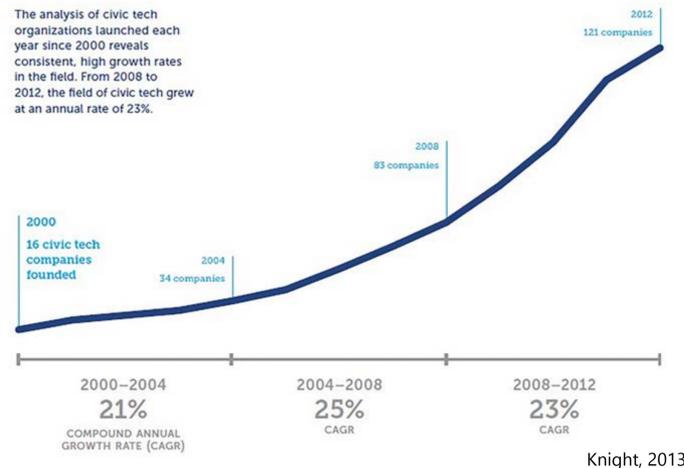
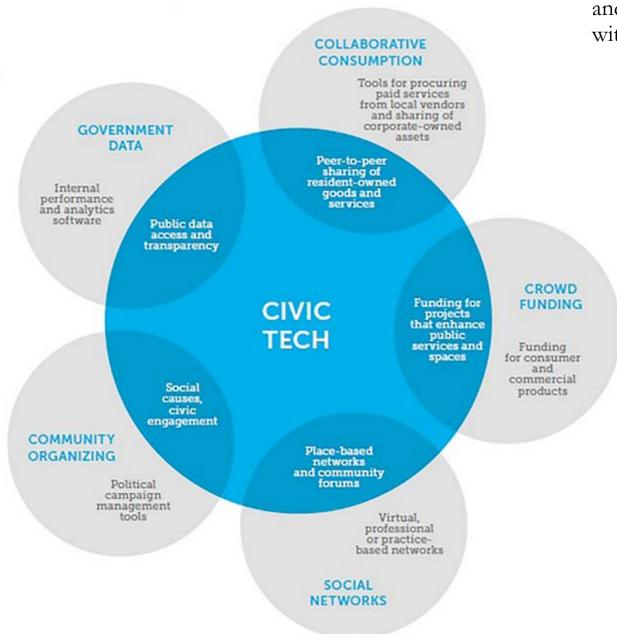


# Civic Technology and Digital Storytelling in Northeast and Central Illinois

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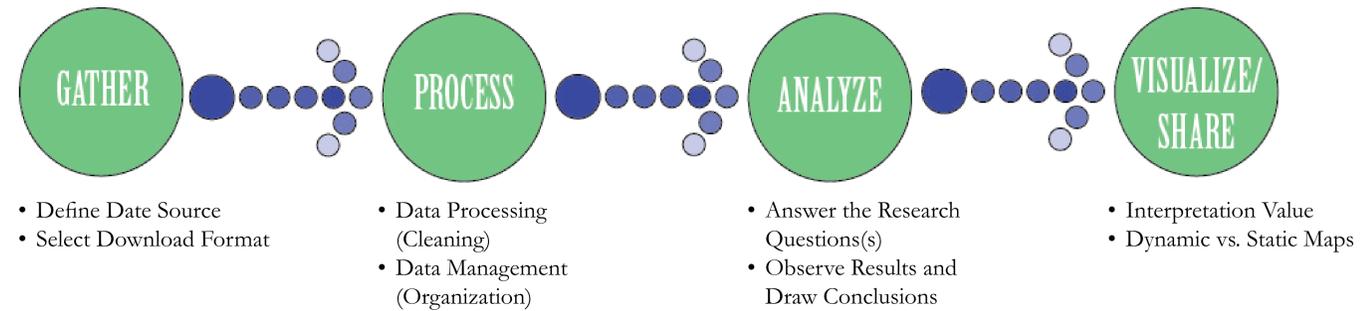
## What is Civic Technology?

Civic technology projects provide information in a way that is easier to understand and is more accessible, while simultaneously encouraging continued engagement with the general public. These projects aim to build data and tools “with, not for.”



## Open Data and Open-Source Tools

Open source data, tools, and web-based information are important factors behind the emergence of civic technology as a frame for public engagement and planning. Increasingly, planners must find creative ways to visualize and share data across multiple networks and types of stakeholders. In other words, working with data is more impactful when framed as storytelling. Civic technology tools and open source data empower others to not only tell their own stories, but to listen and to engage in conversations with other storytellers that leads to action.



## 5 Methods of Civic Engagement in Civic Technology

An engagement methodology for creating a civic technology group in Champaign-Urbana

### 1. Utilize existing social infrastructure

\* refers to the ecosystem of relationships and formal and informal organizations in a community. These structures can be physical or relational, and most are organized by some element of place.



Above: Champaign-Urbana Civic Tech Stakeholders Meeting, 4/1/2016

### 4. Lead from Shared Spaces

### 5. Distribute Power

“The art of leading a collaborative process is the art of getting out of the way.” - McCann, 2015

### 2. Utilize existing tech skills and infrastructure

### 3. Create two-way educational environments

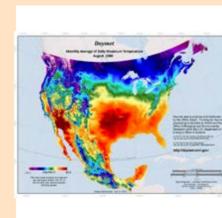
ChiHackNight co-founder Derek Eder acted as a consultant for our team in both engaging the Chicago community with the OHVM project, and starting a C-U based event group similar to ChiHackNight. ChiHackNights happen every Tuesday at 6 pm, and currently meet in the Braintree office at the Merchandise Mart in downtown Chicago. Everyone is welcome to propose a project, join a team, or simply observe and learn. The group provides an excellent semi-local example of how to best follow McCann's recommendations.



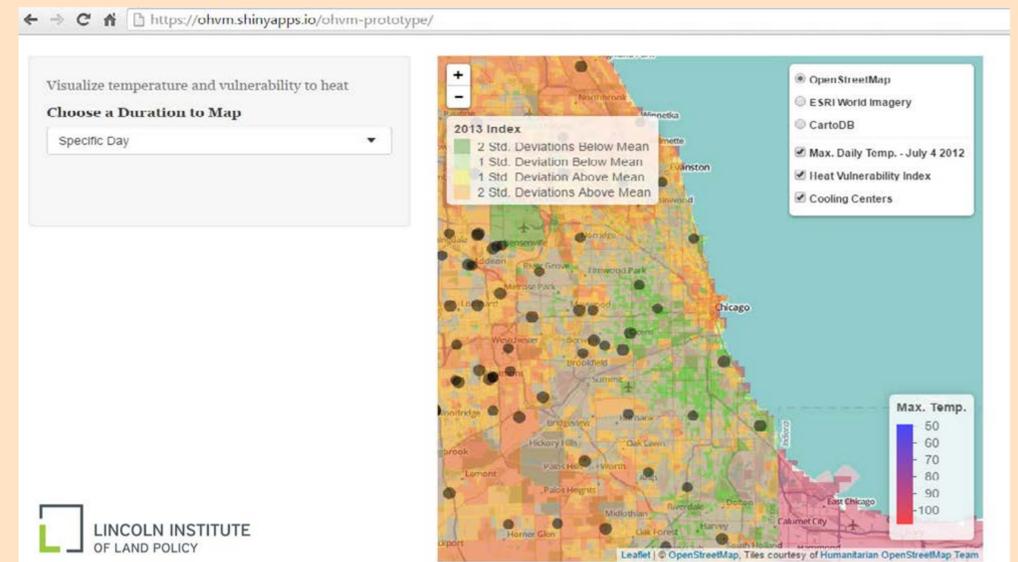
## The Open Heat Vulnerability Mapper (OHVM)

The Open Heat Vulnerability Mapping project, or OHVM, is an example of civic technology that maps where vulnerable populations and hazardous locations are in terms of extreme heat events (EHE) using publicly available datasets. While a primary aim of the OHVM tool is to provide a centralized, web-based platform for accessing scientific datasets and visualizing existing data in an innovative way, the tool was also inspired by a desire to show how vulnerability has changed in the past and may change in the future.

### Gather



The vulnerability index was created using data from the U.S. Census Bureau and Oakridge National Laboratory's DAYMET weather datasets. The data was then processed and analyzed with R, Shiny, and GIS software.



Screenshot from the beta version of the Open Heat Vulnerability Mapping tool.

### Analyze

A raster dataset was created by our team showing grid cells where for a given day, the estimated surface temperature from the Daymet data exceeded the 95th percentile of daily maximum temperature for the previous 30 years at the nearest weather station. Hotspots for the summer of 2013 (listed on the tool drop-down display menu as “Vulnerable + Exposed”) were created by overlapping block groups that were two standard deviations above the mean with the 95th percentile elevated surface temperature.

### Visualize/Share

Like previous research initiatives which focused on vulnerability, the standard deviation of the final factor analysis was ultimately used to measure and display vulnerability across the urban landscape for the 2013 index in particular. There are three different selectable base maps to choose from (OpenStreetMap, CartoDB, and Google satellite imagery), which, along with all the other layers, can be turned on and off from a drop-down menu in the upper right-hand corner of the map. The cooling centers are displayed as large black circles; and, upon, clicking on them, users can see the names of the facility and their address. Actual index values can also be viewed if the user clicks on a particular block group.

Take the Survey: <http://goo.gl/forms/4JkbpmcJnl>

### Process

