

# Dynamically Mapping Need: An Environmental Justice Framework

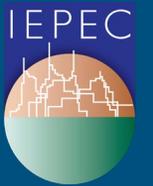
2025 International Energy Program  
Evaluation Conference, Denver, CO

Authors: Jamie Hamilton (Cadmus)  
Rowan Lavelle (Cadmus)  
Jill Steiner (Consumers Energy)

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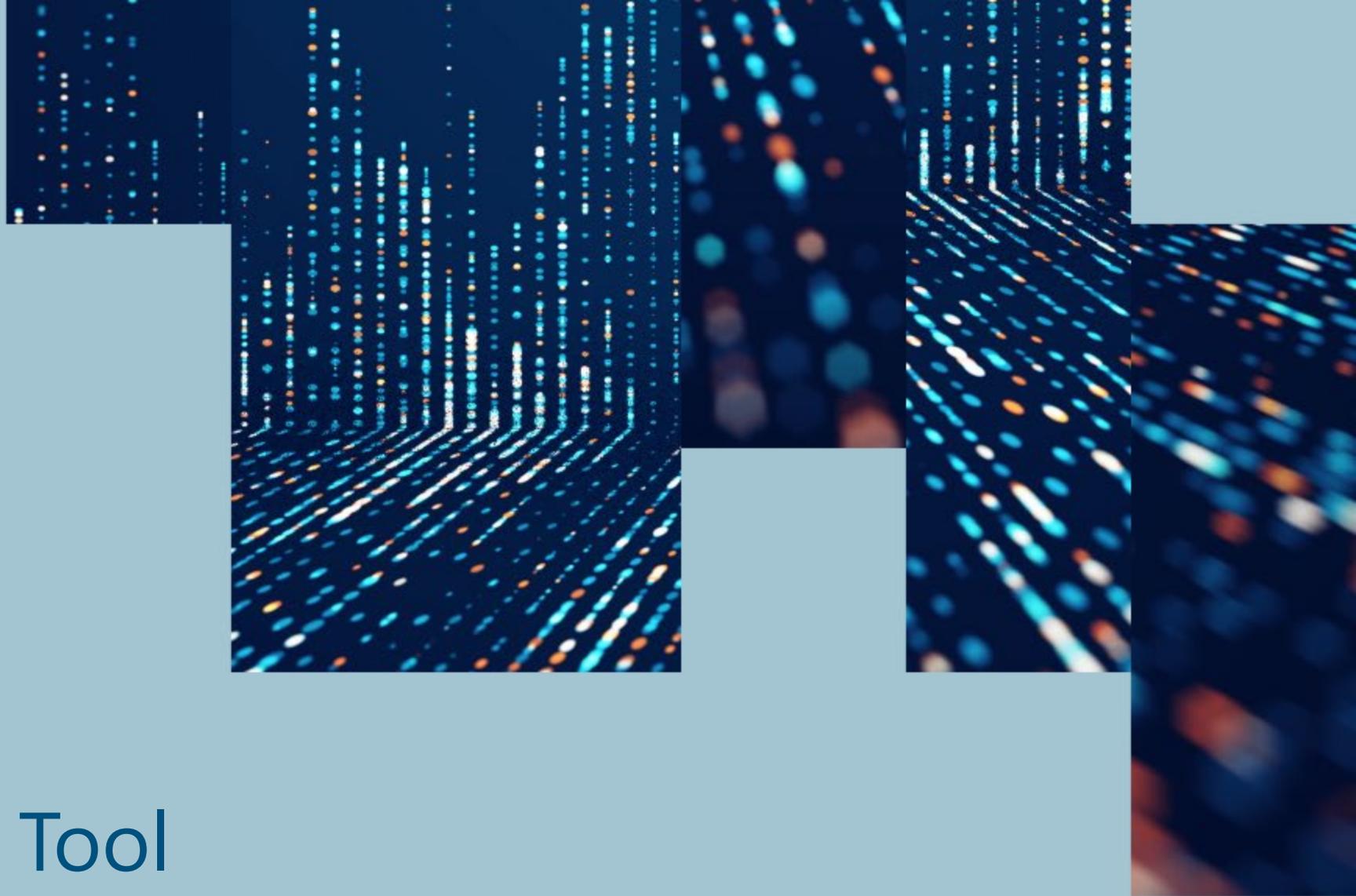


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# Agenda

- The LINA Tool
- Case Study
- Conclusions
- Interactive Dashboard Demonstration



# The LINAs Tool

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# Low-Income Needs Assessment

Cadmus created an interactive dashboard containing:



# Gap Analysis

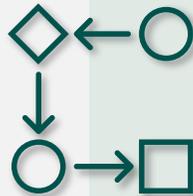
## Methods



**Geocode program participation data**



**Estimate eligible population with ACS data**



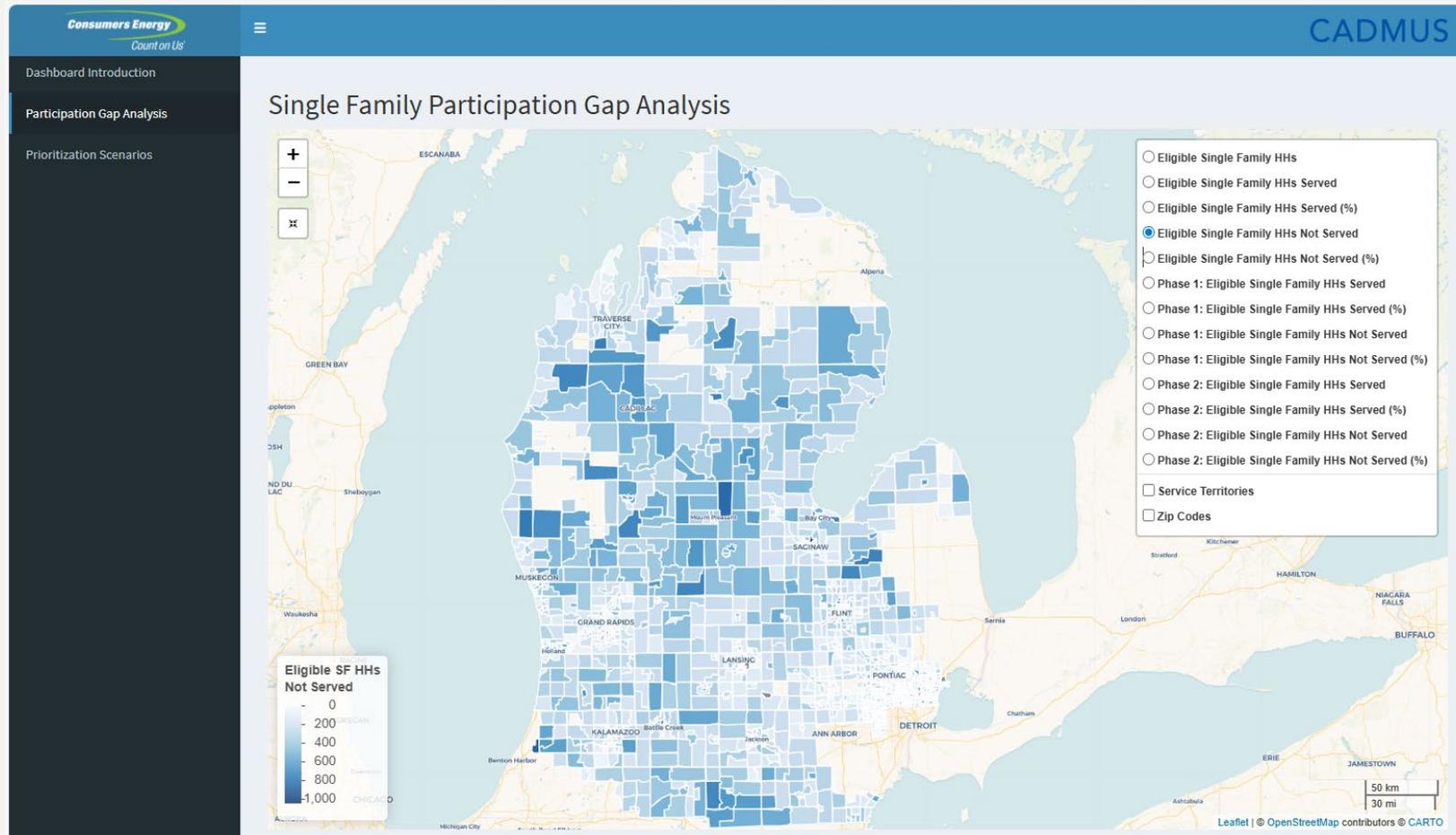
**Estimate unserved eligible population**



**Map!**

# Gap Analysis

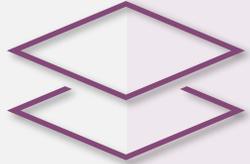
Browser view





# Dynamic Need Scoring

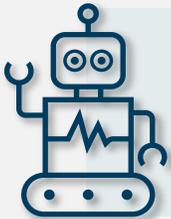
## Methods



**Combine community data** on participation, socioeconomics, and the environment at the census tract level



**Create custom definition of need**  
using drop-down list



**Calculate percentile scores** and combine them into one custom need score



**Map!**

# Case Study

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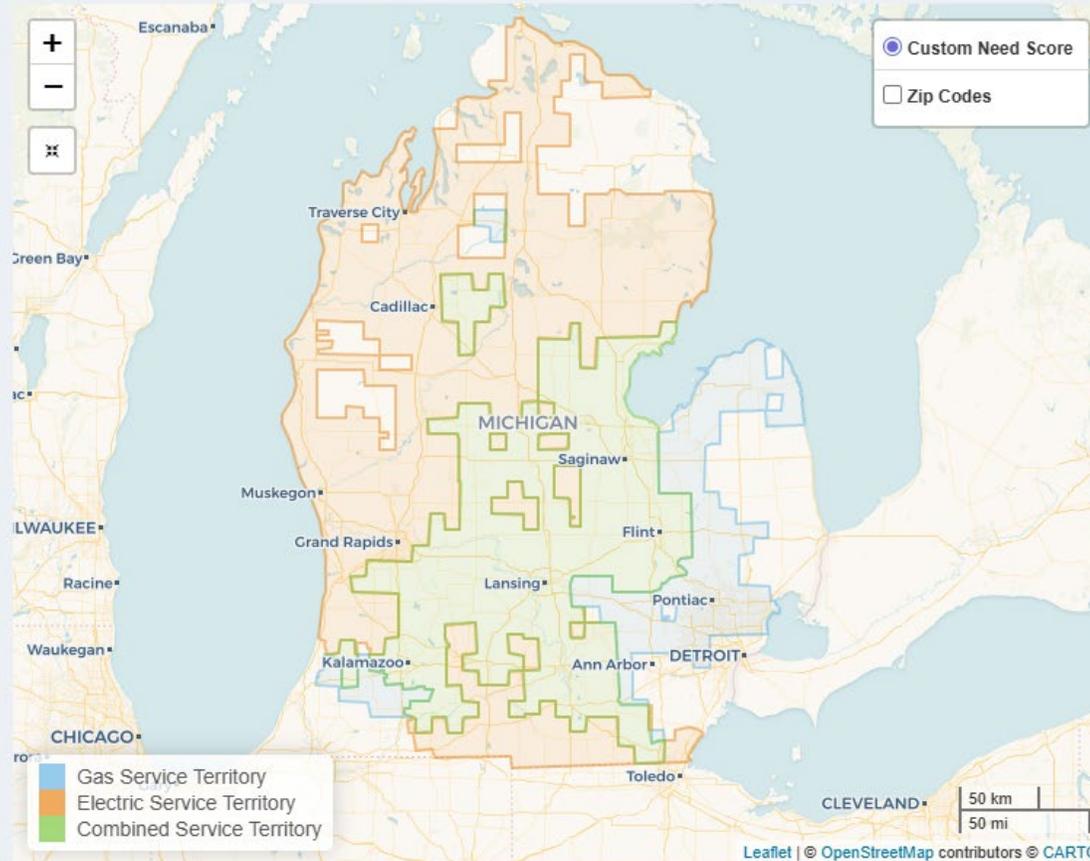
**Consumers Energy**  
Count on Us®



# Case Study

## Criteria selection

### Dynamic Need Scoring



### Create custom need score

Select up to five components:

Percent Population under 200% FPL

Percent Population 18 and under

Percent Population 65 and over

Percent Population Disabled

Energy and Environment

Energy Burden Percent of Income

Environmental Condition Percentile - EJ Score

Population Characteristics Percentile - EJ Score

Overall EJ Score Percentile

# Case Study

Focusing on environmental justice

## Create custom need score

Select up to five components:

Environmental Condition Percentile - EJ Score

Population Characteristics Percentile - EJ Score

Energy Burden Percent of Income

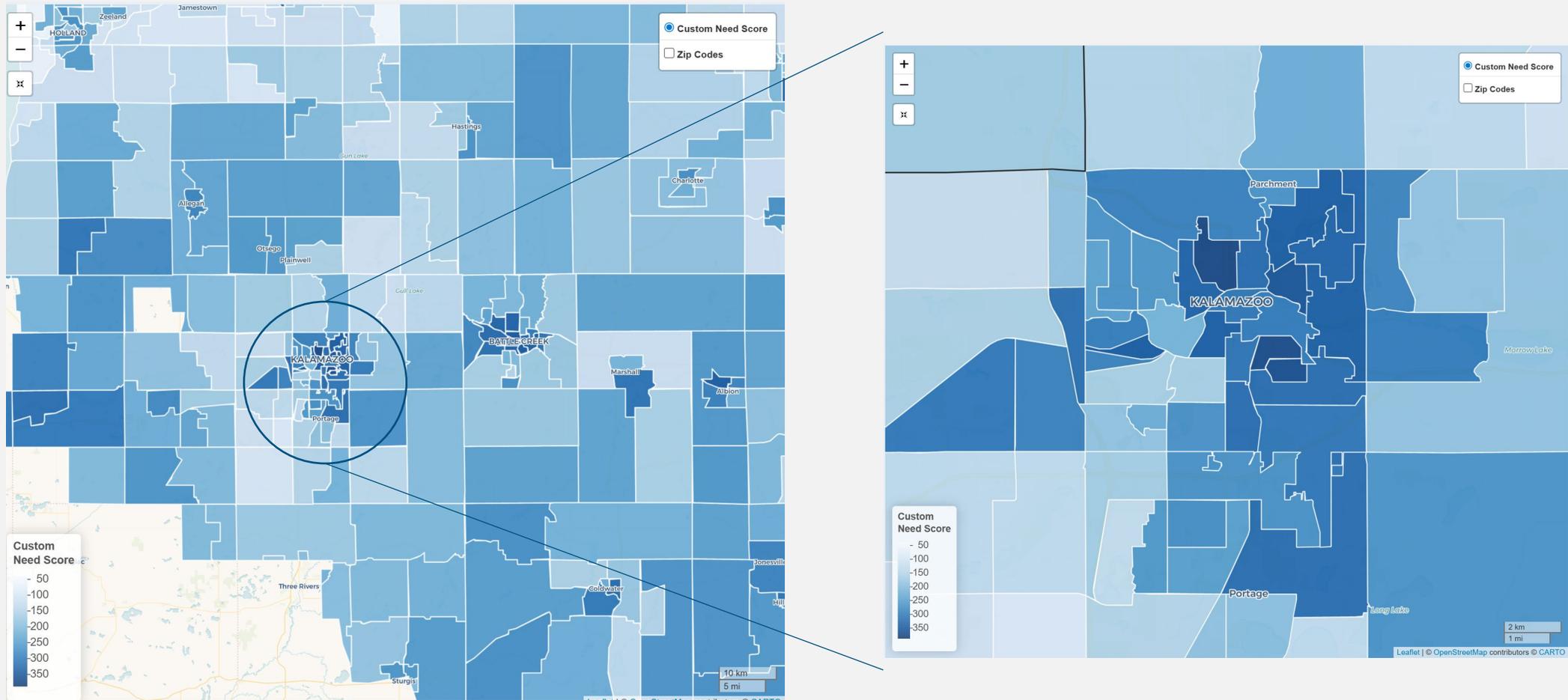
Percent Population under 150% FPL

Calculate

 Download

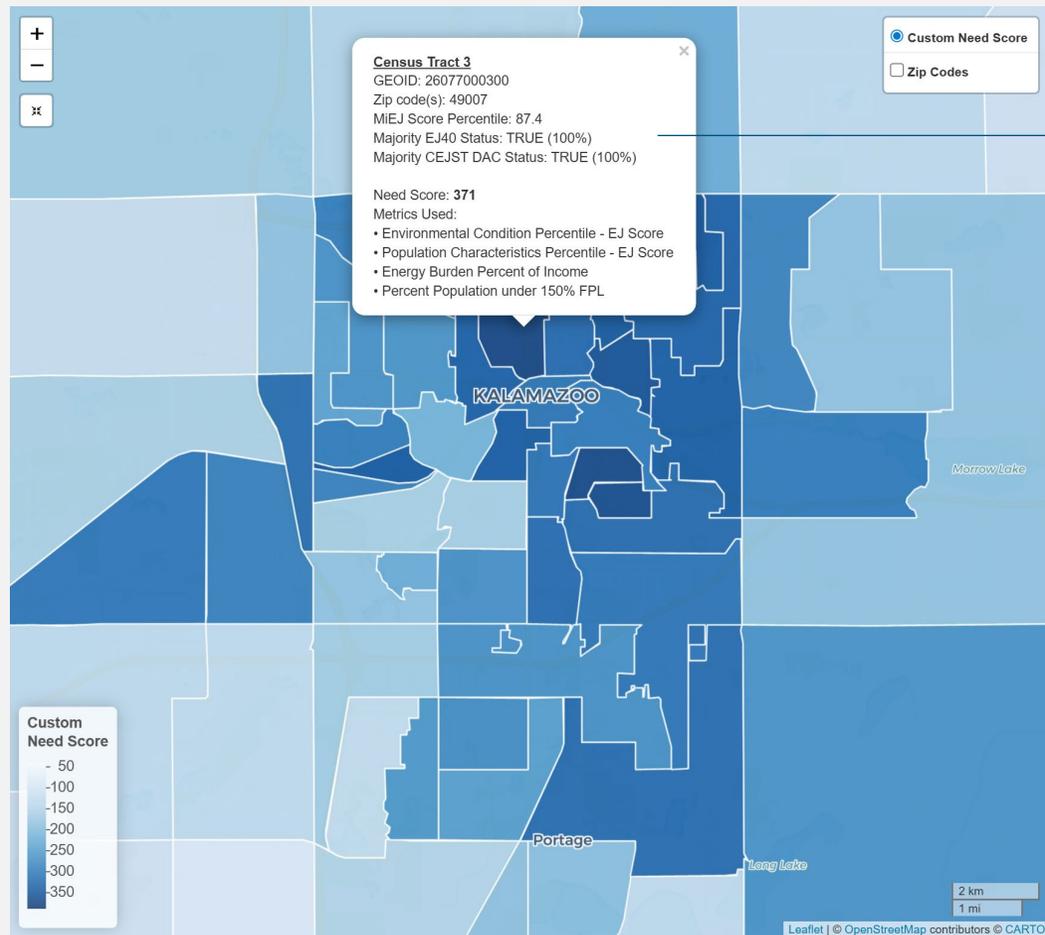
# Case Study

The resulting map (left), with zoomed-in area showing Kalamazoo (right)



# Case Study: Kalamazoo

The pop-up shows details for the selected tract



**Census Tract 3**  
GEOID: 26077000300  
Zip code(s): 49007  
MiEJ Score Percentile: 87.4  
Majority EJ40 Status: TRUE (100%)  
Majority CEJST DAC Status: TRUE (100%)

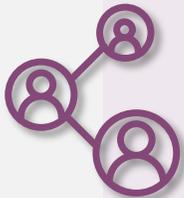
Need Score: **371**  
Metrics Used:  
• Environmental Condition Percentile - EJ Score  
• Population Characteristics Percentile - EJ Score  
• Energy Burden Percent of Income  
• Percent Population under 150% FPL

# Case Study: Kalamazoo

Kalamazoo has a high density of census tracts with high need scores



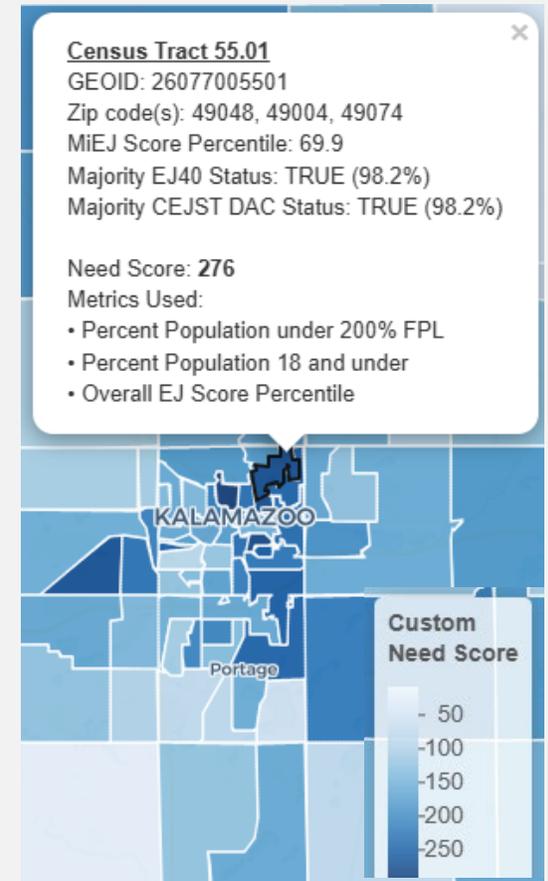
Gap analysis indicated **areas of opportunity**



Consumers Energy launched its *Count on Us* campaign in Kalamazoo to **connect more customers to program services**



Consumers Energy expanded its Health & Safety Initiative to **improve access and eligibility** to other programs





# Conclusion

# Conclusion

The dynamic need mapping tool is helping Consumers Energy identify and expand outreach to disadvantaged communities

Using the Low Income Needs Assessment tool, Consumers Energy can:

- ✓ Iterate on prioritization scenarios
- ✓ Gain insights on specific the needs of regions
- ✓ Better serve disadvantaged customers

Connecting with community-based organizations serving identified areas can create a positive feedback loop:

provide more details of community barriers and needs



build relationships in the community that increase engagement



# Interactive Dashboard Demonstration

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**Consumers Energy**  
Count on Us®



# Thank You

**Jamie Hamilton** (Cadmus)

jamie.hamilton@cadmusgroup.com

**Rowan Lavelle** (Cadmus)

rowan.lavelle@cadmusgroup.com

**Jill Steiner** (Consumers Energy)

jill.e.steiner@cmsenergy.com



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