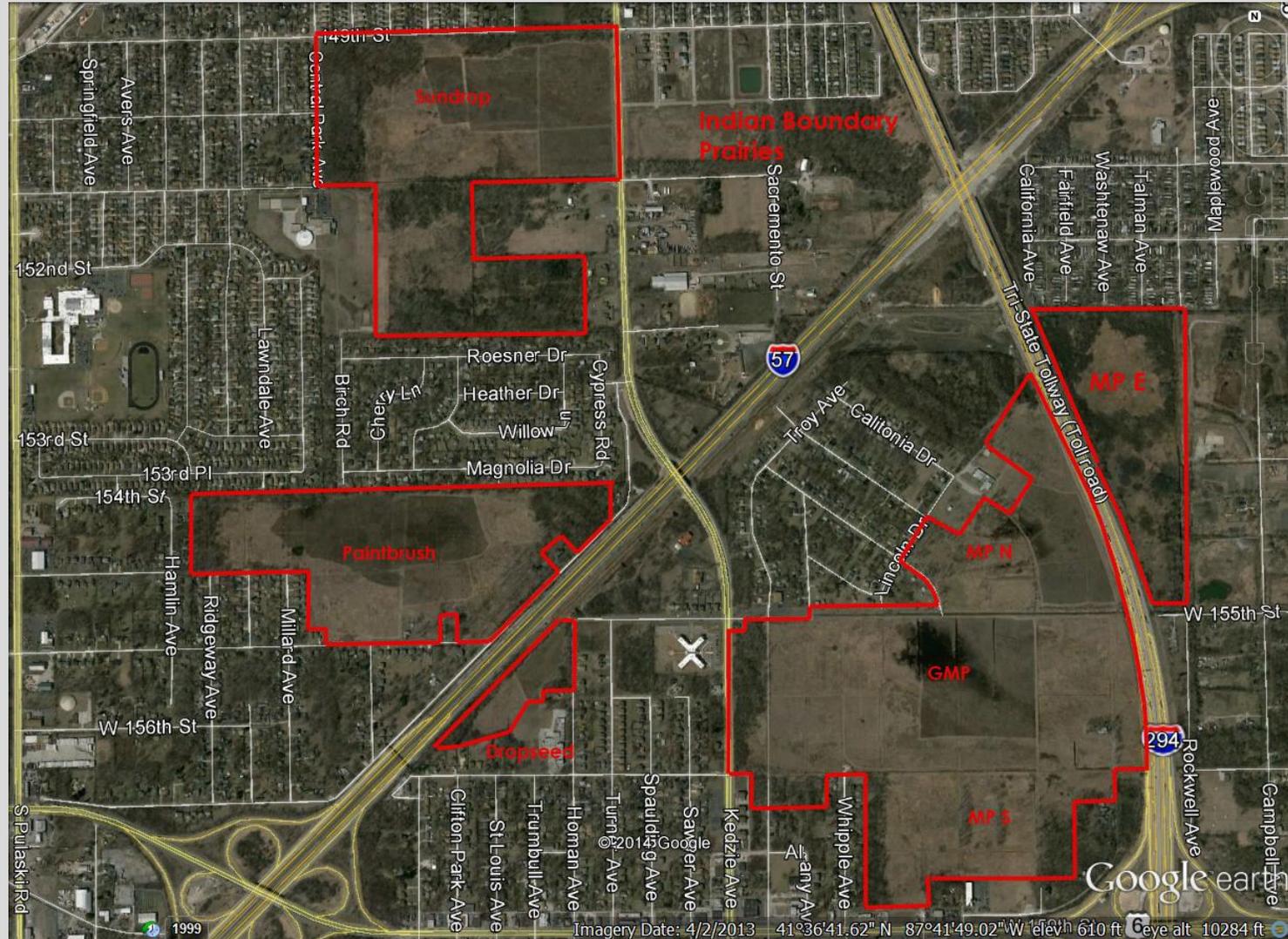


Chicago Greenprint

Sarah Hagen and John Legge



Indian Boundary Prairies, Markham IL



Chicago Greenprint: Questions

In Chicago and Cook County:

1. What locations have the greatest need for tree canopy interventions, based on urban heat impacts and air quality issues?
2. What locations have the greatest need for stormwater interventions, including issues of flooding and basement backups?
3. Are there areas where important biodiversity intersects with these human priority areas?
4. Conversely, are there areas where people also are isolated from nature/greenspace while also being exposed to climate change risks?
5. What locations have the greatest combined need in terms of our mission, looking across areas of flooding, air quality, excess heat, urban biodiversity, and connecting people to nature?

Data Layers Used – Air Quality Targets

- US Census Data
 - Lower Median Household Income
 - Higher Percentage of Youth Under 18
- Higher Air Toxins and Cancer Risk (Source: US EPA)
- Lower Tree Canopy Data (Source: Morton Arboretum)
- Higher Average Daily Vehicle Traffic (Source: IL Department of Transportation)

Data Layers Used – Heat Targets

- US Census Data
 - Lower Median Household Income
 - Higher Percentage of Youth Under 18
 - Higher Percentage of Adults Over 65
- Higher Median Summer Temperature (Source: USGS LANDSAT)
- Lower Tree Canopy Density (Source: Morton Arboretum)
- Higher Percentage of Impervious Surfaces (Source: Morton Arboretum)

Data Layers Used – Flood Risk Targets

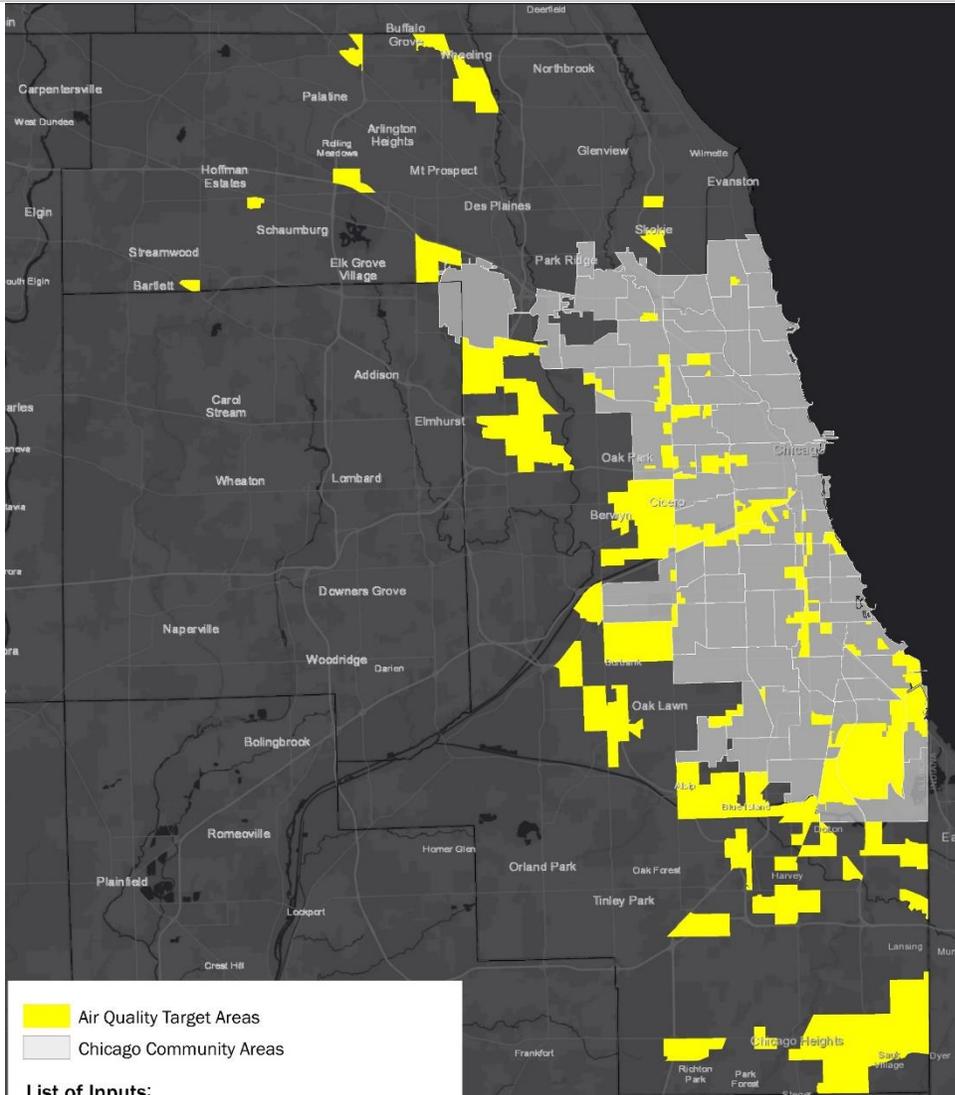
- US Census Data
 - Lower Median Household Income
- Flood Susceptibility Index (Source: Chicago Metropolitan Agency for Planning)
 - Reported Flood Locations
 - Topographic Wetness Index
 - Combined Sewer Service Areas
 - Elevation
 - Impervious Surfaces
 - Age of First Development
 - Precipitation Variation

Data Layers Used – Combined Targets

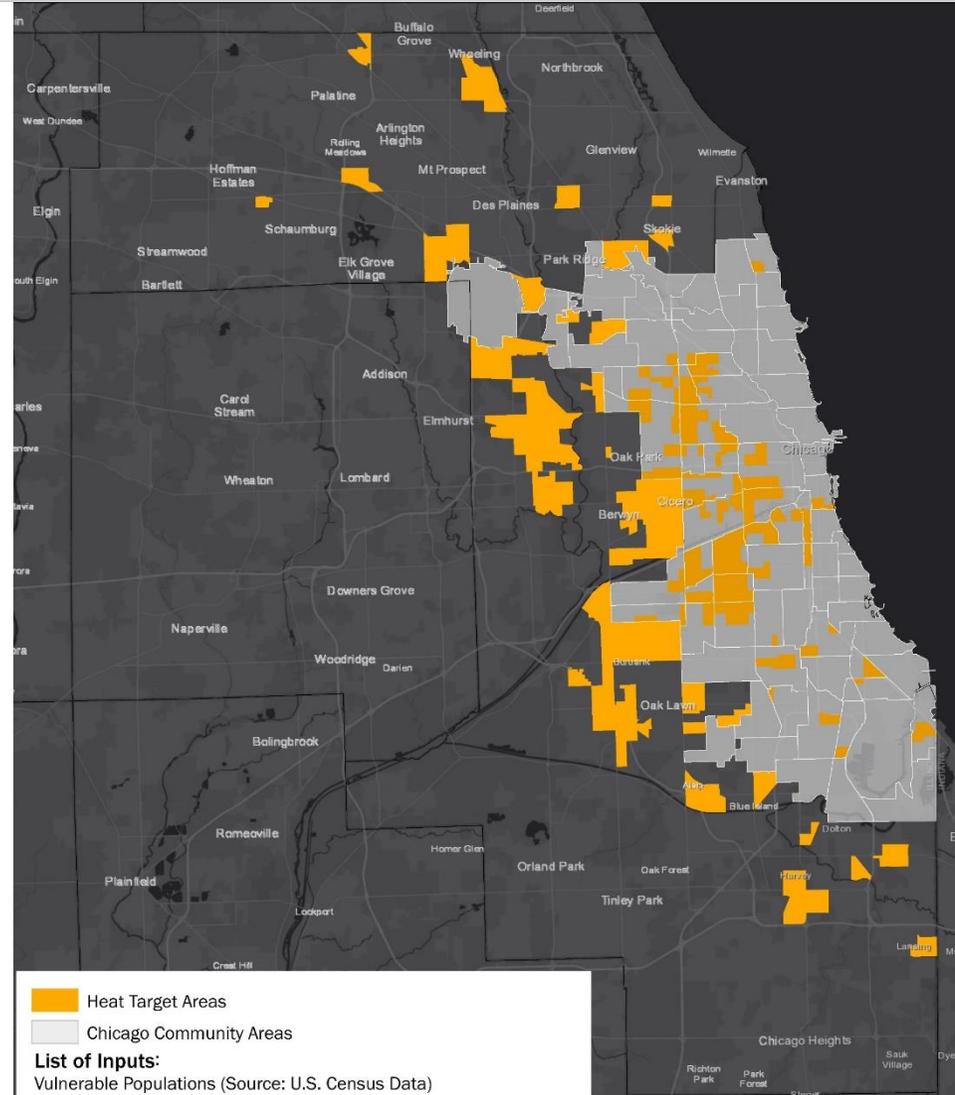
- US Census Data
 - Lower Median Household Income
 - Higher Percentage of Youth Under 18
 - Higher Percentage of Adults Over 65
- Lower Tree Canopy Density (Source: Morton Arboretum)
- Higher Percentage of Impervious Surfaces (Morton Arboretum)
- Higher Median Summer Temperature (Source: USGS LANDSAT)
- Higher Flood Susceptibility (Source: Chicago Metropolitan Agency for Planning)
- Higher Air Toxins and Cancer Risk (Source: US EPA)
- Higher Average Daily Vehicle Traffic (Source: IL Department of Transportation)

Additional Data Layer Options

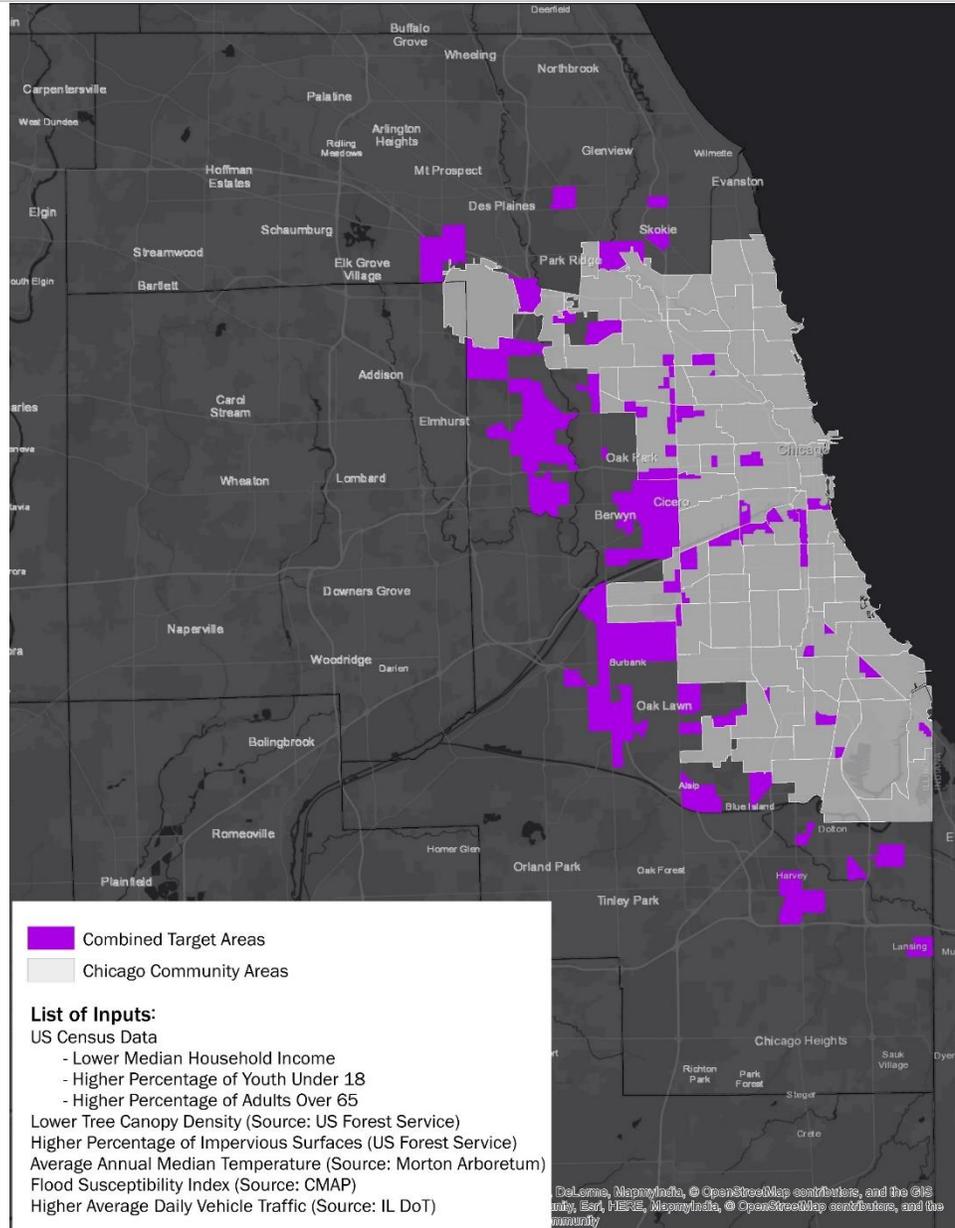
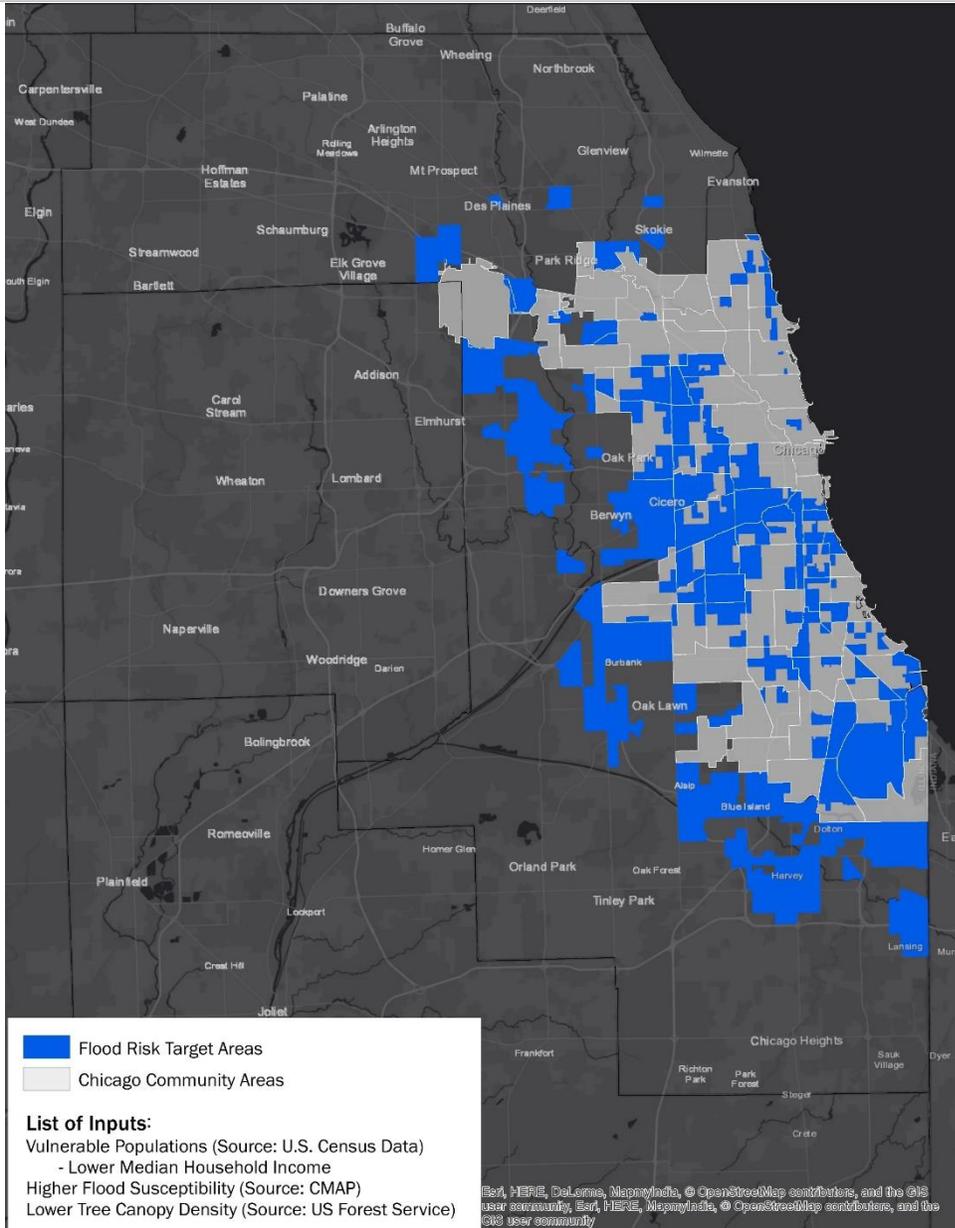
- Chicago Wilderness Green Infrastructure Vision (GIV)
- Chicago Parks, Cook County Forest Preserves
- Park Accessibility (CMAP)
- Municipal Boundaries
- Political Boundaries

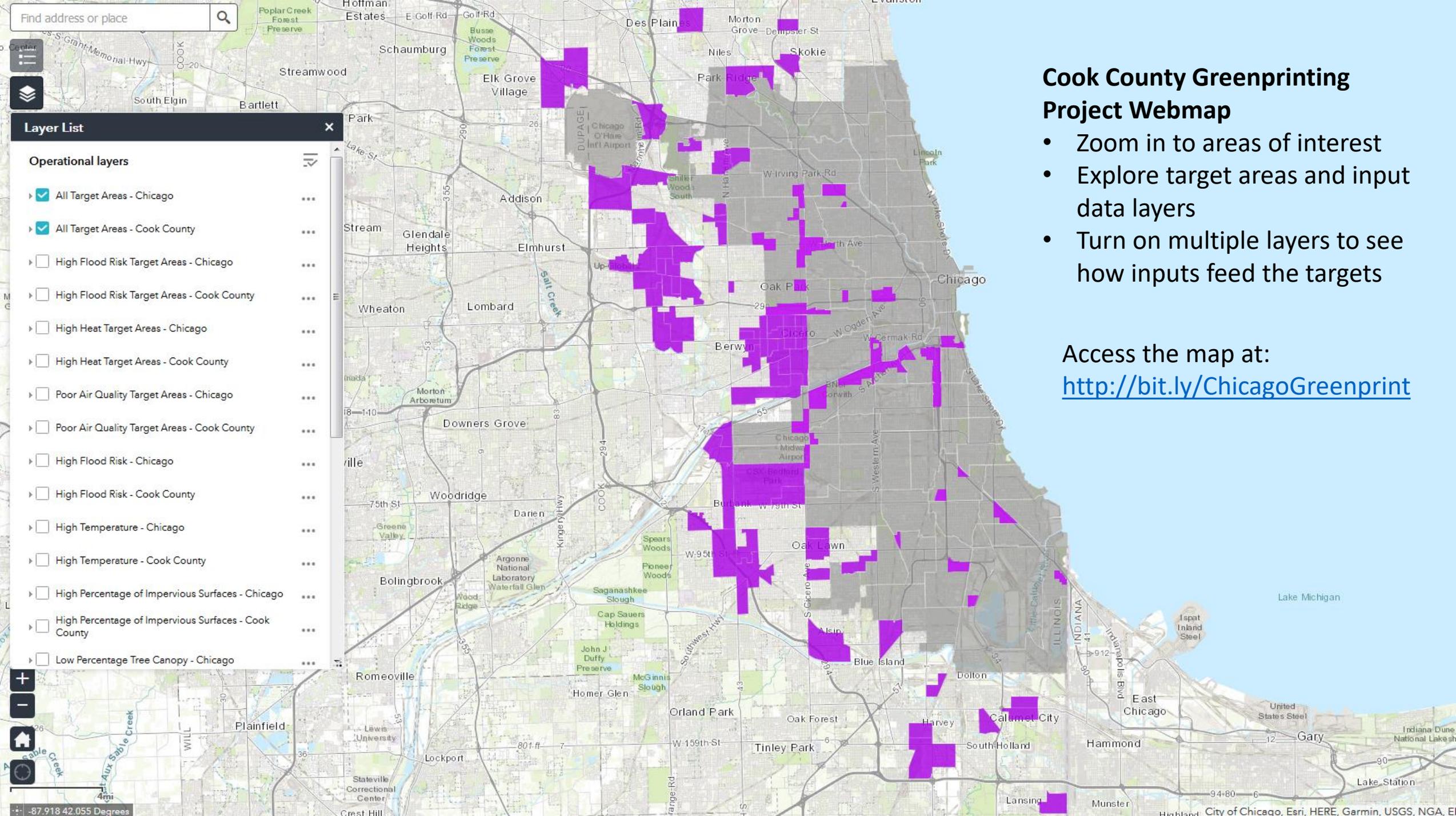


Esri, HERE, DeLorme, Mapbox, and the GIS user community, Esri, HERE, Mapbox, and the GIS user community



Esri, HERE, DeLorme, Mapbox, and the GIS user community, Esri, HERE, Mapbox, and the GIS user community





Find address or place

Layer List

- Operational layers**
- All Target Areas - Chicago
 - All Target Areas - Cook County
 - High Flood Risk Target Areas - Chicago
 - High Flood Risk Target Areas - Cook County
 - High Heat Target Areas - Chicago
 - High Heat Target Areas - Cook County
 - Poor Air Quality Target Areas - Chicago
 - Poor Air Quality Target Areas - Cook County
 - High Flood Risk - Chicago
 - High Flood Risk - Cook County
 - High Temperature - Chicago
 - High Temperature - Cook County
 - High Percentage of Impervious Surfaces - Chicago
 - High Percentage of Impervious Surfaces - Cook County
 - Low Percentage Tree Canopy - Chicago

Cook County Greenprinting Project Webmap

- Zoom in to areas of interest
- Explore target areas and input data layers
- Turn on multiple layers to see how inputs feed the targets

Access the map at:
<http://bit.ly/ChicagoGreenprint>



Chicago Greenprint online: <http://bit.ly/ChicagoGreenprint>

Coming Soon: Data packages of all layers. See Sarah Hagen.

For more information:

- Sarah Hagen, Spatial Scientist shagen@tnc.org
- John Legge, Chicago Conservation Director john.legge@tnc.org

Special Thanks:

- Nora Beck, Chicago Metropolitan Agency for Planning
- Lindsay Darling, Morton Arboretum
- Lucero Flores, TNC intern

Find address or place

To use this map, click on the layers option found in the top right corner of your screen.

From here, you can:

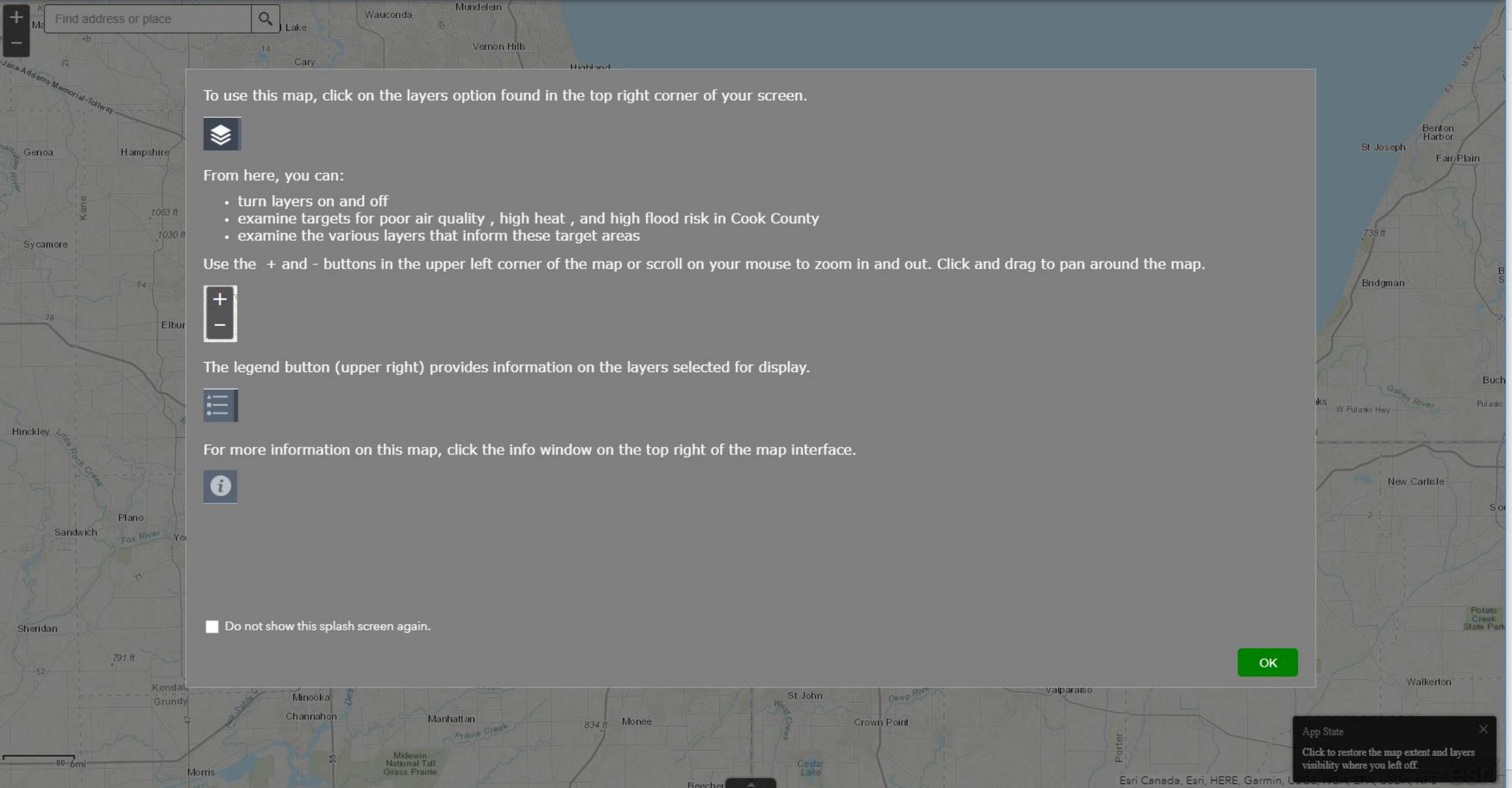
- turn layers on and off
- examine targets for poor air quality , high heat , and high flood risk in Cook County
- examine the various layers that inform these target areas

Use the + and - buttons in the upper left corner of the map or scroll on your mouse to zoom in and out. Click and drag to pan around the map.

The legend button (upper right) provides information on the layers selected for display.

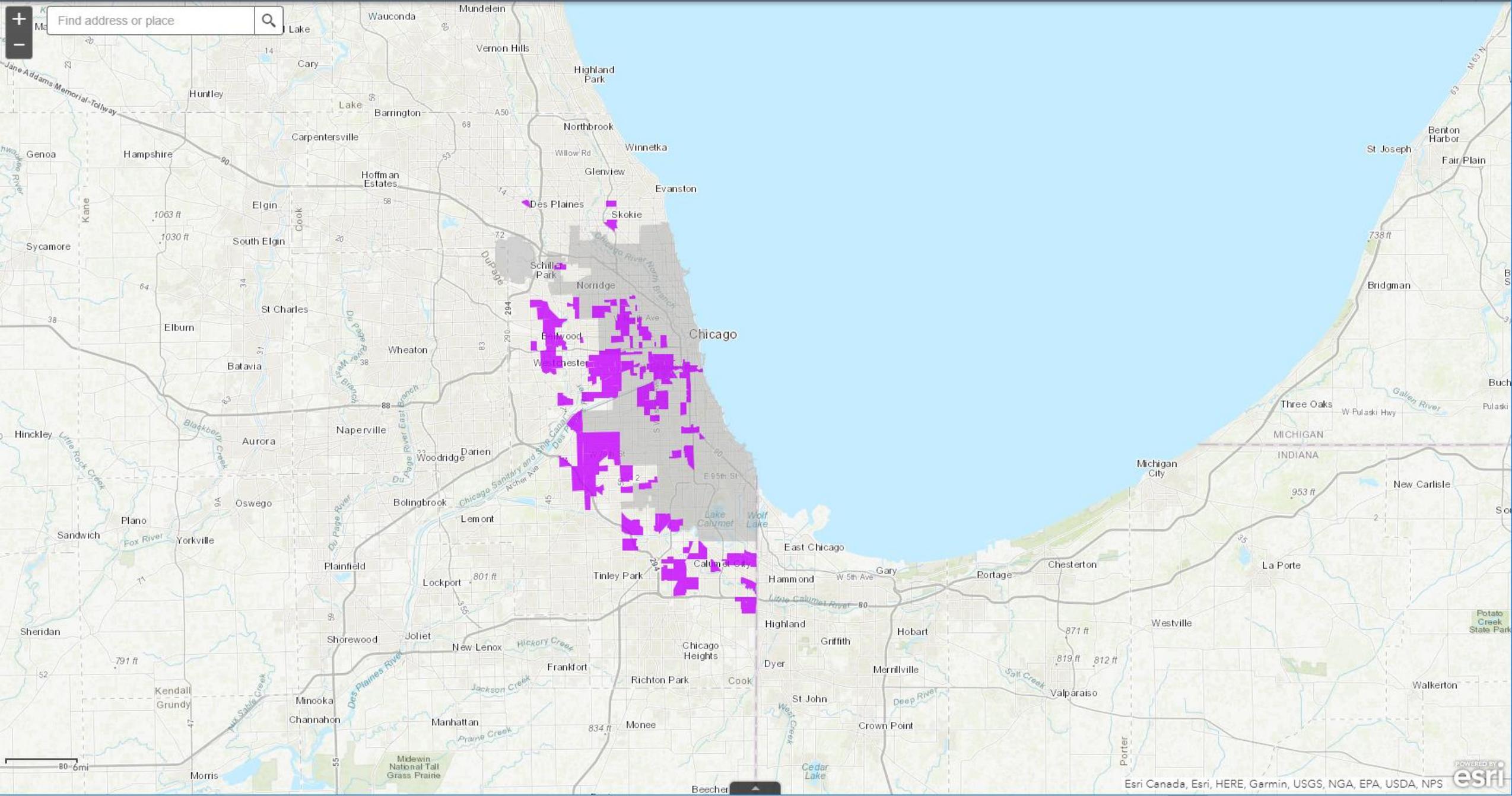
For more information on this map, click the info window on the top right of the map interface.

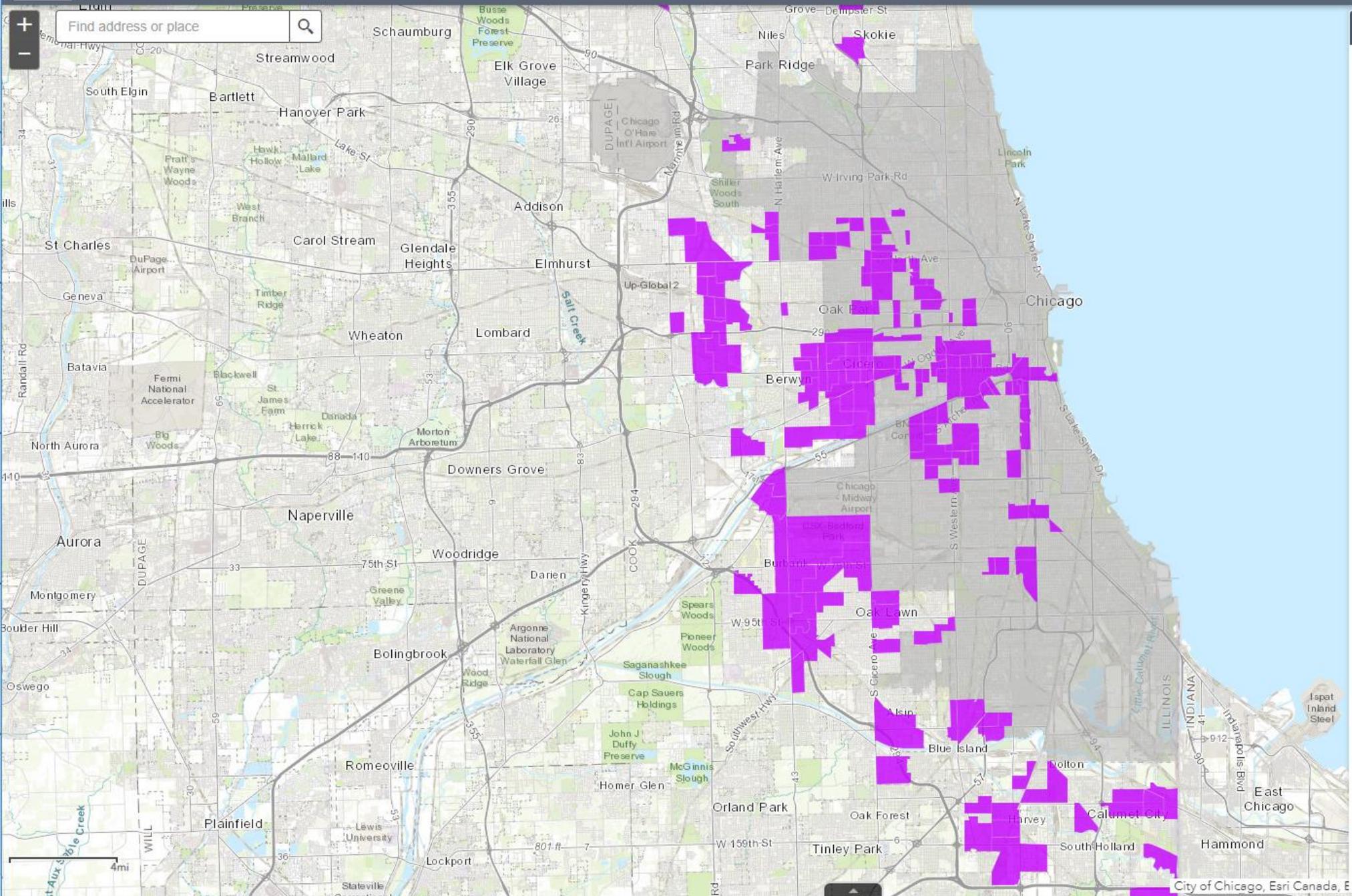
Do not show this splash screen again.



App State

Click to restore the map extent and layers visibility where you left off.



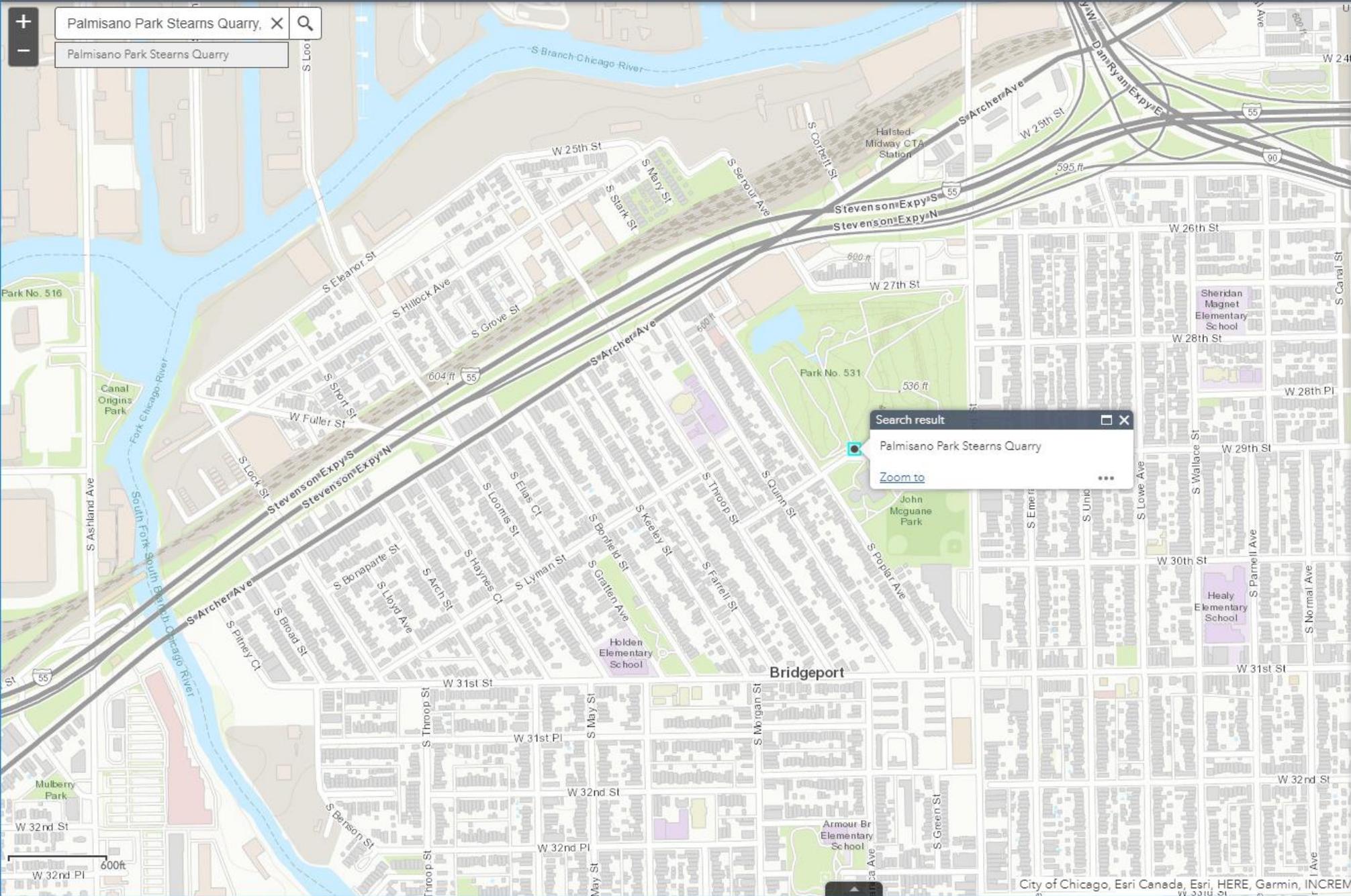


Layer List

Layers

- Combined Target Areas
- Poor Air Quality Target Areas
- High Flood Risk Target Areas
- High Heat Target Areas
- State_Representative_District
- Political_Township
- Municipalities
- Chicago_Community_Areas
- GIV_Composite_Areas
- Illinois Natural Areas Inventory Sites
- Chicago Parks District Natural Areas
- Chicago_Parks
- Access to Parks - CMAP (Park Acres/10,000 Residents)
- Low to Moderate Income Areas - Chicago
- Low to Moderate Income Areas - Cook County
- High Percentage of Children Under 18 - Chicago
- High Percentage of Children Under 18 - Cook County
- High Percentage of Adults 65 and Over - Chicago
- High Percentage of Adults 65 and Over - Cook County
- Low Percentage Tree Canopy - Chicago
- Low Percentage Tree Canopy - Cook County

Search bar: Palmisano Park Stearns Quarry

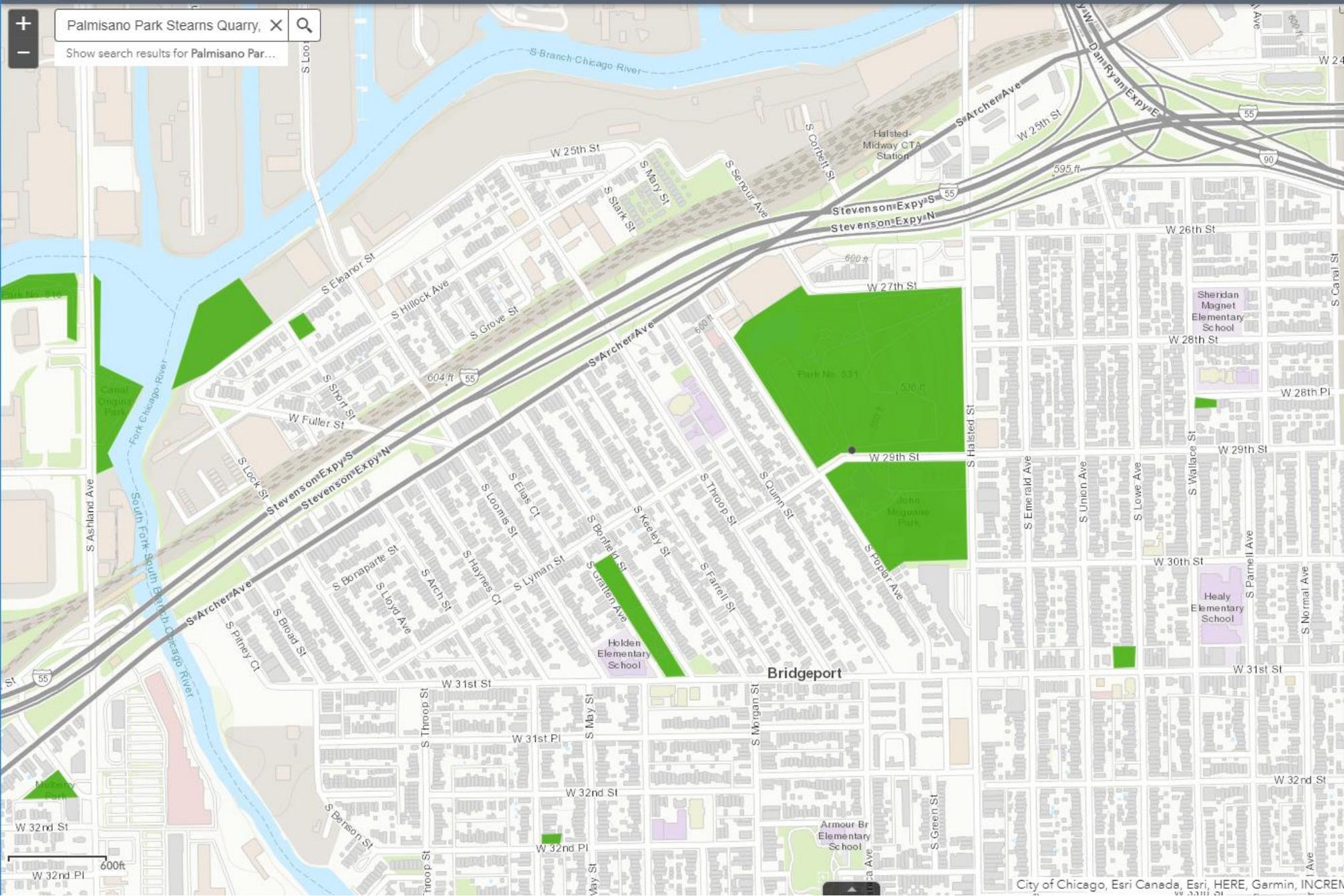


Search result
Palmisano Park Stearns Quarry
[Zoom to](#)

- ### Layer List
- Combined Target Areas
 - Poor Air Quality Target Areas
 - High Flood Risk Target Areas
 - High Heat Target Areas
 - State_Representative_District
 - Political_Township
 - Municipalities
 - Chicago_Community_Areas
 - GIV_Composite_Areas
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 - High Percentage of Children Under 18 - Cook County
 - High Percentage of Adults 65 and Over - Chicago
 - High Percentage of Adults 65 and Over - Cook County
 - Low Percentage Tree Canopy - Chicago
 - Low Percentage Tree Canopy - Cook County

Scale bar: 600ft

Show search results for Palmisano Par...



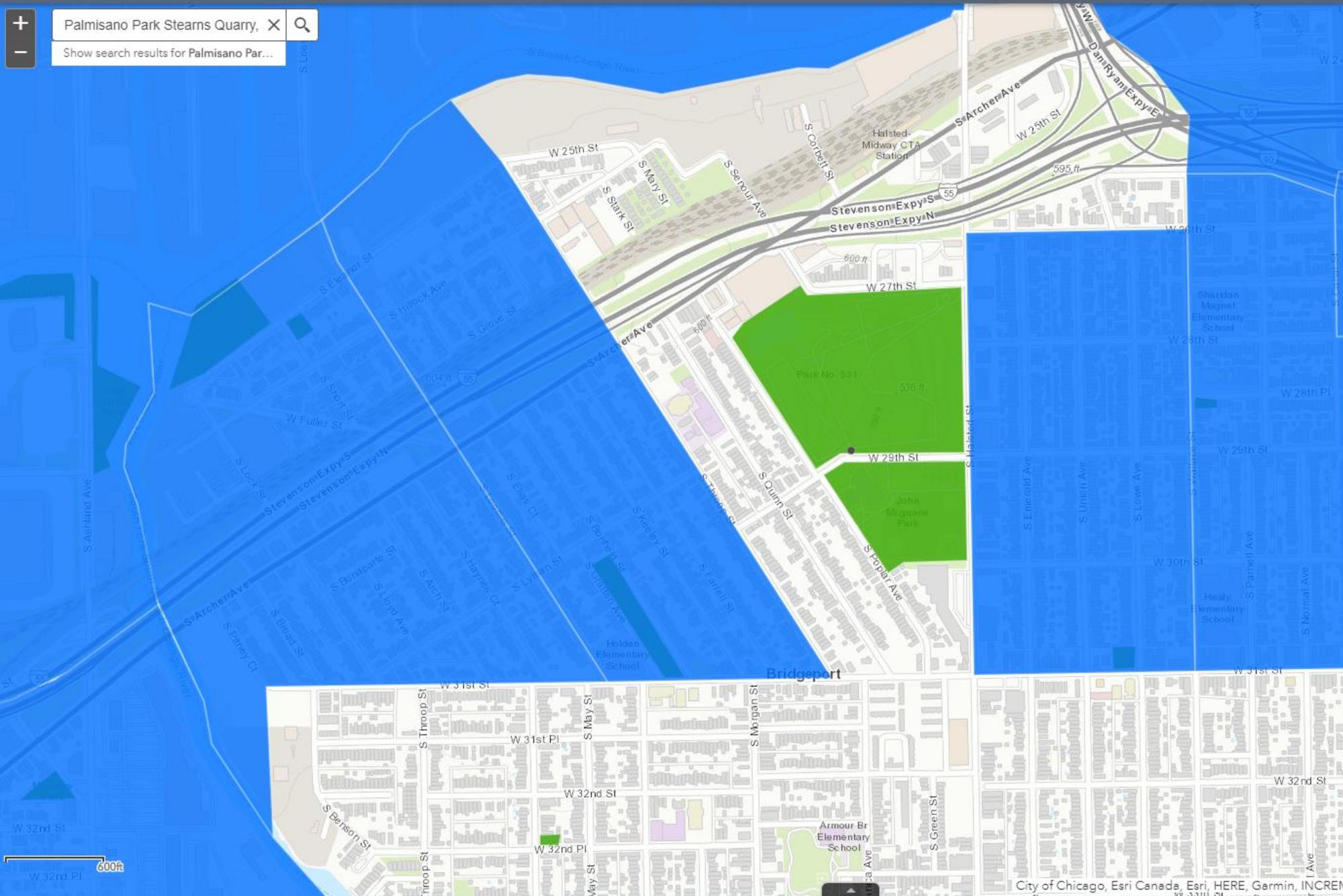
Layer List

- Combined Target Areas ...
- Poor Air Quality Target Areas ...
- High Flood Risk Target Areas ...
- High Heat Target Areas ...
- State_Representative_District ...
- Political_Township ...
- Municipalities ...
- Chicago_Community_Areas ...
- GIV_Composite_Areas ...
- Illinois Natural Areas Inventory Sites ...
- Chicago Parks District Natural Areas ...
- Chicago_Parks ...
- Access to Parks - CMAP (Park Acres/10,000 Residents) ...
- Low to Moderate Income Areas - Chicago ...
- Low to Moderate Income Areas - Cook County ...
- High Percentage of Children Under 18 - Chicago ...
- High Percentage of Children Under 18 - Cook County ...
- High Percentage of Adults 65 and Over - Chicago ...
- High Percentage of Adults 65 and Over - Cook County ...
- Low Percentage Tree Canopy - Chicago ...
- Low Percentage Tree Canopy - Cook County ...



Palmisano Park Stearns Quarry, X Q

Show search results for Palmisano Par...

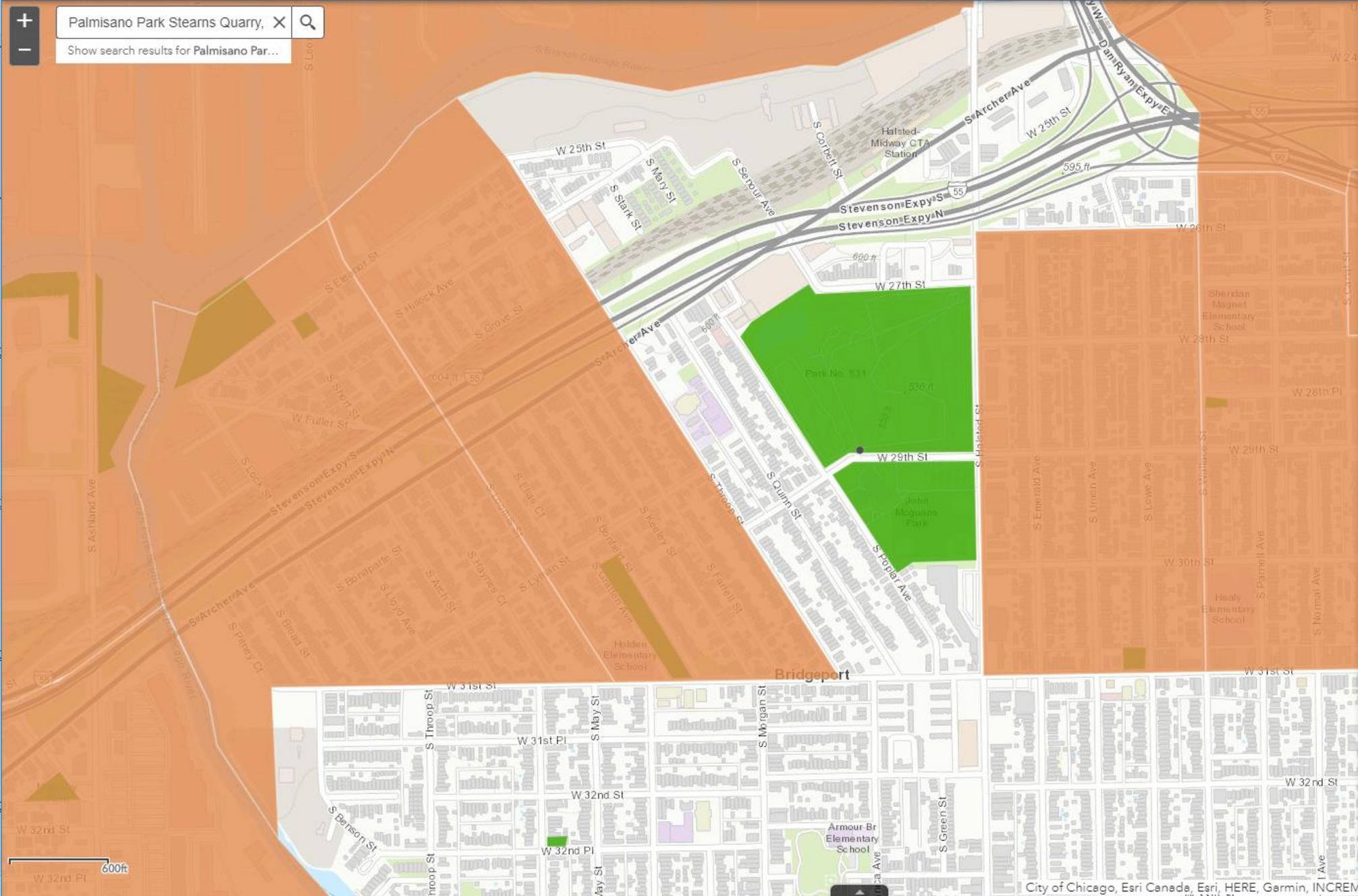


Legend

- High Flood Risk Target Areas
- Chicago_Parks

City of Chicago, Esri Canada, Esri, HERE, Garmin, INCREM

Show search results for Palmisano Par...

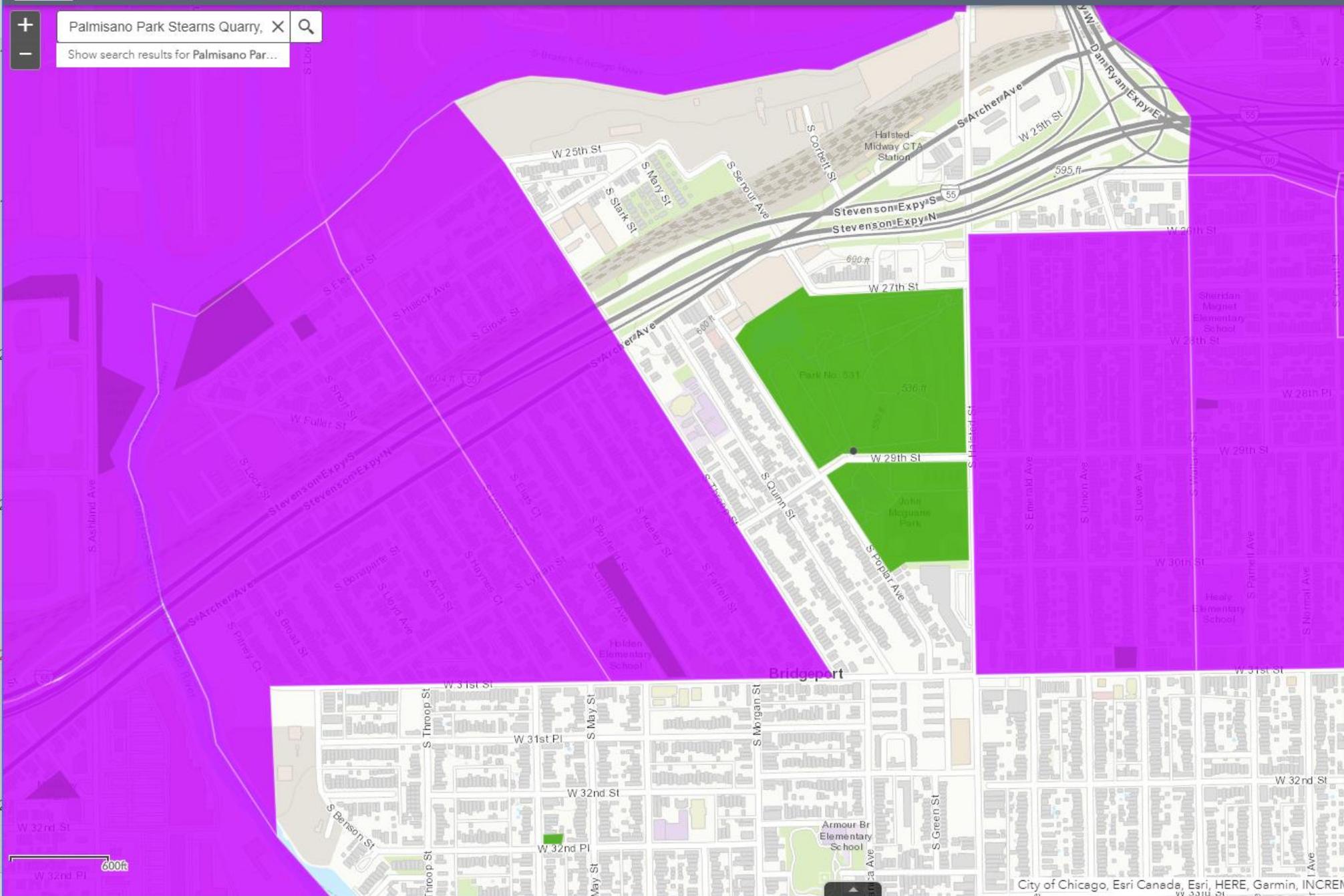


Layer List

- Combined Target Areas ...
- Poor Air Quality Target Areas ...
- High Flood Risk Target Areas ...
- High Heat Target Areas ...
- State_Representative_District ...
- Political_Township ...
- Municipalities ...
- Chicago_Community_Areas ...
- GIV_Composite_Areas ...
- Illinois Natural Areas Inventory Sites ...
- Chicago Parks District Natural Areas ...
- Chicago_Parks ...
- Access to Parks - CMAP (Park Acres/10,000 Residents) ...
- Low to Moderate Income Areas - Chicago ...
- Low to Moderate Income Areas - Cook County ...
- High Percentage of Children Under 18 - Chicago ...
- High Percentage of Children Under 18 - Cook County ...
- High Percentage of Adults 65 and Over - Chicago ...
- High Percentage of Adults 65 and Over - Cook County ...
- Low Percentage Tree Canopy - Chicago ...
- Low Percentage Tree Canopy - Cook County ...

+ Palmisano Park Stearns Quarry, X **Q**

- Show search results for Palmisano Par...



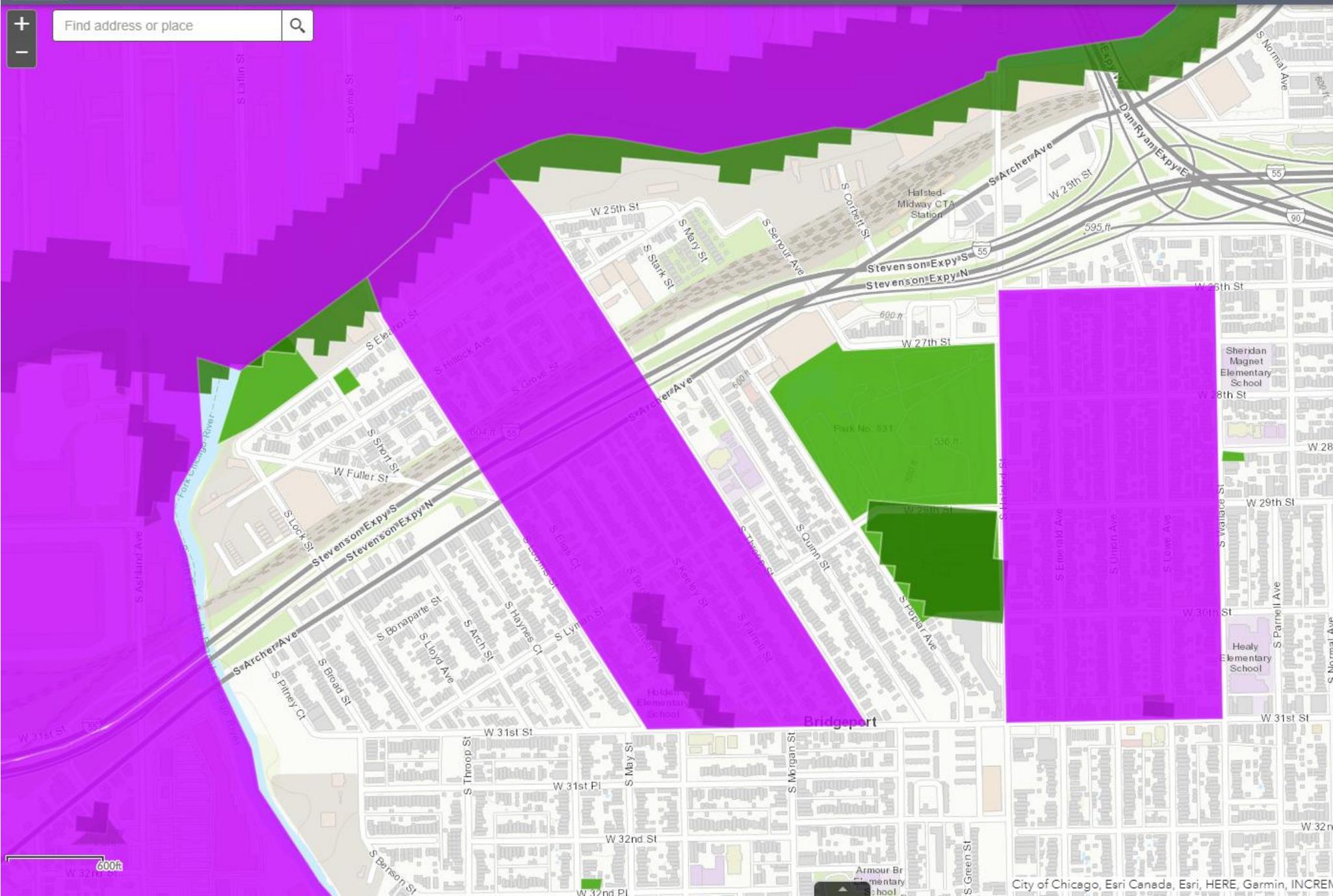
Legend

- Combined Target Areas
- Chicago_Parks

City of Chicago, Esri Canada, Esri, HERE, Garmin, INCREMENTAL



Find address or place



Legend

Combine Target Areas



GIV_Composite_Areas

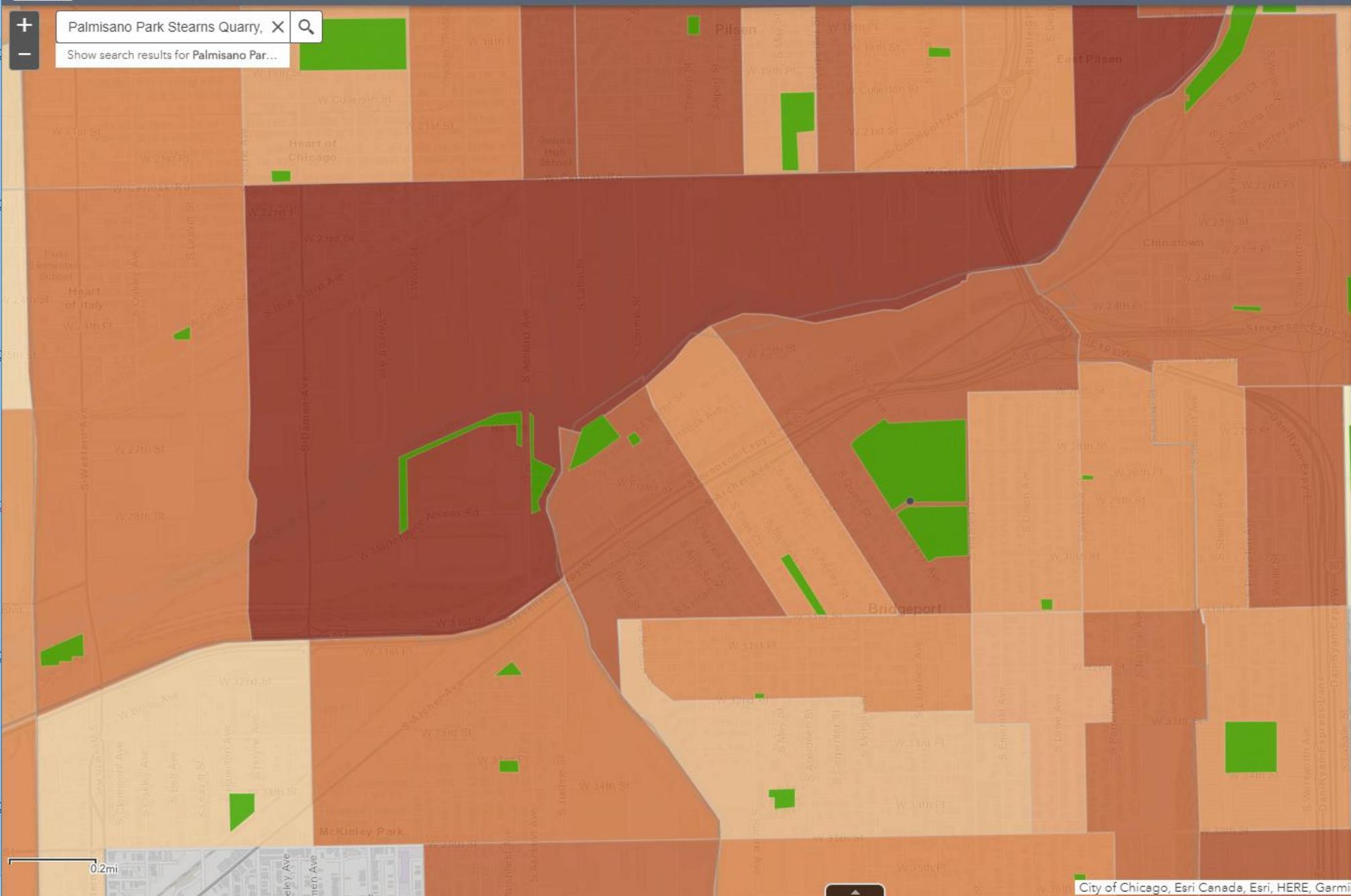


Chicago_Parks





Palmisano Park Stearns Quarry, X Q
Show search results for Palmisano Par...



Legend

- Chicago_Community_Areas
- Chicago_Parks
- Low Percentage Tree Canopy - Chicago
- Tree Canopy Percentage
 - > 19
 - 9.8
 - < 0.6

0.2mi



Palmisano Park Steams Quarry, X Q
Show search results for Palmisano Par...



Legend

Chicago_Community_Areas



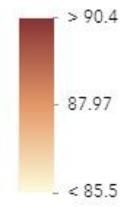
Chicago_Parks



High Temperature - Chicago

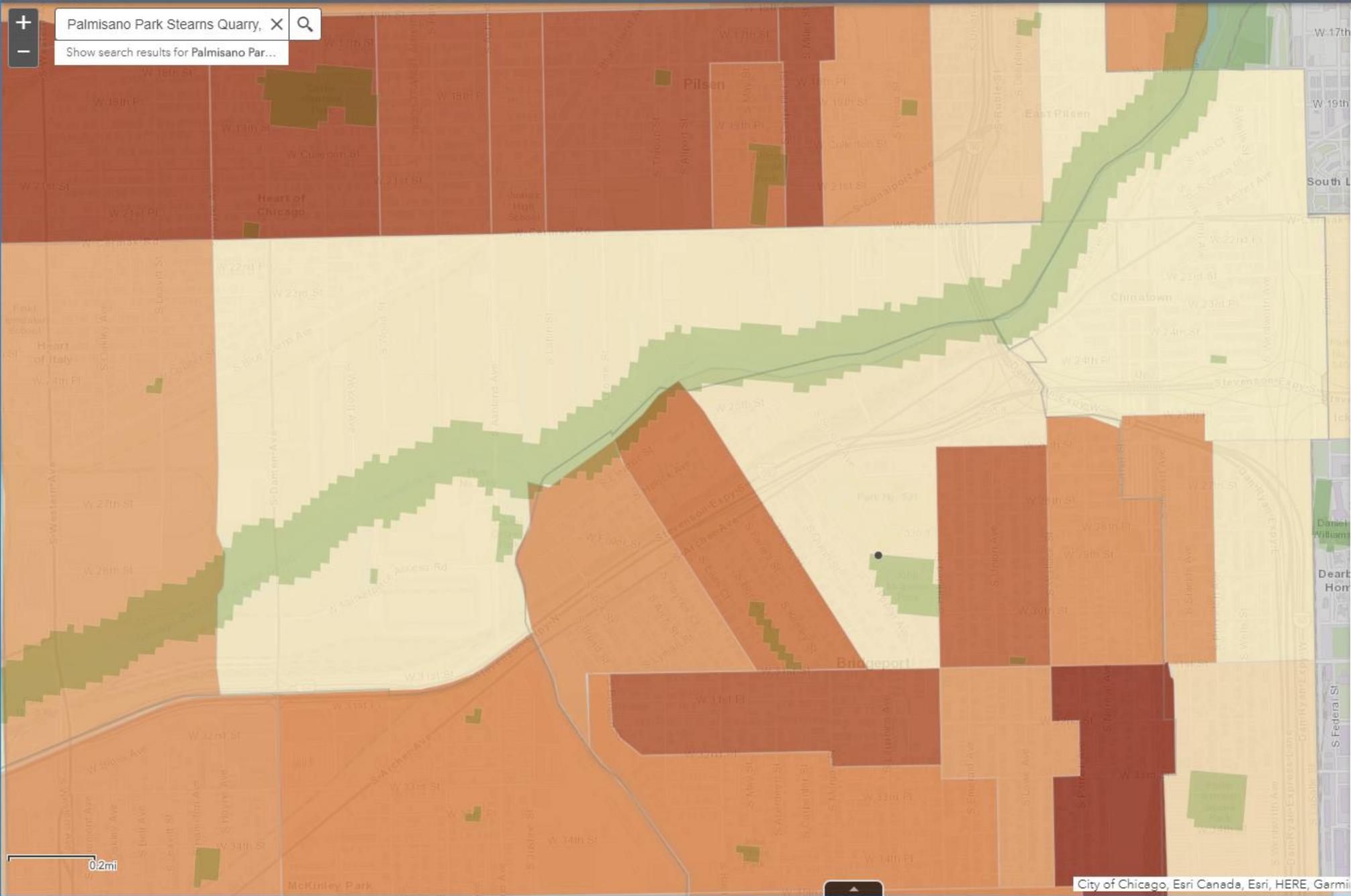


Average Summer Temperature (F)





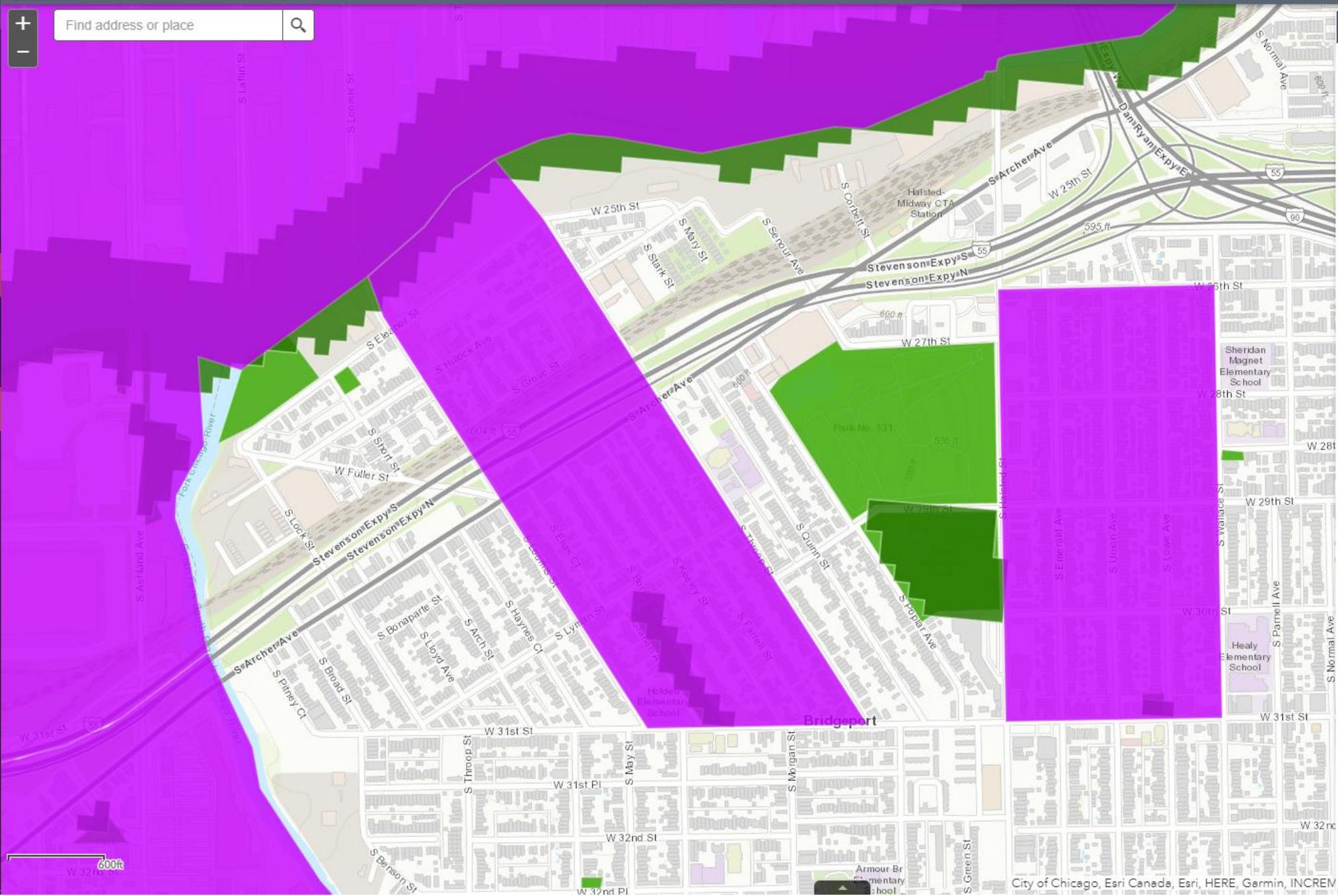
Palmisano Park Stearns Quarry, X Q
Show search results for Palmisano Par...



Layer List

Layers

- Combined Target Areas ...
- Poor Air Quality Target Areas ...
- High Flood Risk Target Areas ...
- High Heat Target Areas ...
- State_Representative_District ...
- Political_Township ...
- Municipalities ...
- GIV_Composite_Areas ...
 - Opaque Transparent
 - 0% 50% 100%
- Illinois Natural Area Transparency
- Chicago Parks District Set visibility range
- Chicago_Parks Enable pop-up
- Access to Parks - Cook County (Residents) Move up
- Low to Moderate Inequality Move down
- Low to Moderate Inequality View in Attribute Table
- High Percentage of Children Under 18 - Cook County Description
- High Percentage of Children Under 18 - Cook County ...
- High Percentage of Adults 65 and Over - Cook County ...
- High Percentage of Adults 65 and Over - Cook County ...
- Low Percentage Tree Canopy - Chicago ...
- Low Percentage Tree Canopy - Cook County ...



About this Web Map

Cook County Greenprint Assessment

Exploring areas where high flood risk, high heat, and low air quality intersect low income or at-risk communities in Chicago and Cook County.

All datasets informing the target areas have been split to show inputs within Chicago separately from inputs in the rest of Cook County outside of Chicago. This was done to avoid bias towards areas within the Chicago city limits.

All datasets informing the target areas look at values above or below the median value for the respective geography (Chicago or Cook County outside Chicago). For any dataset showing a high value (High Temperature, High Percentage Impervious Surface, etc.) map layers show values at or above the median value. For any dataset showing a low value (Low to Moderate Income Areas, Low Tree Canopy) map layers show values at or below the median value.

Clicking on any area of the map with an active target layer or input layer will provide a pop-up with that layer's numerical value in the selected census tract.

Data layers are organized as follows:

- Target Areas
 - Combined Target Areas - Areas where all three priority strategies overlap
 - Poor Air Quality Target Areas
 - High Flood Risk Target Areas
 - High Heat Target Areas
- Political Boundaries
 - State Representative Districts
 - Political Townships
 - Chicago Wards
 - Municipalities
 - Chicago Community Areas
- Biodiversity Data
 - Chicago Wilderness Green Infrastructure Vision Biodiversity Areas
 - Illinois Natural Areas Inventory
 - Chicago Parks District Natural Areas
 - Chicago Parks
 - Chicago Metropolitan Agency for Planning Access to Parks (Park Acres/10,000 Residents - Areas of no data indicate no park access)
- Datasets Informing Target Areas (Census Tract Level)
 - Low to Moderate Income Areas (US Census Bureau Median Household Income, median



Chicago Greenprint online: <http://bit.ly/ChicagoGreenprint>

Coming Soon: Data packages of all layers. See Sarah Hagen.

For more information:

- Sarah Hagen, Spatial Scientist shagen@tnc.org
- John Legge, Chicago Conservation Director john.legge@tnc.org

Special Thanks:

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