

Annual Report Metropolitan Council Committee of the Whole

May 21, 2025



# etropolitan Council

### Climate change impacts all Met Council services









**Transportation** 

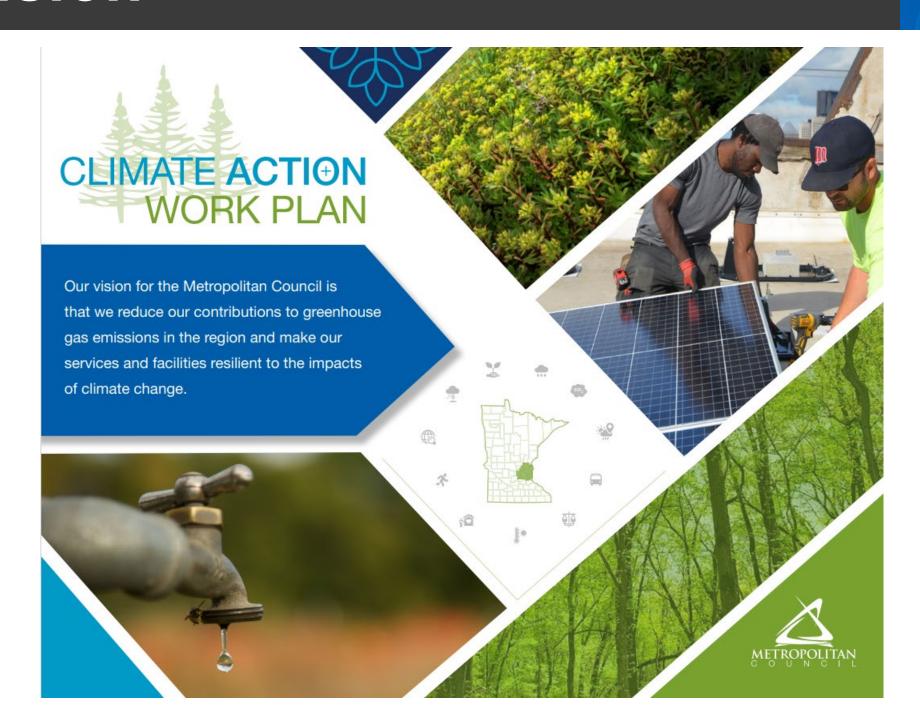
**Parks** 

**Wastewater** 

Housing

### Our climate vision

We reduce our contributions to greenhouse gas emissions in the region and make our services and facilities resilient to the impacts of climate change.



### Climate Action Work Plan structure



A five-year plan (2023-2027)

**6 commitments:** Directional statements that describe the desired end states for climate action in our operations and planning services.

**20 strategies:** Overarching tactics to achieve commitments. The strategies are often cross-divisional in nature.

73 actions: Specific actions and projects with defined timelines, outcomes, and divisional responsibilities.

# Metropolitan Council

### Our core commitments













- 1. We will incorporate **environmental justice principles** as we plan, implement, and evaluate our climate action work.
- 2. We will accelerate emissions reductions from our operations to achieve carbon neutrality
- 3. We will accelerate **regional emissions reduction** through existing and new partnerships.
- 4. We will reduce risks and impacts of climate change hazards to our facilities and services.
- 5. We will support and collaborate with partners to advance regional climate adaptation efforts.
- 6. **Cross-cutting:** Expand staffing and training dedicated to climate work

## 2024 Theme: Focusing on the region



leadership

Imagine 2050 goal:

"We lead on addressing climate change."



# Interconnected planning

Aligning multiple climate plans:

- 1. Imagine 2050
- 2. Climate Action Work Plan
- 3. Comprehensive Climate
  Action Plan (EPA Climate
  Pollution Reduction
  Grant)

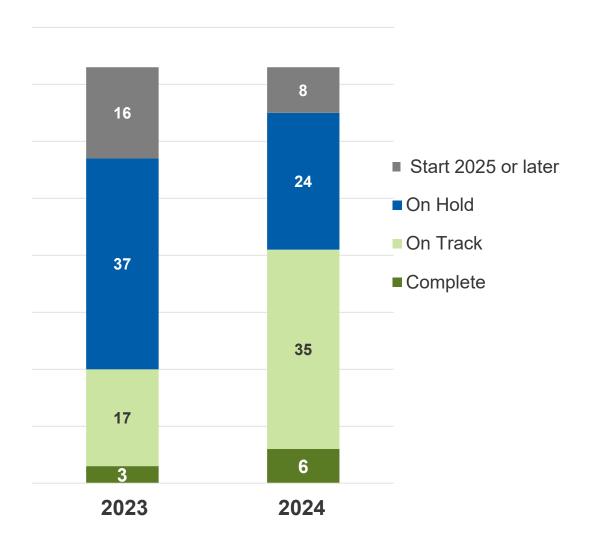


### Staffing focus

- Develop a clear understanding of gaps in our climate workforce
- Create recommendations to fill gaps

## 2024 Theme: Focusing on the region

### Overall Action Progress: 2023 - 2024



# Over half of the 73 CAWP actions are on track or complete

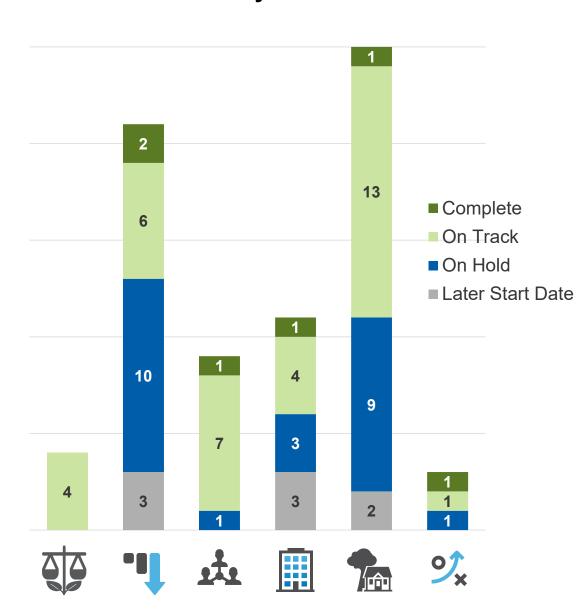
### **Examples**

- **Complete:** Develop climate strategies within the 2050 Policy Plans (Housing, Water Resources, Transportation, Parks).
- On track: Document and share climate change mitigation and adaptation strategies for local governments to adopt into policy, planning, or programs.
- On hold: Reestablish the cross-divisional work group on energy management.
- Start 2025 or later: Develop processes to ensure capital projects maximize lifecycle GHG emissions reduction opportunities.

# Metropolitan Council

## 2024 Theme: Focusing on the region

### **Action Status by Commitment: 2024**



# We've made significant progress on regionally focused commitments



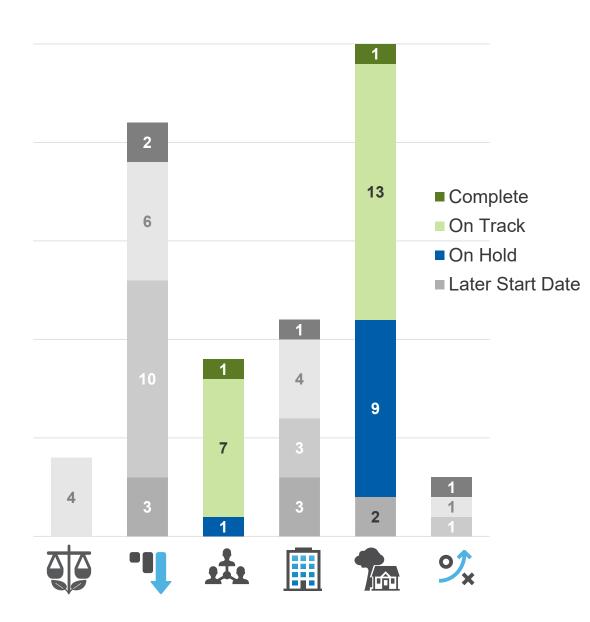
Commitment 3: "We will accelerate regional emissions reduction through existing and new partnerships."



Commitment 5: "We will support and collaborate with partners to advance regional climate adaptation efforts."

## 2024 Theme: Focusing on the region

### **Action Status by Commitment: 2024**



# We've made significant progress on regionally focused commitments

Commitment 3: "We will accelerate **regional emissions reduction** through existing and new partnerships."

89% of actions are on track or complete

Commitment 5: "We will support and collaborate with partners to advance regional climate adaptation efforts."

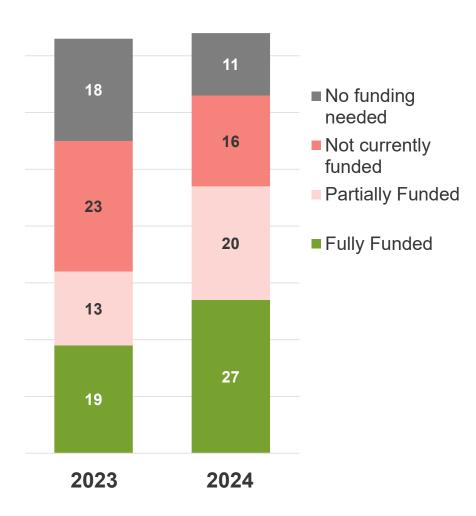
• 56% of actions are on track or complete

Remaining actions for each commitment above are related to implementing Imagine 2050.

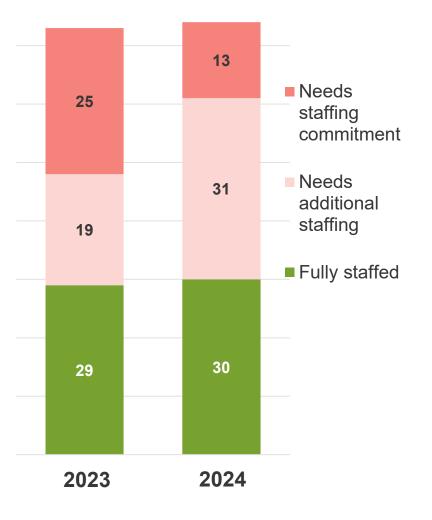
# Metropolitan Council

## 2024 Theme: Staffing gaps are ongoing

### **Action Funding Progress**



### **Staffing Progress**



# While many CAWP projects have funding sources, others are missing staff to lead and implement key actions.

- Approximately 52% of CAWP actions are fully or partially funded.
- However, just 41% of CAWP actions are fully staffed.
- Only 1 additional action has become fully staffed in the past year, while 8 are now fully funded.

# letropolitan Council

### Commitments 2 and 3: Reducing emissions



Commitment 2:

We will accelerate emissions reductions from our operations to achieve carbon neutrality.



Commitment 3:

We will accelerate regional emissions reduction through existing and new partnerships.

# Methopolitan Council

# Met Council emits a large amount of greenhouse gases



2024 Total Met Council Emissions:

~375,000 metric tons CO<sub>2</sub>e



OR



~51,000 homes' energy use for one year

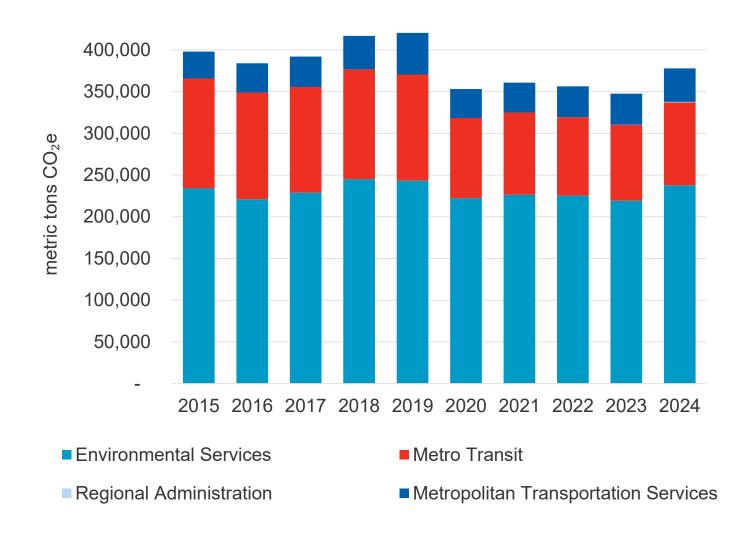
Using 2.5 people per household; slightly larger than Carver County

~88,000 cars driven for one year

Using 2 cars per household; slightly larger than Bloomington, MN

## Council GHG emissions slightly up

### **Greenhouse Gas Emissions by Division**

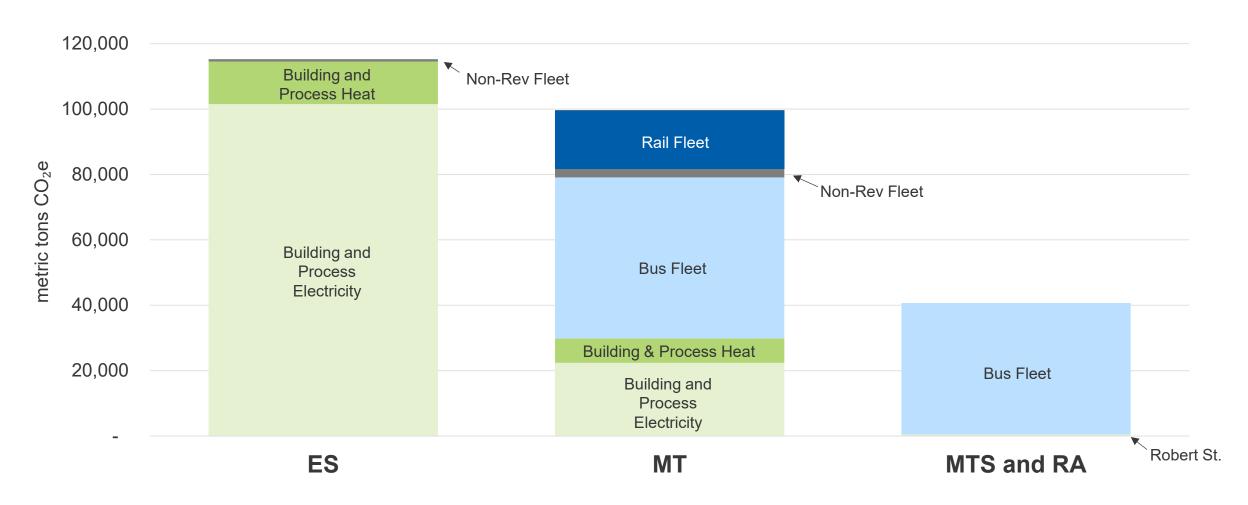


### By division, ES and Metro Transit are the largest emitters

- Most of ES' emissions come from energy used in the wastewater treatment process.
- Emissions from Metro Transit include bus service, light rail propulsion, and facility operations.
- Emissions from RA and CD come from operating 390 Robert Street, which is a very small portion of total Council emissions.

### 2024 emissions: A closer look

### 2024 Met Council Greenhouse Gas Emissions



<sup>\*</sup>Note: Selected wastewater emissions are omitted due to variability and confidence in calculated  $CO_2$ e for nitrification/denitrification, effluent emissions, and incineration. Subsequent slides address next steps.

### **Understanding our emissions: Metro Transit**

### **Emissions metrics scaled to reflect our operations**



- The more miles we can travel before one ton of is CO<sub>2</sub>e emitted, the more efficient
  we are.
- This metric accounts for all of Metro Transit's operations: bus and light rail as well as garages, offices, shelters, and additional facilities.
- This metric uses total miles traveled, rather than service miles.
- This new metric can be used regardless of service changes.

### Understanding our emissions: MTS

How many miles can MTS vehicles travel before emitting 1 metric ton of CO2e?



- The more miles we can travel before emitting one ton of CO<sub>2</sub>e, the more efficient we are.
- This metric accounts for MTS's fleet emissions and 390 Robert St.
  - Does not include emissions information for garages or maintenance facilities owned and operated by contractors.
- This metric also uses total miles traveled, rather than service miles.
- This new metric can be used regardless of service changes.

## Forthcoming greenhouse gas metrics

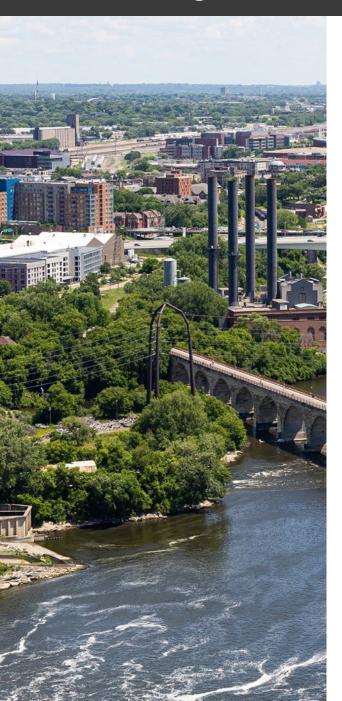


# We are in the process of developing additional metrics that are scaled to our levels of service

#### Draft metrics include:

- 1. Total emissions per passenger mile traveled
  - Emissions by type of service: Bus, light rail, etc.
- 2. Setting **targets for facilities** based on historic and predicted energy consumption
- 3. Emissions by process in wastewater treatment systems
  - We are continuing to pursue the most effective methods to analyze carbon outputs for wastewater operations.

### Project highlight: Regional emissions reductions



### We committed to "lead on addressing climate change"

Integrated climate mitigation and adaptation strategies into each policy area (housing, land use, parks, transportation, water resources) of Imagine 2050.

- 1. Reduce the region's emissions 50% by 2030 (from 2005 levels) and achieve net-zero emissions by 2050.
- 2. Plan, build, and operate infrastructure to address present and anticipated climate challenges and increase regional resilience.
- 3. Acknowledge and remedy historic and ongoing environmental injustices to provide environmental benefits for all.

### Project highlight: Energy efficiency for HRA residents



# **Established HRA and CEE (Center for Energy and the Environment) partnership**

- Completed home energy audits for 9 single-family units
- Types of installations include:
  - LED bulbs
  - Efficient showerheads
  - Smart thermostats
- Ongoing seasonal engagement to enroll additional households
- Goal: Reduce costs and energy use for residents

This is a big step forward in embedding energy efficiency measures across housing operations

# Metropolitan Council

# Project highlight: Energy efficiency at Metro Transit's facilities



# Metro Transit is updating its Building Automation Systems (BAS) to improve energy efficiency

- BAS systems control HVAC systems in buildings from a central control, creating a "smarter" building.
- BAS controls ensure that temperature settings are maintained in zones and that ventilation requirements are met based on occupancy, indoor air quality, and space use.
- 21 Metro Transit facilities, including all service garages and major support facilities, use BAS controls.

State of Good Repair improvements are key to maintaining and increasing the Council's energy efficiency.

# Metropolitan Council

# Project highlight: Energy efficiency for wastewater treatment



### **Low Dissolved Oxygen Demonstration Project**

- Low DO operation involves lowering the amount of air going into the aeration system without impacting our treatment capabilities.
- Nutrients like ammonia and phosphorus in the wastewater can be removed while reducing aeration energy cost by 40%.
- Recognized with the Resource and Recovery Energy (R2E) Award from the Central States Water Environment Association for contributing to energy savings in wastewater treatment across the region.

This study provides groundbreaking fundamental understanding of emerging innovation.

# letropolitan Council

# Commitments 4 and 5: Adapting to a changing climate



Commitment 4:

We will reduce risks and impacts of climate change hazards to our facilities and services.



Commitment 5:

We will support and collaborate with partners to advance regional climate adaptation efforts.

## Project highlight: Regional adaptation

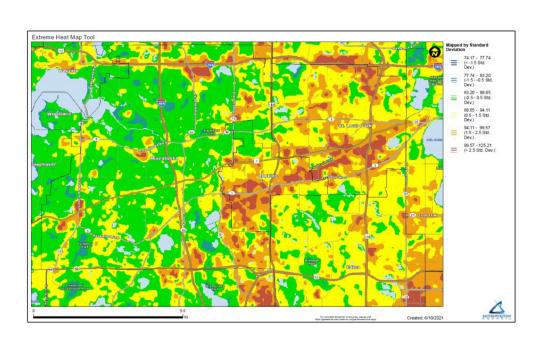


# Climate minimum requirements for local comprehensive plans

- Strategies to address social, built, and natural systems vulnerabilities for:
  - Extreme heat
  - Localized flooding

### **Extreme Heat Mapping Tool**

- Mapping tool depicts differences in land surface temperature across the region.
- Used by communities to identify land use and built environment strategies to mitigate extreme heat.
  - Hopkins and St. Louis Park were early adopters



### Project highlight: Sustainable landscapes



# **Environmental Services is advancing resilient and restorative landscapes**

- 11 sites across ES, from wastewater recovery facilities to lift stations, have transitioned to sustainable landscapes.
- Improvements include:
  - Native plantings, including prairie, bee lawns, and native trees
  - Wetland enhancements
  - Green infrastructure, such as infiltration basins and rain gardens
- Additional sites are planned for future years.

Transitioning to sustainable landscapes improves the Council's, and the region's, climate resilience.

## Commitment 1: Environmental justice



We will incorporate environmental justice principles as we plan, implement, and evaluate our climate work.

# letropolitan Council

### Embedding environmental justice in our work

### Alignment of regional and operational environmental justice

### Climate Action Work Plan Environmental Justice Commitment

We will incorporate environmental justice principles as we plan, implement, and evaluate our climate action work.



## Imagine 2050 Environmental Justice Framework



People-centered, data-driven decision making

Contextualized



Prioritized engagement with overburdened communities

Community-centered



Community benefits beyond harm mitigation

Reparative

# Metropolitan Counci

# Project highlight: Environmental Justice Framework

### **Environmental Justice Framework developed as part of Imagine 2050**

- Imagine 2050's community engagement affirmed the critical importance of centering environmental justice for overburdened communities.
- CAWP and Imagine 2050
   Environmental Justice teams
   are re-launching as one team to
   implement the environmental
   justice components of both
   plans



People-centered, data-driven decision making

Contextualized



Prioritized
engagement with
overburdened
communities

Community-centered



Community benefits beyond harm mitigation

Reparative

## Commitment 6: Cross-cutting efforts



Central strategy:

Expand staffing and training dedicated to climate work.

## Project highlight: Workforce development



# We are expanding training and capacity to achieve our ambitious climate commitments

- 1. Provide **training** for ~120 existing staff
  - Envision Sustainable Infrastructure Training: 40 participants in Cohort 1
- 2. Assessing gaps in existing workforce structure
  - Workforce survey: Over 60 respondents
  - 9 peer agency interviews
- 3. Developing **recommendations** based on gap assessment

We are on track to meet our commitment to identify internal workforce development needs

# Metropolitan Council

## Looking ahead: 2025-2026



### Accelerating and sustaining our climate work

- Accelerating our work
  - Continued funding streams
  - Additional dedicated staff
  - High-level staff accountability to our commitments sustaining our work
- We are 2.5 years into a 5-year plan
  - Ready to think about CAWP version 2.0, which we would anticipate in late 2026.
  - 2.0 will continue and enhance actions in the current plan

Continued action at the regional level is key to advancing Minnesota's climate work

### Climate Action Work Plan Team Members

### We're on this together

#### **Community Development**

- LisaBeth Barajas\*
- Heather Giesel
- Zhu Gong\*
- Gillian Greenberg
- Paul Hanson
- Sam Limerick
- Stephanie Paulsen
- Kevin Phan
- Kenny Smith
- Terri Smith
- Angela Torres\*
- Lucy Tschida
- Peter Wilfahrt
- Zoey Yandell

#### **Environmental Services**

- Walter Atkins
- Amanda Cerne
- John Chlebeck
- Steve Christopher
- John D. Clark
- Craig Edlund
- Laura Fischer
- Terry Gilchrist
- Andrea Kaufman
- Ben Keenan
- Jen Kostrzewski\*
- Chuck LaPierre
- Sam Paske\*
- Trevor Prater
- Deborah Rose
- Emily Schon
- Sara Smith
- Judy Sventek
- Dan White
- Eric Wojchik\*
- Jenn Zuchowski

#### **Metro Transit**

- Laura Bretheim\*
- Victoria Dan
- Rick DeMarchis
- Dave DeRossette
- Carrie Desmond\*
- Jeff Freeman\*
- Jim Harwood
- Mark Lanthier
- Chelsey Palmateer
- Marilyn Porter
- Kristin Thompson
- Claire Warren
- Akia Vang

### Metropolitan Transportation Services

- Paul Colton\*
- Wendy Duren
- Tony Fischer
- Jed Hanson
- Liz Roten
- Heidi Schallberg
- Amy Vennewitz\*

#### **Regional Administration**

- Lisa Belland
- Becky Grams
- Richard Hammonds
- Kelly Jameson
- Melissa Johnson
- Jeanne Landkamer\*
- Kathy Matter\*
- Greg Kaslow

\*Action or Working Group Leads

### **Questions?**

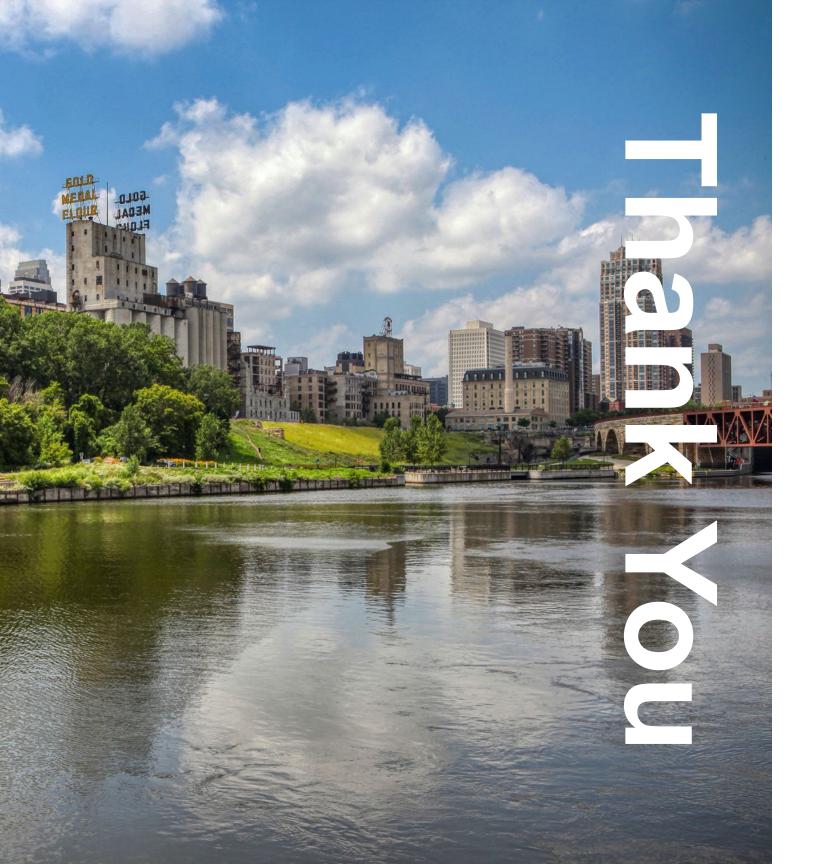


### What else would you like to know?

- Additional metrics that we have not shared?
- Projects that are of interest?
- Greenhouse gas emissions updates?

### **Partnerships:**

- Are there additional people we should connect with in this work?
- Are there external partners or activities to be aware of as we proceed?



### **Climate Action Work Plan Coordinating Team**

LisaBeth Barajas - Community Development

Jeff Freeman - Metro Transit

Kathy Matter - Regional Administration

Sam Paske - Environmental Services

Jen Kostrzewski – Environmental Services

Amy Vennewitz - Metropolitan Transportation Services

Jeanne Landkamer – Regional Administration

Laura Bretheim – Metro Transit Project Coordination

Lucy Tschida – Climate Action Implementation Intern, CD



