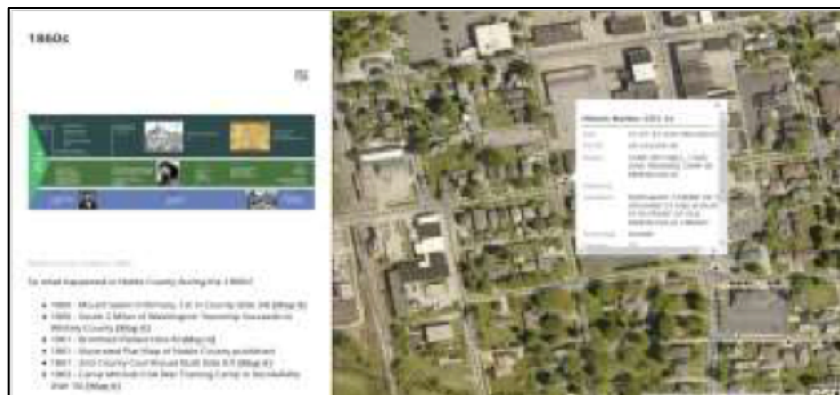
INDIANAVIEW HISTORY AND SUCCESSES

IndianaView is a state-wide consortium of 15 universities and institutions in Indiana. The vision for IndianaView is to facilitate and promote the sharing and use of public domain remotely sensed imagery (from both satellite and aerial platforms) by Indiana universities, four-year colleges, community colleges, K-12 institutions, libraries, museums, government agencies and the private sector. IndianaView was accepted into the national AmericaView consortium in 2004 with Purdue University as the lead institution. Programs and activities sponsored by IndianaView include:

- Mini-grants have supported 29 projects conducted in seven institutions. These projects promote the use of remotely sensed imagery in K-16 education, facilitate the use of remote sensing data to address state-wide issues such as urban development, and provide easier access to remote sensing image data. (www.indianaview.org/fact_sheets.html)
- Student Scholarships provided undergraduate and graduate students with opportunities to participate in remote sensing projects that are relevant to the state and/or their community. (www.indianaview.org/fact_sheets_student_scholarships.html)
- Interactive class lessons for high school students to learn geospatial skills were developed as a result of a partnership with the Geography Educators' Network of Indiana. (www.iupui.edu/~geni)
- Freeware application and tutorials are available for analyzing remotely sensed imagery and determining long-term impacts of a change in land use. (engineering.purdue.edu/~biehl/MultiSpec)



Student scholarship project to model carbon in Indiana state forests. (a) High-resolution forest carbon map in Yellowwood State Forest, Indiana; (b) LiDAR-based canopy height metric.



Mini-grant project involving IGIC & GENI working with a Noble County High School educator and middle school students to generate GIS lesson materials and an ArcGIS Online Story Map Timeline for Noble County.



A graduate student is helping middle school students work through a flood activity using MultiSpec Online during a geospatial session for Purdue's TOTAL Camp in June 2017.

IndianaView is a member of the AmericaView Consortium, a nationally coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state. AmericaView is funded by USGS grant agreement G18AP00077.



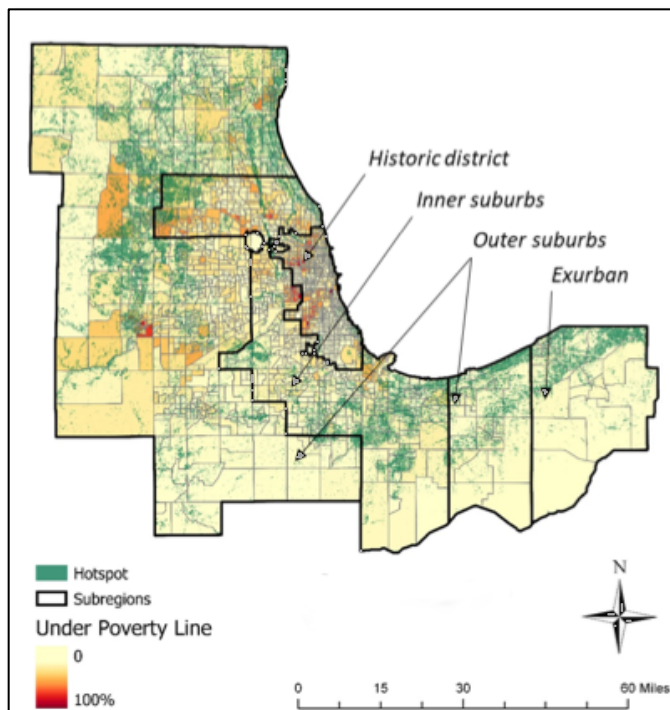
AmericaView Website:
www.AmericaView.org
 Christopher McGinty, Executive Director:
chris.mcginty@americaview.org
 Lisa Wirth, Program Manager:
lisa.wirth@americaview.org
 Brent Yantis, Board Chair:
rodnev.yantis@louisiana.edu

INDIANAVIEW 2018 - 2019 ACTIVITIES

IndianaView student scholarship program

IndianaView provided scholarships for six undergraduate & graduate students from the member educational institutions to participate in geospatial projects. The scholarships represented three of the educational institutions in the IndianaView consortium.

Each of the students provided a fact sheet about their project and a testimonial on how the scholarship assisted them. Examples of activities that the students completed include: study compatibility of aerial and terrestrial lidar to upscale detailed measures of canopy structure to large spatial extents; examine the collective impacts of time since invasion by emerald ash borer, canopy structure and ash tree mortality on understory plant invasion in Indiana; study the distribution of high-rate multi-ecosystem service providing areas (hotspots) across the Chicago region in relation to local social context; evaluate a method for generating long-term and consistent remotely sensed nighttime light (NSTL) data; study important values cemeteries provide to an urban landscape such as their relationship to urban wildlife; and air-sea interactions play a crucial role on the onset of monsoon intra-seasonal oscillations.



Distribution of hotspots (green) in relation to percentage of people living under poverty line across subregions in the Chicago area.



Portable Canopy Lidar (PCL) system being used to measure 2-D forest canopy structure. The PCL system is mobile and efficient for measuring canopy structure.

Scholarship Testimonial: With the support of IndianaView, I participated in the Student Honors Paper Competition of Remote Sensing Specialty Group of AAG 2019 and won the first place. (NSTL project)

IndianaView mini-grant program

IndianaView provided a means for partner institutions to participate in IndianaView via geospatial projects relative to the state of Indiana. Two mini-grants were funded during 2019. One mini-grant was a project to promote education and training in UAV mapping/remote sensing and augmented reality (AR) visualization techniques. The resources and videos developed by this project will be made available online by the mid-2019-20 academic year to share with the wider Indiana and global community.

Another mini-grant developed a time series of land use and land cover maps for Marion County (Indianapolis) from 1998 to 2017 using Landsat data. The features used for the image classifications included solar reflectance values, land surface temperature, and several spectral indices.

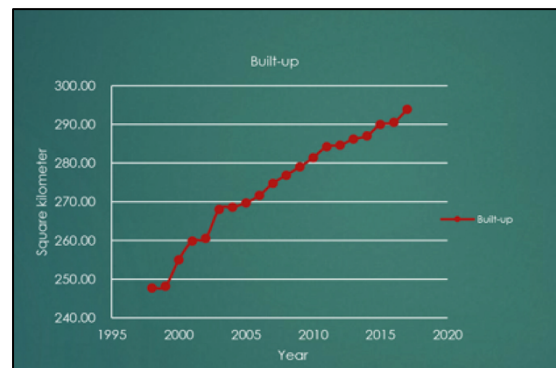


Illustration of the change of Built-up area from 1998 to 2017 in Marion County, IN.

IndianaView Principal Investigator:

NICOLE KONG

PURDUE UNIVERSITY

765-496-9474

kongn@purdue.edu



www.indianaview.edu