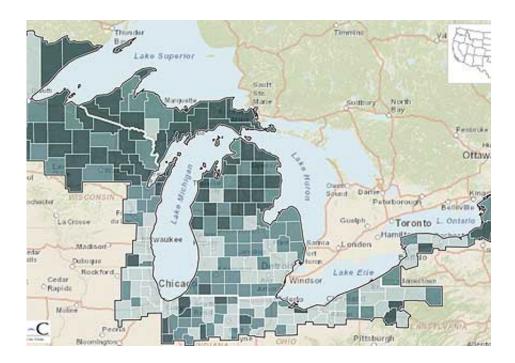


Interactive map to support climate change adaptation planning in Great Lakes region

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Screenshot of interactive map that shows how the social and economic characteristics of the Great Lakes Region are impacted by regionally specific changes in climate. It was developed in partnership with the Great Lakes Adaptation Assessment for Cities at the University of Michigan.

A jointly developed interactive map launched this month by the University of Michigan's Graham Sustainability Institute and Headwaters Economics gives Great Lakes policymakers and decision-makers easy access to targeted data to help them plan for, and adapt to, the regional impacts of climate change.



The free online tool—the "Socioeconomics and Climate Change in the Great Lakes Region" map—provides social, economic and demographic statistics on 225 counties in the region, overlaid with detailed data about municipal spending, land-use change and climate-change characteristics.

It was co-developed by the Graham Sustainability Institute (as part of its Great Lakes Adaptation Assessment for Cities project, known as GLAA-C) and Headwaters Economics, an independent, nonprofit research group. The Kresge Foundation funded and facilitated the collaboration.

"We anticipate that the impacts of <u>climate variability</u> and change will be felt differently in different regions of the Great Lakes based on their economies, infrastructure and vulnerable populations," said Don Scavia, director of the Graham Sustainability Institute. "This collaboratively built resource is designed to give these communities some of the solutions-focused, place-based <u>climate science</u> they need to adapt."

Elizabeth Gibbons, GLAA-C project manager and research area specialist, further explained: "The interactive map is geared toward helping stakeholders see how changes in climate interact with social, economic and land-use changes across the region. We're really hoping it proves to be a valuable tool for all the municipalities who use it."

Matt Naud, sustainability coordinator for the city of Ann Arbor, was one of several regional officials and practitioners who served on the project planning steering committee over the past year—including a full-day design roundtable this past spring. He said there was a very strong planning process for deciding what content the tool should display.

"This interactive map displays a lot of valuable information for telling the story of climate vulnerability for different regions in the state," he said. "This could really help drive some important discussions about economics and climate resiliency."



Megan Hunter, chief planning officer for the city of Flint, said, "We see a lot of vulnerability in our city because of age and poverty. By taking an even closer look at our demographics and infrastructure data through the mapping tool, we can clearly see how cooling centers and other actions are key to responding to our residents' needs."

According to John Nordgren, senior program officer for the Kresge Foundation's Environment program, this kind of community-specific planning to adapt to <u>climate change</u> is exactly what the Kresge Foundation was seeking when it supported the Graham Sustainability Institute and Headwaters Economics in collaborating on the interactive map.

Ray Rasker, executive director of Headwaters Economics, said the new <u>interactive map</u> is a data-rich, user-friendly visual tool.

"Whether end users just want to have a quick look at core content or really dive in for details, they should be able to easily find information to help them better understand <u>climate</u>, its potential impacts, and how they can help their communities adapt," Rasker said.

The online tool—which includes historical data from 1951 to 2011—covers counties in the states of Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania and New York. U-M and Headwaters Economics expect to co-develop a similar map for Ontario in the months ahead.

Multiple people contributed toward planning and previewing the resource, including stakeholders from the state of Michigan's Community Health Department; the cities of Ann Arbor, Cleveland, Dayton, Flint and Toledo; U-M faculty members from urban planning, public health and natural resources and environment; and staff members from the Graham Sustainability Institute, the Great Lakes Integrated



Sciences and Assessments Center and Headwaters Economics.

The online map is available for use at no cost through both the Graham Sustainability Institute and Headwaters Economics websites.

More information: Interactive map on Graham Sustainability Institute website: www.graham.umich.edu/glaac/great-lakes-atlas
Interactive map on Headwaters Economics website: headwaterseconomics.org/intera ... we/great-lakes-atlas

Provided by University of Michigan

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