

e-JUST — Environmental Justice using Urban Scalable Toolkit

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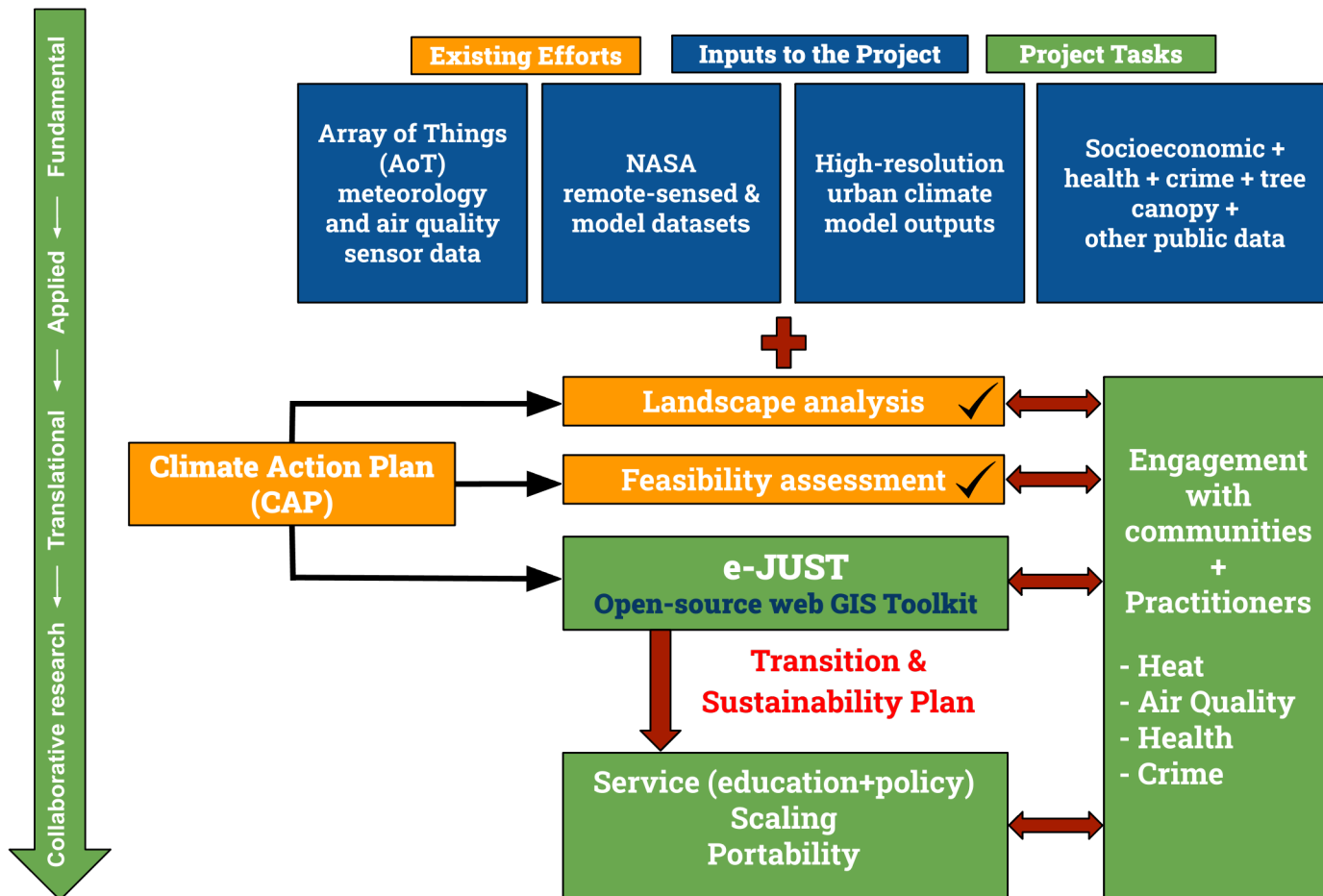
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A federal funded collaborative project between UI system and MMC



e-JUST — Environmental Justice using Urban Scalable Toolkit



Themes

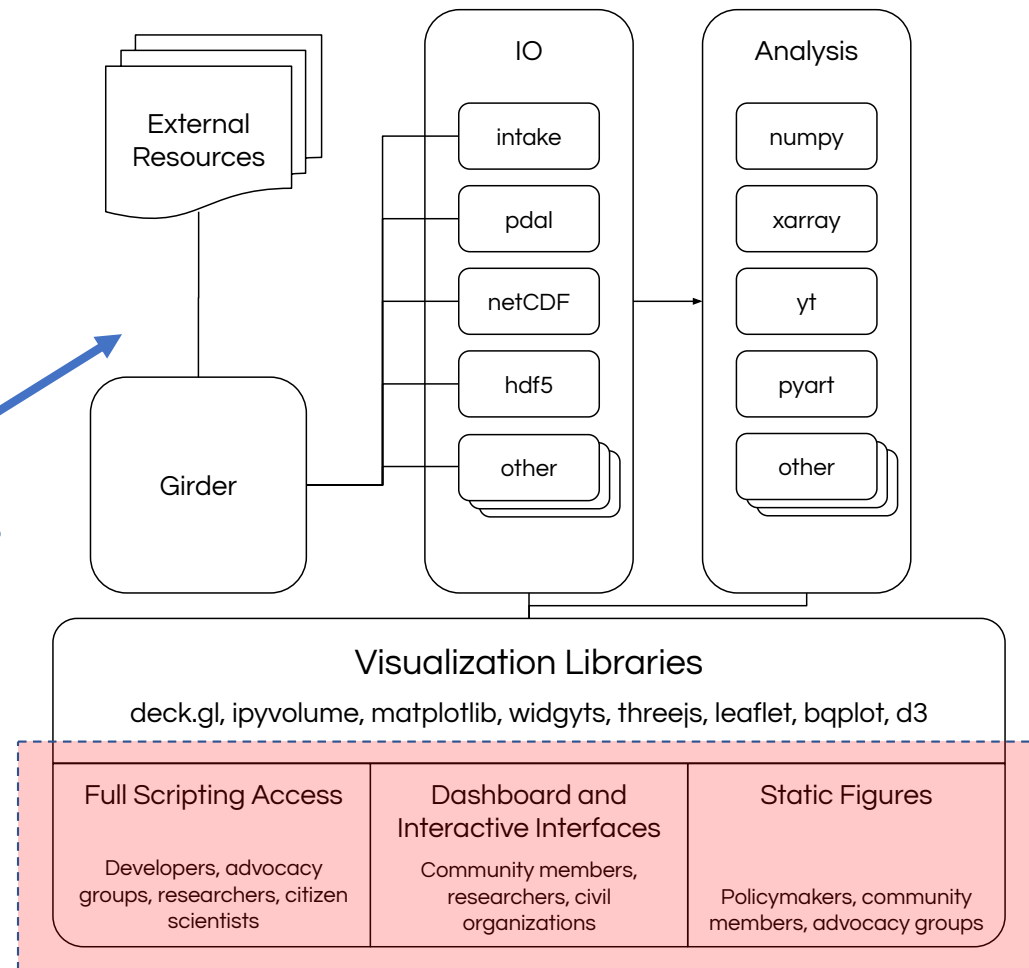
-  Climate Hazards
-  Extreme Heat
-  Public Health
-  Air Quality
-  Greenspace
-  Tree Canopy
-  Urban Development
-  Energy
-  Utilities
-  Crime

Objective 1

Develop e-JUST architecture with capacity for **scale** and **portability**.

Data analysis
behind the scenes

Web-based
GIS visualization



Objective 2

Co-identify extreme heat and air quality threats to health, equity, and crime.

- Gather community-based inputs (citizen engagement via participatory sessions, citizen commissions, etc.)
- Heat Vulnerability Index (HVI)
- Crime mapping

Objective 3

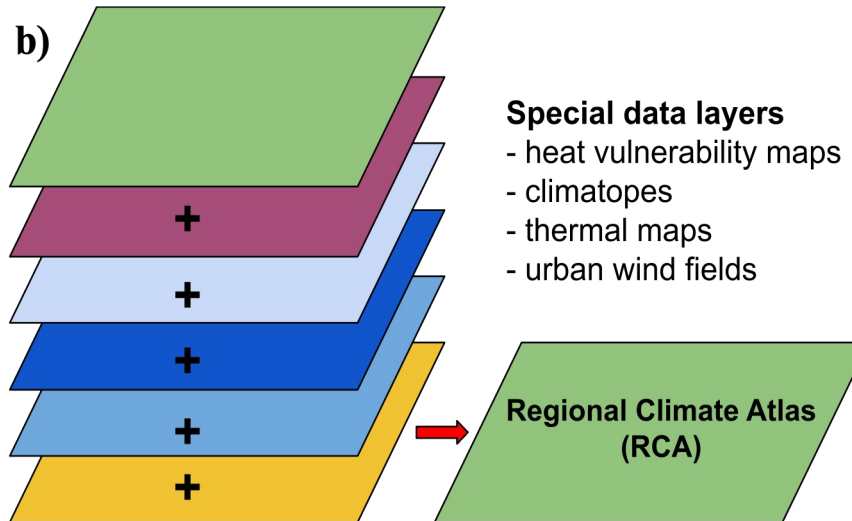
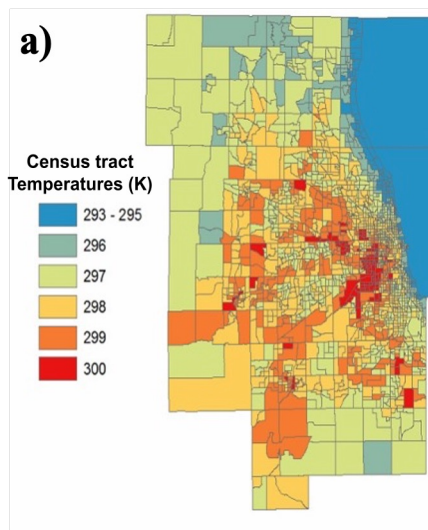
Develop **integrated products** for equity-informed planning and decision-making

Array of Things
(AoT)
meteorology
and air quality
sensor data

NASA
remote-sensed &
model datasets

High-resolution
urban climate
model outputs

Socioeconomic +
health + crime + tree
canopy +
other public data

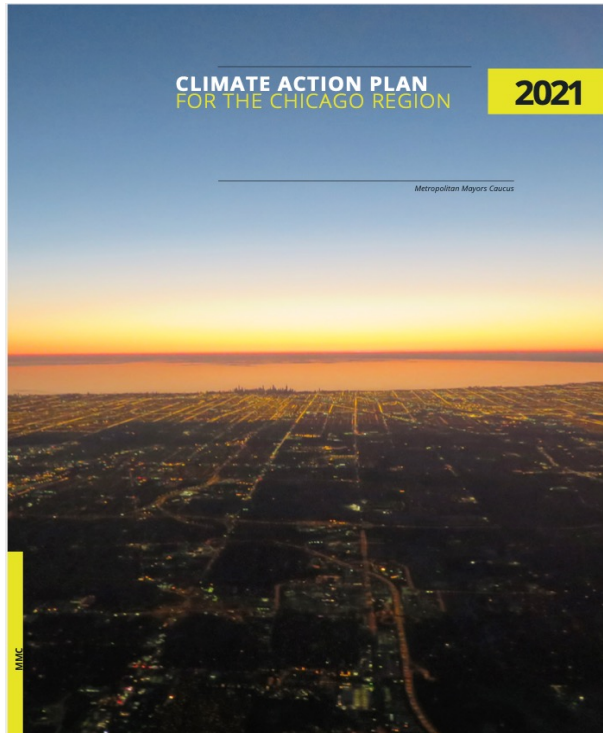


Objective 4

Empowering communities with **evidence-based measures** to improve health equity and reduce crime.

- **Co-produce knowledge** to empower underserved and EJ communities
- Integrate health and equity focus into municipal planning and operations (**MMC CAP**)





Planned Outcomes

- Contribute to adopting short-term health and equity strategies
- Learning and preparing for long-term solutions to advance EJ actions

This project will serve

- interdisciplinary scientists and researchers;
- policymakers and their staff;
- community members;
- developers seeking to augment, utilize or build on the technology and data available through e-JUST.

Thank you

Press release: <https://blogs.illinois.edu/view/7447/55588468>

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