



City of Minneapolis – Sustainability

October 31, 2018



Overview

- Local foods
- Climate change and clean energy
- Environmental justice
- Climate resilience



Local Food Systems Policy

1. Minneapolis Food Council
2. Urban Ag and Garden Lease Program
3. Farmers' Markets of Minneapolis

Minneapolis Food Council

The Homegrown Minneapolis Food Council envisions a vibrant local food system that enhances the health of all residents, protects the earth, increases economic vitality, expands social connectedness, and improves food security.



Urban Agriculture and Garden Lease Program

- Leasing vacant City lots to local gardeners
- Garden in a Box program
- Promote community garden composting
- Support food infrastructure development and continued innovation in Minneapolis food system



Farmers Markets of Minneapolis

- USDA funded metrics project
- Marketing campaign with Minneapolis markets
- Supporting vendor training

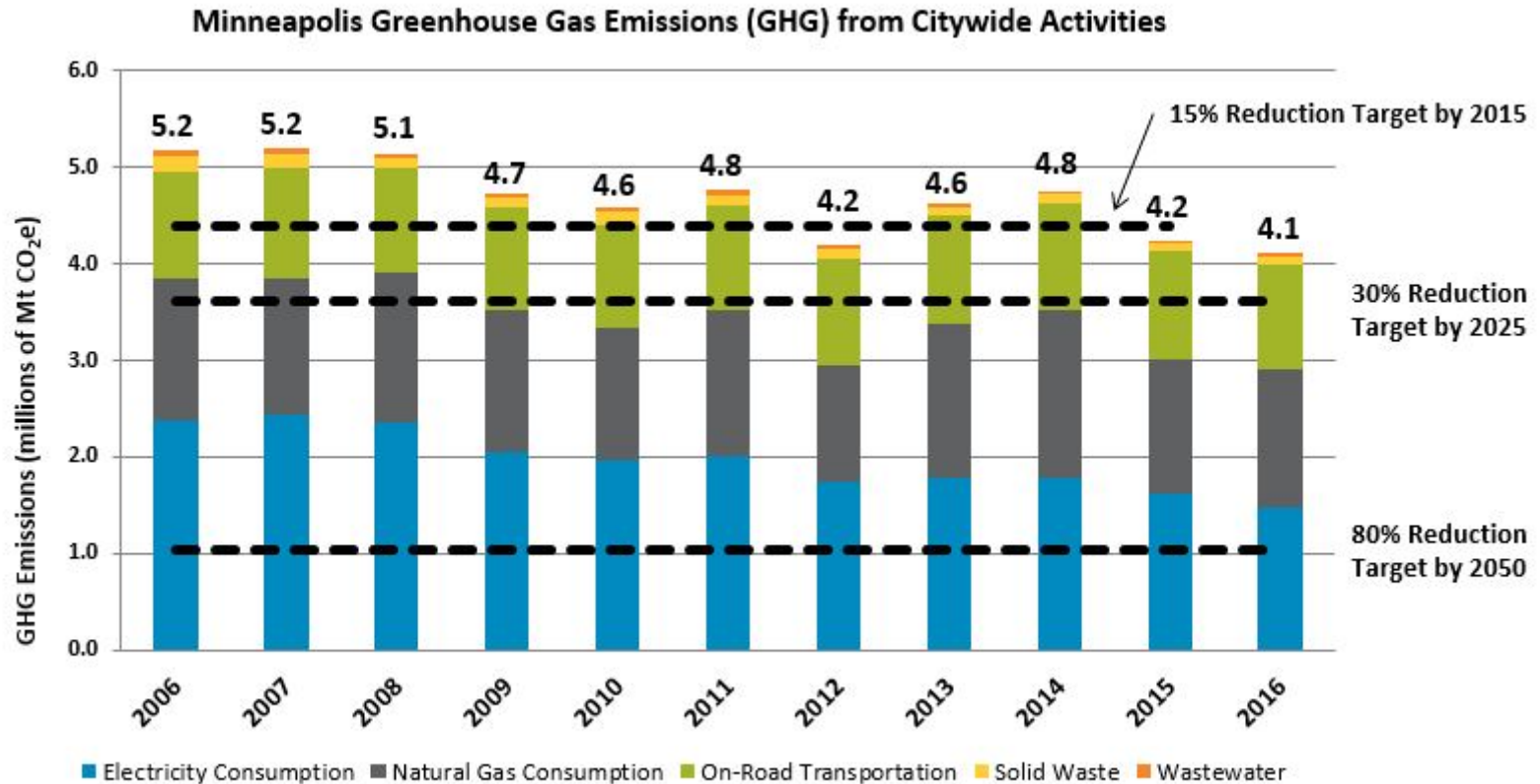




Climate Change & Clean Energy

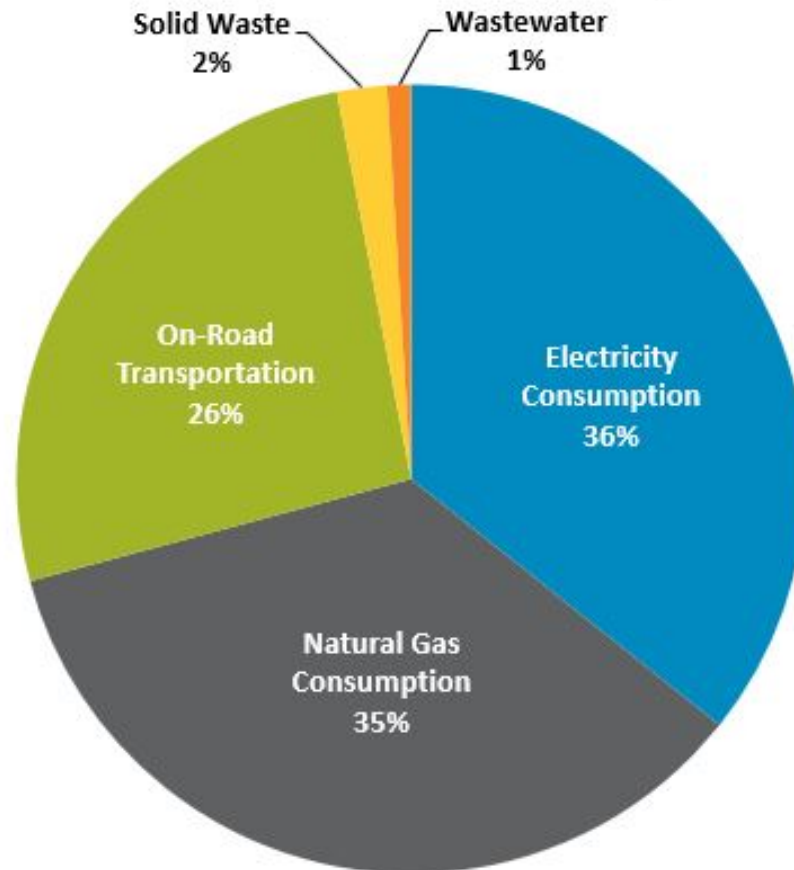
1. City goal: 80% carbon emissions reduction by 2050.
2. Climate Action Plan (2013)
3. Clean Energy Partnership with Xcel and CenterPoint (2015)
4. Municipal Operations
5. Commercial Building Energy Benchmarking
6. New Initiatives

Minneapolis Community GHG Reduction Targets



Minneapolis Greenhouse Gas Emissions by Citywide Activities

Minneapolis Greenhouse Gas Emissions
by Citywide Activities (2016)





Minneapolis Climate Action Plan

A roadmap to reducing citywide greenhouse gas emissions

May 2013



Goal: Reduce greenhouse gas emissions 15% by 2015 and 30% by 2025 (2006 baseline)

Large year-long stakeholder process to develop recommendations

Council adopted June 2013

Implementation underway

Clean Energy Partnership

Franchise Fee

- Increased .5% in 2018 to support sustainability activities

Clean Energy Agreements

- Develop workplan activities that support the implementation of the Minneapolis Climate Action Plan





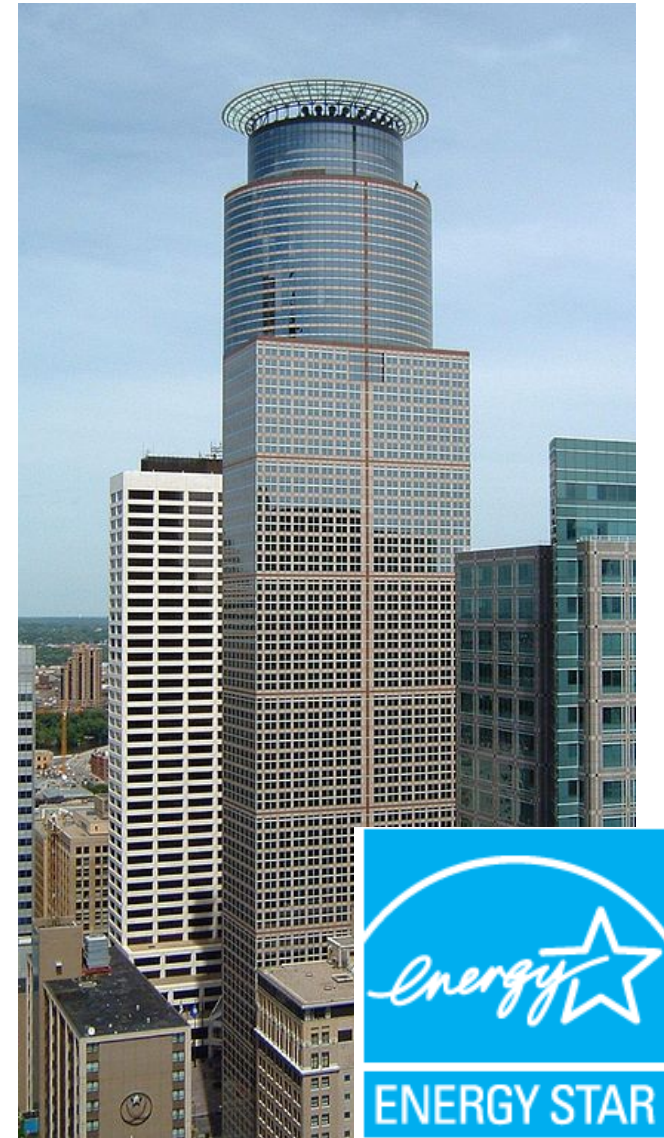
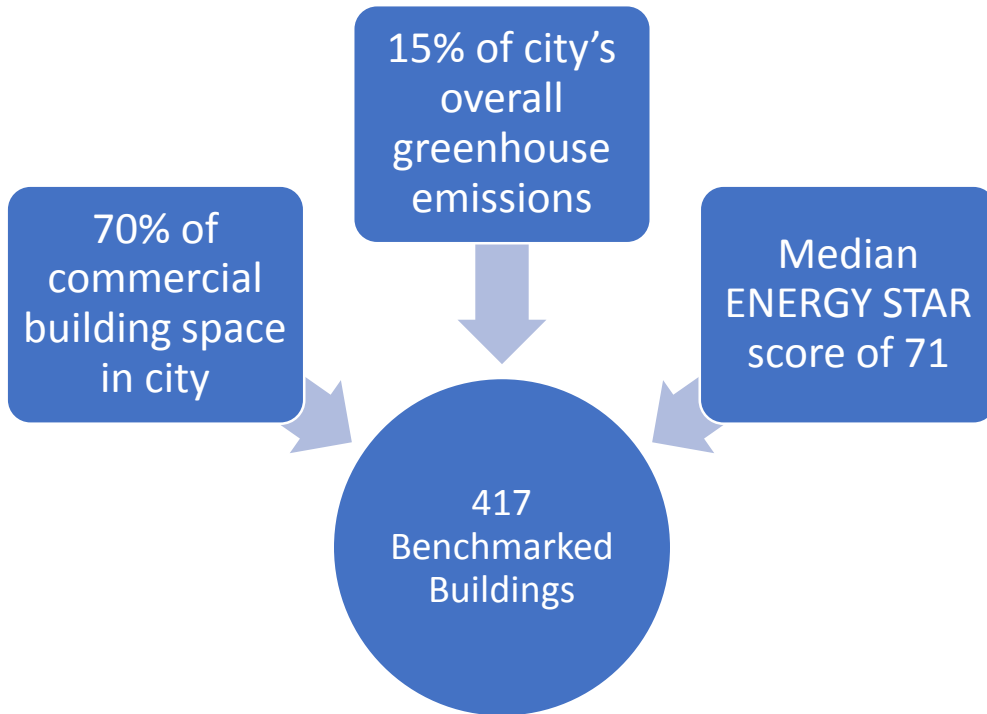
Existing Programs

- Green Business Cost Share for businesses
- No cost home energy assessments
- 0% financing for insulation and air sealing
- Workforce development assessment
- ETAP: Minneapolis small business energy efficiency
- Commercial benchmarking
- EV charging station pilot
- LEED certification for public buildings

Program Results:

Commercial Benchmarking

Energy use ↓ 3% since 2015



Program Results



\$19 million in EE for heating, electricity, steam, & chilled water of city buildings



Expanded Bike Paths



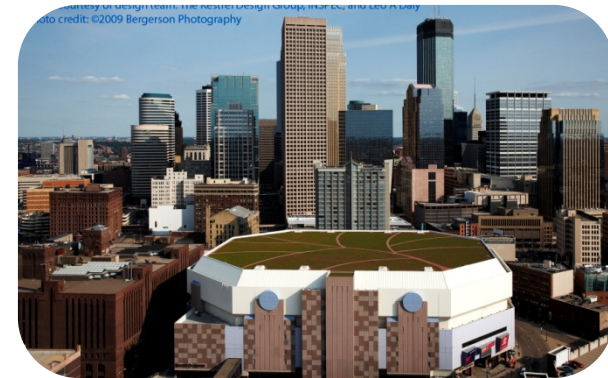
Electric Vehicle charging stations



Convention Center – 2600 solar panels (600 kW)



LEED Platinum
Public Works facility



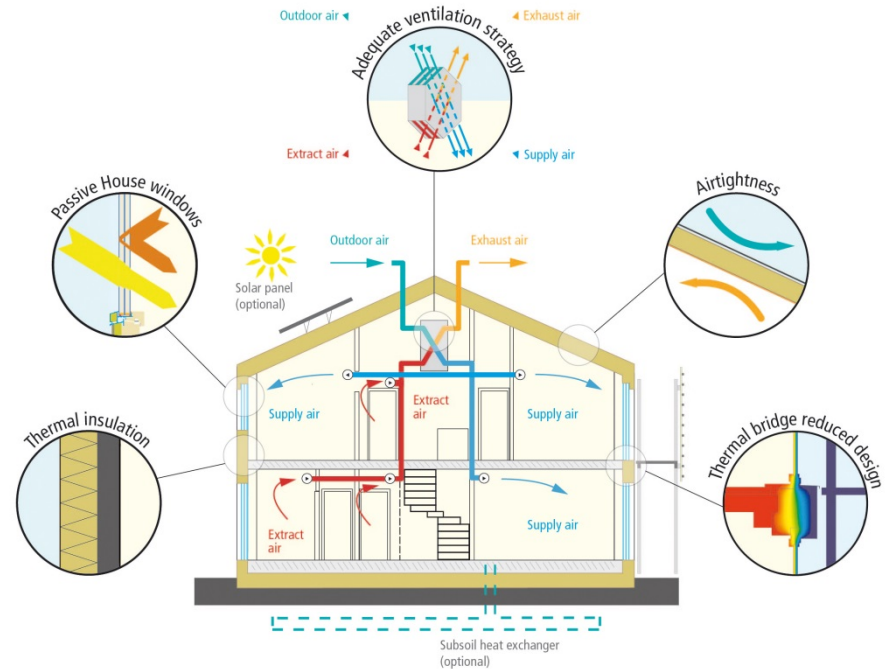
Target Center
Green roof

New Programs

- Bloomberg American Cities Climate challenge
- Residential energy disclosures
- Blueprint for 100% renewable electric
- Passive House Pilot
- Upper Harbor Terminal
- Community Solar Gardens: focus on low income
- Electric Vehicles in City Fleet
- Plant-Based Diets
- City wide solar strategy
- Mobility Hub and mobility as a service

Passive House

- Passive House standard
 - Continuous insulation
 - Airtightness
 - Thermal bridging
 - High performance windows
 - Mechanical heat recovery
- Reduced carbon emissions



Upper Harbor Terminal



- Large space: opportunities to address environmental topics
 - District energy and community solar
 - Stormwater management
 - Low carbon emissions



Electric Vehicle Infrastructure

- EV charging capability at multi-unit buildings
 - Attractive to potential buyers
 - Can provide LEED points to the property
 - Can be marketed and will enhance the “green” image of the property
- EVs have fewer life cycle emissions than regular gasoline cars, and that number can be lowered further by using renewable electricity sources.
- Majority of new cars sold in 2025 will be EVs or PHEVs

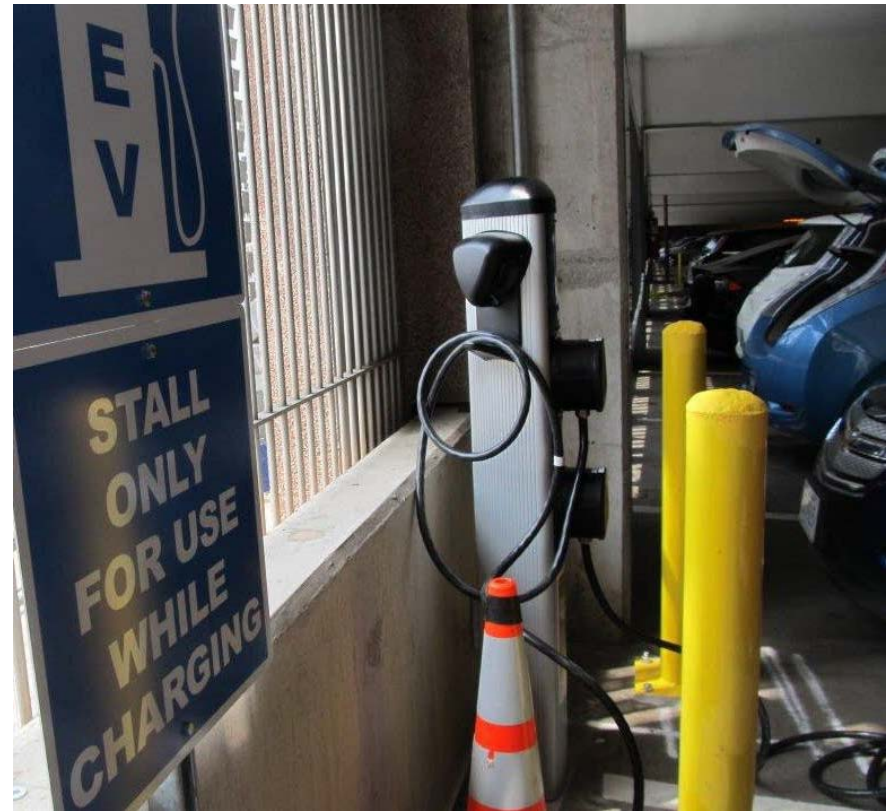
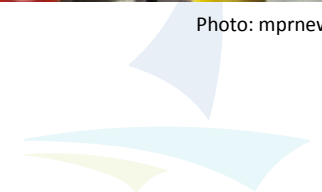


Photo: mprnews.org



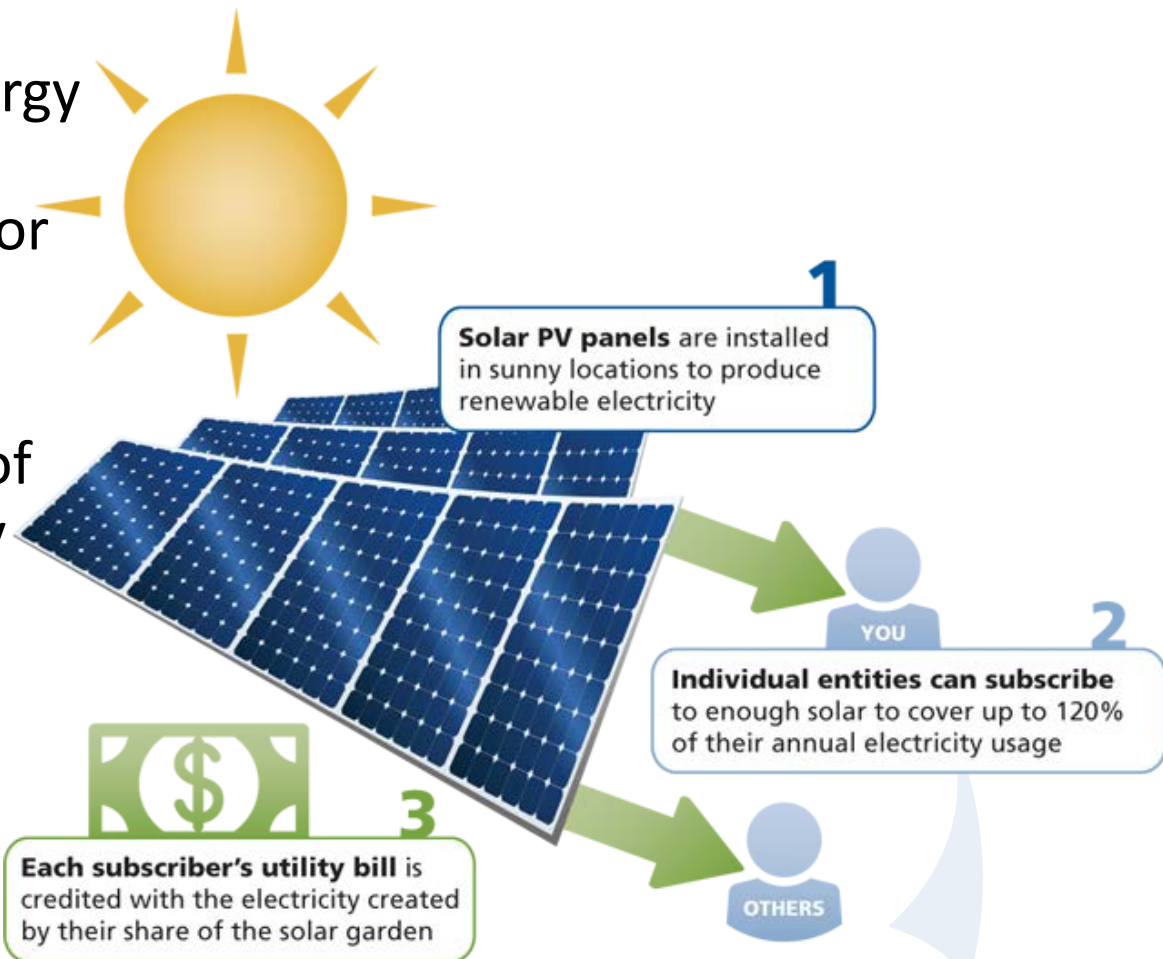
Plant-Based Diets

- Eating a plant based diet can reduce a carbon footprint by 35% compared to a meat eater. Even just going meatless two days a week could reduce a footprint by 15%.
- Mayor Frey signed proclamation encouraging efforts to eat a plant based diet.



Community Solar Gardens

- Benefit from solar energy without installing a system on your home or business.
- Xcel customers can purchase up to 120% of their annual electricity usage.
- Subscriptions can be donated to children/nonprofit organizations





Environmental Justice and Climate Resilience

1. Green Zones
2. Climate Change Vulnerability Assessment

What is a Green Zone?

- **Place-based** policy initiative aimed at improving **health** and supporting **economic development** using **environmentally conscious** efforts in communities that face the **cumulative effects** of environmental pollution, as well as social, political and economic vulnerability.



Goals



Green Zone Progress 2018

Southside Green Zone

- Recruiting for new SouthSide Green Zone Council to implement Work Plan

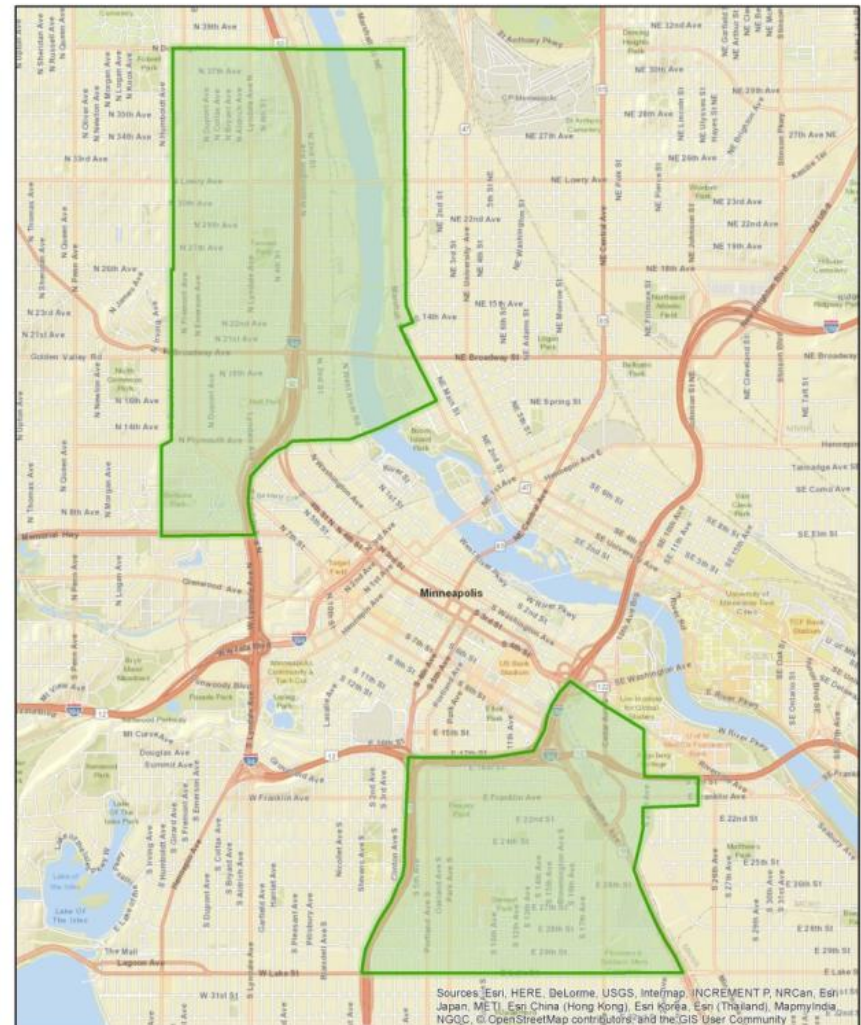
Northside Green Zone

- Northern Metals Consent Decree Advisory Committee/ Northside Green Zone Task Force
 - In partnership with Health Department and Community Action Partnership of Hennepin County

Concerns/Opportunities

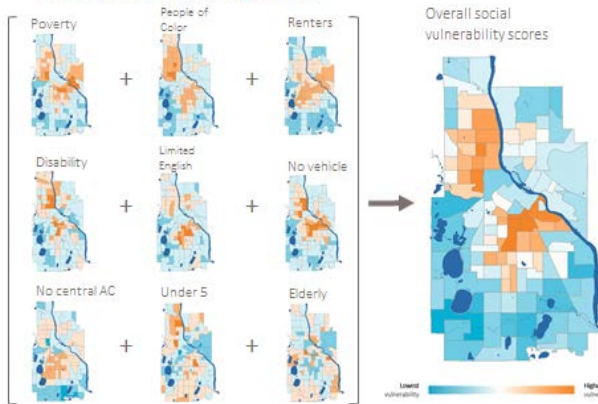
- Shift from business as usual
 - Transformational not transactional
 - Targeting resources (program outreach, engagement, funding)
 - Change system – how priorities are made, who decides, who benefits, who owns

Minneapolis Green Zone Boundaries

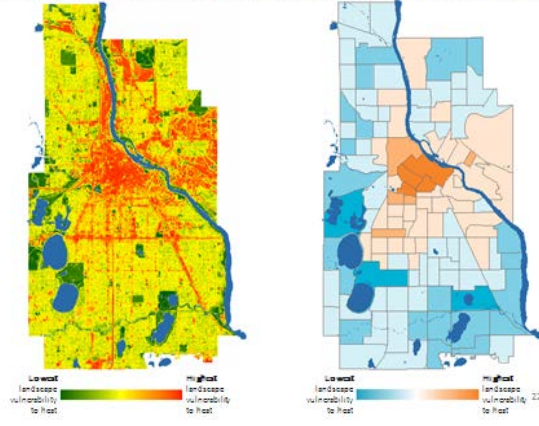


Climate Change Vulnerability

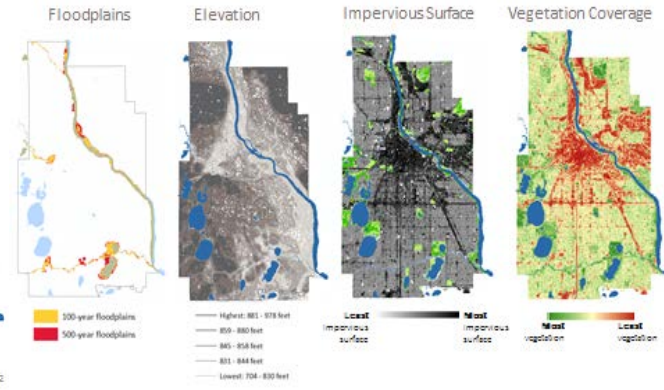
The overall social vulnerability map combines all nine factors together.



Locations with **low vegetation** and **high impervious surface** are key places to focus urban heat island adaptation effort



These are the main factors that contribute to overloading the stormwater drainage system.



- Mapped populations that are inherently more vulnerable
- Mapped cumulative social vulnerability

- Mapped urban heat island effect
- Identified opportunity areas: high impervious surface and low vegetation

- Mapped factors that contribute to flooding
- Mapped low-elevation areas prone to flooding



Things you can do to make a difference

- Shop at Farmers markets
- Enjoy a plant based diet twice a week
- Participate in a community solar garden and purchase up front subscription
- Encourage your condo associations to implement EV charging infrastructure.

Thank you!

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