

# Indiana University's Environmental Resilience Institute

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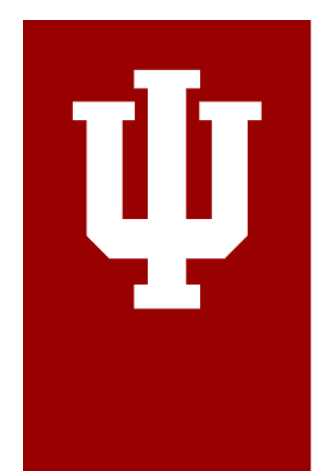


# Environmental Resilience Institute

The mission of the Environmental Resilience Institute is to enhance resilience to environmental change in Indiana and the Midwest by accurately predicting impacts and effectively partnering with communities to implement feasible, equitable, and research-informed solutions.

“ In just a few short years, the Environmental Resilience Institute has proven invaluable to cities and towns. The data and educational resources being provided by the institute are critical new tools that local officials have never had before.”

Matt Greller, Accelerated Indiana Municipalities CEO

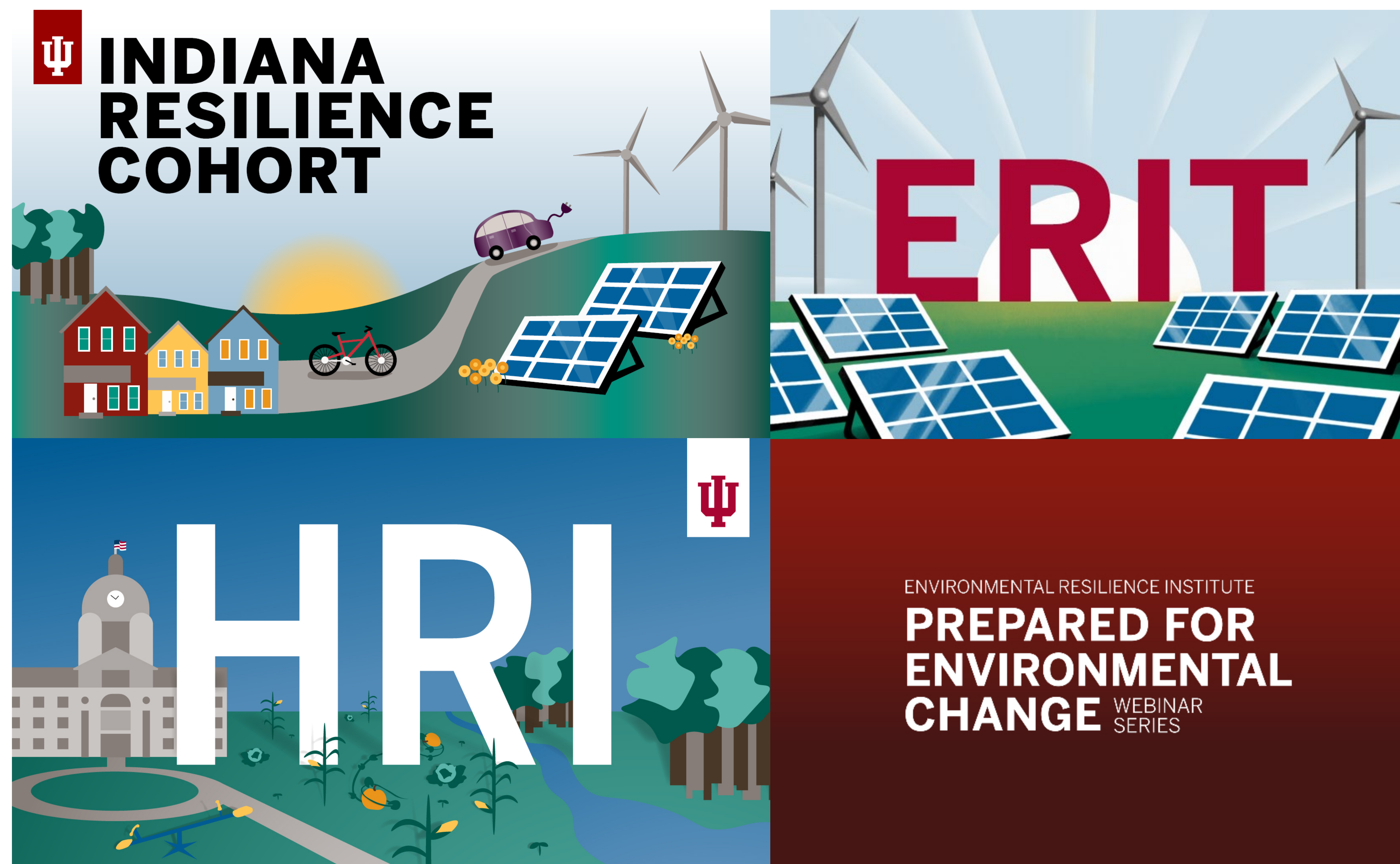


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# Tools and Resources





# Impact of the Resilience Cohort

## Community-scale Greenhouse Gas (GHG) Inventories

**17**

Local governments  
have completed GHG  
inventories

**22**

Local governments are  
completing a GHG  
inventory in 2021

**~50%**

of the state's population  
will be covered by  
a GHG inventory  
by December 2021

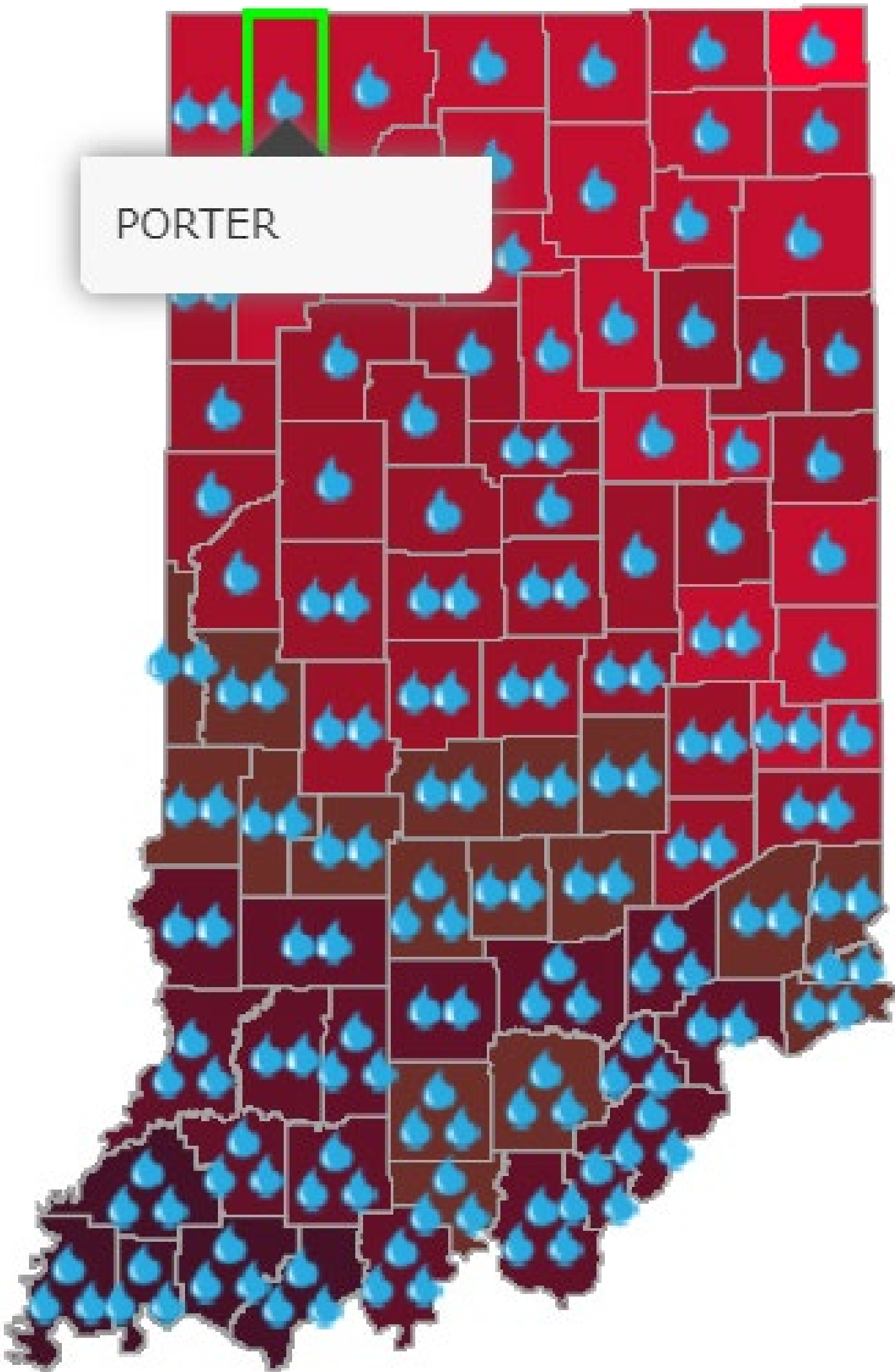
Funders:



Partner:



# Hoosier Resilience Index



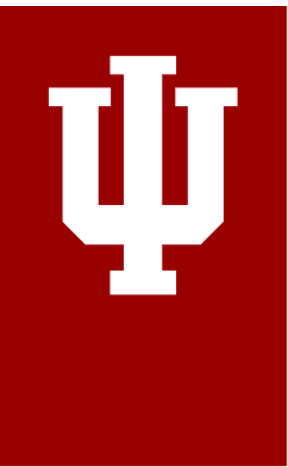
[hri.eri.iu.edu/](http://hri.eri.iu.edu/)

## Extreme Heat

### Average Number of Extreme Heat Events per Year

Porter County

Timeframe	High Heat Days <i>i</i>	High Heat Nights <i>i</i>	High Heat Days and Nights <i>i</i>	Total Days with Extreme Heat Events* <i>i</i>
Current <i>i</i>	8	7	7	23
2050s - Medium Emissions Scenario <i>i</i>	21	12	27	60
2050s - High Emissions Scenario <i>i</i>	24	13	37	73



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# Hoosier Resilience Index

## Completed Readiness Assessments

Bloomington

Clarksville

Crawford County

Culver

Dyer

Fishers

Fort Wayne

Goshen

Huntington

Lafayette

Monroe County

Noble County

Richmond

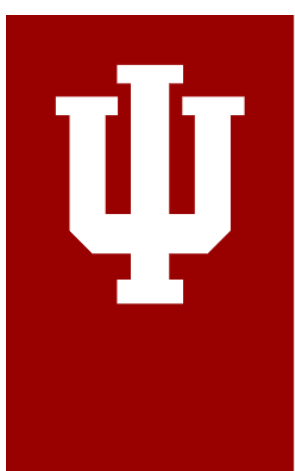
Spencer

Tippecanoe County

West Lafayette

Whiting

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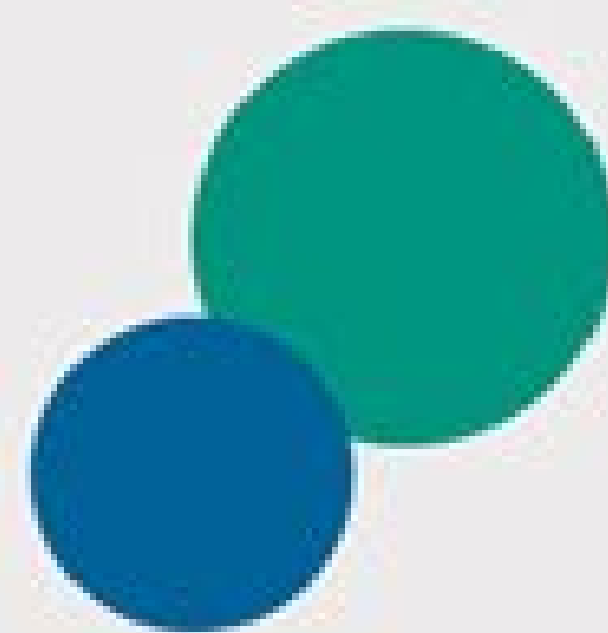


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# THE IMPACT OF



OVER  
**50K**  
PAGEVIEWS

ERIT has been viewed over 50,000 times by over 41,500 unique visitors in 65 countries and ALL US states.

SINCE ITS LAUNCH IN SEPTEMBER 2018, ERIT HAS PROVIDED RESOURCES TO LOCAL GOVERNMENTS IN INDIANA, ACROSS THE MIDWEST, AND THROUGHOUT THE WORLD

Before ERIT launched, very few resources existed that were relevant to Midwestern local governments. Now, the following resources are available to help local governments of all sizes in our part of the country.

**75**

**CASE STUDIES**

Including 43 written by ERI staff

**37**

**IMPLICATIONS  
PAGES**

**41**

**STRATEGIES PAGES**

Including over 1,000 individual strategies

**85**

**FUNDING  
OPPORTUNITIES**

# Environmental Resilience Institute Toolkit

## Air Quality

- ☐ Indoor Air
- ☐ Outdoor Air

## Critical Infrastructure

- ☐ Buildings and Housing
- ☐ Communications
- ☐ Energy Generation, Procurement and Transmission
- ☐ Transportation Systems
- ☐ Waste and Wastewater

## Ecosystem Protection

- ☐ Estuaries
- ☐ Invasive Species and Pests
- ☐ Lakes, Rivers and Streams
- ☐ Maintaining Biodiversity
- ☐ Parks, Trees and Forests
- ☐ Urban Ecosystems
- ☐ Wetlands

## Energy

- ☐ Alternative and Renewable Energy Sources
- ☐ Distribution Mechanisms
- ☐ Energy Efficiency

## Equity and Justice

- ☐ Climate and Environment
- ☐ Energy
- ☐ Food
- ☐ Housing

## Food and Agriculture

- ☐ Food Distribution and Access
- ☐ Rural Agriculture
- ☐ Urban Gardens and Farms

## Policies and Planning

- ☐ Disaster Preparedness and Emergency Response
- ☐ Greenhouse Gas Inventories and Mitigation
- ☐ Resilience Planning
- ☐ Risk and Vulnerability Assessments
- ☐ State and Local Policies

## Public Health

- ☐ Air Quality
- ☐ Extreme Heat
- ☐ Mosquitoes, Ticks and Other Vectors
- ☐ Water Quality

## Solid Waste Management

- ☐ Contaminated Site Management
- ☐ Disaster Debris Management
- ☐ Waste Reduction and Recycling

## Transportation

- ☐ Alternative Fuels
- ☐ Multi-modal Transportation
- ☐ Walkable Communities

## Water Management

- ☐ Algal Blooms
- ☐ Drinking Water
- ☐ Drought
- ☐ Erosion and Sedimentation
- ☐ Flooding
- ☐ Green Infrastructure
- ☐ Saltwater Intrusion
- ☐ Sea-level Rise

## New Case Studies

Evansville’s solar technician training program for low-income residents

NWI’s voluntary air quality improvement program

Richmond’s solar potential map

Plymouth’s EV charging infrastructure

Lucas County, OH’s nutrient source inventory

New Albany’s walkable downtown



# Prepared for Environmental Change Webinar Series



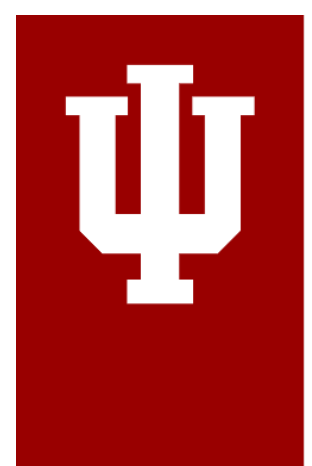
## Community Solar Projects to Enhance Resilience and Promote a Just Energy Transition

SEPTEMBER 8, 12-1PM EST



## Green Infrastructure and Stormwater Management

OCTOBER 13, 12-1PM EST



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# CIVIC Workbook

## Climate Initiative Value Calculation

### Conduct a Benefit Cost Analysis:

- Bike Share
- Electric car share
- Roundabouts
- Recycling demolition materials
- Landfill methane capture and reuse
- Residential composting
- A pay-as-you-throw trash program
- and more



ERI will release more initiatives this summer





# Beat the Heat Program

## Clarksville and Richmond

They receive:

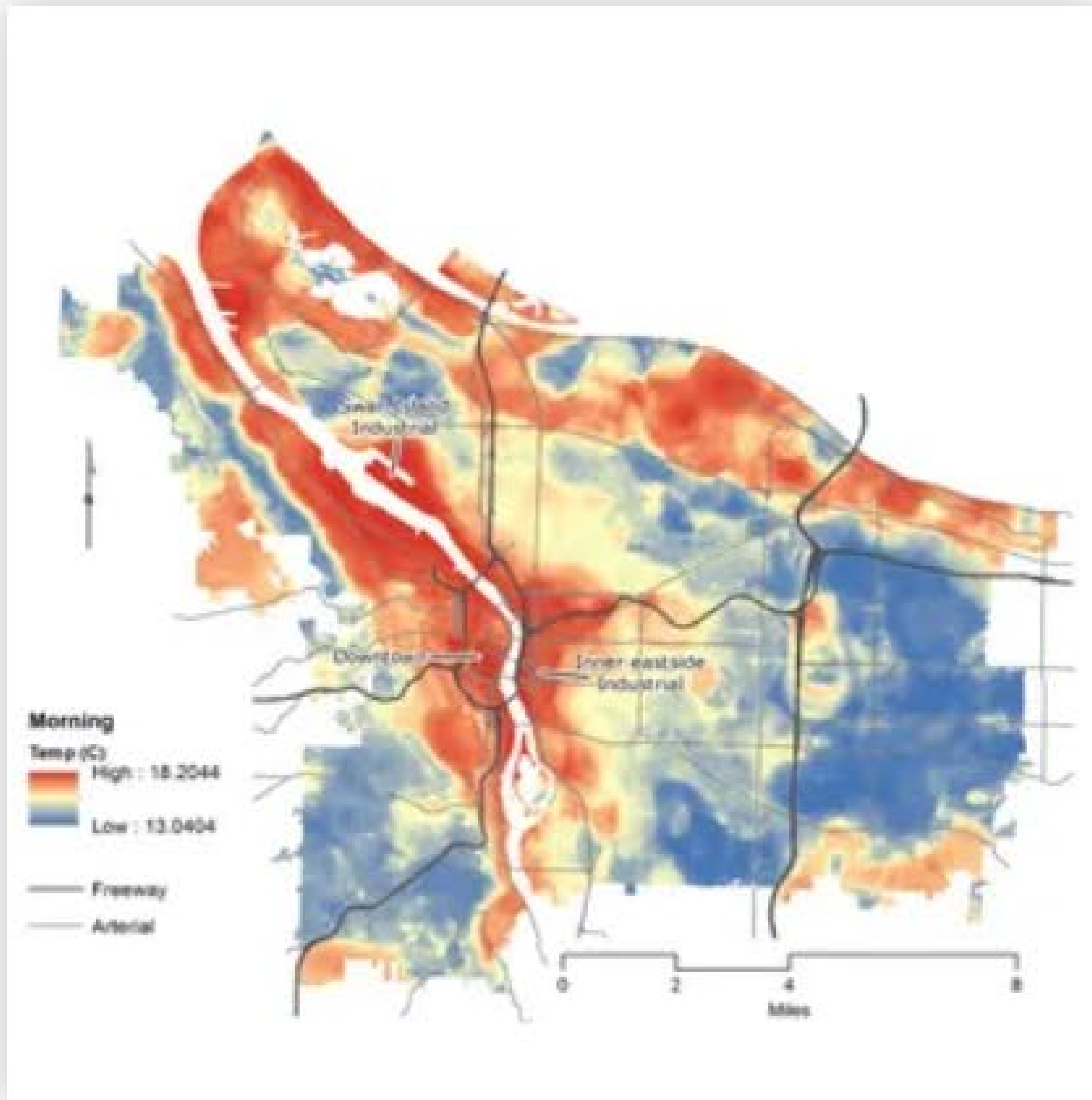
- Funding for a full-time staff person for two years
- Funding for some program activities
- Technical assistance and guidance

Deliverables:

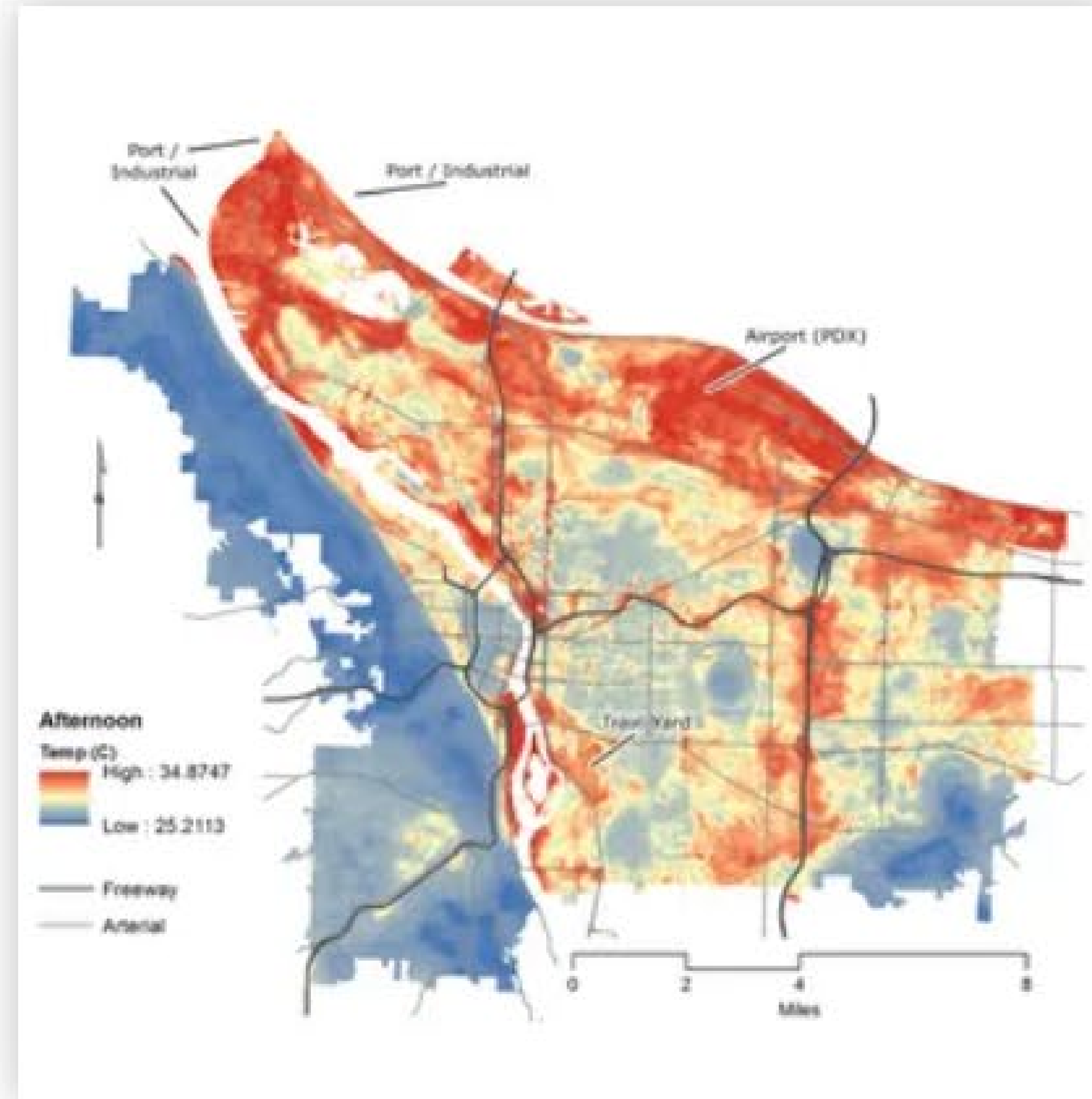
- Community Needs Assessment
- Heat Management Strategy Development
- Implementing Heat Management Projects
- Heat Management Protocol
- Program Evaluation



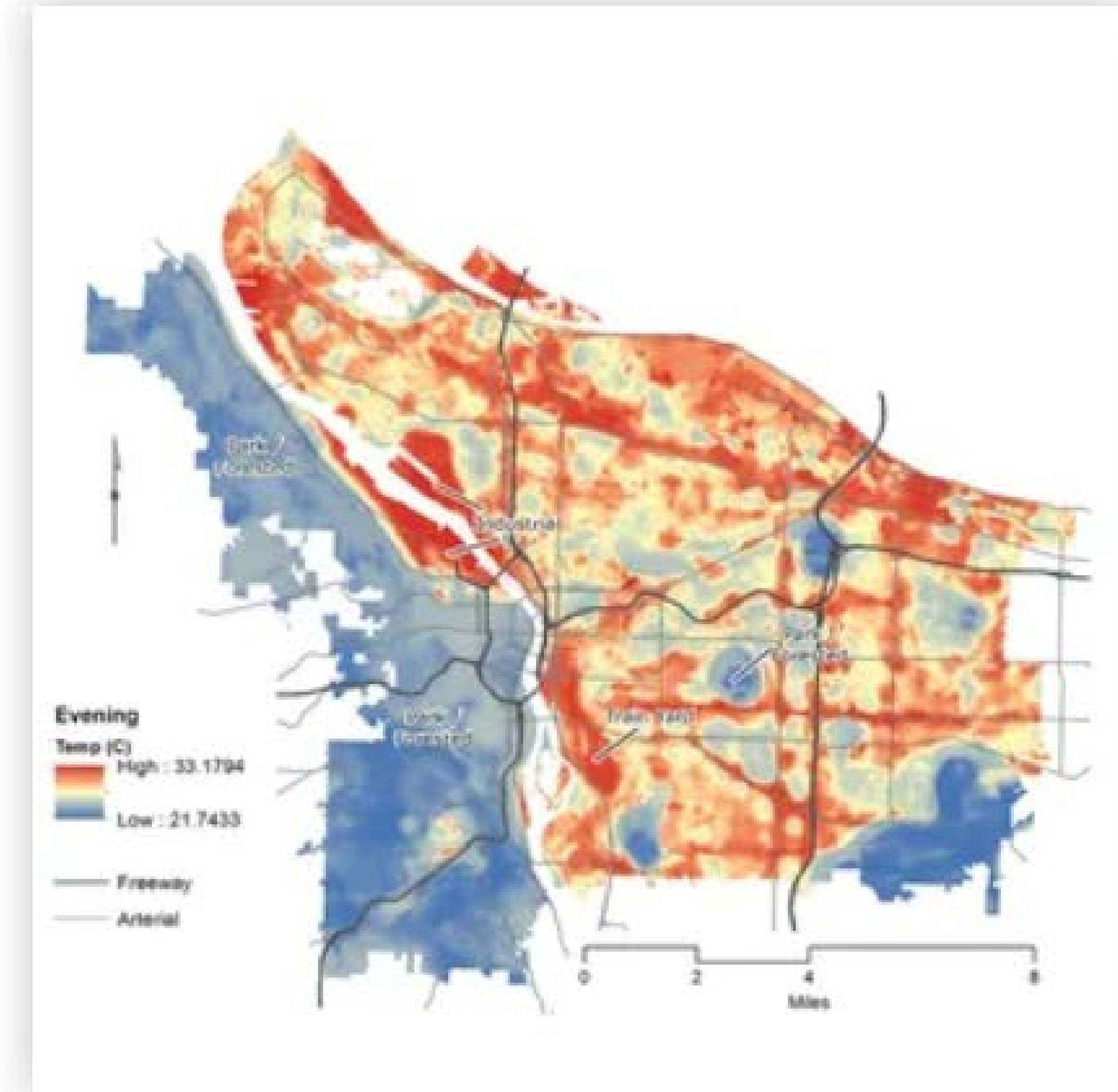
# Local Temperature Map



Morning



Afternoon



Evening





# Hoosier Life Survey

- Statewide survey conducted Aug.-Dec. 2019 with a follow-up survey issued Oct. 2020-March 2021

## HLS 2.0 Takeaways:

- 2020 was hard on Hoosiers. Nearly 2 out of 3 reported their lives as being worse than in 2019, with 70% indicating the pandemic as the biggest factor.
- Despite more immediate challenges, **Hoosiers expressed more concern for the climate in 2020 than 2019**. Overall, 84% agreed that climate change is happening and 83% attribute the cause of climate change at least partly to human activity.





# Thank you!

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