



**CHICAGO
REGION
TREES
INITIATIVE**

Our Trees.
Our Communities.
Our Future.

What's Going on with our Trees?

Melissa Custic

What is the urban forest?



2010 Tree Census Overview



Invasive species are a problem

Pre-settlement species (especially oaks and hickories)
are not abundant

Ashes and maples were very common



2020 Update?



New 2020 Tree Census by spring 2021



What has happened since then?



- **13 million ash trees are dead**
- Our canopy has dropped to 18% (national avg. for metro areas is 41%)
- Canopy continues to grow in communities with resources and is getting smaller in communities without resources
- Climate change continues to increase

Emerald Ash Borer



Average 2014 cost: \$250,000

Range of costs: \$100 to \$2.8 million

EAB programs:

- Tree removal (97%)

- Public education (64%)

- Pesticide application (37%)

- Tree ordinances specific to EAB (33%)



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Urban tree canopy



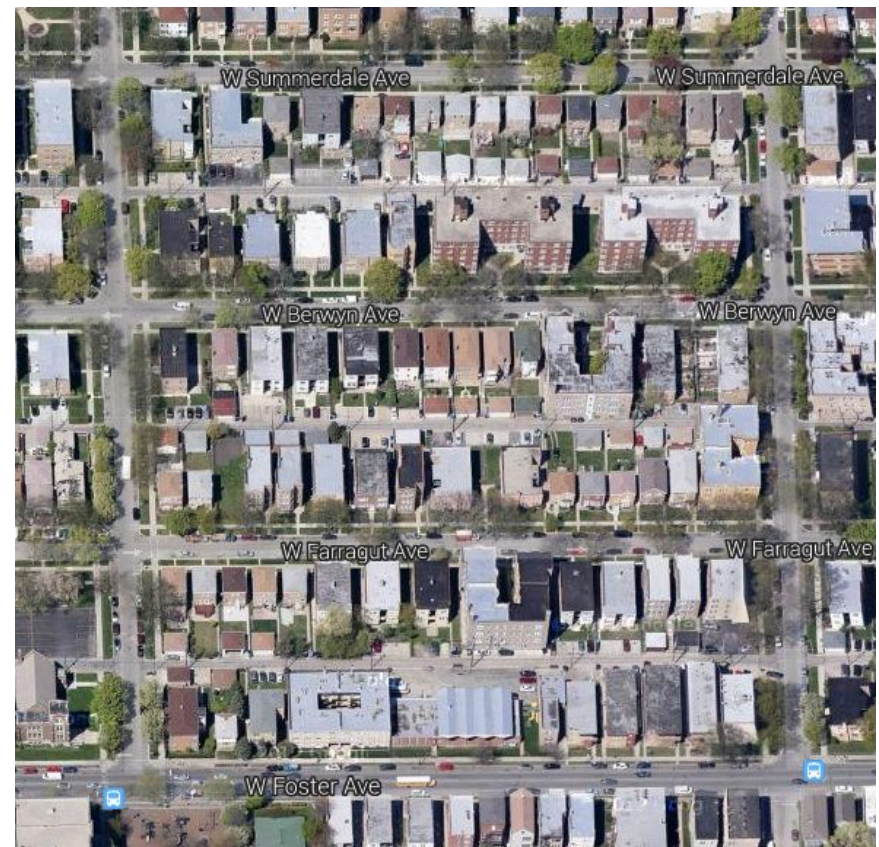
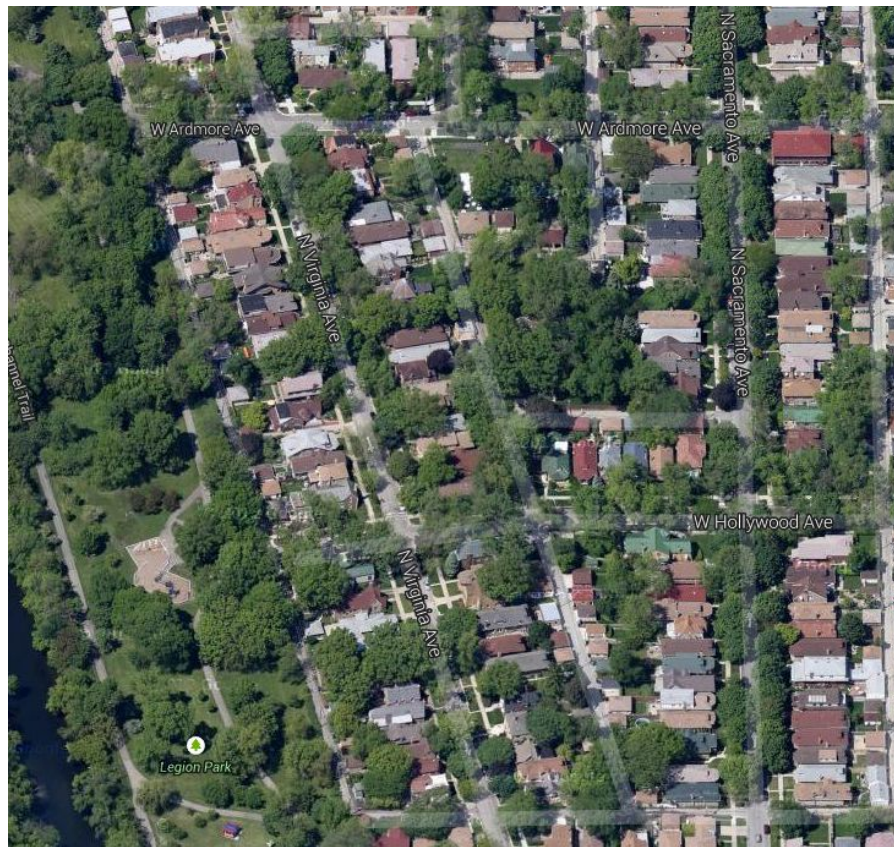
Larger trees offer more benefits



Urban tree canopy



Extent of tree benefits correlates
with tree canopy abundance



LiDAR Analysis



Trees

Vegetation

Road/Rail

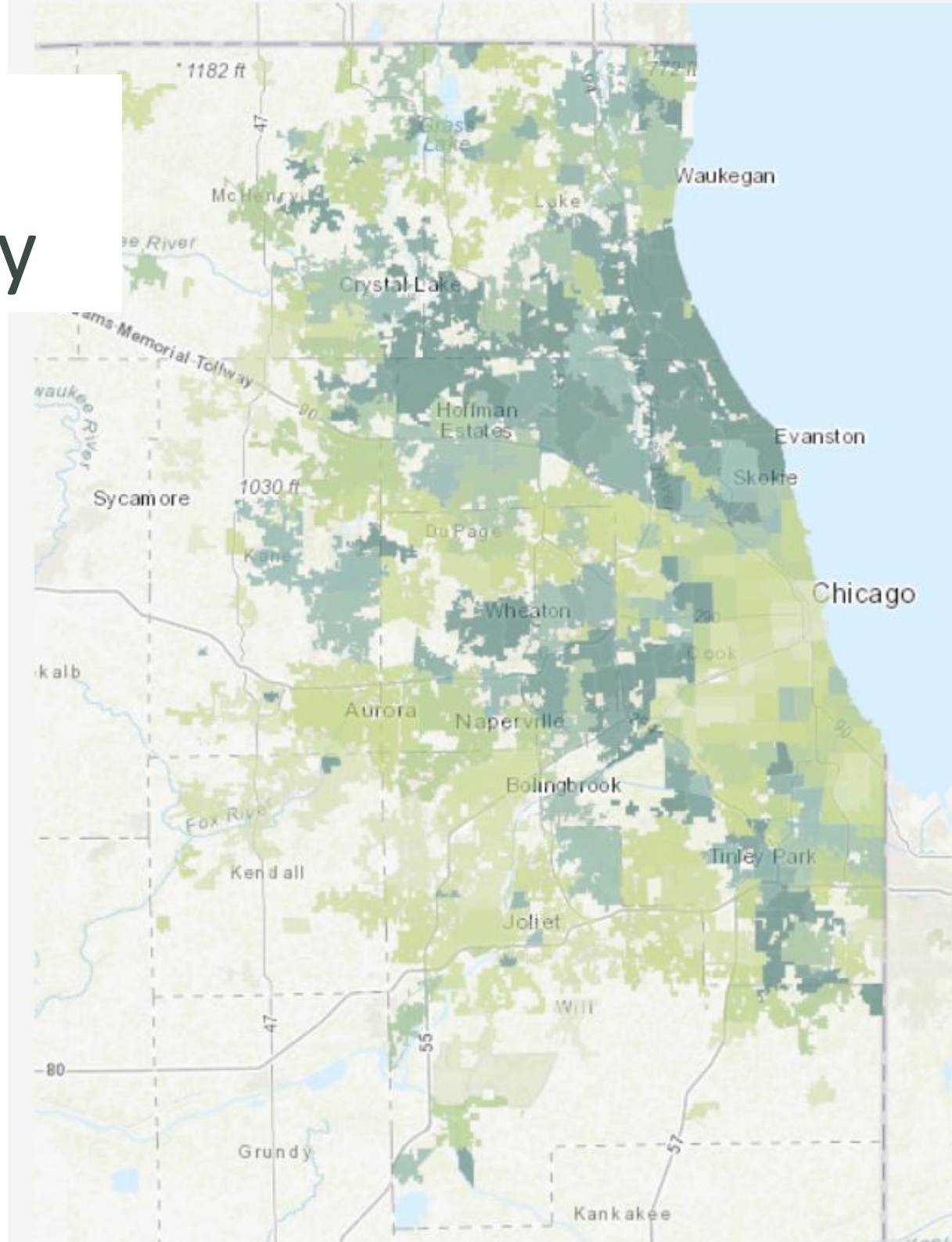
Buildings

Other Paved Surfaces

Water

Bare Dirt

Tree Canopy



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2020 Update?



New 2020 Urban Tree Canopy Assessments by spring 2021



What has happened since then?



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Midwest:

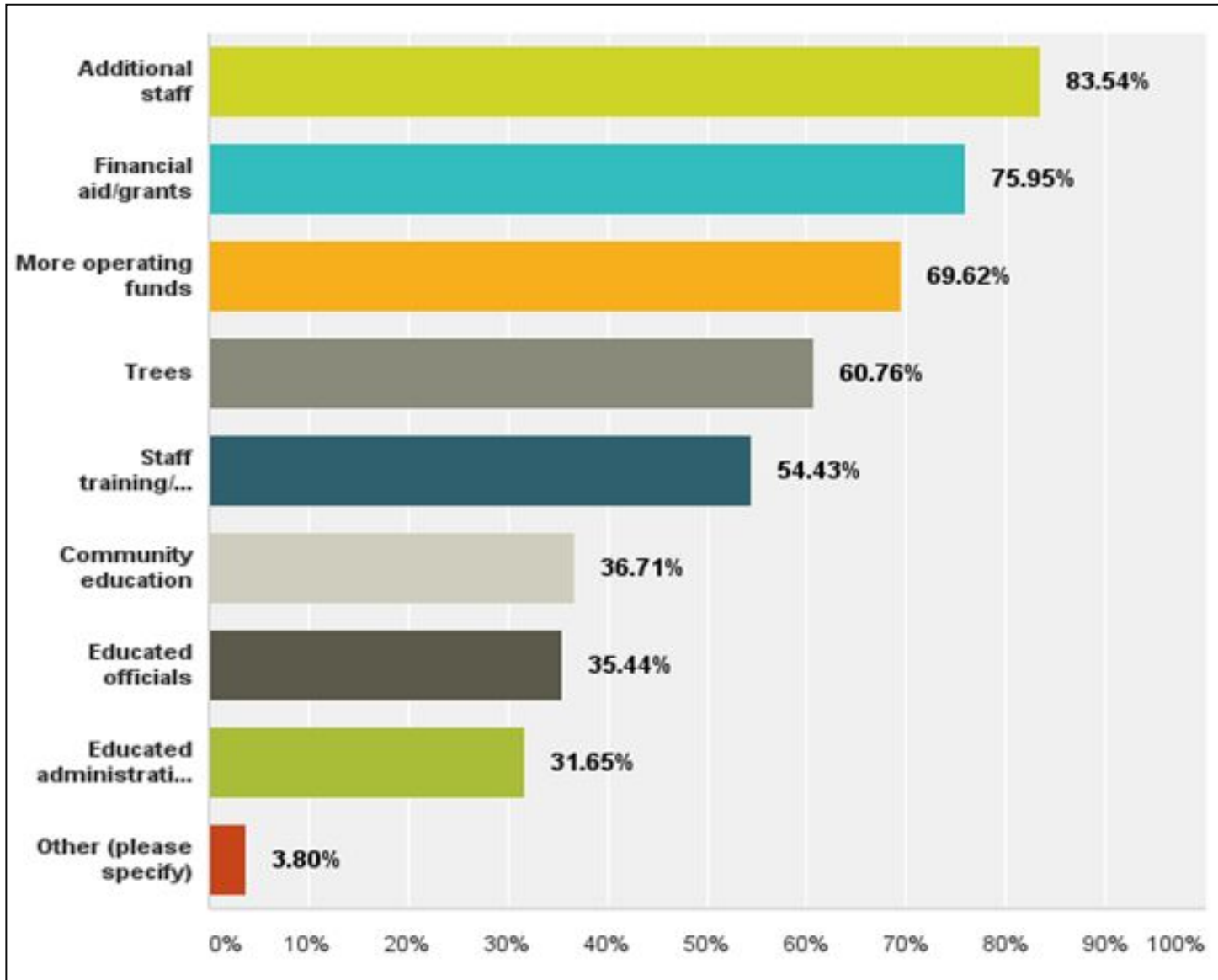
- Extreme heat
- Heavy downpours
- Flooding
- Drought
- Pest and pathogens



Ancillary impacts to:

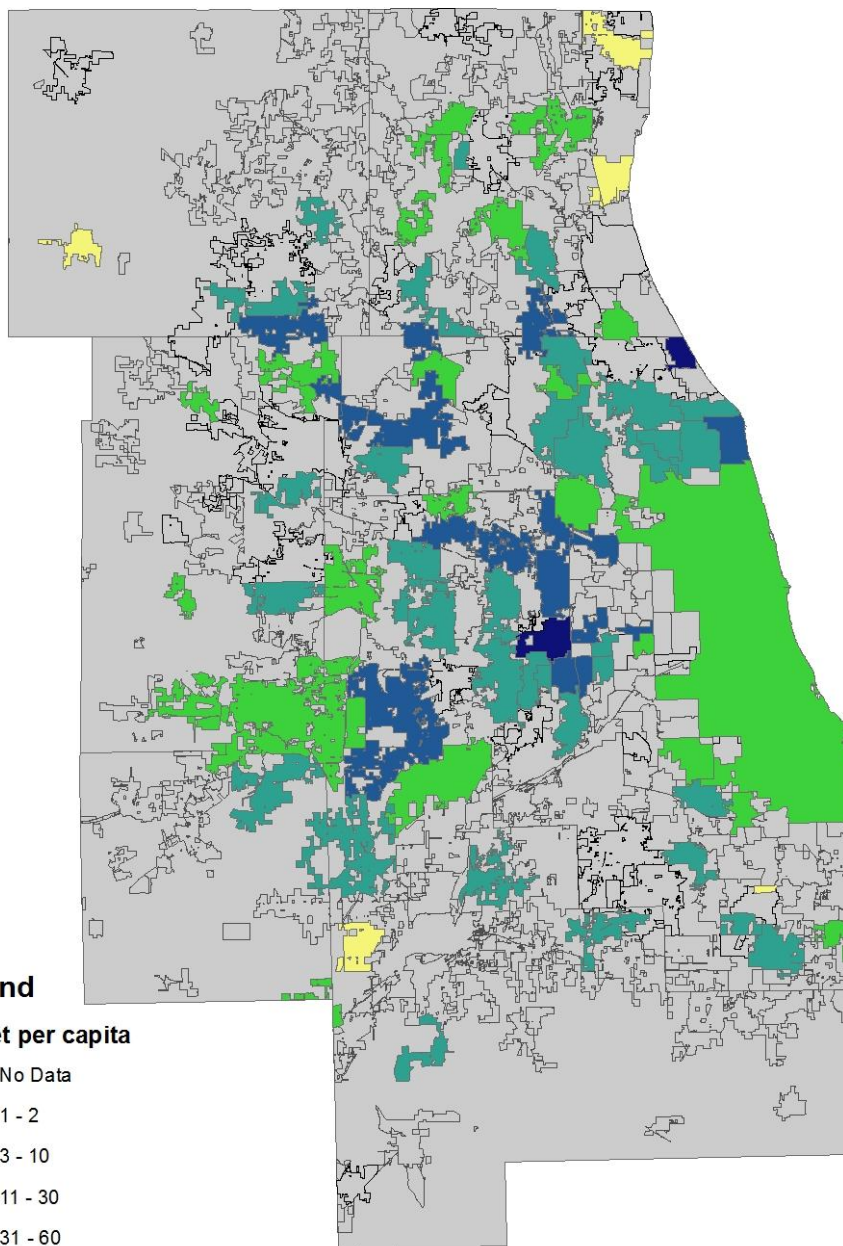
- Infrastructure
- Health
- Agriculture
- Forestry
- Transportation
- Air and Water Quality

Capacity to care for trees



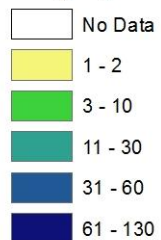


Budget Per Capita

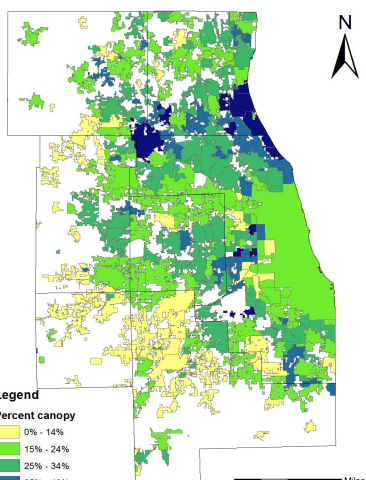


Legend

Budget per capita



Chicago region canopy cover



Legend

Percent canopy



0 5 10 20 Miles

Return on investment

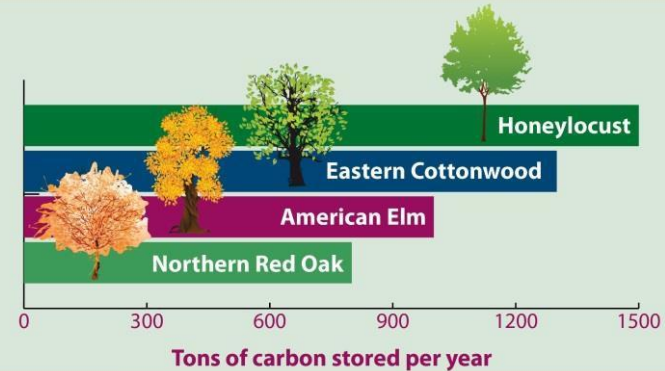
Find specific studies here:
ChicagoRTI.org/TreeBenefits

\$1 Spent on mgmt → **\$1.37-3.09** returned in services

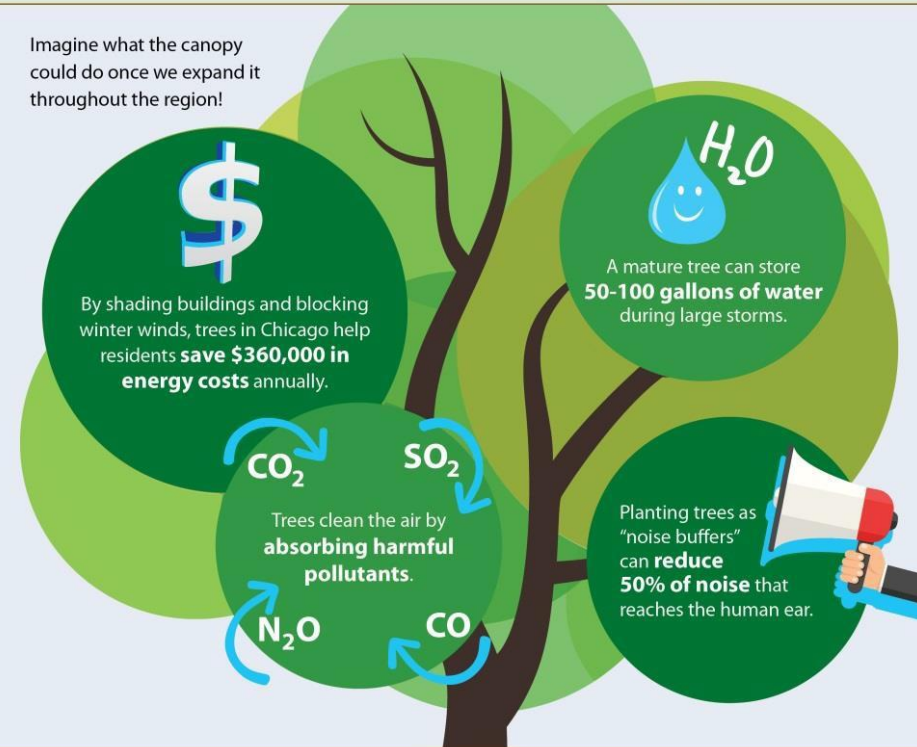
Trees are a Person's Best Friend

Trees aren't only pretty to look at; they also provide numerous benefits for society. The Chicago region's tree canopy is already contributing to the human and environmental health of the area.

As trees grow, they store more carbon dioxide, a greenhouse gas that contributes to climate change. In the Chicago region, trees sequester an estimated **17,700 tons of carbon** per year.



Imagine what the canopy could do once we expand it throughout the region!



Bluestem Communications is proud to be a part of the Chicago Region Trees Initiative, a coalition of organizations working to improve the Chicago region's tree canopy size, health and diversity. The data presented here is part of the research being conducted by the CRTI. If you're interested in learning more about the CRTI, click this image.

Do you need help with your marketing, outreach or communications work? Give Bluestem a call, **(312-754-0403)** we are ready to help you tell your story and engage your audience.

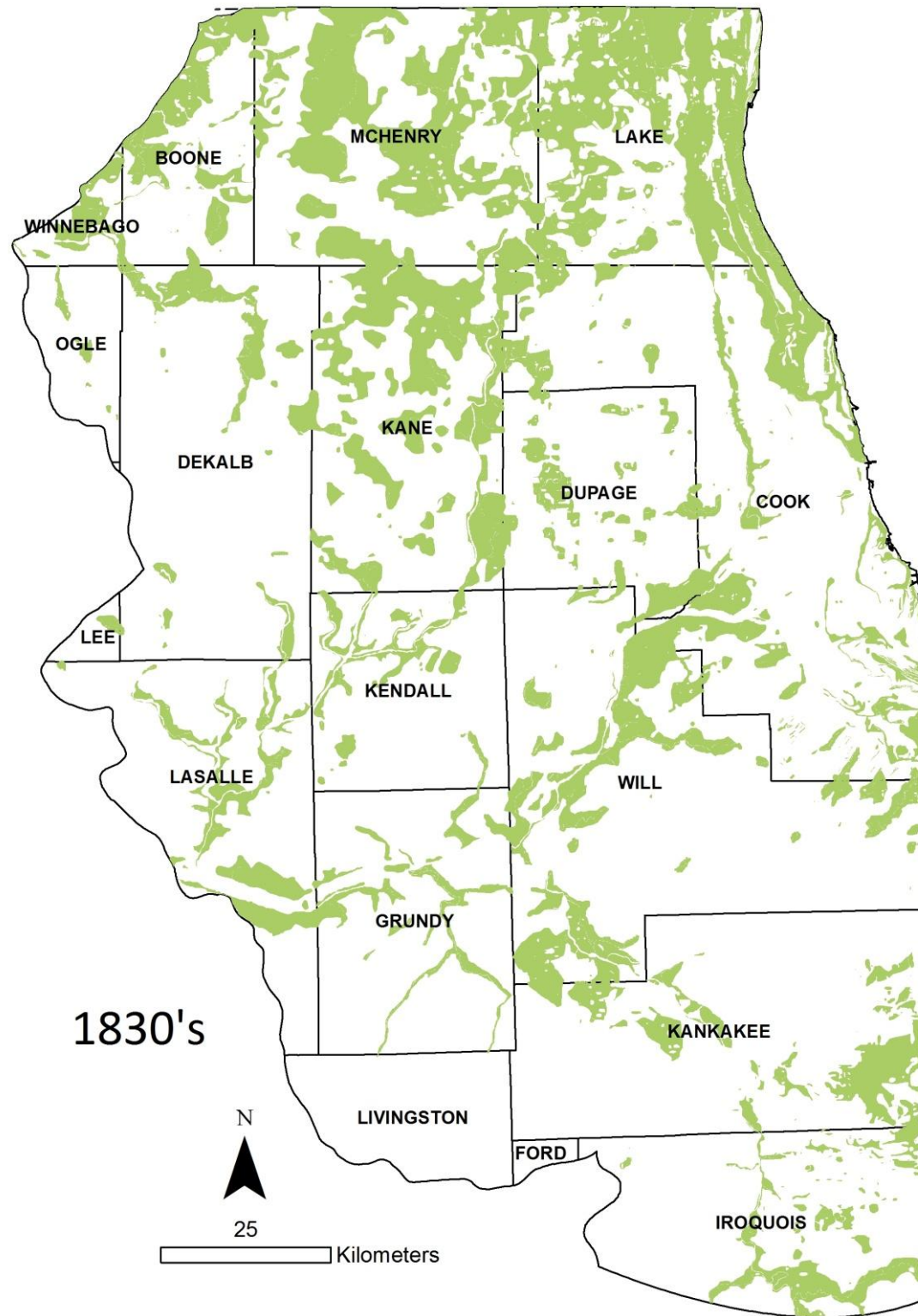


Forest Management Survey



Please complete the survey!

<http://chicagorti.org/MGMTsurvey>



1830's

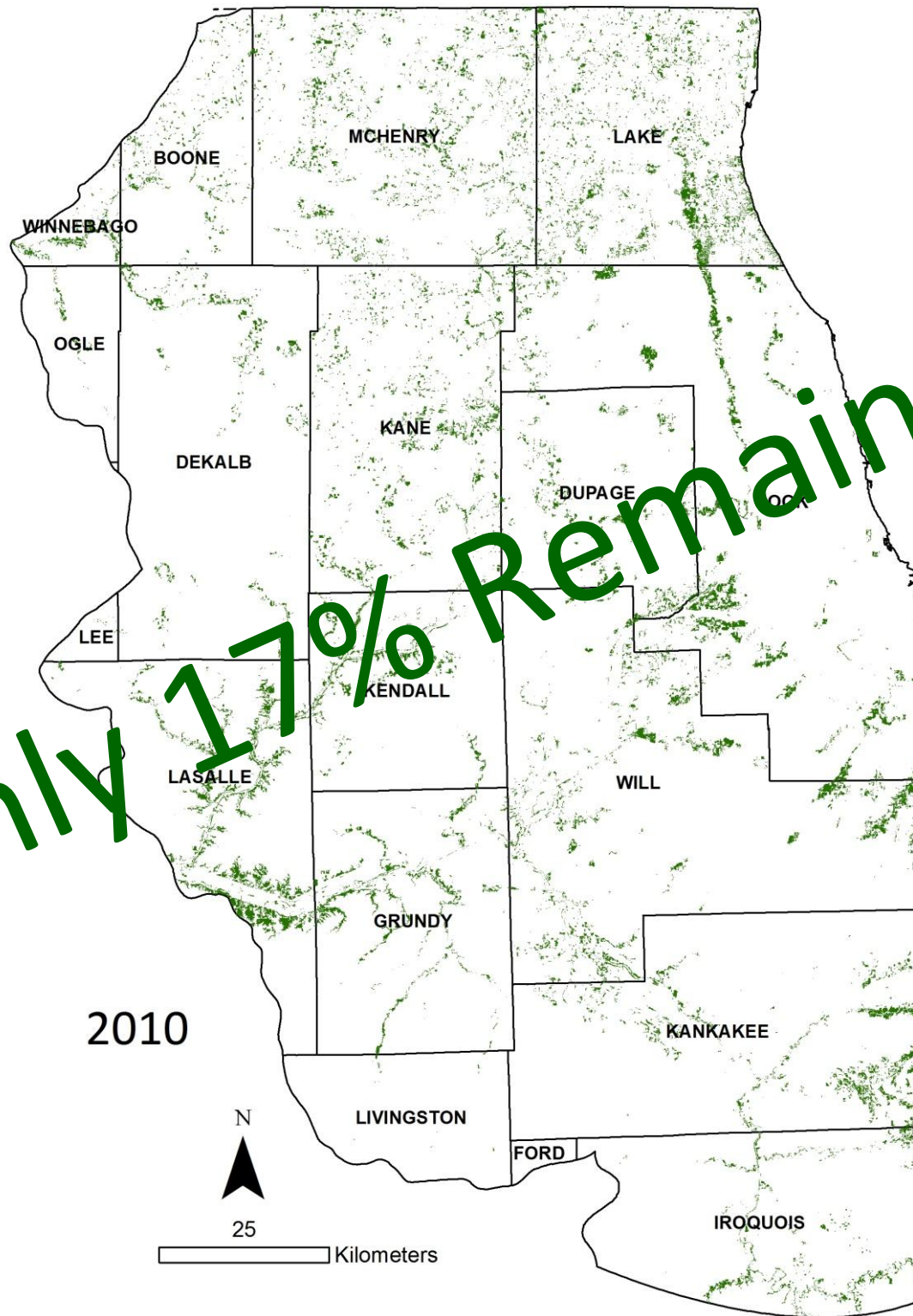
N



25

Kilometers

Only 17% Remains



2010

N

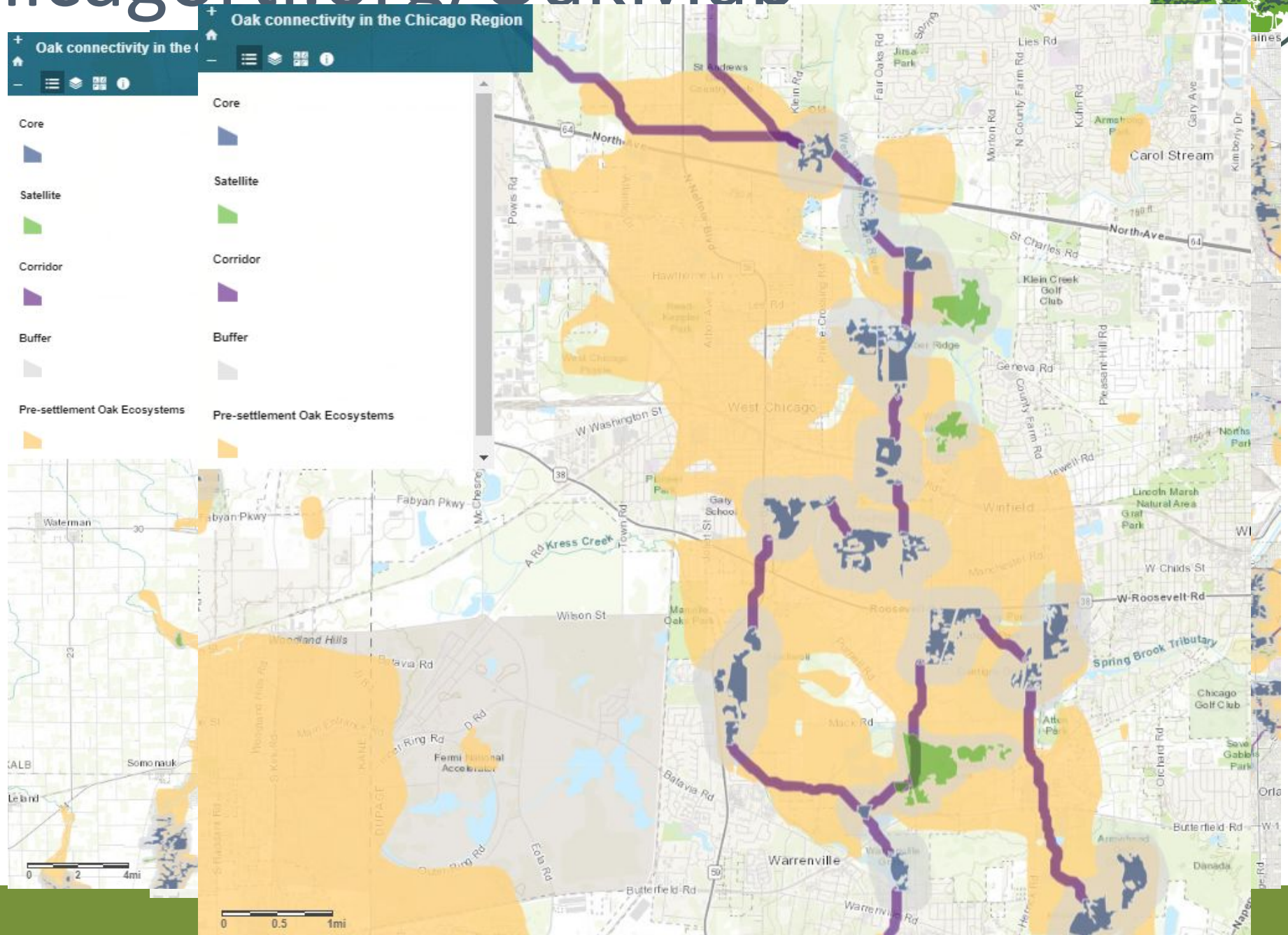
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Kilometers

ChicagoRTI.org/UTC



chicagorti.org/OakMap





Interactive priority map

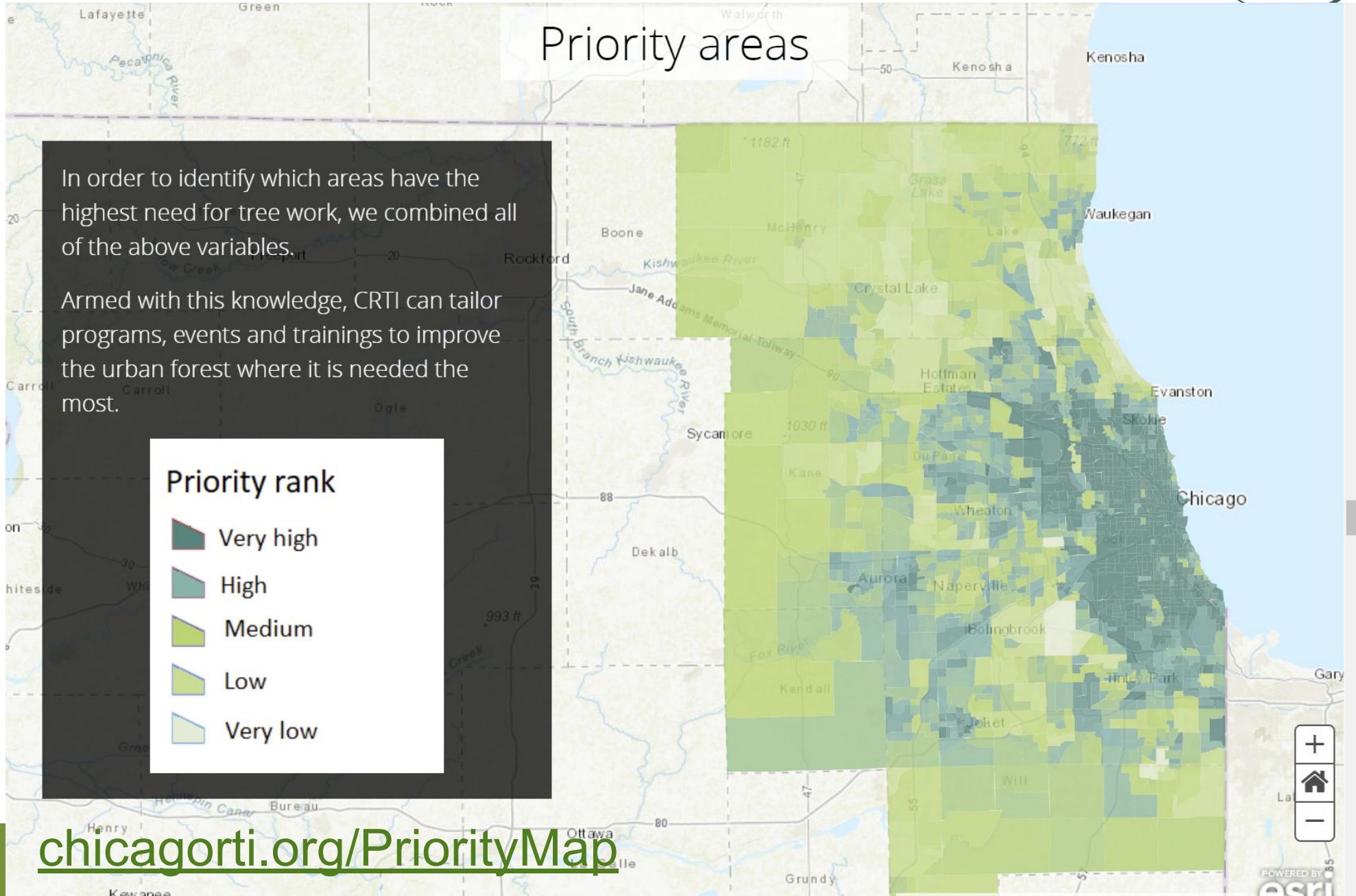
Priority areas

In order to identify which areas have the highest need for tree work, we combined all of the above variables.

Armed with this knowledge, CRTI can tailor programs, events and trainings to improve the urban forest where it is needed the most.

Priority rank

- Very high
- High
- Medium
- Low
- Very low

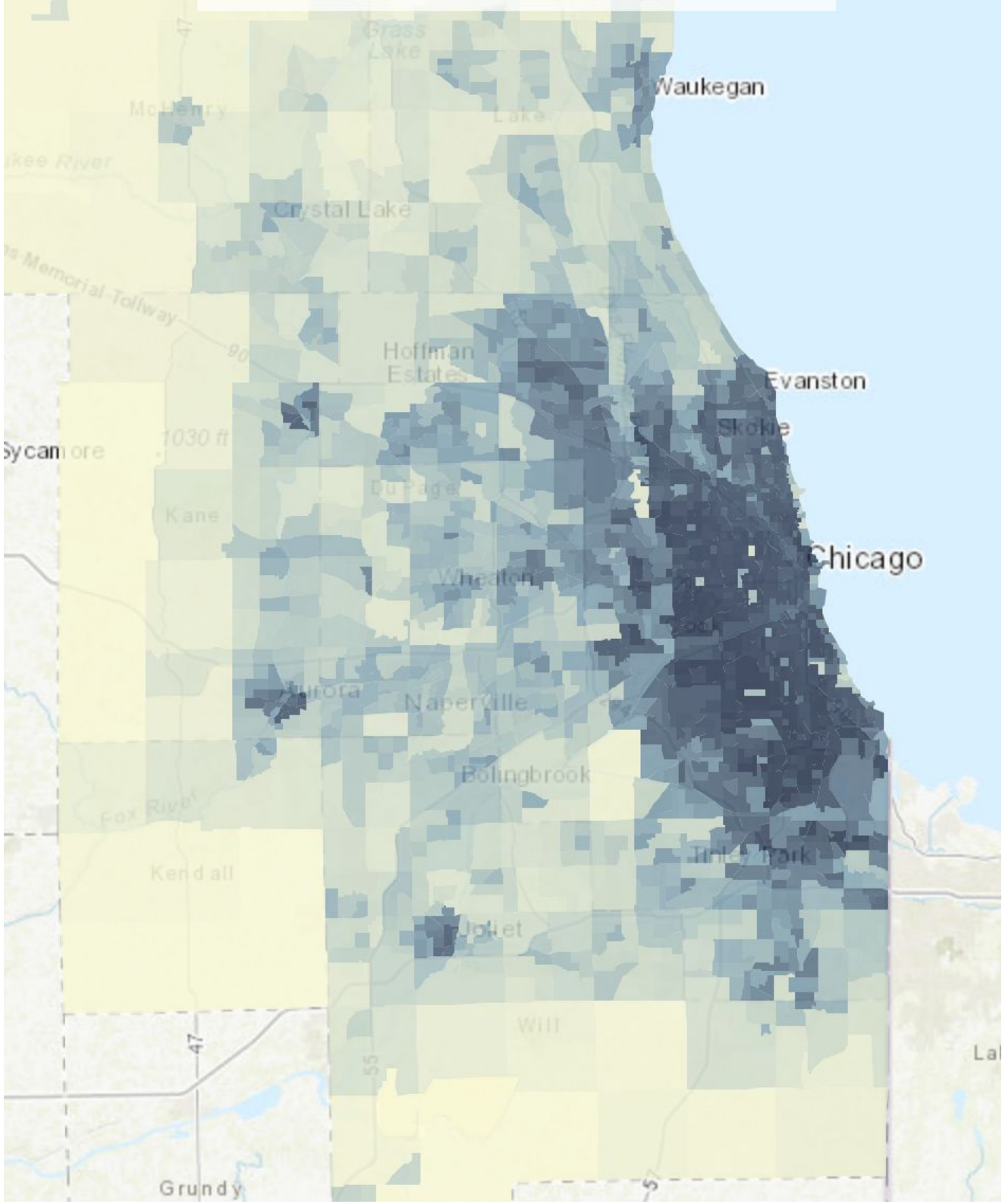


chicagorti.org/PriorityMap

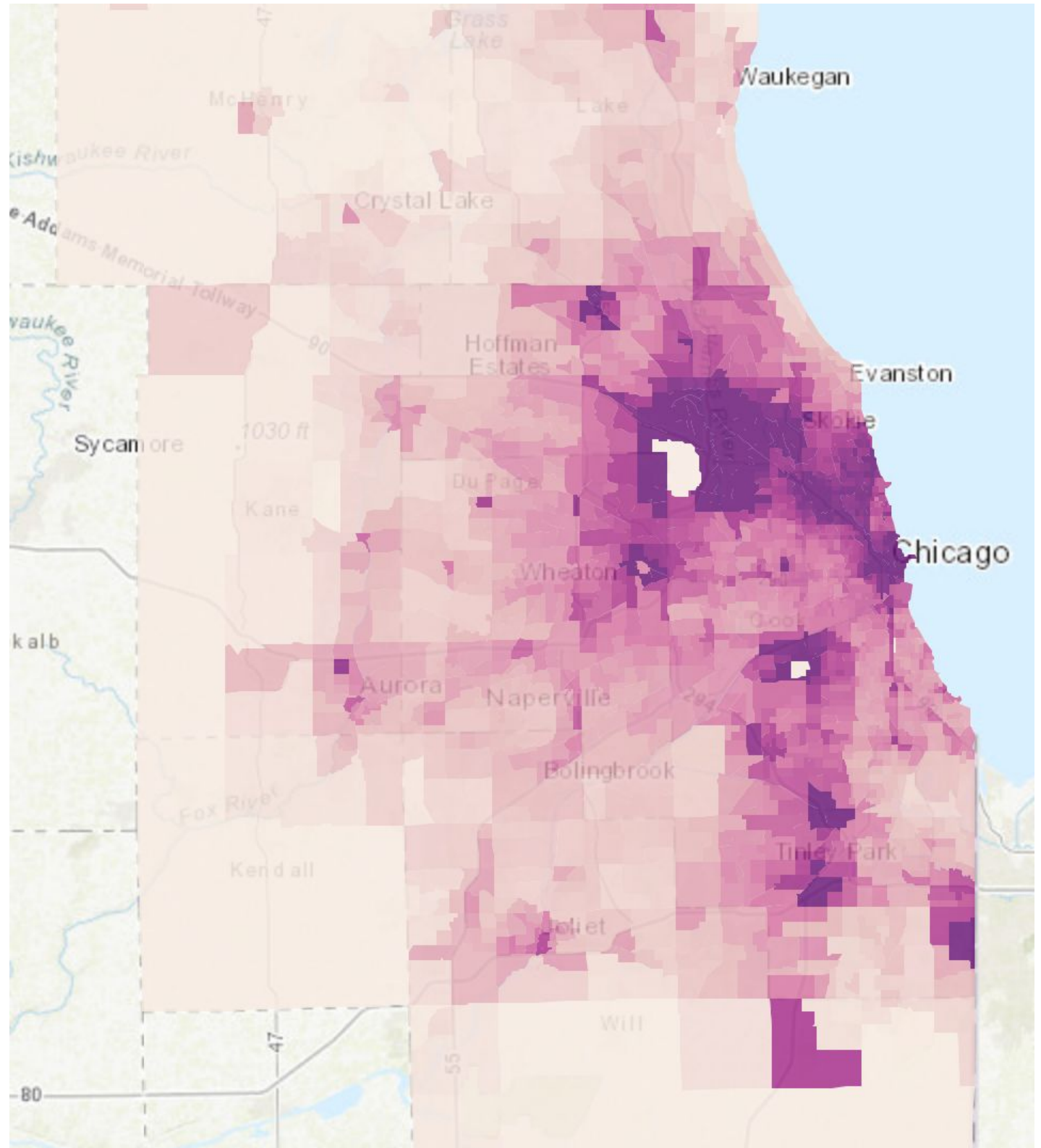


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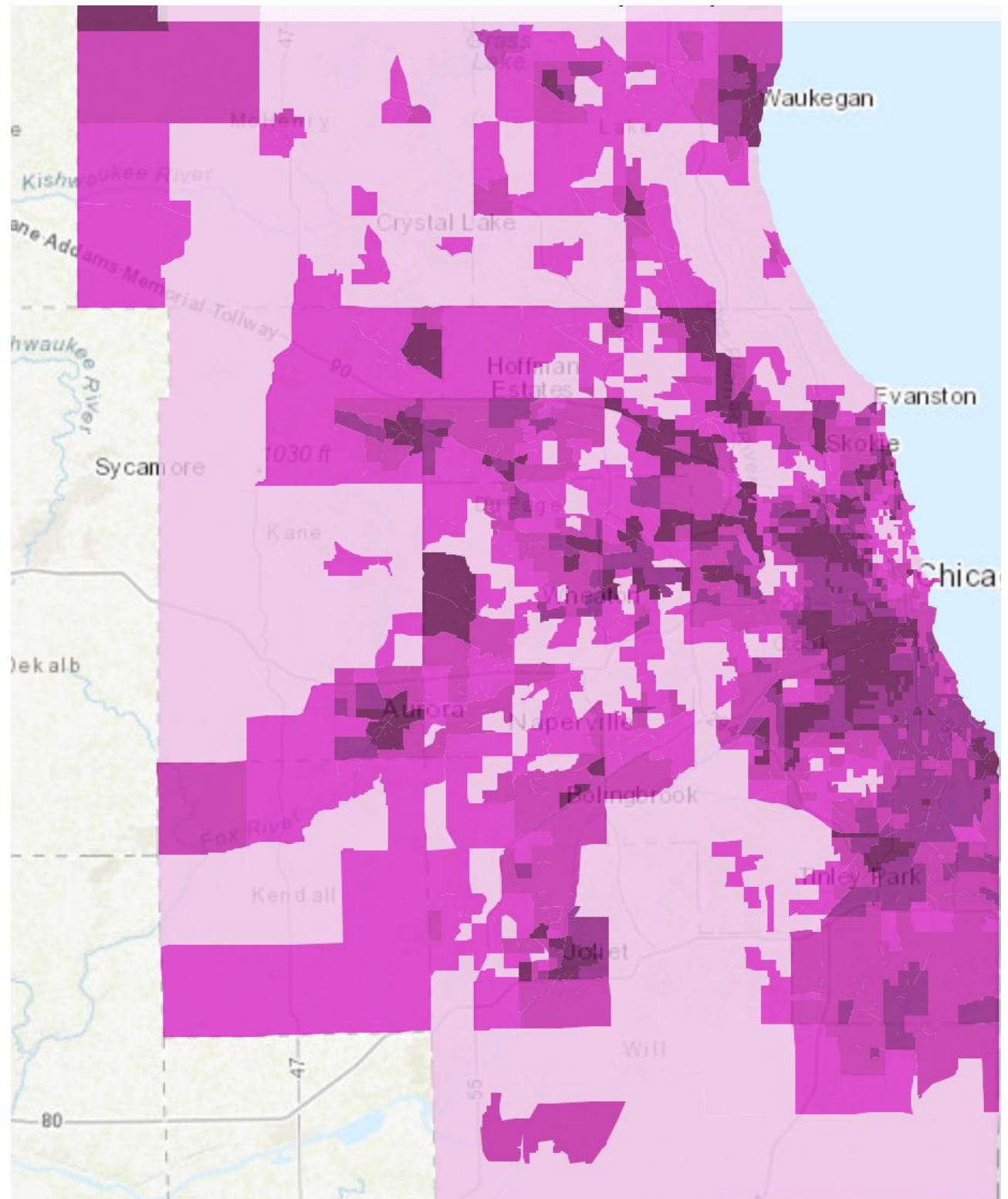
Flooding



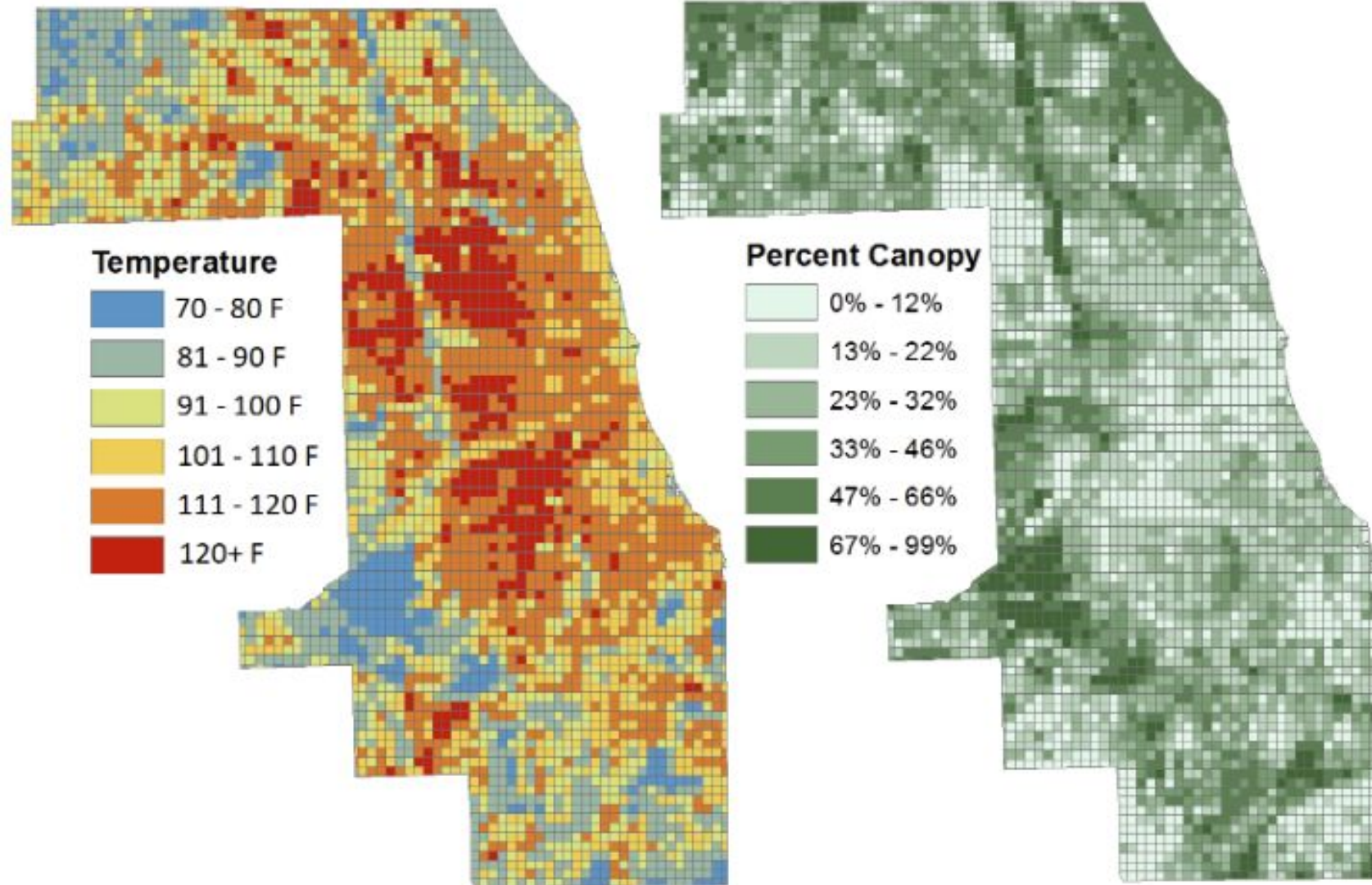
Air Quality



Vulnerable Populations



Heat

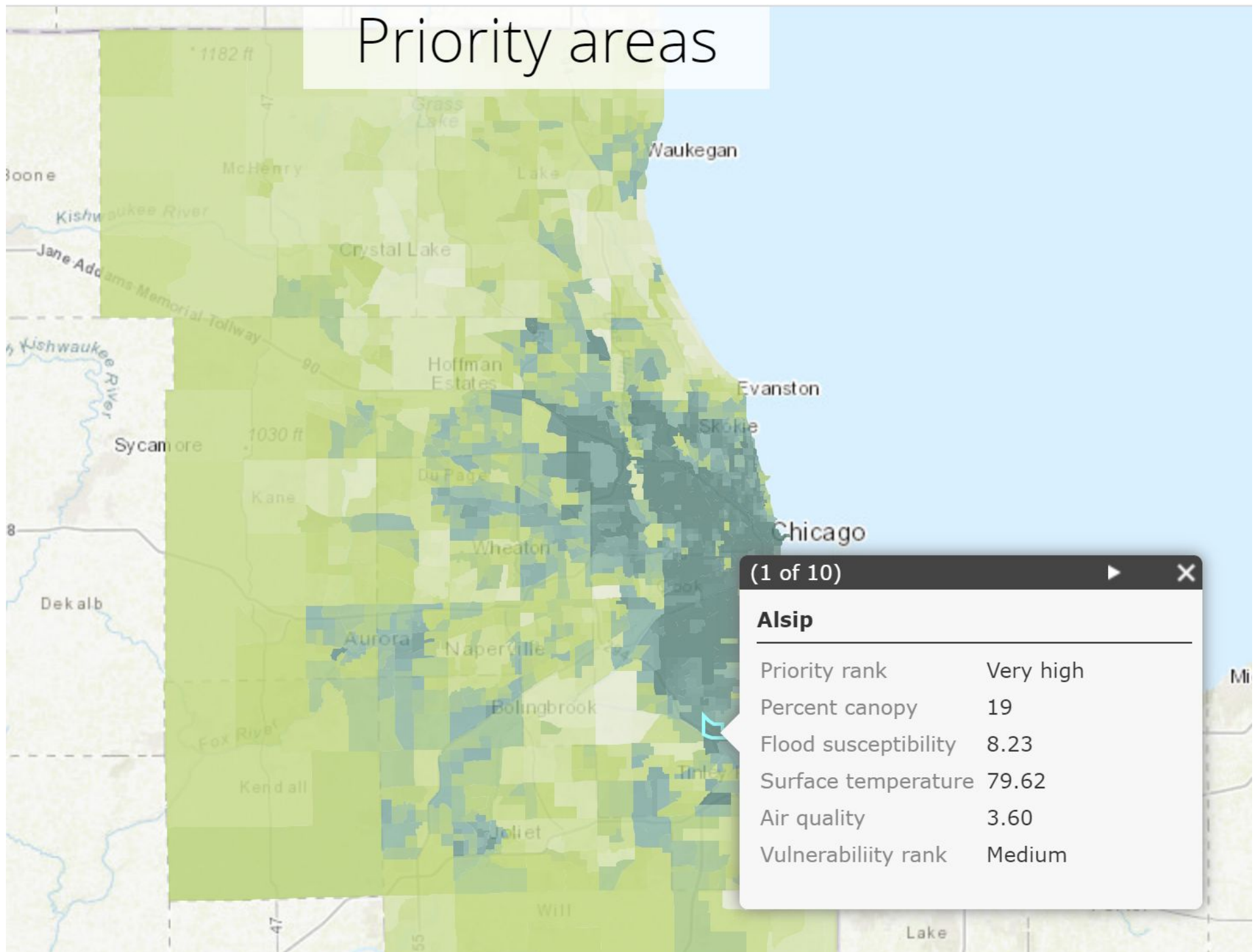


Temperature Map

chicagorti.org/surface-temperature-and-tree-canopy



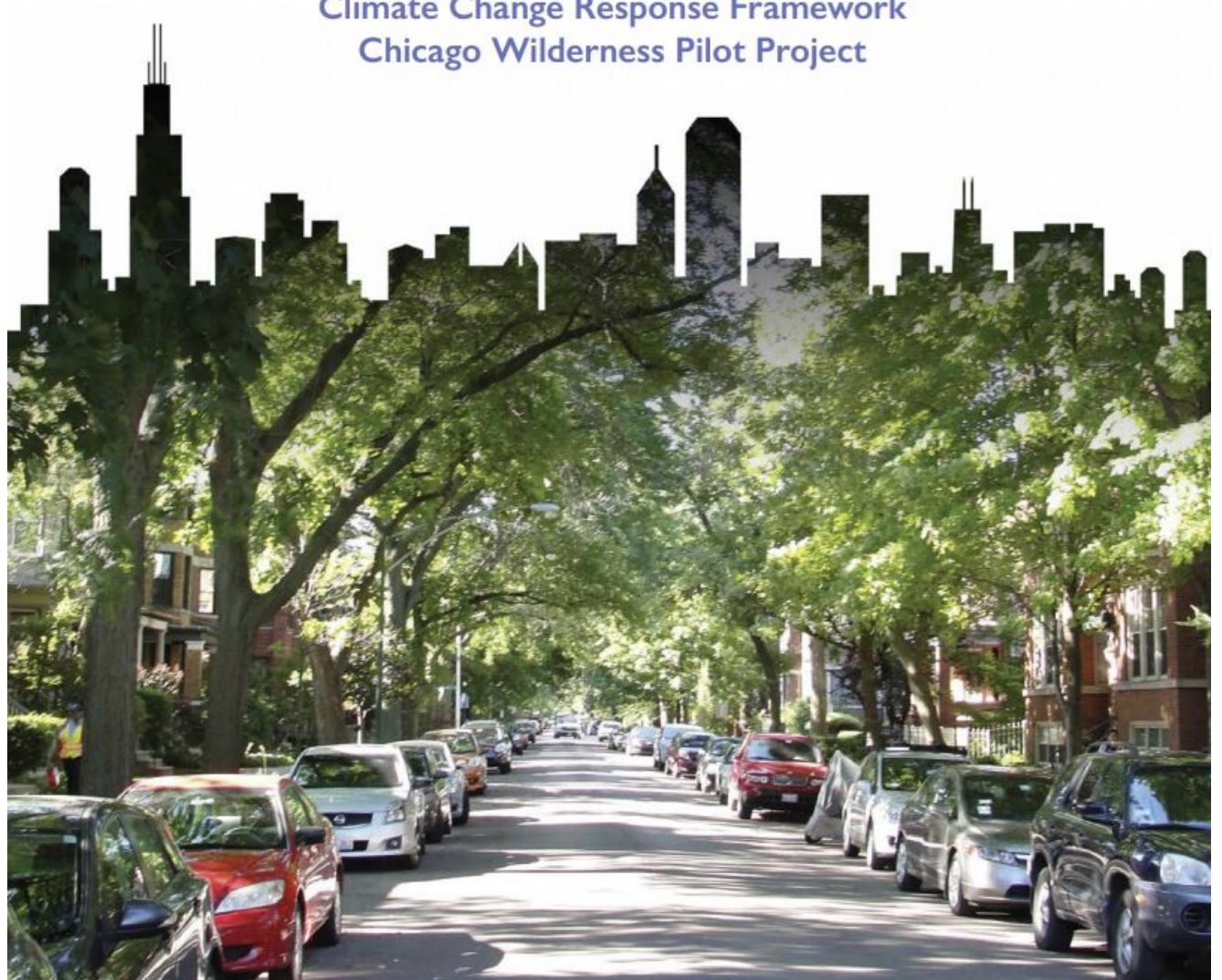
Priority areas



Climate Vulnerability

CHICAGO WILDERNESS REGION URBAN FOREST VULNERABILITY ASSESSMENT AND SYNTHESIS:

A Report from the Urban Forestry
Climate Change Response Framework
Chicago Wilderness Pilot Project





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