



Minnesota GreenStep Cities

CELEBRATING 10 YEARS

Step 4 & 5 - Metrics Highlights

Updated June 2020

The following summaries are taken from Step 4 & 5 metrics reports and are considered unique or improved. Full reports are available by clicking on a city name located on the “All Cities” page at <https://greenstep.pca.state.mn.us>

Summary – 2020 Reports

- In 2020, 26 cities completed Step 4 and 18 cities completed Step 5 metrics reporting. All cities submitting metrics received recognition.
- Added key metrics related to climate adaptation and resiliency in 2020:
 - o 8.6a – Percent of net new trees (8.6) that are “likely to thrive” due to climate change and tree disease/pests.
 - o 9.2 – Climate adaptation stormwater score using the Stormwater Assessment Tool
 - o 14.2a – Storage capacity of renewable energy, generated by city-owned and private renewable energy sites.
- 10 Step 5 cities reported a reduction in kBtu usage in city facilities. (Metric 1.1.)
- Percent LED streetlights owned by the city and utility have increased to an average of 66% in 2020 from 14% in 2016 (Metric 1.4)
- 17 cities report 100% of their traffic signals have been converted to LED. (Metric 1.5)
- 9 Step 5 cities saw an improvement in city fleet gasoline MPG. The total average for all cities is 10.4 MPG (Metric 3.2)
- 7 Step 5 cities saw an improvement in city fleet diesel MPG. The total average for all cities is 4 MPG (Metric 3.4)
- Cities report owning or leasing 36 electric vehicles in the city fleet; up from just 28 in 2018. (Metric 3.5)
- Cities reported that 34.2 miles of new or reconstructed sidewalks or trails were completed (Metric 4.1)
- An average of 96% of residents in reporting cities live within one mile of a bike route (4.2); 84% live within ¾ mile of transit route (5.8); 88% live within ½ mile or 10 minute walk of parkland (8.3).
- The number of public electric vehicle charging stations have more than doubled over previous year metrics to 182 in 2019. (Metric 5.1)
- Cities reported adding 160 affordable housing units throughout their communities. (Metric 7.6)
- Reporting cities average 30% of total city acres in open space (8.1); an average of 1,715 acres per community (8.2); and an average of 34% tree canopy across the city (8.4).
- Cities reported planting a total of 7,531 new trees in their communities. (Metric 8.6)
- 11 Step 5 cities saw a reduction in daily residential gallons of water used per person/per day; an average of 57 gallons – a reduction of 5.59 gallon per person/per day over 2019 reported metrics. (Metric 10.1)
- 8 Step 5 cities saw a reduction in daily business gallons of water used per job/per day; an average of 39.33 gallons – a reduction of 3.06 gallons per job/per day over 2019 reported metrics. (Metric 10.2)
- Cities reported an average of 3.13 pounds of solid waste generated per city resident/per day. (Metric 13.1)

- 2020 Step 4&5 cities reported a collective total of 1,361 municipal and private renewable energy generation sites – an increase of 771 sites compared to the previous year. (Metric 14.1)
- The average percent of total city energy use that is met by generated and/or purchased renewable energy increased to 46.7%. (Metric 14.6)

Apple Valley

Step 4	2020
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- 100% of traffic lights are LED.
- 100% of Apple Valley’s housing is within 1 mile of a bike route.

Bloomington

Step 4	2020
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- 98% of traffic lights are LED.
- 99% of Apple Valley’s housing is within ½ mile of a bike route.
- 32 public EV charging stations are available in Bloomington.
- 95% of housing is located within ¾ mile of transit routes.
- 95% of Bloomington’s housing is located within ½ mile or 10 minute walk of parkland.

Duluth

Step 4	2020
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- Duluth has the lowest kBtu of city buildings compared to all Step 4/5 reporting cities at 29.81 kBtu/square foot.
- 98% of streets lights of LEDs.
- 96.7% of housing is located within ¾ mile of transit routes.
- 64.4 kW of storage capacity of renewable energy, generated by city-owned and private renewable energy sites, the only step 4/5 city to report capacity.
- 660 miles were travelled by city-owned e-bikes in 2019.

Eagan

Step 4	2017-2020
Step 5	2018-2020

- 100% of traffic lights are LED.
- Eagan’s average gasoline fleet MPG increased from 7.6 MPG in 2017 to 9.71 MPG in 2019.
- Eagan’s annual VMT by diesel fleet decreased from 196,328 in 2017 to 120,485 in 2019.
- The number of electric vehicle charging stations in the city has increased from 2 in 2017 to 9 in 2019.
- 100% of Eagan’s housing is within 1 mile of a bike route.
- 99.72% of Eagan’s housing is located within ½ mile of parkland.
- Reduced impaired bodies of water from 4 to 3 in 2019.
- Increased the number of city-owned and private renewable energy generation sites from 13 (899 kW) in 2017 to 20 (2047 kW) in 2019.
- Eagan now purchases 61262MWhr/yr of renewable energy for city operations; 5% of city operations.

Eden Prairie

Step 4	2016-2020
Step 5	2017-2020

- Reduced kBtu per square foot per year in city buildings from 147.73 in 2018 to 126.55 in 2019.
- 100% of street lights and traffic lights are LEDs.
- Increased the number of city-owned/leased hybrid vehicles in the city fleet from 6 in 2017 to 10 in 2019.
- 100% of Jordan's housing is within ½ mile of a bike route.
- Increased the number of public electric vehicle charging stations from 10 in 2018 to 14 in 2019.
- Increased the number of new affordable housing units by 25.13% of all new 2018 housing units.
- Residential water usage decreased from 75 gallons/person/day in 2018 to 65.8 in 2019.
- Business water usage decreased from 27.2 gallons/job/day in 2018 to 20.4 in 2019.

Edina

Step 4	2018, 2020
Step 5	2020

- Reduced kBtu per square foot per year in city buildings from 107.9 in 2018 to 103.93 in 2019.
- Increased LED traffic lights from 30% to 100% in 2019.
- Increased city fleet diesel MPG from 3.73 in 2018 to 5.97 in 2019.
- Increased the number of public electric vehicle charging stations from 4 in 2018 to 9 in 2019.
- Residential water usage decreased from 84.2 gallons/person/day in 2018 to 79 in 2019.
- Business water usage decreased from 28.4 gallons/job/day in 2018 to 24 in 2019.
- The city reduced its summer and winter water usage by over 203,180,000 gallons in 2019 compared to 2018.
- Increased the number of city-owned and private renewable energy generation sites from 36 (377 kW) in 2018 to 54 (466 kW) in 2019.

Elk River

Step 4	2016-2020
Step 5	2017-2020

- Reduced kBtu per square foot per year in city buildings from 84.97 in 2018 to 83.77 in 2019.
- Increased LED street lights that are owned by the city and utility from 23% to 40% in the last three years; 100% of traffic lights and 100% of city buildings and property are LEDs.
- Residential water usage decreased from 53.3 gallons/person/day to 34.72 in three years.
- Business water usage decreased from 83.7 gallons/job/day in 2018 to 76.54 in 2019.
- City summer water usage decreased from 14,465,000 gallons to 8,930,000 gallons in three years.
- In 2019, Elk River residents generated 1.36 pounds of waste/day/resident, less than 1.49 reported in 2018; recycling increased from 20.35% to 21.61%; organics increased from 0.27 to 0.29.
- Increased the number of city-owned and private renewable energy generation sites from 10 to 15 in 2019.
- 100% of total city operations energy use that is generated or purchased renewable electricity (over 17% in 2018).

Falcon Heights

Step 4	2017-2020
Step 5	2018-2020

- Reduced kBtu per square foot per year in city buildings from 86.01 in 2018 to 82.6 in 2019.
- 100% of street and traffic lights are LEDs.
- 100% of Falcon Heights' housing is within 1 mile of a bike route.
- 100% of housing is located within ¼ mile of transit routes.
- Falcon Heights has seen a reduction of the city population vehicle miles traveled per person/per day from 17.71 in 2017 to 16.7 in 2019.
- City employees commuting by single occupancy vehicles reported a reduction from 23 vehicles miles traveled per person/per day in 2017 to 13.54 miles in 2018.
- 80% of the city is in open space, the most of any Step 4/5 reporting city.
- Falcon Heights purchases 72.56 MWhr/yr of renewable energy for city operations, amounting to 80% of total city operations energy use that is generated or purchased renewable electricity (over 21.9% in 2017).

Golden Valley

Step 4	2019
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- This is the first year Golden Valley has reported.
- 100% of outdoor City Hall campus lighting is LED.
- The average MPG for the city gasoline fleet is 12.1 and 6.1 for the diesel city fleet.
- The city constructed 1.32 miles of new trails or sidewalks.
- 100% of housing units are located within ¼ mile of public transit options.
- 6.23% of land is within a commercial/mixed zoning district.
- 70.8% of city land is open space.

Hutchinson

Step 4	2016-2020
Step 5	2017-2020

- 100% of traffic lights are LED; LEDs in city buildings and property increased from 7.5% in 2018 to 20% in 2019.
- 100% of Isanti's housing is within 1 mile of a bike route.
- Nearly doubled the amount of trees planted from 160 in 2018 to 314 in 2019.

Inver Grove Heights

Step 4	2020
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- 100% of traffic lights are LED.
- The average MPG for the city gasoline fleet is 11.89 and the diesel city fleet is 8.01.
- 100% of Isanti's housing is within 1 mile of a bike route.

Isanti

Step 4	2018-2020
Step 5	2019-2020

- Increased LED street lights from 36% in 2017 to 44% in 2018.
- 86.4% of new housing units added in 2018 were affordable.
- 100% of Isanti's housing is within 1 mile of a bike route.
- City employees commuting by single occupancy vehicles reported a reduction from 18.52 vehicles miles traveled per person/per day in 2018 to 13.19 miles in 2019.

Jordan

Step 4	2020
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- 100% of Jordan's housing is within 1 mile of a bike route.
- 56.19% of new housing units added in 2019 were affordable.
- 52% of the city is in open space.
- 100% of Jordan's housing is located within ½ mile of parkland.
- 120% of Jordan's total city operations use renewable energy.

Mahtomedi

Step 4	2019-2020
Step 5	2020

- 100% of street and traffic lights are LED.
- Mahtomedi increased LED lighting in city buildings and property from 5% in 2018 to 90% in 2019.
- Increased city fleet gasoline MPG from 7.8 in 2018 to 8.12 in 2019.
- Increased city fleet diesel MPG from 5.75 in 2018 to 13.82 in 2019.
- 100% of housing is located within 1 mile of a bicycle route.
- Increased acres of new development on previously developed land from 5.8 in 2018 to 14 in 2019.
- 53.2% of total city acres are in open space.
- 70% of the city has tree canopy coverage.
- Mahtomedi cut summer water usage by almost half from 3,030,148 gallons in 2018 to 1,811,656 in 2019.
- Increased the number of city-owned and private renewable energy generation sites from 8 (19.72 kW) in 2018 to 16 (73.5 kW) in 2019.
- Mahtomedi purchases 554.09 MWhr/yr of renewable energy for city operations; 18.5% of city operation's needs.

Maplewood

Step 4	2016-2020
Step 5	2017-2020

- Reduced kBtu per square foot per year in city buildings from 131.96 in 2018 to 100.42 in 2019.
- Maplewood spends the least on energy for city buildings – at \$0.29/square foot – out of all Step 4/5 respondents.
- 100% of traffic lights are LEDs.

- 100% of Maplewood residents are within 1 mile of a bicycle route, an increase over 62% in 2017.
- Increased the number of public electric vehicle charging stations from 10 in 2018 to 14 in 2019.
- 99.55% of Maplewood’s housing is located within ½ mile or 10-minute walk of parkland.
- The percent of impaired waters decreased from 31% to 28% in 2019 because Beaver Lake was delisted.
- Increased percent of residential solid waste composted increased from 5% in 2018 to 21.8% in 2019.
- Increased the number of city-owned and private renewable energy generation sites from 7 (81 kW) in 2017 to 52 (626 kW) in 2019.
- 14 private and 18 public rain gardens were added in 2019.

Minnetonka

Step 4	2019-2020
Step 5	2020

- Minnetonka’s city fleet gasoline MPG increased from 12.7 in 2018 to 14.7 in 2019.
- Minnetonka’s city fleet diesel MPG increased from 4.2 in 2018 to 4.4 in 2019.
- 100% of housing is located within 1 mile of bicycle route.
- Total parkland increased to 2018 acres in 2019.
- 98.4% of housing is located within ¼ mile of transit routes.
- Gallons of water used/day decreased for residents from 53.8/resident in 2018 to 46.4/resident in 2019 and 54.1/job in 2018 to 50.6/job in 2019.
- The city reduced its summer and winter water usage by over 1,189,000 gallons in 2019 compared to 2018.
- 47.9% of total city operations energy use is generated or purchased by renewable electricity, up from 37% in 2018.
- 98% of residents rate the overall quality of the natural environment in Minnetonka as excellent or good, up from 96% in 2018.
- 82% of households participate in curbside recycling programs, up from 30% in 2018.

New Brighton

Step 4	2019-2020
Step 5	2020

- Reduced kBtu per square foot per year in city buildings from 98.93 in 2018 to 89.82 in 2019.
- 100% of traffic lights, and 100% of city buildings and property are LEDs.
- 100% of housing is located within 1 mile of bicycle route, up from 95% in 2018.
- 87.8% of New Brighton employees commute 20 miles or less.
- 100% of New Brighton’s housing is located within ½ mile or 10-minute walk of parkland.
- Residential water usage decreased from 63.5 gallons/person/day in 2018 to 55.72 in 2019.
- Business water usage decreased from 43.3 gallons/job/day in 2018 to 35.27 in 2019.

Northfield

Step 4	2020
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- 70% of streets lights and 100% of traffic lights are LEDs.
- 100% of housing is located within 1 mile of bicycle route.

- Northfield residents travel 8.9 vehicle miles per person/per day; 60% of residents travel fewer than 20 miles/day; just 52% travel in single occupancy vehicles; 11% use a car/van pool or ride share; 8% bike or walk to work; and 32.6% work from home/telecommute.
- 99.9% of Northfield's housing is located within ½ mile or 10-minute walk of parkland.

North Saint Paul

Step 4	2020
Step 5	2020

- 100% of street lights, 100% of traffic lights, and 97% of city buildings and properties are LEDs.
- Increased city fleet gasoline MPG from 3 in 2018 to 3.64 in 2019.
- Increased city fleet diesel MPG from 3.77 in 2018 to 4.48 in 2019.
- 98% of housing is located within 1 mile of bicycle route.
- 98% of North Saint Paul's housing is located within ½ mile or 10-minute walk of parkland.
- Double the amount of trees planted from 143 in 2018 to 288 in 2019.
- Improved Stormwater Assessment scores from 54 in 2018 to 26 in 2019; adaptation scores from 60 to 61.
- In 2019, North Saint Paul residents generate 6.12 pounds of waste/day/resident, less than 8.44 reported in 2018; commercial solid waste generated decreased from 36.43 to 24.51 pounds/job/day.
- Residential solid waste recycled increased from 48.72% in 2018 to 55.33% in 2019; composting increased from 0% to 0.5%.
- Increased the number of city-owned and private renewable energy generation sites from 3 (33 kW) to 4 (445.5535 kW) in 2019.
- North Saint Paul now purchases 620 MWhr/yr of renewable energy for city operations, amounting to 100% of total city operations energy use that is generated or purchased renewable electricity; increased from 588 MWhr/yr in 2018.

Oakdale

Step 4	2017-2020
Step 5	2018-2020

- 100% of traffic lights are LEDs.
- Oakdale reduced annual city fleet VMT by nearly 100,000 miles for gas and diesel vehicles in 2019 compared to 2018 data.
- Oakdale's city fleet gasoline MPG increased from 10.295 in 2018 to 11.48 in 2019.
- 100% of housing is located within 1 mile of bicycle route.
- 95% of Shoreview's housing is located within ½ mile or 10-minute walk of parkland.
- In 2019, Oakdale residents generate 1.19 pounds of waste/day/resident, less than 2.38 reported in 2018; recycling increased from 22.14% to 26.52%.
- Increased the number of city-owned and private renewable energy generation sites from 19 (345.71 kW) to 29 (445.55 kW) in 2019.
- Oakdale purchases 3307.1 MWhr/yr of renewable energy for city operations, amounting to 84.7% of total city operations energy use that is generated or purchased renewable electricity; increased from 75% in 2018.

Red Wing

Step 4	2017-2020
Step 5	2018-2020

- 99% of street lights and 100% of traffic lights are LEDs.
- Increased city fleet gasoline MPG from 11.5 in 2018 to 12.5 in 2019.
- Increased city fleet diesel MPG from 4.7 in 2018 to 5.8 in 2019.
- Residential water usage decreased from 46 gallons/person/day in 2018 to 40 in 2019.
- Reduced greenhouse gas emissions from travel from 61,456 in 2017 to 61,036 tons in 2019.
- Increased the number of city-owned and private renewable energy generation sites from 23 (334 kW) to 41 (424 kW) in 2019.
- Oakdale purchases 3328 MWhr/yr of renewable energy for city operations, amounting to 120% of total city operations energy use that is generated or purchased renewable electricity.

Rochester

Step 4	2018, 2020
Step 5	2018, 2020

- Reduced kBtu per square foot per year in city buildings from 74.79 in 2018 to 50.71 in 2019 and has the lowest ratio of actual energy use to predicted energy use (0.43) of any Step 4/5 reporting city.
- 99.7% of Rochester's housing is within 1 mile of a bike route.
- Increased the number of public electric vehicle charging stations from 9 in 2018 to 19 in 2019.
- 96% of housing is located within $\frac{3}{4}$ mile of transit routes.
- Nearly doubled the amount of trees planted from 930 in 2018 to 1505 in 2019.
- Rochester residents produce the least amount of waste water of any Step 4/5 reporting city with 35.99 gallons/person/day.
- Increased the number of city-owned and private renewable energy generation sites from 91 (1070 kW) to 138 (2760 kW) in 2019.

Roseville

Step 4	2020
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- 100% of street lights, 100% of traffic lights, and 100% of city buildings and properties are LEDs.
- 100% of housing is located within $\frac{3}{4}$ mile of transit routes.
- 78.2% of city employees commute less than 20 miles.
- 96.4% of Roseville's housing is located within $\frac{1}{2}$ mile or 10-minute walk of parkland.

Saint Anthony

Step 4	2016-2020
Step 5	2017-2020

- Increased street lights that are now LED from 25% in 2017 to 100% in 2019; 100% of traffic lights are LED; Increased city facility LED lighting from 21% in 2016 to 65% in 2019.
- Increased city fleet gasoline MPG from 7.25 in 2018 to 9.07 in 2019.
- Increased city fleet gasoline MPG from 11.5 in 2018 to 12.5 in 2019.

- Increased the number of city-owned and private renewable energy generation sites from 9 (90.97 kW) in 2018 to 15 (138.15 kW) in 2019.
- % of residents who bike or walk to commute increased from 3.5 in 2018 to 5.4 in 2019.
- 100% of North Saint Paul's housing is located within ½ mile or 10-minute walk of parkland.
- Residential water usage decreased from 63.5 gallons/person/day in 2018 to 55.72 in 2019.
- Business water usage decreased from 43.3 gallons/job/day in 2018 to 35.27 in 2019.

Saint Louis Park

Step 4	2020
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- 2 city owned buildings meet the City's Green Building Policy
- 100% of Saint Louis Park's housing is within 1 mile of a bike route.
- Oakdale now purchases 3502.73.1 MWhr/yr of renewable energy for city operations, amounting to 100% of total city operations energy use that is generated or purchased renewable electricity.

Saint Paul

Step 4	2017-2019
Step 5	2018-2019

- St. Paul now has 100% LED traffic signals.
- Increased the number of public EV charging stations from 38 in 218 to 47 in 2019.
- Increased the amount of open space by 1% in 2019.
- Increased the number of city-owned and private renewable energy generation sites from 192 (91646 kW) in 2018 to 279 (2373 kW) in 2019.
- In St. Paul, 7,190 private entities participate in renewable energy purchasing/green power programs – up 1,307 from 2017.
- Increased the percent of total city operations using renewable energy from 1% to 16% in 2019.

Shoreview

Step 4	2018-2020
Step 5	2019-2020

- 100% of Shoreview's housing is within 1 mile of a bike route.
- 94.6% of housing is located within ¾ mile of transit routes.
- 11.4% of land is within residential or mixed zoning with dwelling units per acres at or above 7.0.
- 50% of all new housing were affordable housing units in 2019.
- 94.9% of Shoreview's housing is located within ½ mile or 10-minute walk of parkland.
- 50.3% of the city has tree canopy coverage.
- In 2019, the Shoreview reduced the annual energy used per million gallons of water distributed by 524 MMbtu.
- 51.5% of Shoreview residential solid waste is recycled.
- Increased the number of city-owned and private renewable energy generation sites from 22 (181 kW) in 2017 to 41 (380 kW) in 2019.
- Shoreview has a public apple orchard and weekly farmers market.
- The city has seen a decrease in RII GHG city-wide emissions data from 253,166 to 247,247.

Woodbury

Step 4	2019-2020
Step 5	2019-2020

- Reduced kBtu per square foot per year in city buildings from 83.06 in 2018 to 76.4 in 2019.
- 100% of street lights, 100% of traffic lights are LEDs.
- Woodbury leases or owns 2 additional electric vehicles in the city fleet, for a total of 12.
- 100% of housing is located within 1 mile of bicycle route.
- Increased the number of public electric vehicle charging stations from 8 in 2017 to 24 in 2019.
- 100% of residents are located within a ½ mile or 10 minute walk of a park.
- Residential water usage decreased from 80 gallons/person/day in 2018 to 71.45 in 2019.
- Increased the number of city owned and private renewable energy generation sites from 63 (1045 kW) in 2017 to 107 (1368 kW) in 2019.
- Increased the percent of total city operations using renewable energy from 28% to 95% in 2019

Previous Step 4/5 Communities that did not update in 2020:

- White Bear Lake (Step 4 - 2018)
- Golden Valley (Step 4 – 2019)
- Burnsville (Step 4 – 2017; Steps 4 & 5 – 2018, 2019)
- Saint Paul (Step 4 – 2016; Steps 4 & 5 – 2017)