



# Best Practices for Cross Governmental and Interdisciplinary Collaboration to Advance Heat Governance

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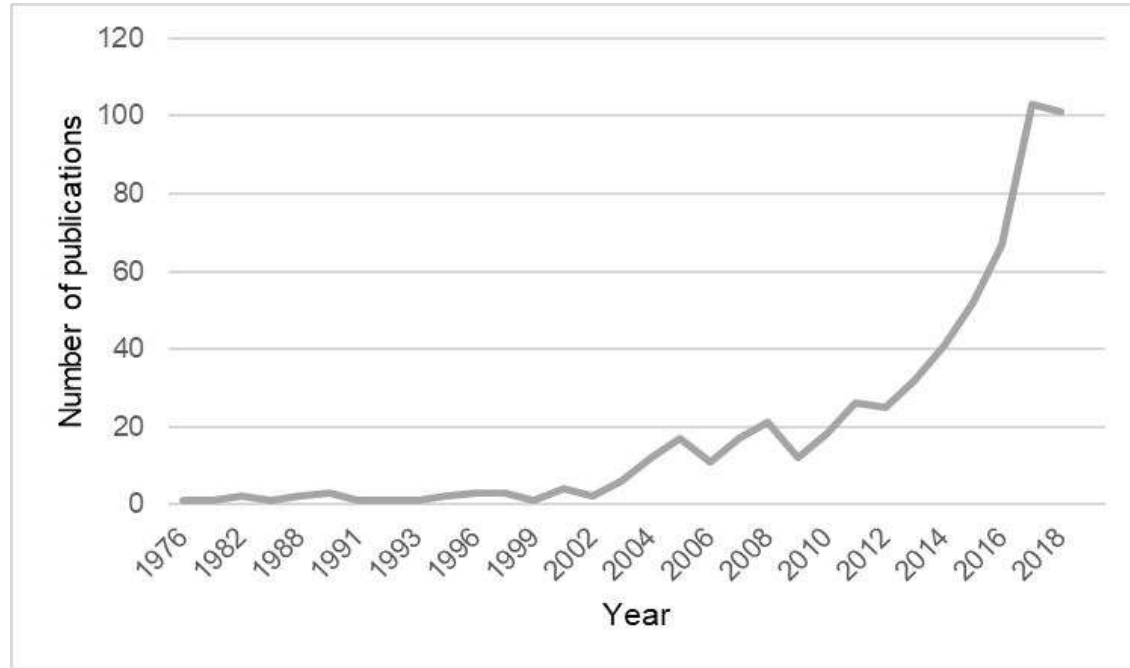
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# Planning for extreme heat: A review

Ladd Keith, Sara Meerow, & Tess Wagner

Rapid growth in heat research

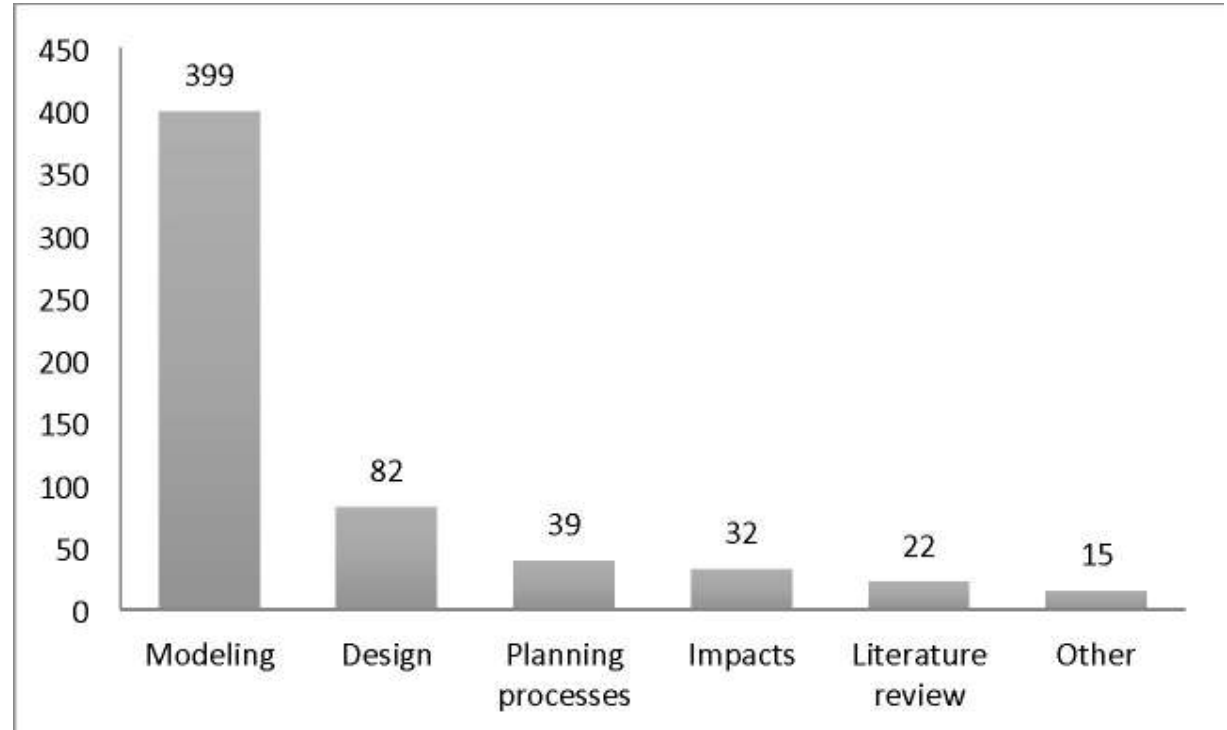


Number of all publications on extreme heat planning in the Scopus database, by year

# Planning for extreme heat: A review

## Focus of research

- 68% Modeling
- 14% Design
- **7% Planning processes and governance**
- 5% Impacts
- 4% Literature reviews
- 3% Other

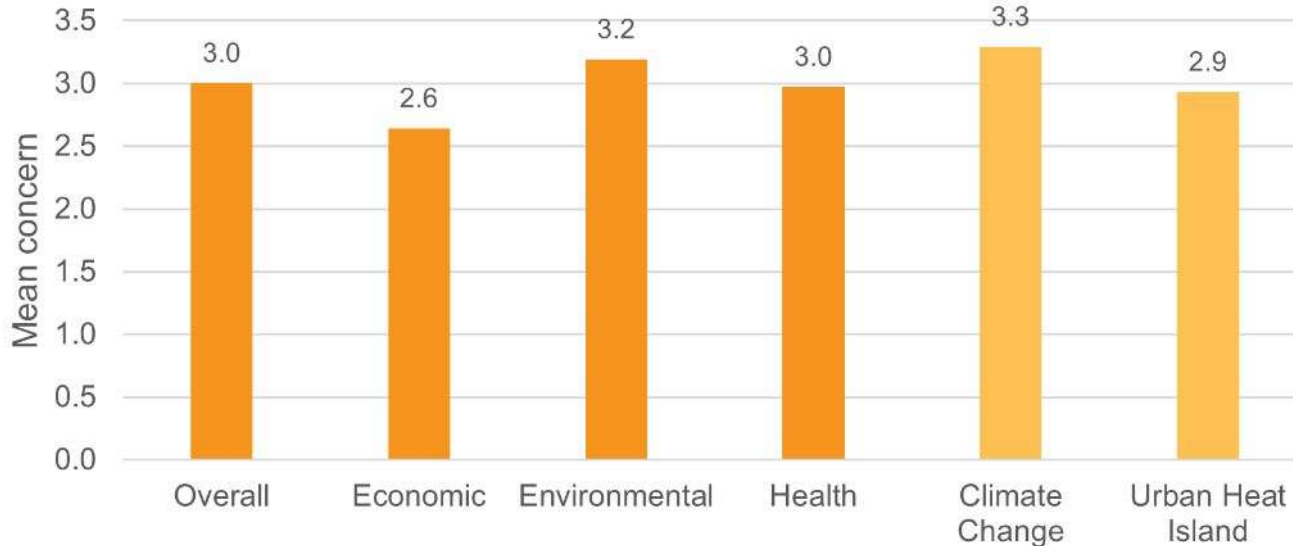


Full paper at [tinyurl.com/extremeheatplanning](https://tinyurl.com/extremeheatplanning)



# Planning for extreme heat: A national survey of U.S. planners

## Concern for heat impacts & heat contributors

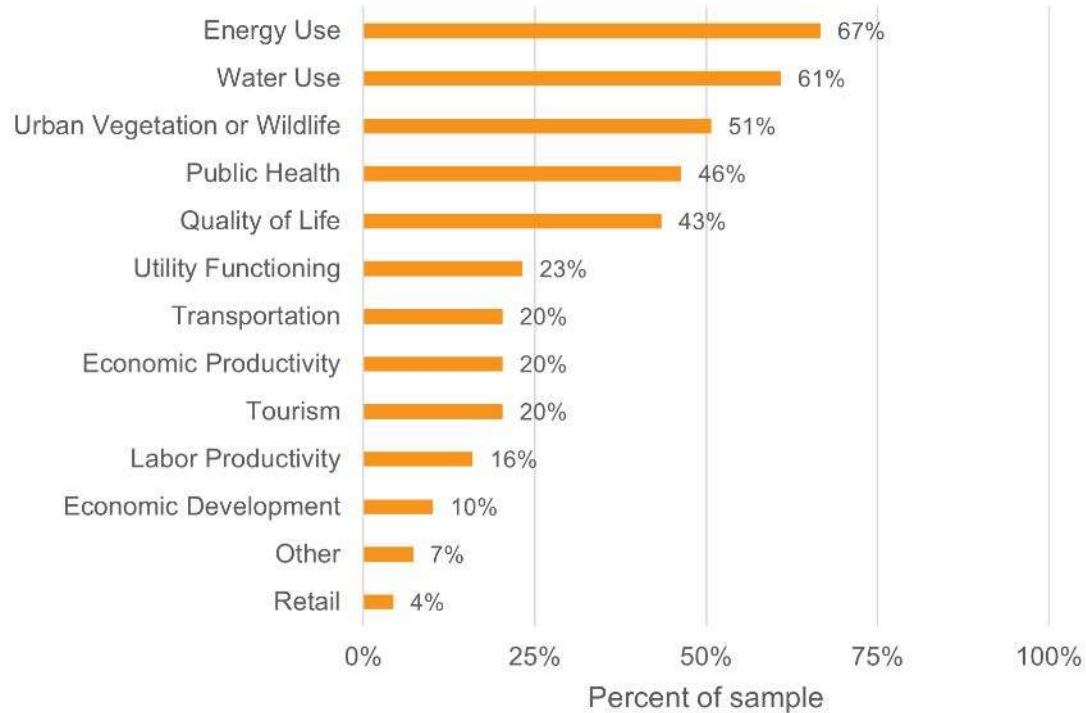


Average concern for environmental, public health, and economic impacts of extreme heat

Concern for extreme heat caused by climate change and the urban heat island effect

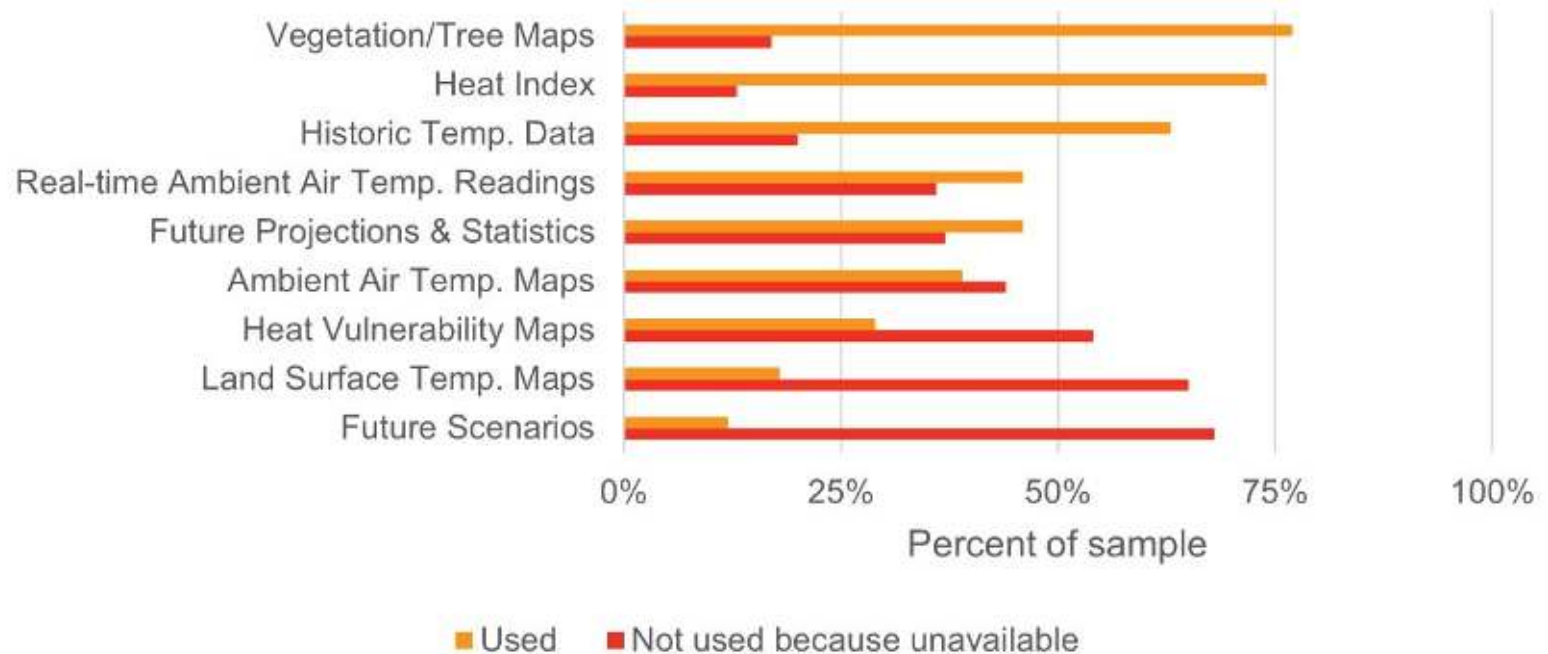
# Planning for extreme heat: A national survey of U.S. planners

## Reported heat impacts

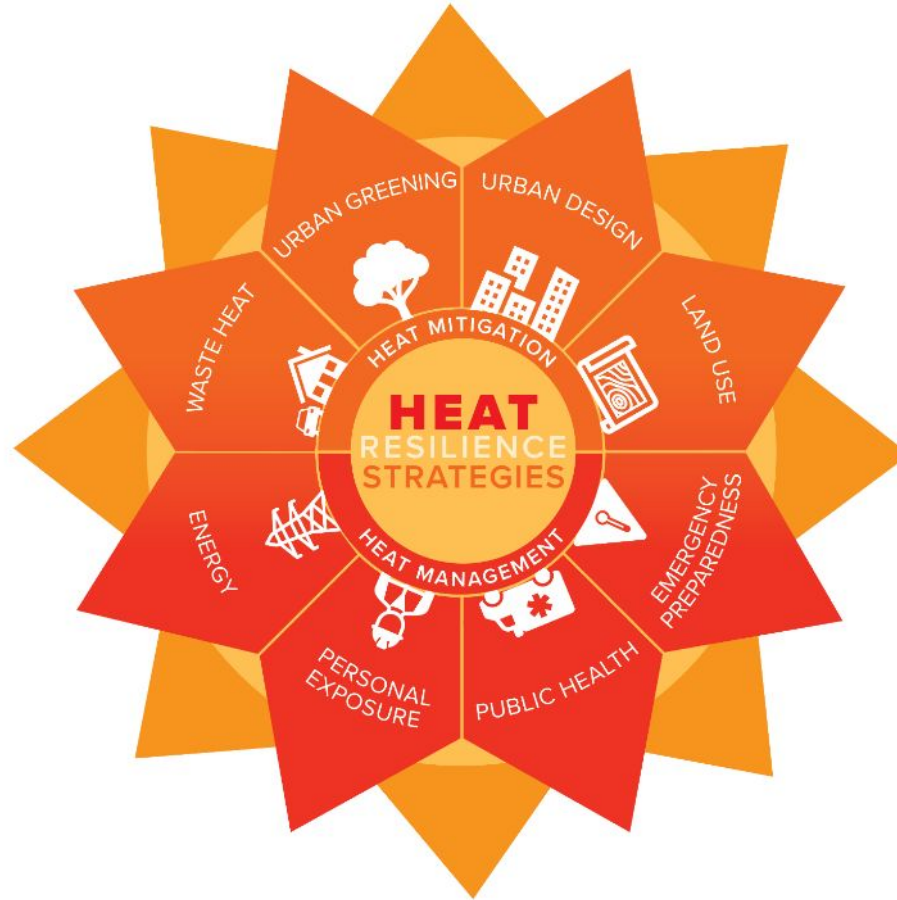


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## Heat information sources



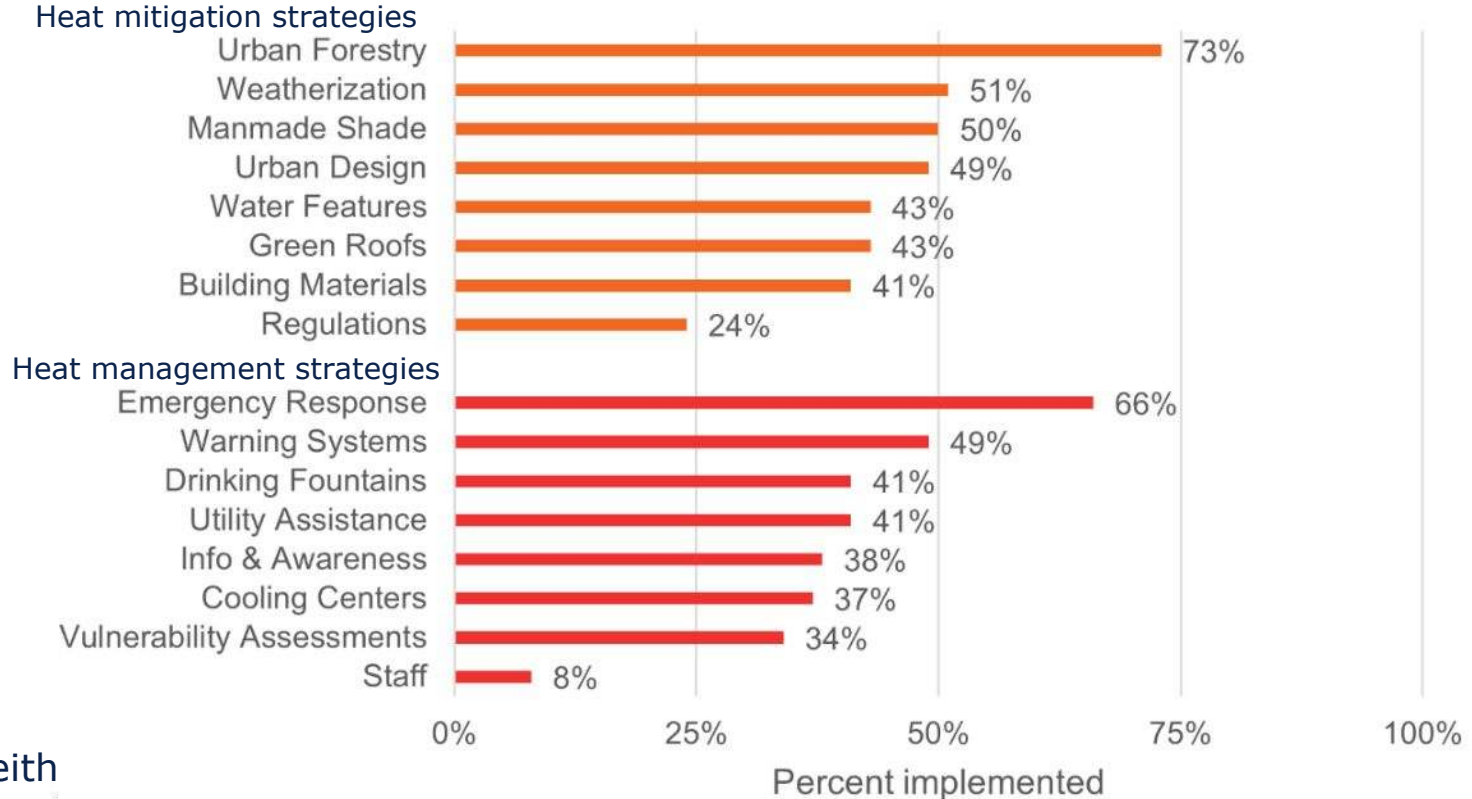
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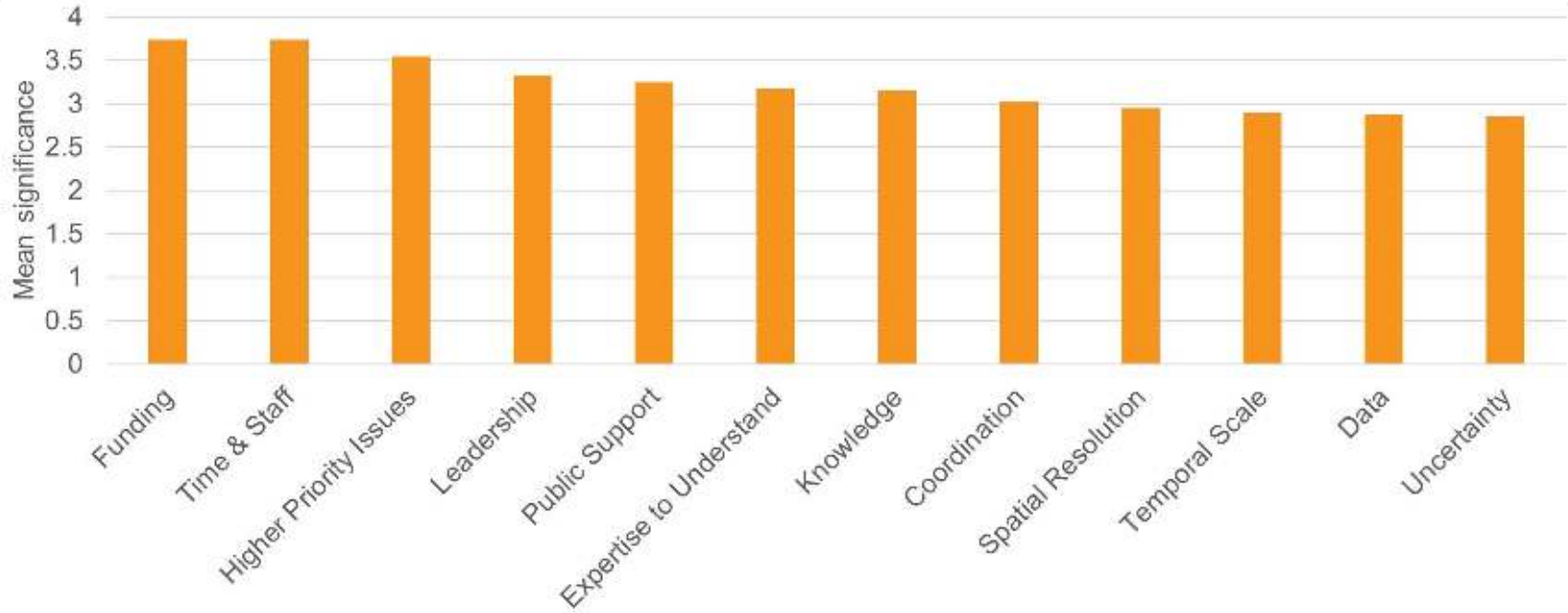
# Planning for extreme heat: A national survey of U.S. planners

## Heat strategies



# Planning for extreme heat: A national survey of U.S. planners

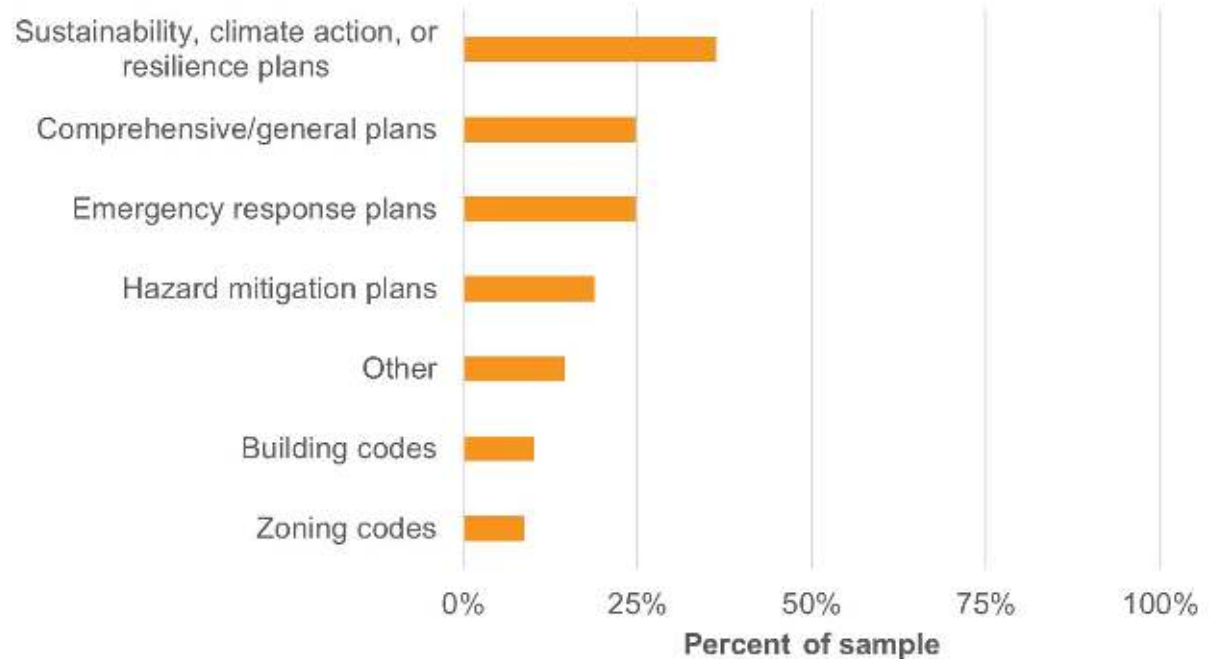
## Barriers to heat planning



# Planning for extreme heat: A national survey of U.S. planners

## Plans that address heat

- 65% addressed in some plan
- 36% a sustainability, climate action, or resilience plan
- 19% in hazard mitigation plan

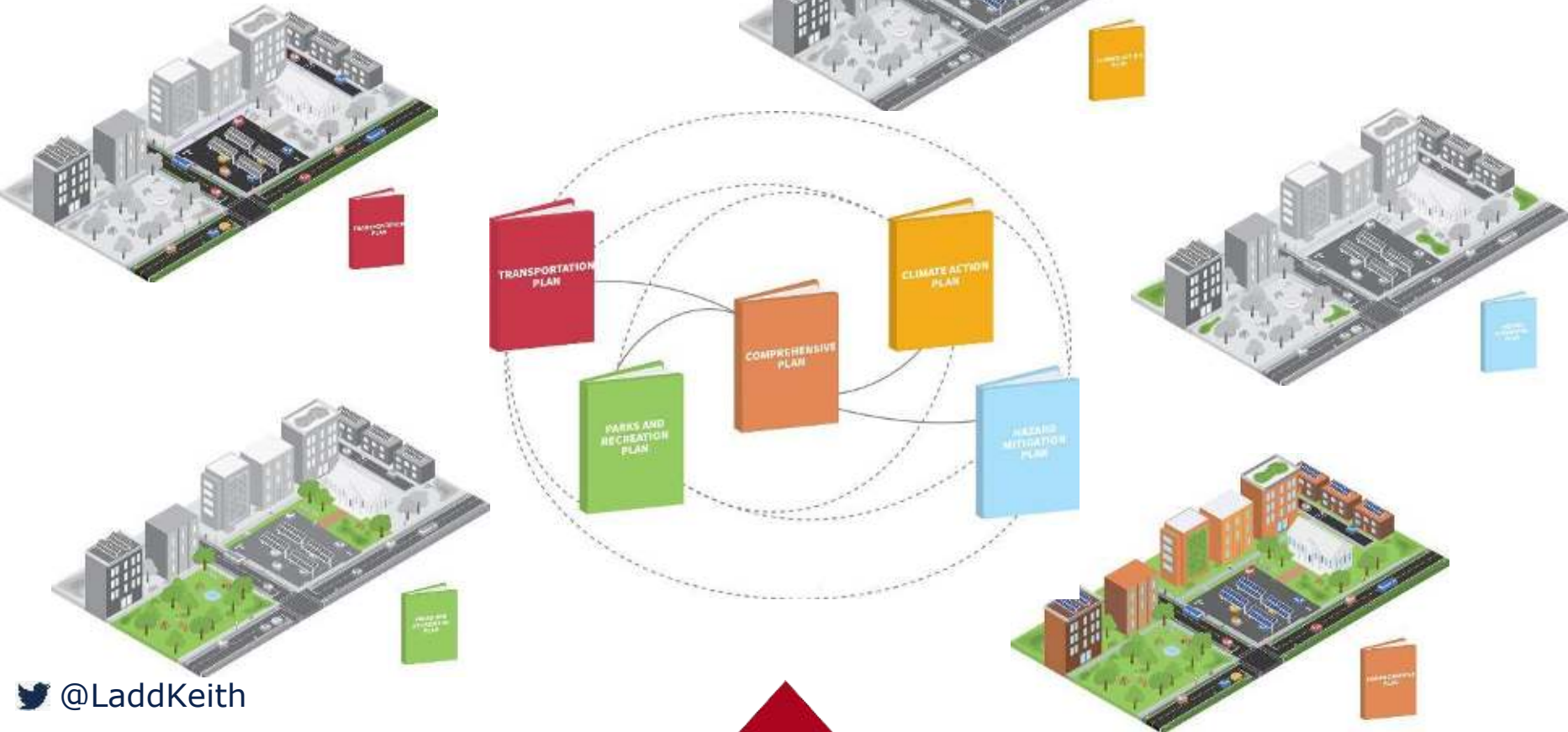


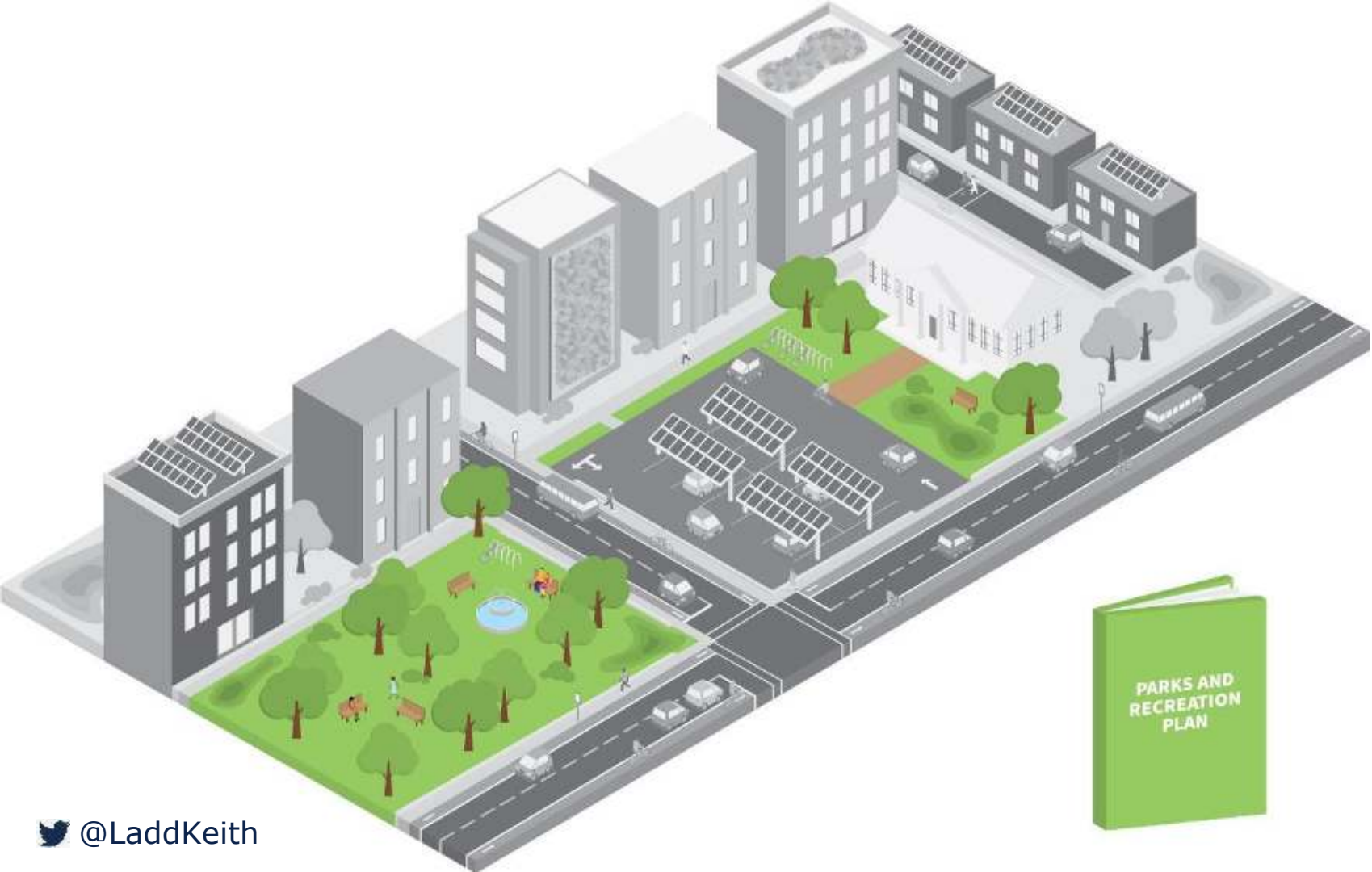
# Planning for extreme heat: A national survey of U.S. planners

## Conclusions

- Most planners are already concerned about extreme heat
- Over 80% planners said their community was impacted by heat
- Majority of planners reported addressing heat in some plan, but using development regulations yet
- Many communities implementing both heat mitigation and management strategies
- Few communities reported providing utility assistance or conducting vulnerability assessments
- Forthcoming in the *Journal of the American Planning Association*, preprint of paper at [tinyurl.com/heatplansurvey](https://tinyurl.com/heatplansurvey)

# Plan Integration



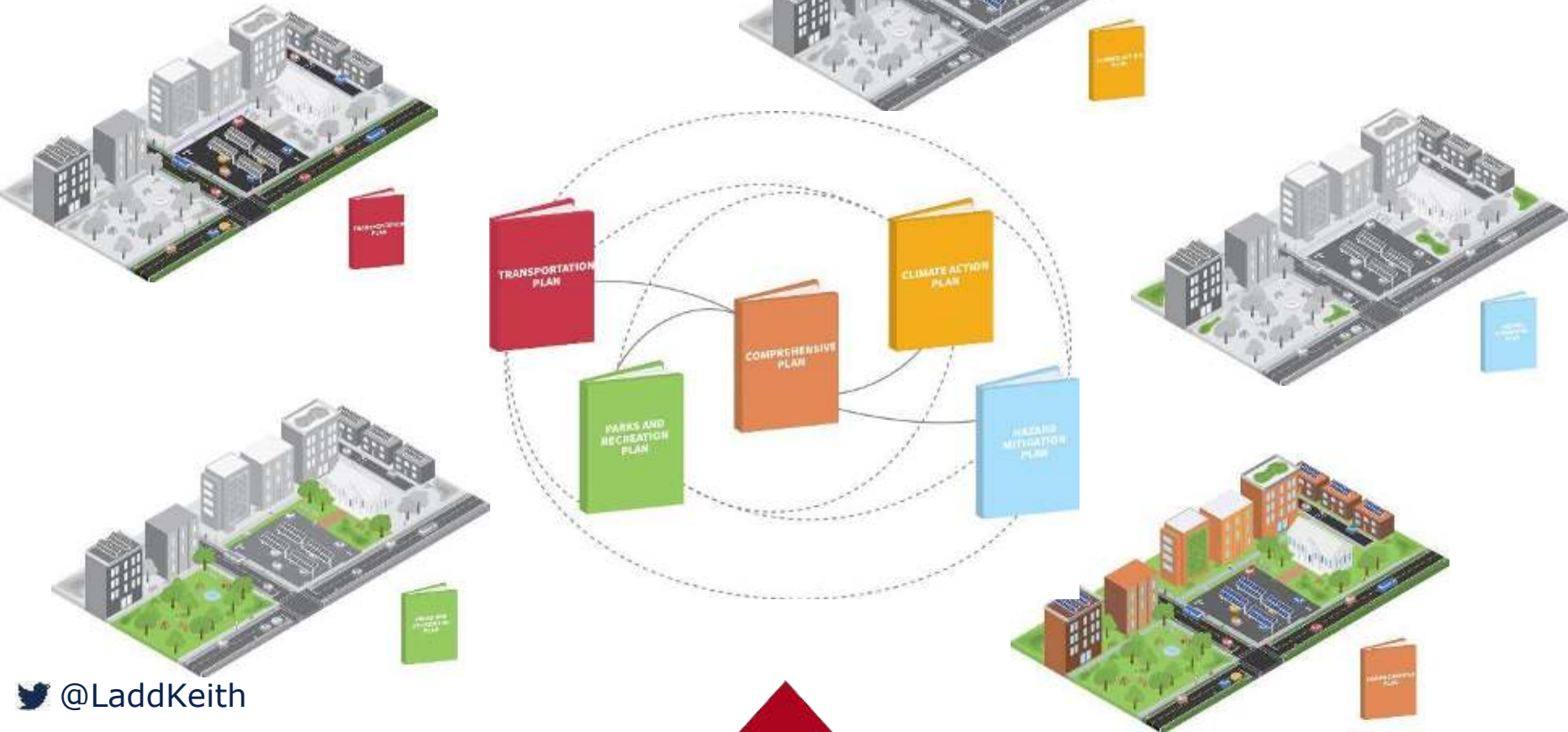






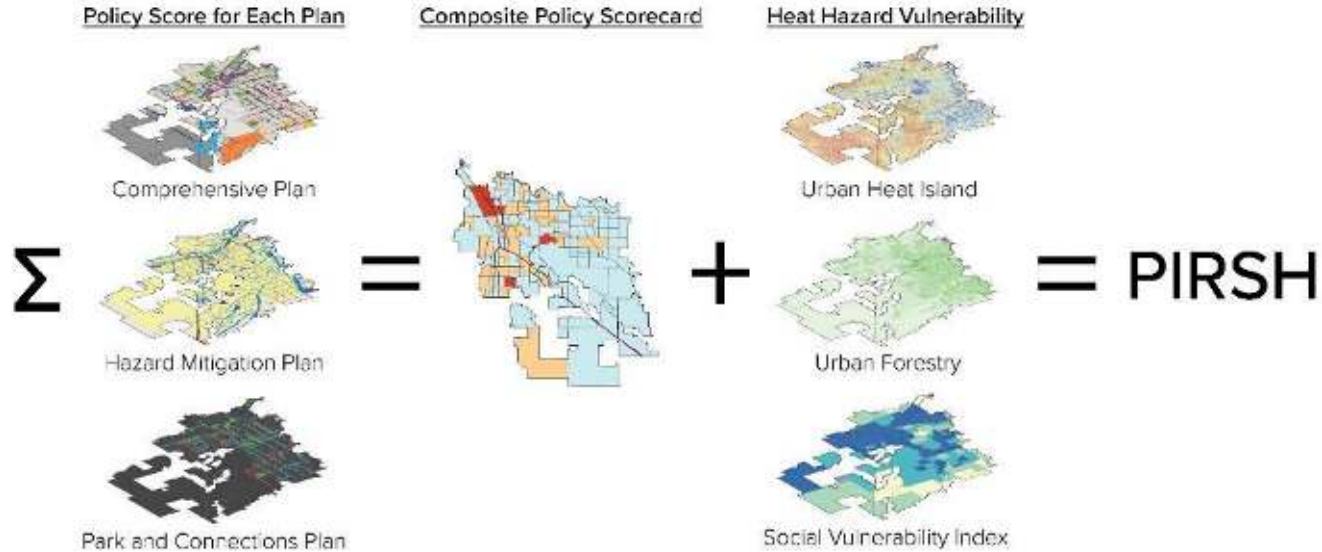


# Plan Integration



# Plan Integration for Resilience Scorecard for Heat (PIRSH)

Ladd Keith, Sara Meerow, Philip Berke, & Joseph DeAngelis



## PIRSH Pilot Communities:

Baltimore, Boston, Fort Lauderdale, Houston, Seattle



[mitigationguide.org/](https://mitigationguide.org/)

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# Deploy heat officers, policies and metrics

Ladd Keith, Sara Meerow, David M. Hondula, & James C. Arnott

**Heat governance:** “The actors, strategies, processes, and institutions that guide decision-making for mitigating and managing heat as a hazard.”

## Six guiding principles for researchers and decision-makers

- Advance heat equity
- Mitigate heat
- Manage heat
- Develop metrics
- Coordinate initiatives
- Build heat institutions

Available at [go.nature.com/2ZZ9STt](https://go.nature.com/2ZZ9STt)

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**nature**

Setting the agenda in research

## Comment



In June, residents in Portland, Oregon, fill a cooling centre to escape record-breaking temperatures.

## Deploy heat officers, policies and metrics

Ladd Keith, Sara Meerow, David M. Hondula, V. Kelly Turner & James C. Arnott

# Thank You



Shade structure at The University of Arizona's College of Architecture, Planning, and Landscape Architecture  
(AZ Daily Wildcat, Ian Green)

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