The Regional Indicators Initiative participants include:

- **46%** of the seven county metropolitan area population, **1,330,326 people**
- **28%** of total MN population, **1,525,529 people**
REGIONAL INDICATORS INITIATIVE

METRICS

ENERGY (IN BTUS): electricity, natural gas, and district energy consumed citywide (subdivided into residential and commercial/industrial)

WATER (IN GALLONS): potable water consumed citywide (subdivided into residential and commercial/industrial)

TRAVEL (IN VEHICLE MILES TRAVELED): on-road distance traveled within city limits

WASTE (IN POUNDS): citywide municipal solid waste managed via recycling, composting, combustion, and landfilling (prorated from countywide data)

COMMON METRICS

GREENHOUSE GAS EMISSIONS (IN TONNES CO₂E): citywide greenhouse gas emissions associated with each of the four indicators

COST (IN DOLLARS): cost estimates associated with each of the four indicators

ADDITIONAL DATA

DEMOGRAPHICS
All data is reported both as a total as well as in units/capita. Residential data is reported in units/household, and Commercial/Industrial data is reported in units/job

AREA
City Area (sf)

WEATHER
Heating Degree Days
Cooling Degree Days
Precipitation (in)
REGIONAL INDICATORS INITIATIVE

TOTAL ENERGY USE (kBtu/capita/day)

- ENERGY: British Thermal Units
- WATER: Gallons
- TRAVEL: Vehicle Miles Traveled
- WASTE: Pounds
- GHG EMISSIONS: Carbon Dioxide Equivalents

Graph showing trends from 2008 to 2011:
- 2008: ENERGY 291
- 2009: WATER 278
- 2010: GHG EMISSIONS 269
- 2011: ENERGY 280
THE ‘CHECK MARK’ TREND
TOTAL ENERGY USE 2008-2011 (MMBtu/year)

MINNEAPOLIS
ST. PAUL
ROCHESTER
DULUTH
RICHFIELD
HOPKINS
ST. LOUIS PARK
ST. ANTHONY
EDINA
FALCON HEIGHTS
MAPLEWOOD
WHITE BEAR LAKE
COON RAPIDS
OAKDALE
SHOREVIEW
EAGAN
EDEN PRAIRIE
MINNETONKA
WOODBURY
LAKE ELMO
2012 was a hot year, with increased electricity use from 2011 and decreased natural gas use in all eleven cities with complete energy data.
INITIAL 2012 DATA
ELEVEN CITIES - WEATHER NORMALIZED

ENERGY/CAPITA/DAY

COMMERCIAL/INDUSTRIAL
ENERGY/JOB/DAY

RESIDENTIAL
ENERGY/HOUSEHOLD/DAY
REGIONAL INDICATORS INITIATIVE

ENERGY USE - 2011

KBTU/CAPITA/DAY

RESIDENTIAL

COMMERCIAL/INDUSTRIAL

CENTRAL/STAND ALONE CITIES

INNER-RING SUBURBS

OUTER-RING SUBURBS

MINNEAPOLIS

SAINT PAUL

ROCHESTER

DULUTH

RICHFIELD

HOPKINS

SAINT LOUIS PARK

SAINT ANTHONY

EDINA

FALCON HEIGHTS

MAPLEWOOD

WHITE BEAR LAKE

COON RAPIDS

OAKDALE

SHOREVIEW

EAGAN

EDEN PRAIRIE

MINNETONKA

WOODBURY

LAKE ELMO
REGIONAL INDICATORS INITIATIVE

ENERGY
BRITISH THERMAL UNITS

WATER
GALLONS

TRAVEL
VEHICLE MILES TRAVELED

WASTE
POUNDS

GHG EMISSIONS
CARBON DIOXIDE EQUIVALENTS

TOTAL POTABLE WATER USE
(gallons/capita/day)
Residential Water Use
Gallons/Capita/Day - 2011

Central/Stand-Alone Cities: 47.3
Inner-Ring Suburbs: 64.4
Outer-Ring Suburbs: 78.8

RII Average, 58.0
WATER USE - 2011

- Residential: 49% in Central, 51% in Outer
- Commercial/Industrial: 39% in Central, 61% in Outer
- Inner-Ring Suburbs: 47
- Outer-Ring Suburbs: 46
- Central/Stand-Alone Cities: 41
- Inner-Ring Suburbs: 64
- Outer-Ring Suburbs: 79
- Residential: 42% in Central, 58% in Outer

GALLONS/CAPITA/DAY
REGIONAL INDICATORS INITIATIVE

ENERGY
BRITISH THERMAL UNITS

WATER
GALLONS

TRAVEL
VEHICLE MILES TRAVELED

WASTE
POUNDS

GHG EMISSIONS
CARBON DIOXIDE EQUIVALENTS

TOTAL VEHICLE MILES TRAVELED
(VMT/capita/day)
VEHICLE MILES TRAVELED INCREASES AT GREATER DISTANCES FROM CENTRAL CITIES

VMT/CAPITA/DAY - 2011

CENTRAL/STAND-ALONE CITIES

19.5

INNER-RING SUBURBS

21.4

OUTER-RING SUBURBS

30.1

MN AVERAGE, 29.1
US AVERAGE, 26.1
RII AVERAGE, 21.7
SO WHAT?

TOTAL GREENHOUSE GAS EMISSIONS FROM PRIMARY SOURCES (tonnes CO\textsubscript{2}e/capita/year)

RII data

49% reduction from 2005
CONCLUSIONS

• It is possible to measure community-wide data and normalize by jobs, population, households, and weather

• This data collection helps cities establish a baseline to enable action and track their progress over time.

• Minnesota cities are interested in reducing their emissions, but our data shows that emissions are increasing.

• The Metropolitan Council has begun the process of incorporating the Regional Indicators into the Thrive 2040 process.

• A next step could be reporting indicators in city comprehensive plans.
Select recommendations from Minnesota Climate Change Advisory Group report

- Target growth in ways that reduce the number and length of vehicle trips
- Expand infrastructure and programs to increase transit ridership, carpooling, bicycling, and walking
- Prioritize existing roads and design new and expanded roads to serve higher-density, more compact, pedestrian-friendly development in priority growth areas
- Reduce investment in new roads and roadway expansion that accommodate and encourage both low-density development and more and longer vehicle trips
Council directions on climate change

- Continue to advance operational sustainability in wastewater and Metro Transit
- Use climate change as a lens for policy and operational decisions
- Develop expertise in developing, collecting and disseminating information about climate change, including energy and climate data, the next generation of the Regional Indicators data, and a regional greenhouse gases inventory
- Provide technical assistance to the region’s local governments around climate change mitigation and adaptation
- Encourage local governments to plan and prepare for climate change, including incorporating climate change planning into their local comprehensive plans.
- Collaborate with regional leadership and convene local governments and the broader community to address climate change mitigation and adaptation within the region