



Climate and Housing: exploring the potential climate futures of post-industrial neighborhoods

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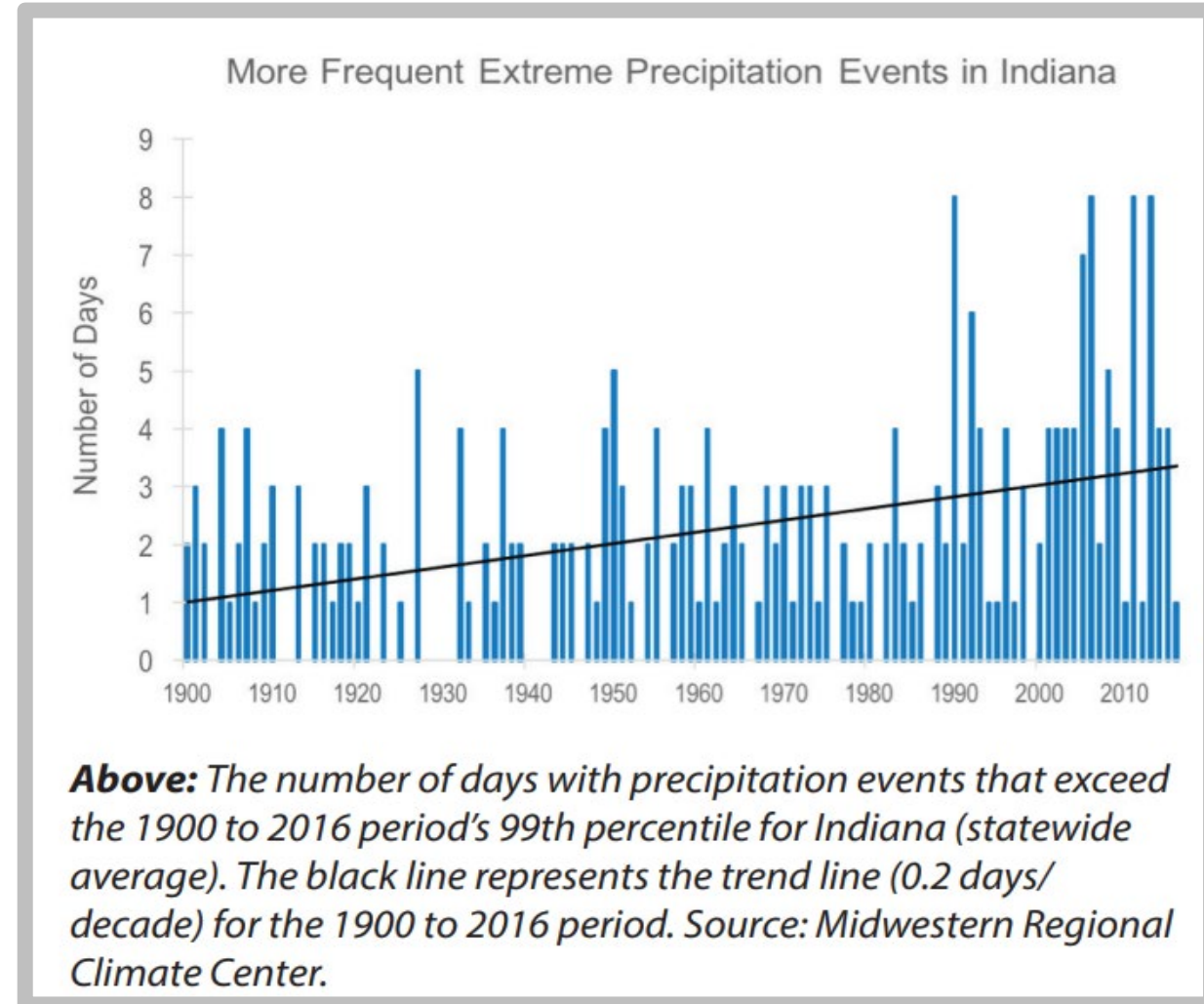
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The Midwest and South Bend region's climate future

- Increased frequency of extreme precipitation events.
- South Bend has nearly 450 acres of developed land in the historic 100- and 500-year floodplain.
- South Bend is projected to have 2.5 times the number of extreme heat days by 2050.
- South Bend has a number of census tracts where the population is considered particularly vulnerable to climate impacts, which is correlated with poverty and race.



Indiana Climate Change Impacts Assessment.

What does climate have to do with affordable housing?



Climate impacts will change:

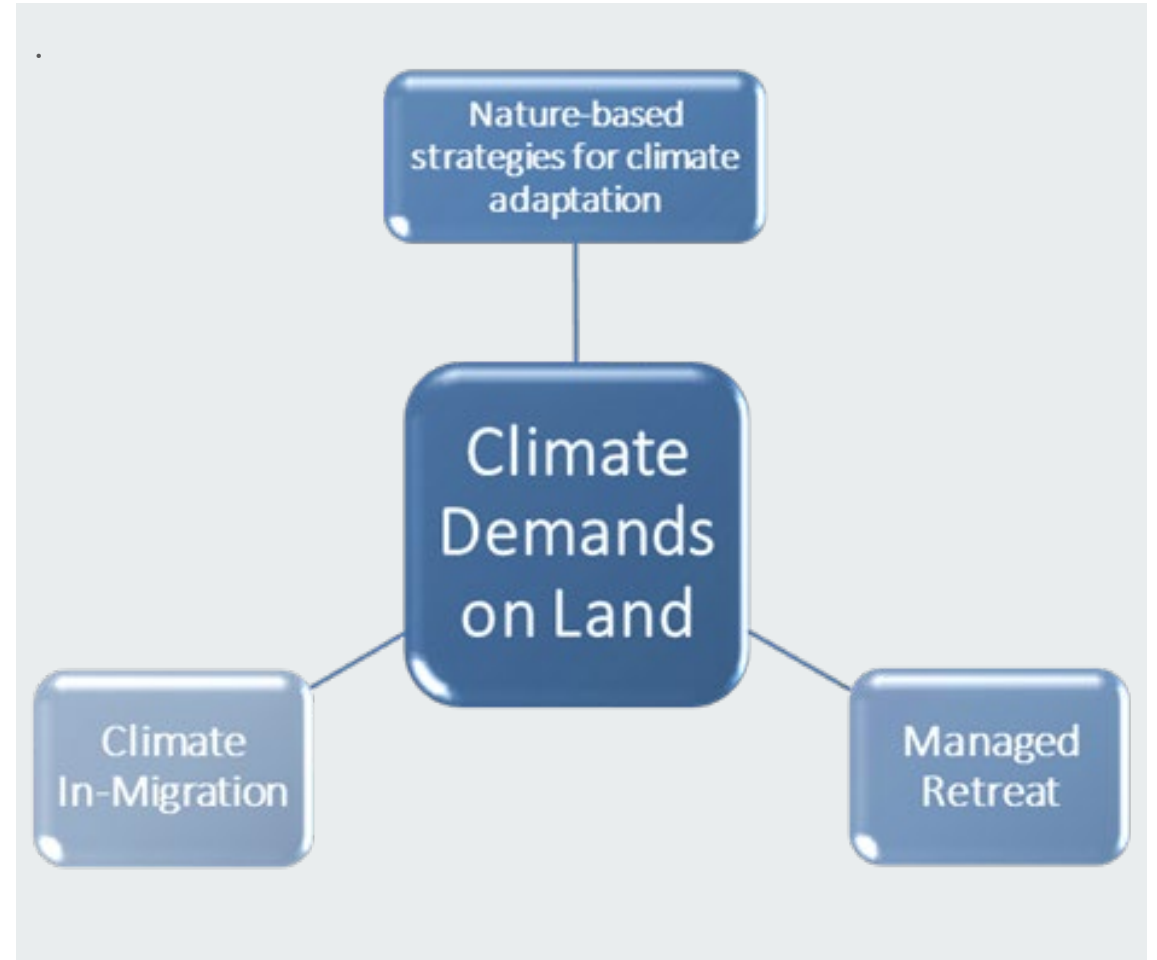
- Where people would stay;
- Where people can build;
- Climate migration from other parts of the country; and
- Land requirements for nature-based solutions to issues like flooding or cooling



Climate and Land

Climate demands on land:

- Managed retreat;
- Nature-based strategies for adaptation;
- Climate in-migration.



Opportunities in Neighborhoods

- Neighborhoods in deindustrialized cities have existing infrastructure and thousands of vacant lots.
- Infill development is *currently* generally difficult
- Partnership opportunities with neighborhoods to preserve affordable housing



Existing Efforts

- Native Tree Nurseries
- Community Canopy Tree Program
- Bioswales and permeable pavements



- Research indicates tree canopy at the neighborhood level should be at about 40%. Most neighborhoods in South Bend are not even half of that. Low-income neighborhoods will experience greater heat stress.

From Conservation Subdivisions



THIS



NOT THIS



...to Restoration Redevelopment (planning for affordable housing)

Nature-based solutions for flood control and cooling

- Urban and regional wetland restoration
- Pocket and small urban forests

Neighborhood-scale planning for both affordable housing and climate adaptation

- Neighborhood Associations
- Community Land Trusts
- Community Development Corporations



Tianjin Bridge Park, China