

**CITY OF FALCON HEIGHTS**  
City Council Workshop  
City Hall  
2077 West Larpenteur Avenue

**AGENDA**  
Wednesday, May 7, 2025  
6:30 P.M.

- A. CALL TO ORDER: 6:37 PM
- B. ROLL CALL: GUSTAFSON\_\_X\_\_ LEEHY\_\_X\_\_  
MEYER\_\_X\_\_ MIELKE\_\_X\_\_  
WASSENBERG\_\_X\_\_  
STAFF PRESENT: LINEHAN\_\_X\_\_ JOHNSON\_\_X\_\_ LYNCH\_\_X\_\_
- C. POLICY ITEMS:
1. Falcon Heights Climate Action Plan – Final Draft
  2. Pay-by-Mobile Parking Program / ParkMobile Program Recommendations
  3. City Hall Summer Hours
  4. Goal-Setting Final Draft Plan
  5. Early Retirement Incentive Program
  6. Councilmember Out-of-State Travel Request
- D. ADJOURNMENT: 8:36 PM

*DISCLAIMER: City Council Workshops are held monthly as an opportunity for Council Members to discuss policy topics in greater detail prior to a formal meeting where a public hearing may be held and/or action may be taken. Members of the public that would like to make a comment or ask questions about an item on the agenda for an upcoming workshop should send them to [mail@falconheights.org](mailto:mail@falconheights.org) prior to the meeting. Alternatively, time is regularly allotted for public comment during Regular City Council Meetings (typically 2nd and 4th Wednesdays) during the Community Forum.*

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|                     |                                                 |
|---------------------|-------------------------------------------------|
| <b>Meeting Date</b> | May 7, 2025                                     |
| <b>Agenda Item</b>  | Policy C1                                       |
| <b>Attachment</b>   | Draft Climate Action Plan                       |
| <b>Submitted By</b> | Hannah Lynch, Community Development Coordinator |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Item</b>                | Climate Action Plan Final Draft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Description</b>         | <p>The City of Falcon Heights is developing a Climate Action Plan to reduce greenhouse gas emissions, address the climate crisis, and build resilience. The city has already seen the effects of climate change in variable weather conditions, air quality health risks from wildfires, and extreme heat. To address it, the city has goals to reduce greenhouse gas emissions and switch to renewable energy sources. As a GreenStep city and part of the Partners in Energy program through Xcel Energy, we are already taking action to address climate change. A Climate Action Plan is one of the most important next steps for achieving these goals.</p> <p>The plan is being funded by a Minnesota Pollution Control Agency grant via the Local Climate Action Grant Program and is being supported by paleBLUEdot LLC, the City's consultant. The Climate Action Plan stems from the Climate Crisis resolution adopted by the City Council in January 2023, which included a commitment to consider a Climate Action Plan with inputs from the Falcon Heights community and local partners.</p> <p>The Climate Action Plan team has met four times, including one meeting with important advisory stakeholders, to identify goals and actions which serve as the basis for the drafted Climate Action Plan.</p> <p>The attached final draft includes changes based on staff review, City Council comments, Action Plan Team review, resident review, and feedback provided during the April 26 Sustainability Fair. The goal is to adopt the Climate Action Plan this month.</p> |
| <b>Budget Impact</b>       | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Attachment(s)</b>       | <ul style="list-style-type: none"> <li>Final Draft - Falcon Heights Climate Action Plan</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Action(s) Requested</b> | Staff requests Council discuss the final draft and determine if any changes are needed before adoption.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Final Draft**



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# Climate Action Plan

A Collaborative Community Vision

May 2025



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# Plan At A Glance

## 6 Sectors (Click icon to view)



Transportation



Buildings/Energy



Waste



Water



Food



Greenspace

## 23 Strategies focused on



**53%**  
lower GHG\*  
emissions



**5%**  
fewer VMT\*\*



**40%**  
increase in  
public transit



**15%**  
registered  
EVs\*\*\*



**8%**  
increase in



**45%**  
lower GHG\*  
emissions



**22%**  
clean  
electricity



**5%**  
less electricity  
use



**45%**  
less fuel  
combustion



**20%**  
fuel switching  
from fossil



**20%**  
lower GHG\*  
emissions



**10%**  
less solid  
waste



**10%**  
more organics  
diversion



**10%**  
more recycling  
diversion



**5%**  
less water use



**5%**  
reduction in  
wastewater



**Increased**  
stormwater  
resilience



**Increased**  
water  
restoration



**Increased**  
access to local  
food



**Increased**  
production of  
local food



**Decreased**  
hunger and  
food waste



**11%**  
more tree  
canopy cover



**15%**  
less turf, more  
native grass



**10%**  
less dark  
impervious  
surfaces

\* Greenhouse Gas Emissions (GHG)  
\*\* Vehicle Miles Traveled (VMT)  
\*\*\* Electric Vehicle (EV)

## To reduce our GHG\* emissions



**12,894**  
Metric tons (MT CO<sub>2</sub>e) in  
2023 from vehicle use  
citywide



**19,681**  
Metric tons (MT CO<sub>2</sub>e) in  
2023 from building energy  
citywide



**881**  
Metric tons (MT CO<sub>2</sub>e) in  
2023 from solid waste  
citywide

## ...and enhance our Climate Resilience



**Extreme Heat / Weather**



**Flooding**



**Air Quality**



**Food Insecurity**



**Infrastructure Failure**

Achieving GHG Emission Reductions of

**47%** BY 2035

**100%** BY 2050



## QUICK FACTS

**19,681**

Metric tons (MT CO<sub>2</sub>e) in  
2023 from building  
energy citywide

**12,894**

Metric tons (MT CO<sub>2</sub>e) in  
2023 from vehicle use  
citywide

**881**

Metric tons (MT CO<sub>2</sub>e) in  
2023 from solid waste  
citywide

# Introduction

Falcon Heights has long been a leader in environmental stewardship, embracing sustainability as a core value of our community. Over the years, the City has adopted forward-thinking “green” practices—becoming one of Minnesota’s first GreenStep Cities in 2009 and pioneering projects like a 40 kW solar installation on City Hall in 2012, community gardens, a native plant ordinance, and LED streetlight upgrades. This strong foundation reflects a commitment to a high quality of life through sustainable infrastructure and conservation.

### Climate Emergency Resolution

Climate change is already impacting Falcon Heights, bringing warmer winters, hotter summers, and extreme weather. The City Council responded by unanimously declaring a Climate Emergency in January 2023, committing Falcon Heights to urgent action and a just transition. This Climate Action Plan (CAP), supported by a Minnesota Pollution Control Agency grant, is a key step in meeting that commitment.

### Current Initiatives and Partnerships

Building on our strong foundation, Falcon Heights now holds Step 5 recognition in the GreenStep Cities program, reflecting ongoing leadership in energy savings, waste reduction, and sustainability. The City is also a Charging Smart community, recognized for electric vehicle readiness. With Xcel Energy, we’ve launched an Energy Action Plan to cut emissions—progress driven by residents and businesses. Falcon Heights collaborates with Ramsey County and nearby cities on recycling, composting, and resilience projects, and engages residents through events like the 2025 Sustainability Fair. These efforts show what’s possible when our community works together for a sustainable future.

### A Vision for the Future

This CAP outlines a clear path to a low-carbon, resilient future. It sets ambitious goals aligned with Minnesota’s climate targets—cutting emissions 47% by 2035 and reaching net zero emissions by 2050. Shaped by public input, the plan calls on everyone—residents, businesses, and partners—to play a role. Together, we can protect what we value today and create a thriving, resilient Falcon Heights for generations to come.



[Click here to return to TOC](#)



## Co-Benefits of Climate Action Planning

### Common Co-Benefits of Climate Planning

Reduced Costs



Improved Energy Resilience



Safer Streets



Protected / Enhanced Ecosystems



Reduced Pollution



Improved Community Resilience



Improved Mobility



Improved Quality of Life



The World Health Organization reports growing evidence that climate policies can deliver both cost savings and significant health improvements. Community actions to cut greenhouse gas emissions in sectors like housing, transportation, and energy create multiple co-benefits beyond mitigating climate change. These include cleaner air, better public health, reduced health risks, greater resource efficiency, stronger local economies, and increased resilience of ecosystems and infrastructure.<sup>1,2,3,4</sup> These outcomes not only improve quality of life and natural resources but also generate financial gains.

### Positive Financial Impacts

Many climate actions offer direct financial benefits, such as lower fuel costs, and indirect savings, particularly from improved air quality. Research shows that health and air pollution benefits can offset much of the cost of these initiatives.<sup>5</sup> Additional savings come from increased resilience, such as reduced reliance on fossil fuels—valued locally at \$141 per metric ton (MT) of greenhouse gas reductions.<sup>6,7,8</sup> Health benefits may be even greater, with estimates ranging from \$50 to \$380 per MT of GHG reduced globally.<sup>9</sup>

### Improved Quality of Life

Implementing climate action plans like this one can enhance quality of life by expanding mobility options, creating jobs, and reducing poverty and inequality.<sup>10</sup> These co-benefits strengthen community well-being as we address climate challenges.

### Improved Natural Resources

Taking action on climate change also helps protect ecosystems that provide essential services.<sup>11</sup> For example, expanding Falcon Heights' tree canopy to meet this plan's goals could increase the annual economic value of community trees by up to \$22,500. Other strategies will improve residents' access to green spaces, supporting both environmental health and quality of life.<sup>12</sup>

---

# Planning Process

**9 months**

Planning  
timeframe

**100+**

Community  
members  
engaged

**2**

Community  
meetings and  
events

**2**

Online  
community input  
surveys

**31**

Planning team  
members

**5**

Foundational  
research  
documents

The Falcon Heights Climate Action Plan was developed collaboratively with a 31-member planning team, including community members, businesses, institutions, City commissions, and Falcon Heights staff. The planning team considered, created, and reviewed strategies and actions for each of the sectors included in this plan (see Plan Framework). The team participated in planning workshops from January to April 2025. The process included community engagement including community-wide surveys and input meetings and events. Goals and actions were shaped by community feedback, expert analysis, and best practices from other Minnesota and U.S. cities. Through workshops, the team refined and prioritized strategies, resulting in a co-authored plan that reflects the voices of Falcon Heights.

## Research Based Climate Action Plan

To establish the plan's goals, strategies, and actions, the planning team conducted extensive research and produced several key assessments. These included studies on climate vulnerability, ground cover and tree canopy, greenhouse gas emissions, and renewable, or "clean" energy potential, providing critical data on climate risks, carbon sequestration, emissions trends, and solar opportunities. A final Climate Action Baseline Study synthesized these findings, reviewed key community metrics, and outlined preliminary sector-specific goals to guide planning discussions. Click on the icons below to view these documents:



Climate Action  
Baseline Study



Climate Vulnerability  
Assessment



Community-Wide  
GHG Inventory



Ground Cover, Tree  
Canopy & Carbon  
Sequestration Study



Community-Wide  
Renewable Energy  
Potential Study



# What We Heard

Community input was gathered through two surveys with over 75 responses from residents and businesses.<sup>13</sup> The first gathered climate concerns and action ideas; the second collected feedback on draft strategies. This input shaped the plan to reflect local priorities.

## The City's Role in Climate Action

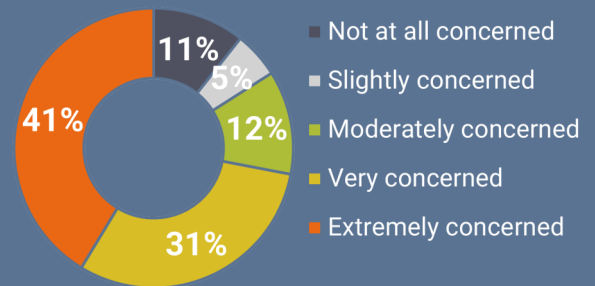
Respondents reported that they agree or strongly agree...

It is important for Falcon Heights to take action to prepare for the projected impacts of climate change. **83%**

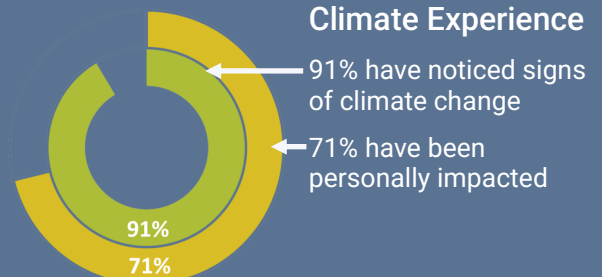
It is important for Falcon Heights to take action to reduce greenhouse gas emissions. **82%**

It is important for Falcon Heights to be a leader in proactively addressing climate change. **74%**

## How concerned are you about climate change?



## Climate Experience



## Key Themes

Key themes that emerged from the community included:



### Support for Municipal Action and Leadership

84% of respondents are concerned about climate change. Additionally, 83% support the City preparing for impacts, 82% back reducing emissions, and 74% want Falcon Heights to lead on climate.



### Clean Energy

79% support rental properties meeting energy efficiency standards to reduce costs while 67% support incentives for efficiency and solar readiness, and 61% support solar installation incentives.



### Impacts on Vulnerable Populations

Over 80% of respondents are concerned about climate change risks to vulnerable groups.



### Protect Resources

84% are concerned about air quality, 82% about impacts on ecosystems, and 77% about risks to clean water.

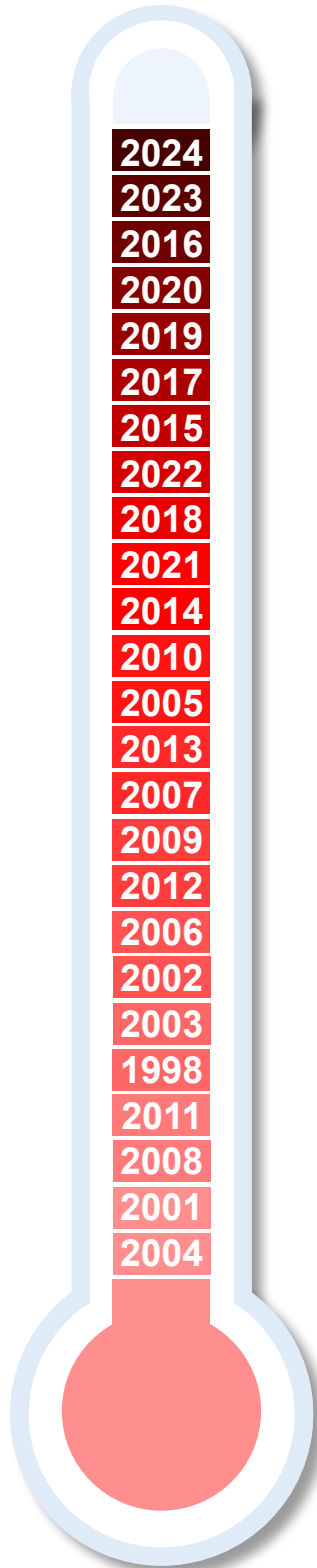


Survey Summary

For Additional Information  
(click icon)



**The Hottest**  
25 Hottest Global  
Years on Record<sup>27</sup>



# Climate Change Impacts

Climate change is a global issue with serious local impacts. Scientists agree that rising greenhouse gas emissions are destabilizing Earth's climate. Twenty-four of the 25 hottest years on record have occurred since 2000. In Minnesota, much of the state has warmed nearly 3°F over the past century, causing drier soils and a 20% increase in heavy rain events.<sup>14,15,16</sup>

## Climate Change in Falcon Heights

Falcon Heights is already experiencing these changes. Between 1980 and 2018, the city saw rising average temperatures, more days above 95°F, more heavy rain events, and fewer days below 32°F.<sup>17,18</sup> One of the most notable shifts is in precipitation patterns. While overall annual precipitation has increased, the change is uneven. Fall and winter precipitation rose up to 15.5%, while spring and summer levels remained largely unchanged.<sup>19</sup>

## Climate Projections for Falcon Heights<sup>7</sup>

Over their lifetime, a child in Falcon Heights can expect.<sup>20,21</sup>

| Climate Conditions                                                  | Baseline | Mid-Century<br>(2050 average) | End of Century<br>(2100 average) |
|---------------------------------------------------------------------|----------|-------------------------------|----------------------------------|
| Average Daily Maximum Temperature                                   | 55° F    | 62°F                          | 62°F - 67°F                      |
| Number of Days Per Year with Maximum > 95° F                        | 2        | 23                            | 23 - 52                          |
| Number of Days Per Year With Minimum < 32° F                        | 154      | 131                           | 130 - 107                        |
| Change in Growing, Allergy, & Tick/Mosquito Season <sup>22,23</sup> | 9 days   | 23 days                       | 24-37 days                       |
| Average Annual Precipitation <sup>24</sup>                          | 26"      | 32"                           | 28-35"                           |
| Increase in Heavy Precipitation Events (Days with > 1" Rainfall)    | N/A      | 27%                           | 27-55%                           |
| Air Conditioning Demand (Cooling Degree Days)                       | 700      | 1500                          | 1500-2200                        |
| Heat Related Increase In Per Capita Electricity <sup>25</sup>       | N/A      | 36%                           | 36-53%                           |

# Falcon Heights' Climate Risks

The anticipated climate changes in Falcon Heights over the next few decades pose potential risks to residents, with certain populations—such as children, seniors, and individuals with disabilities—being more vulnerable to these impacts. Below are some of the most notable risks to the community.<sup>7</sup>



## Extreme Heat and Weather

Certain individuals face higher risks of stress, health issues, or even death from extreme weather events like severe storms, hail, heavy rain events, and heat waves.<sup>26,27</sup> Susceptibility to heat stress increases with pre-existing conditions such as diabetes and heart disease, as well as demographic, socioeconomic, and environmental factors like land cover.



## Flooding

The latest National Climate Assessment shows that heavy precipitation events are already on the rise across the U.S. and in Minnesota. These intense rainfall events are expected to continue increasing throughout the state. The growing frequency of both extreme and total precipitation is likely to contribute to more frequent over-bank flooding (river and lake flooding) and flash floods.



## Air Quality

Climate change is anticipated to impact air quality through various channels, including higher levels of allergens and pollen, increased regional ozone concentrations, greater risks of smoke from wildfires, and elevated particulate pollution and dust.



## Food Insecurity

Climate change is likely to destabilize cropping systems, interrupt transportation networks, and trigger food shortages and spikes in food cost.



## Infrastructure / Power Failure

Extreme weather events, flooding, flash flooding, and the growing daily challenges from climate variability all pose risks to the stability of our aging infrastructure. Power outages, road damage, bridge collapses, and water system failures are significant physical climate risks to the community, particularly for those most vulnerable to climate impacts.



Vulnerability

For Additional  
Information  
(click icon)

# Greenhouse Gas Emissions

Measuring, tracking, and reducing greenhouse gas (GHG) emissions is essential for effective climate action. Understanding our emissions helps us focus efforts on minimizing our community's climate impact.

In Falcon Heights, community-wide emissions decreased from 37,466 MT CO<sub>2</sub>e in 2019 to 33,457 MT CO<sub>2</sub>e in 2023, a reduction of nearly 11%.<sup>6</sup>

## 2022 GHG EMISSIONS IN Falcon Heights<sup>6</sup>



38.5%



12,894

MT CO<sub>2</sub>e from  
transportation

37.4%



12,514

MT CO<sub>2</sub>e from natural  
gas

21.4%



7,168

MT CO<sub>2</sub>e from  
electricity

2.6%



881

MT CO<sub>2</sub>e from solid  
waste

### Inside The Numbers:

Total Vehicle Miles  
Traveled (VMT):  
27,333,000

Gasoline consumed  
(est):  
1,035,911 gallons

Diesel fuel  
consumed (est):  
398,464

Electric Vehicle (EV)  
share of total:  
2.7%

Non-residential  
therms used:  
1,186,300

Residential therms  
used:  
1,175,347

Non-residential kWh  
used:  
17,215,000

Residential kWh  
used:  
12,964,000

Customer-owned  
clean energy share:  
0.58%

Total solid waste  
generated:  
6,160 tons

Solid waste  
landfilled:  
669 tons

Solid waste used for  
waste-to-energy:  
2,330 tons

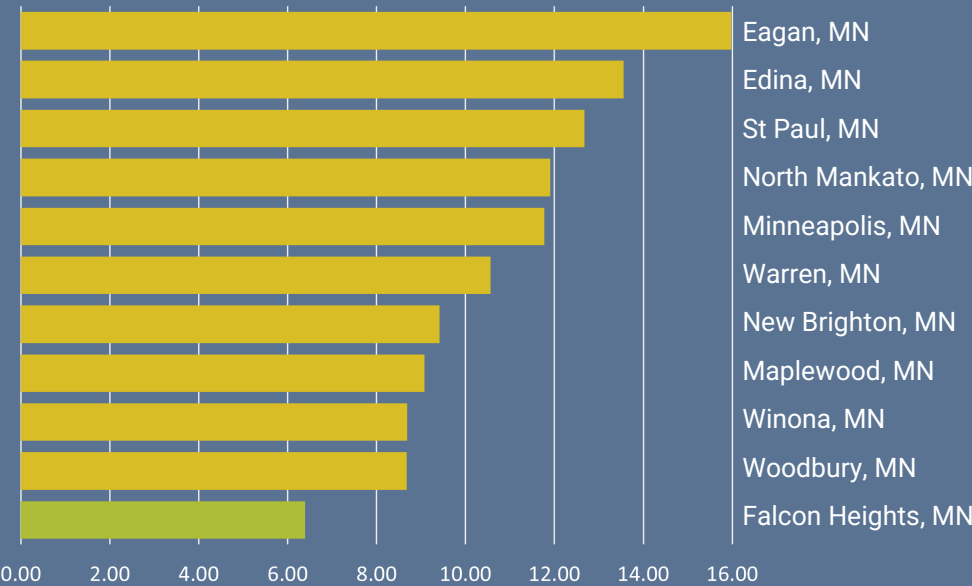
Solid waste recycled:  
1,936 tons

Organic solid waste  
recycled/composted:  
1,224 tons

# How Large Are The Citywide GHG Emissions?

The City’s total emissions for 2023 are equal to **656 Million** cubic feet of human-made greenhouse gas. This volume of atmosphere is equal to a cube **869** feet on each face shown here west of Snelling on Larpenteur Ave as viewed from Como Avenue from over **1.5 miles** away.

Emissions Per Capita



## How Do We Stack Up?

Falcon Heights emits 6.73 MT CO<sub>2</sub>e per person, significantly below the U.S. average of 20.7 MT CO<sub>2</sub>e.<sup>6</sup> The chart on the left compares Falcon Heights' emissions to other Minnesota communities.



For Additional Information  
(click icon)



# Plan Framework

The plan guides Falcon Heights' municipal operations and citywide climate action, covering GHG reductions and climate resilience. It includes an implementation section and six sectors, each with goals and detailed actions for implementation.



[Click here for section](#)

## Transportation and Land Use

Strengthening Falcon Heights' mobility resilience while reducing emissions and environmental impacts.

### Sector Strategies:

- Reducing vehicle use
- Increasing public transit use
- Increasing population density (within already developed land)
- Increasing zero emission vehicle registration
- Increasing community "EV Readiness"



[Click here for section](#)

## Buildings and Energy

Increasing building resilience through energy efficiency, clean energy adoption, and decreased on-site fuel use.

### Sector Strategies:

- Reducing energy use
- Switching from fossil fuel combustion
- Increasing clean energy use



[Click here for section](#)

## Waste Management

Reducing GHG emissions by increasing recycling and organic diversion, and decreasing overall waste.

### Sector Strategies:

- Reducing amount of solid waste produced
- Recycling more of our waste
- Sending less organic waste to landfills



[Click here for section](#)

## Water and Wastewater

Decreasing water consumption and wastewater effects while improving resilience to flooding and stormwater.

### Sector Strategies:

- Using less water
- Preparing for more and heavier rainfall
- Keeping water clean and protecting it



[Click here for section](#)

## Local Food and Agriculture

Strengthening the resilience, accessibility, and security of the community's local food system.

### Sector Strategies:

- Making it easier to get locally grown food
- Growing more food in the community
- Cutting down on food waste and reducing hunger



[Click here for section](#)

## Greenspace and Ecosystems

Encouraging community adaptation by increasing green infrastructure and strengthening ecosystem resilience.

### Sector Strategies:

- Planting more trees to increase shade and tree coverage
- Planting more pollinator-friendly native plants instead of lawns
- Reducing the amount of pavement

# GHG Reduction Goal

This plan aligns with science-based greenhouse gas reduction targets to limit global warming to 1.5°C above pre-industrial levels. Meeting this target would greatly reduce climate risks and impacts.<sup>29,30</sup> The CAP sets both interim and long-term goals.

City of Falcon Heights' GHG interim reduction goal:



**"To reduce citywide GHG emissions by 47% below 2019 levels by 2035."\***

Long-Term Goal



City of Falcon Heights' long-term GHG goal:

**"To achieve net zero emissions by 2050."\*\***

This citywide goal guides sector-specific strategies. Sector goals aim to evenly distribute greenhouse gas reductions and meet the community's overall emissions targets. They are designed to be achievable yet ambitious, surpassing business-as-usual outcomes.

\* Goal aligns with IPCC recommended reduction targets which use 2019 as the baseline year<sup>31</sup>

\*\* A community, business, institution, or building that produces the same amount of energy it consumes through renewable GHG emission-free sources ("clean energy"), resulting in zero net emissions over a year. See Glossary of Terms for more information.

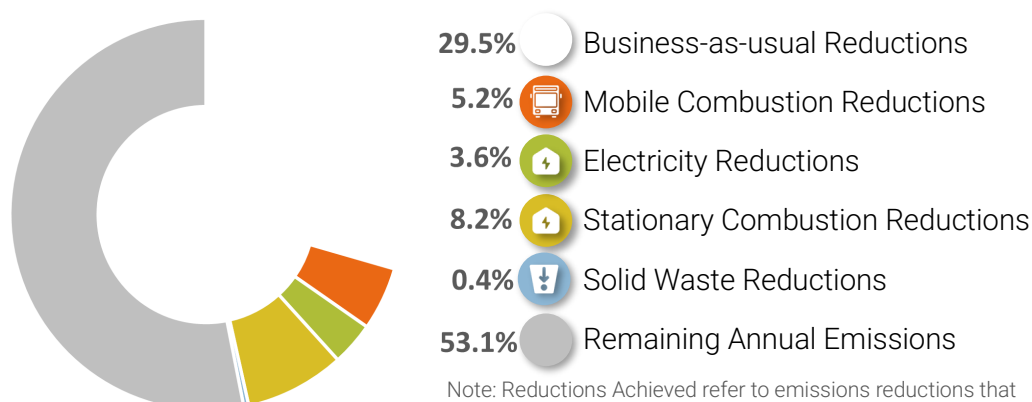
## Survey of Peer Community Carbon Reduction Goals

|               |                                                                                                                       |
|---------------|-----------------------------------------------------------------------------------------------------------------------|
| Burnsville    | Reduce community-wide GHG emissions 40% below 2005 levels by 2030 and 80% below 2005 levels by 2050.                  |
| Eagan         | To reduce community-wide GHG emissions 55% below 2014 levels by 2035, and net zero emissions by 2050 .                |
| Edina         | To reduce community-wide GHG emissions 45% below 2019 levels by 2030, and net zero emissions by 2050 .                |
| Maplewood     | Reducing greenhouse gas emissions to 20 percent of the City's 2015 baseline levels by 2050 (an 80 percent reduction). |
| Minneapolis   | 100% renewable energy for city operations by 2022 and citywide electricity by 2030.                                   |
| New Brighton  | To reduce community-wide GHG emissions 42% below 2013 levels by 2030, and achieve carbon neutrality by 2050 .         |
| St Louis Park | 100% renewable electricity citywide by 2030, carbon neutrality by 2040.                                               |
| St Paul       | Carbon neutral municipal operations by 2030, carbon neutral citywide by 2050.                                         |



# Plan Impacts

This plan includes strategies and actions designed to reduce emissions over the long term. Their potential impact has been modeled using projections for reduced energy and fuel use. The modeling also accounts for expected adoption rates of clean energy and low- or zero-emission transportation options. From this modeling, we know that with the successful implementation of the strategies outlined in this CAP, citywide annual GHG emissions are projected to drop to 19,892 MT CO<sub>2</sub>e by 2035, a 46.9% decrease below 2019 levels. The potential cumulative GHG emissions reductions over the 10 year implementation period are estimated at over 42,498 MT CO<sub>2</sub>e. This is equal to the elimination of over 834 million cubic feet of greenhouse gases by 2035.<sup>6</sup>



Note: Reductions Achieved refer to emissions reductions that have occurred since 2014 based on the City of Falcon Heights Community GHG Inventory. 'Business-as-usual' (BAU) Reductions are anticipated reductions resulting from existing requirements or commitments, such as federal vehicle fuel efficiency standards and electric utility carbon-reduction commitments, which are outside the scope of this plan.







### Potential Economic Savings

Below is an estimate of the cumulative community-wide economic savings potential of implementing the plan through 2035.

#### Transportation Economic Potential\*:

|                        |              |
|------------------------|--------------|
| Sector Savings:        | \$9,517,233  |
| Sector Cost Increases: | -\$1,564,585 |

Potential Sector Net Cost Savings:

**\$7,952,649**

#### Buildings and Energy Economic Potential\*:

|                        |              |
|------------------------|--------------|
| Sector Savings:        | \$3,526,485  |
| Sector Cost Increases: | -\$2,543,594 |

Potential Sector Net Cost Savings:

**+ \$982,892**

#### Waste Reduction Economic Potential\*:

|                      |             |
|----------------------|-------------|
| Residential Savings: | \$463,869   |
| Commercial Savings:  | \$1,531,208 |

Potential Sector Net Cost Savings:

**+ \$1,995,078**

#### Social Cost of Avoided Carbon:

**+ \$6,002,051**

Estimated Localized Social Cost of Carbon: \$141

#### Cumulative Community Savings Potential:

**= \$16,932,669**

\* Estimated community-wide costs and savings are calculated based on achieving goal statements and are not calculated on an individual action basis. Values do not include economic potential of job creation and new business potential represented in the plan actions. See Appendix for a detailed illustration of how cumulative costs and savings are arrived at.



## QUICK FACTS

**38.5%**

of community-wide GHG emissions in 2023 from transportation

**27,333,000**

Vehicle Miles Traveled in 2023

**45.9%**

Commuters drove alone in 2023

**10.3%**

Commuters use public transit

**87**

Battery Electric Vehicles (BEV) registered in 2023

For More Information (click icon):



Vulnerability



GHG Inventory

# The Plan:

## Transportation and Land Use

Transportation is energy- and resource-intensive. Beyond road vehicles, off-road equipment (such as construction machinery and gas-powered lawn mowers) also burns significant fossil fuel. Globally, transportation accounts for nearly one-third of all energy use and roughly one-quarter of energy-related carbon emissions.<sup>1</sup> In Falcon Heights, transportation contributes about 38% of the city's greenhouse gas emissions.<sup>2</sup> As electricity gets cleaner, transportation's share of emissions could grow—making it a key focus for climate action.

There are many ways to make transportation more sustainable while improving quality of life and equity, including:

- **Shared and Public Transportation:** Riding together on buses, trains, or carpools means fewer single-occupancy cars on the road. This cuts traffic and pollution while improving access to transportation for everyone.
- **Bicycle-sharing stations like Nice Ride Minnesota** offer a clean and active way to get around. Encouraging walking, biking, or e-scooter use reduces air pollution and improves public health.
- **Electric Vehicles and Clean Fuels:** Transitioning to electric vehicles (EVs) and renewable fuels can dramatically reduce transportation emissions. EVs produce no tailpipe pollution, improving air quality for everyone.

### The Link Between Land Use and Transportation Emissions

Transportation emission strategies often focus on technology and low-carbon fuels, but studies show smart growth and compact development are also key. Denser, well-planned communities reduce driving and support more energy-efficient housing. In the 125 largest U.S. urban areas, a 10% increase in population density could cut CO<sub>2</sub> emissions by 4.8% from travel and 3.5% from residential energy use.<sup>3</sup>



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## ACTIONS

|        |                                                                                                                                                                                                                                                                                                                                    |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TL 1-1 | Adopt and implement a Living Streets policy. (Note: Living Streets are green, multimodal streets that enhance walking and biking conditions, safety, and neighborhood livability while reducing environmental impacts and maintenance costs.)                                                                                      |
| TL 1-2 | Create an Active Mobility Plan emphasizing multimodal transportation, transit access, bike/pedestrian safety, and infrastructure improvements. Prioritize protected bike lanes. Review Ramsey County's bike/pedestrian plan and partner with adjacent communities, the University of Minnesota and State Fair on connected routes. |
| TL 1-3 | Establish a policy for a Transportation Demand Management (TDM) plan, which includes a transit component, applicable to all new developments and redevelopments projects.                                                                                                                                                          |
| TL 1-4 | Collaborate with partners on a branded campaign and incentives to promote alternative transportation, focusing on short trips and equity-driven support for bike and eBike adoption.                                                                                                                                               |
| TL 1-5 | Develop and distribute a resident-focused brochure through landlords that highlights local parks, transit options, bike and walk routes, sustainability resources, waste and recycling programs, clean energy opportunities, and related incentives, including links to the current City information.                              |

## ACTIONS

|        |                                                                                                                                                                                                                  |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TL 2-1 | Collaborate with Metro Transit and partners to secure funding for free or reduced fares for Falcon Heights residents and expand transit access through fare reductions, Bus Rapid Transit, and other strategies. |
| TL 2-2 | Collaborate with Metro Transit and partners to enhance bus stop infrastructure according to industry best practices, including pullouts, shelters, and safe pedestrian crossings.                                |
| TL 2-3 | Partner with Metro Transit and others to develop and distribute educational materials about public transit options and resources                                                                                 |
| TL 2-4 | Work with local businesses to promote and expand Metro Transit's Guaranteed Ride Home and Employer Sponsored Pass programs for employees and students                                                            |

## STRATEGY TL1:

**Decrease community-wide Vehicle Miles Traveled (VMT) by 5% by 2035.**

### Strategy Co-Benefits



In 2023, Falcon Heights' total vehicle miles traveled (VMT) was 27.3 million miles. VMT rose 1% from 2014 to 2019 but then fell, ending 2023 20% below 2014 levels.<sup>2</sup>

Reducing VMT by 5% would eliminate 1.7 million miles and cut annual greenhouse gas emissions by over 640 MT CO<sub>2</sub>e<sup>4,5</sup> Expanding safe, accessible bike and walking routes to schools, shops, and recreation areas can help reduce vehicle use for daily trips.

## STRATEGY TL2:

**Increase public transit commuter ridership 4% by 2035.**

### Strategy Co-Benefits



Since 2013, Falcon Heights' 6,100 workers have averaged a 19.9-minute commute. About 97% commute in from outside the city, while 87% of employed residents work elsewhere.<sup>6,7</sup> With vehicle operating costs at \$0.81 per mile, each 1% shift to public transit could reduce driving by 273,000 miles and save commuters over \$200,000 annually.<sup>8</sup>

## STRATEGY TL3:

**Increase average population per developed acre by 8% by 2035.**

### Strategy Co-Benefits



The city has 875 acres of developed land, covering 61% of its total area and supporting 5,232 residents—an average of 6 residents per developed acre.<sup>9,10</sup> Falcon Heights' population could grow by up to 12.8% by 2035.<sup>18</sup>

Research shows that every 1% increase in population-weighted urban density reduces household travel CO<sub>2</sub> emissions by 0.12% to 0.48%.<sup>3,11</sup> Zoning policies and incentives that promote higher density in developed areas, while ensuring affordable housing and preventing gentrification, can help reduce citywide emissions.\*

## ACTIONS

- TL 3-1 Amend zoning ordinances to support higher-density, walkable neighborhoods by increasing building heights, allowing approved densities, encouraging Accessory Dwelling Units (ADUs), promoting Transit-Oriented Development (TOD) near transit stations, and supporting mixed-use developments.
- TL 3-2 Use the Comprehensive Plan process to identify vacant or underutilized land suitable for higher-density development, walkability improvements, transit access, or greenspace.
- TL 3-3 Attract and support mixed-use, multimodal redevelopment projects on priority sites identified through the Comprehensive Plan.

\* Note: a significant portion of vacant land within the boundary of Falcon Heights is owned by the Minnesota State Fair and University of Minnesota over which the City does not have jurisdictional control.

## STRATEGY TL4:

**Increase battery electric vehicle (BEV) use to 15% of vehicles on the road by 2035.**

### Strategy Co-Benefits



Shifting vehicles communitywide from fossil fuels to low- and zero-emission alternatives is key to cutting long-term emissions. Electric vehicles (EVs) reduce vehicle emissions by 50–70%, with battery production impacts offset within two years.<sup>12</sup>

Falcon Heights has about 3,200 vehicles but only 87 battery electric vehicles (BEVs) as of January 2024.<sup>4,13</sup> Nationally, EV sales have grown fivefold in three years, showing strong potential for local adoption.<sup>14</sup> Each 1% shift to EVs in the city could reduce annual emissions by up to 112 MT CO<sub>2</sub>e, even with added electricity use.<sup>2,5</sup>

## ACTIONS

- TL 4-1 Collaborate with Xcel Energy and partners to expand incentives for electric vehicles (EVs), residential chargers, and eBike adoption, including low-cost loan or bulk-purchase programs to reduce costs.
- TL 4-2 Provide information to the community through workshops, an EV guide, and enhanced website content highlighting EV technology, incentives, and available programs.
- TL 4-3 Partner with Ramsey County Environmental Health to host and promote a Falcon Heights EV Fair, providing education, test drives, and vendor interaction.
- TL 4-4 Through trash hauler permitting, promote or require fleet efficiency improvements such as fuel-efficient practices, optimized routing, zero-emission vehicles or low-emission fuels, and advanced technologies. Include a provision for annual reporting on progress.



## ACTIONS

- |        |                                                                                                                                                                                                                                                                                                        |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TL 5-1 | Implement an "EV Ready" building ordinance for new developments that includes EV charging infrastructure and dedicated parking.                                                                                                                                                                        |
| TL 5-2 | Create an Electric Vehicle Infrastructure Readiness Plan that assesses current and future charging needs, maps existing stations, identifies expansion opportunities in public, commercial, and multi-family residential areas, and prioritizes equitable access in low/moderate-income neighborhoods. |
| TL 5-3 | Promote funding opportunities and resources for local businesses to provide electric vehicle charging stations.                                                                                                                                                                                        |
| TL 5-4 | Identify an existing or develop and distribute an "EV Ready Guide" with building readiness standards and fleet conversion resources.                                                                                                                                                                   |

## ACTIONS

- |        |                                                                                                                                                                                                   |
|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TL 6-1 | Conduct phased fleet analyses to transition to electric and alternative fuel vehicles and equipment. Identify replacements, infrastructure requirements, and facility upgrades.                   |
| TL 6-2 | Adopt a policy for new City fleet vehicles to be electric or use low/no-carbon fuels by 2030 for light-duty and by 2040 for medium/heavy-duty vehicles.                                           |
| TL 6-3 | Implement and enforce a city operations anti-idling policy of combustion vehicles.                                                                                                                |
| TL 6-4 | Create an "Eco Driving Guide" to promote fuel efficiency, distribute it to City employees, include it in new employee training, and make it available to Falcon Heights residents and businesses. |

## STRATEGY TL5:

**Make the community "EV-ready" with electric vehicle charging stations in every public and private parking lot or ramp by 2030.**

### Strategy Co-Benefits



As a core climate action strategy, communities are prioritizing EV readiness by expanding Level 2 and DC fast charging infrastructure across public and private parking areas. This widespread access reduces range anxiety, increases EV adoption, and cuts transportation emissions.<sup>15</sup> Benefits include cleaner air, improved public health, and economic growth through job creation and cost savings.<sup>16</sup> Making all parking EV-ready also supports equitable access, strengthens transportation systems, and supports community resilience.

## STRATEGY TL6:

**Convert 100% of the municipal non-emergency fleet and equipment to EVs and improve remaining combustion vehicle fuel efficiency by 10% by 2035.**

### Strategy Co-Benefits



Falcon Heights can lead in sustainable transportation by transitioning its fleet to EVs, reducing emissions, costs, and supporting EV adoption. In 2023, gasoline made up 43% of fleet fuel use (1,141 gallons). Converting to EVs by 2035 could cut emissions by 10 MT CO<sub>2</sub>e annually, with a 10% increase in efficiency of remaining vehicles saving another 2 MT CO<sub>2</sub>e.<sup>2,17</sup>



## QUICK FACTS

**58.8%**

of community-wide GHG emissions in 2023 from buildings and energy

**30,240,951**

kWh or electricity used in 2023

**2,361,647**

Therms of natural gas used in 2023

**78.9%**

of all homes were built before 1980

**52**

solar arrays community-wide in 2023

For More Information (click icon):



Vulnerability



GHG Inventory



Renewable

# The Plan:

## Buildings and Energy

Energy use in buildings is a major contributor to greenhouse gas (GHG) emissions from both residential and commercial properties. Emissions come from direct on-site fossil fuel use, like heating and cooking, and from off-site power generation. Prioritizing efficient building design improves long-term energy performance and comfort. Increasing efficiency reduces emissions, lowers energy costs for households and businesses, and strengthens climate resilience. Improving Falcon Heights' built environment also creates environmental, economic, and social benefits for the community.

### Residential Energy

In 2023, Falcon Heights' residential sector consumed over 12.9 million kWh of electricity (6,324 kWh per household) and 1.175 million therms of natural gas (573 therms per household). This resulted in 9,059 MT CO<sub>2</sub>e of GHG emissions, about 46% of citywide building energy emissions.<sup>1</sup>

### Non-Residential Energy

The non-residential sector consumed over 17.2 million kWh of electricity (2,816 kWh per job) and 1.186 million therms of natural gas (194 therms per job) in 2023. This resulted in 10,607 MT CO<sub>2</sub>e of GHG emissions, about 54% of citywide building energy emissions.<sup>1</sup>



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## ACTIONS

- BE 1-1 Collaborate with partners to establish a program achieving deep energy retrofits for 80% of low/moderate-income households by 2030. Goal: 100 households annually, each achieving 15% energy reductions. (Comprehensive Plan)
- BE 1-2 Offer and promote fully subsidized Home Energy Squad visits for income-qualified residents.
- BE 1-3 Adopt an energy benchmarking ordinance (Comprehensive Plan)
- BE 1-4 Establish a policy for City-funded projects to meet energy efficiency standards (e.g., SB2030, LEED Gold, Enterprise Green Communities, ICC/ASHRAE 700). Encourage other developments needing PUD, CUP, and zoning approval to meet the same standard. (Comprehensive Plan)
- BE 1-5 Consider establishing a Mayor's Home Energy Challenge to encourage and incentivize residential energy-efficiency upgrades.
- BE 1-6 Adopt and promote a voluntary net-zero energy code through the building permit process (Comprehensive Plan)
- BE 1-7 Consider adopting a "Dark Sky" lighting ordinance to promote ecosystem and human health and reduce exterior lighting energy consumption.

## ACTIONS

- BE 2-1 Coordinate an annual group purchase campaign for residents and small businesses to reduce costs of electrification, energy efficiency, and weatherization upgrades (e.g., air and ground source heat pumps). Prioritize equity in program design, support local contractors, and consider integration with clean energy purchase programs. Goal: 30 households and 10 businesses annually.
- BE 2-2 Collaborate with partners to expand and promote incentives for low-income residents to electrify their homes. Goal: 15 households annually.
- BE 2-3 Address misconceptions and promote new technologies through educational materials and City communications.

## STRATEGY BE1:

**Improve total Citywide building energy efficiency 5% for electricity and 15% for natural gas by 2035.**

### Strategy Co-Benefits



Homes built between 2000 and 2009 use 15% less energy per square foot than 1980s homes.<sup>2</sup> Retrofitting older homes offers significant potential to reduce citywide energy use, especially natural gas. In Falcon Heights, 85% of owner-occupied and 69% of renter-occupied homes were built before 1980, making energy upgrades a key opportunity.<sup>3,4</sup> Building permits suggest up to 20% of residential units could be added, renovated, or replaced over 10 years.<sup>3</sup>

## STRATEGY BE2:

**Achieve 30% building "fuel switching" from on-site fossil fuel combustion to electrification or renewable fuels by 2035.**

### Strategy Co-Benefits



64.7% of the city's residential heating is provided by natural gas and 28.5%.<sup>5</sup> As Falcon Heights' electric grid nears carbon neutrality, building heating fuel will become an increasingly important target for emission reductions.<sup>6</sup> Reduction, and ultimately the elimination of all fossil fuel heating (oil, propane, natural gas), in the buildings sector will be required in order to achieve community wide carbon reductions.<sup>1,7</sup>

## STRATEGY BE3:

**Increase customer-owned or purchased clean electricity to 22% of total building electricity use citywide by 2035.**

### Strategy Co-Benefits



Grid electricity emissions are expected to decline, but increasing consumer clean energy purchases remains essential to meet GHG reduction goals as well as offering cost savings and increased resilience.<sup>1,6,8,9</sup> As of 2023, Falcon Heights had 52 customer-owned solar systems generating 1 MW.<sup>10</sup> Those unable to install solar can buy clean energy from their utility to reduce their emissions and support grid decarbonization.<sup>11,12,13</sup>

## STRATEGY BE4:

**Improve total municipal building energy efficiency by 5% for electricity and 15% for natural gas by 2035.**

### Strategy Co-Benefits



In 2023, the City of Falcon Heights municipal buildings and operations consumed over 151 thousand kWh of electricity and 8,238 therms of natural gas. Building energy consumption represents over 76% of GHG emissions associated with municipal operations.<sup>1</sup> Increasing energy efficiency of municipal operations by 5% for electricity and 15% for natural gas would save as much as 7,500 kWh and 1,200 therms, eliminating 8.5 MT CO<sub>2</sub>e of GHG emissions annually.<sup>1,14</sup>

## ACTIONS

- BE 3-1 Collaborate with partners to implement and promote an annual Residential Solar Group Purchase program, supported by a program administrator such as the Midwest Renewable Energy Association or others experienced in solar group purchase programs. Goal: 15 participants and 100 kW installed Annually.
- BE 3-2 Establish a policy to incorporate clean energy standards into the PUD ordinance. (Comprehensive Plan)
- BE 3-3 Identify top privately-owned sites for Solar PV installations (rooftop, ground, carport) and develop site assessments detailing estimated costs, energy generation, and 20-year economic payback. Provide assessments to additional property owners biennially through 2032 to maximize solar incentives. Coordinate with the Commercial property and Industrial property Solarize program.
- BE 3-4 Organize an annual group solar purchase program for commercial and industrial properties, coordinating with the City's "Top Solar Potentials" initiative. Goal: 5 participants installing 150 kW annually.
- BE 3-5 Organize education and outreach promoting net-zero energy development, clean energy rebates, and tax credits; provide resources on the City's Energy Hub website. (Comprehensive Plan)

## ACTIONS

- BE 4-1 Establish a policy for City-owned buildings to achieve and maintain ENERGY STAR ratings of 75 or higher, meet or exceed IGCC standards, and publicly report energy use. All facility design and construction RFPs for new or major renovation projects must also evaluate opportunities to achieve Net Zero Energy.
- BE 4-2 Conduct energy audits of all City facilities, including Dark Sky LED outdoor lighting guidance. Use audit results to prioritize facility improvements in the Capital Improvement Plan, with implementation within 5 years.



## ACTIONS

|        |                                                                                                                                                                                                                                                                                                 |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BE 5-1 | Identify and assess City facilities to prioritize for electrification and schedule improvements.                                                                                                                                                                                                |
| BE 5-2 | Establish a policy for all new City-owned buildings to be 100% electric (or have zero onsite fossil fuel combustion).                                                                                                                                                                           |
| BE 5-3 | Conduct a City Facility Solar and Clean Energy Master Plan study assessing on-site solar feasibility, options for achieving 100% clean electricity including ownership options, community solar, RECs, and solar+storage microgrids. Establish an implementation timeline. (Comprehensive Plan) |

## STRATEGY BE5:

**Achieve 100% municipal building clean electricity use and "fuel switching" from on-site fossil fuel combustion to electrification by 2035.**

### Strategy Co-Benefits



By expanding clean energy and reducing fossil fuel use, the city can model sustainable, resilient energy systems. Reaching 100% municipal electric use through on-site generation and green energy purchases could cut emissions by up to 36 MT CO<sub>2</sub>e annually.<sup>1</sup> Switching City facilities to electric heating as the grid decarbonizes could reduce emissions by another 44 MT CO<sub>2</sub>e each year.<sup>1</sup>



## QUICK FACTS

**2.6%**

of community-wide GHG emissions in 2023 from solid waste

**669**

tons of landfilled waste in 2023 - 10.9% of all solid waste

**2,330**

tons of waste used for waste-to-energy in 2023 - 37.8% of all solid waste

**1,224**

tons of organics diversion in 2023 - 19.9% of all solid waste

**52**

tons of recycling diversion in 2023 - 37.8% of all solid waste

For More Information (click icon):



GHG  
Inventory



Renewable

# The Plan:

## Waste Management

Waste management—including solid waste, recycling, and organics—plays a key role in reducing climate impacts. Landfills emit methane, a greenhouse gas over 25 times more potent than carbon dioxide, as organic waste like food, paper, and yard trimmings decomposes without oxygen.<sup>1</sup> Reducing landfill waste, especially organics, is critical to lowering these emissions.

Waste collection also produces carbon emissions from diesel-powered trucks. Cutting waste through recycling and composting reduces collection trips and transportation emissions.<sup>2</sup> Recycling conserves natural resources and lowers emissions from raw material extraction and manufacturing.<sup>3</sup> Composting prevents methane emissions, enriches soil, and helps sequester carbon.<sup>4</sup>

Waste reduction is the most effective strategy, cutting emissions throughout a product's life cycle.<sup>5</sup> In Minnesota, waste reduction and recycling already prevent nearly 4.9 million metric tons of CO<sub>2</sub> annually—the equivalent of removing one million cars from the road.<sup>6</sup> Expanding recycling, composting, and waste reduction can help Falcon Heights cut climate pollution, conserve resources, and build healthier, more sustainable systems.

### Solid Waste in Falcon Heights<sup>7</sup>

Total solid waste handled in 2019 was 6,598 tons. By 2023 the total was 6,160 for a 6.6% decrease. On a per-capita basis, however, the decrease in total solid waste handled is lower at 2.1%. The share of solid waste being diverted for recycling has decreased from 33% in 2019 to 31.4% in 2023. Organics diversion, however, has increased from 17.2% in 2019 to 19.9% in 2023. These numbers highlight a significant opportunity to divert more waste from landfills, especially organic materials, which generate the most greenhouse gas emissions.



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## ACTIONS

|        |                                                                                                                                                                                                                                                                                         |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WM 1-1 | Establish a Zero Waste policy for City operations with clear annual waste reduction targets to achieve Zero Waste. External users of City facilities to comply with the Zero Waste policy, and event permit applications must be updated to mandate recycling and composting at events. |
| WM 1-2 | Explore waste hauling improvements to support CAP goals, including updates to the City's licensing process and the implementation of organized waste hauling strategies.                                                                                                                |
| WM 1-3 | Establish a policy for all construction and demolition projects to submit waste management plans demonstrating how they will meet specific waste diversion targets aligned with the City's Climate Action Plan goals                                                                    |
| WM 1-4 | Collaborate with partners such as Reuse MN to promote material reuse and waste reduction, including community events like swaps and garage sales.                                                                                                                                       |
| WM 1-5 | Collaborate with partners to create a comprehensive communication campaign to provide standardized information and communications on waste reduction, recycling, and organics collection options to reach the residential sector.                                                       |

## ACTIONS

|        |                                                                                                                                                                                                |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WM 2-1 | Promote participation in the Ramsey/Washington Recycling and Energy Center's Food Scraps Pickup Program when available for Falcon Heights residents. Goal 75% household participation by 2035. |
| WM 2-2 | Incorporate zoning standards for commercial and multi-family buildings that ensure convenient organics and recycling collection, making diversion as easy as garbage disposal.                 |
| WM 2-3 | Collaborate with partners to promote backyard composting by providing residents with low-cost or free compost bins and educational materials.                                                  |
| WM 2-4 | Collaborate with partners such as Ramsey County Urban Agriculture Coordinator to promote use of the community compost drop off site for residents unable or unwilling to compost at home.      |

## STRATEGY WM1:

**Decrease total annual municipal solid waste generated by 10% by 2035.**

### Strategy Co-Benefits



The Minnesota Pollution Control Agency (MPCA) ranks waste management strategies by environmental impact, prioritizing reduction, reuse, recycling, and organics recovery.<sup>8</sup> Reducing waste conserves resources, cuts emissions, and can save homes and businesses hundreds of dollars annually.<sup>9,10,11</sup> Strengthening waste reduction policies offers a major environmental opportunity for Falcon Heights.

## STRATEGY WM2:

**Increase organics and compostable diversion from 19.9% to 22% of total MSW handled by 2035.**

### Strategy Co-Benefits



Most landfill gas arises from bacterial decomposition when organic waste breaks down by bacteria. Organic wastes include food, garden waste, street sweepings, textiles, wood, and paper products.<sup>12</sup> The State's 2013 Waste Characterization study shows that over 50% of Falcon Heights' landfill and waste-to-energy stream is organic material, including paper—presenting a major emissions reduction opportunity.<sup>13,14</sup>

## STRATEGY WM3:

**Increase recycling diversion from 31.4% to 35% of total MSW handled by 2035.**

### Strategy Co-Benefits



The 2013 State Waste Characterization study identifies significant potential to boost recycling, estimating that up to 48% of landfilled waste could be recycled.<sup>14</sup> The largest opportunities lie in paper and plastics, with additional potential in metals and glass.

## ACTIONS

- |        |                                                                                                                                                                                                                                                                                  |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WM 3-1 | Collaborate with partners on a comprehensive communication campaign providing standardized education and guidance on waste reduction, recycling, organics collection, hazardous waste management, and available waste diversion programs for residential and commercial sectors. |
| WM 3-2 | Partner with Ramsey County and the Recycling Ambassador program to reduce barriers to recycling participation at multifamily and commercial properties.                                                                                                                          |
| WM 3-3 | Through waste hauler permitting or organized waste collection processes, incentivize or include conditions for haulers to educate customers on recycling, waste reduction, and diversion.                                                                                        |
| WM 3-4 | Adopt an ordinance that ensures all "to-go" packaging is recyclable, compostable, or reusable.                                                                                                                                                                                   |



# The Plan:

## Water and Wastewater

Climate change directly impacts water and wastewater systems, affecting availability, quality, and infrastructure capacity in Falcon Heights.<sup>1</sup> Rising temperatures and shifting rainfall patterns increase water risks, requiring strategies like conservation, efficient irrigation, and drought-resistant landscaping to protect limited resources.<sup>2,3</sup>

Heavier rainfall can overload wastewater systems, causing overflows.<sup>4</sup> Adaptive strategies include increasing wastewater facility capacity, using green infrastructure like rain gardens and bioswales to manage stormwater, and preventing contamination. Integrating climate projections into planning supports proactive adaptation and strengthens the long-term sustainability of water and wastewater systems. By prioritizing resilience, Falcon Heights can protect public health, the environment, and the local economy while ensuring safe water and reliable wastewater treatment.<sup>5</sup>

### Regional Water Stress

By 2025, an estimated 1.8 billion people will live in areas plagued by water scarcity, with two-thirds of the world's population living in water-stressed regions. Since 1985 the Falcon Heights area has had a reduction in water yield of approximately 10%. Through 2050, the City can anticipate an increase in water demand of 20%.<sup>6</sup>



### QUICK FACTS

**36%**

annual precipitation  
increase projected by  
2100

**27-55%**

heavy precipitation event  
increase projected by  
2100

**144**

flood and severe storm  
events in Ramsey County  
reported since 2000

**\$30,869,000**

in flood and storm  
damage reported by  
NOAA since 2000

For More Information (click icon):



Vulnerability



GHG  
Inventory



Ground  
Cover



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## STRATEGY W1:

**Promote a 5% reduction in water use and wastewater generation Citywide by 2035.**

### Strategy Co-Benefits



Reducing water use and wastewater is key to cutting emissions and building climate resilience. Using less water eases pressure on freshwater resources, supports ecosystems, and lowers energy demand for treatment and transport, reducing greenhouse gases. Minimizing wastewater further conserves energy and cuts emissions. Together, these actions strengthen sustainability and water security.

## STRATEGY W2:

**Identify flood-prone areas and develop plans to address future stormwater and climate-related impacts.**

### Strategy Co-Benefits



Falcon Heights can expect as much as a 36% increase in annual precipitation and 55% more heavy downpours by 2100.<sup>1,7,8</sup> These trends are likely to lead to more runoff and flash flooding on less absorbent ground.<sup>9</sup> Infrastructure is often based on past rainfall, but climate-ready designs must use projections from NOAA and others to account for increased precipitation and heavier storms.

## ACTIONS

- W 1-1 Collaborate with regional partners, including Saint Paul Regional Water Services, Capitol Region, Rice Creek Watershed Districts, and Met Council, to help Falcon Heights' largest water users reduce consumption through an opt-in program. Offer technical resources or grants for water-efficient equipment to assist large institutions and businesses in conserving water internally.
- W 1-2 Promote community-wide adoption of WaterSense fixtures by accelerating installation in homes and expanding to commercial properties. Goal: achieve 30 households and 10 businesses upgraded annually.
- W 1-3 Evaluate adopting a Lawn and Landscaping watering policy that provides clear irrigation guidelines and promotes water conservation.
- W 1-4 Implement a policy establishing rainwater collection systems and WaterSense fixtures and appliances as standard for all City facility projects, including modeling best practices in the anticipated new park building. Encourage projects receiving City financing or public funds to adopt similar practices and offer technical support as needed.
- W 1-5 Partner with Ramsey County, Saint Paul Regional Water Services, and others to establish a reduced-cost or giveaway program for rain barrels.

## ACTIONS

- W 2-1 Incorporate anticipated increases in precipitation and extreme weather into the City's stormwater management plans, including addressing redevelopment of currently exempt properties. Collaborate with Capitol Region and Rice Creek Watershed Districts.
- W 2-2 Conduct a pavement analysis and permeable pavement conversion study, prioritizing flood-vulnerable areas identified in the City's 2024 Ground Cover Study. Develop an implementation master plan and replacement schedule. (Consider integration with the Land Conversion Opportunity Study.)
- W 2-3 Explore zoning adjustments to reduce impervious surfaces citywide, emphasizing pavement removal, permeable pavement installation, floodplain preservation, and green stormwater infrastructure. Collaborate with Capitol Region and Rice Creek Watershed Districts.
- W 2-4 Partner with Capitol Region and Rice Creek Watershed Districts to create or expand incentive programs encouraging rain garden installations, prioritizing areas vulnerable to stormwater impacts.

## ACTIONS

- |       |                                                                                                                                                                                                   |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| W 3-1 | Partner with Capitol Region and Rice Creek Watershed Districts to assess the percentage of impervious surface runoff treated by Best Management Practices (BMPs) and set a 2035 improvement goal. |
| W 3-2 | Strengthen ordinances and enforcement to protect riparian areas, streams, and wetlands that store and filter floodwaters.                                                                         |
| W 3-3 | Adopt a no-fertilizer, no-pesticide policy for all City-owned or managed properties and encourage reduced fertilizer and pesticide use by residents and businesses.                               |
| W 3-4 | Collaborate with partners to educate residents on environmentally safer alternatives to road and sidewalk salt for ice control.                                                                   |

## STRATEGY W3:

**Increase groundwater, stream, river and wetland water quality protection and restoration.**

### Strategy Co-Benefits



Protecting aquifers, lakes, and natural water bodies is vital for climate adaptation, as they store freshwater, support ecosystems, and meet human needs.<sup>10</sup>

Climate change harms water quality through evaporation, flooding, and contamination. Groundwater management, land use planning, and riparian restoration are key. Green infrastructure like permeable pavements and rain gardens reduces runoff and improves water quality.<sup>11</sup>



## QUICK FACTS

1

community gardens  
within the city

0

farmers markets within  
the city

10.5%

average food insecurity  
rate in Ramsey County

19.0%

child food insecurity rate  
in Ramsey County

# The Plan:

## Local Food and Agriculture

Transporting food across long distances relies heavily on fossil fuels, contributing significantly to greenhouse gas emissions. The extended travel time also increases the need for energy-intensive refrigeration, further adding to the environmental impact. By minimizing transportation and refrigeration, we can make our food systems more sustainable.<sup>1</sup>

Choosing locally grown food helps reduce the carbon footprint associated with our meals while also strengthening the local economy. Studies indicate that local produce markets support approximately 32 jobs per \$1 million in sales, compared to just 10.5 jobs generated by wholesale distribution channels. Additionally, community gardens and neighborhood gardening provide social and environmental benefits.<sup>2</sup> These spaces can foster a sense of community, create opportunities for people of all ages to engage in shared activities, encourage low-impact outdoor exercise, and support biodiversity by creating habitats for plants, animals, and pollinators.<sup>3</sup>

At the same time, our food systems face increasing threats from climate change.<sup>4</sup> Extreme weather events, rising temperatures, and changing precipitation patterns put crops and livestock at risk. Challenges range from animal heat stress to increased pest infestations and disruptions to natural cycles. These physical impacts are compounded by social and economic consequences. Food insecurity—when access to adequate nutrition is limited by factors like income or availability—disproportionately affects low-income households, who are nearly three times more likely to experience it.<sup>5</sup> As climate change intensifies, it is likely to deepen these existing inequities and further strain food security in many communities.<sup>6</sup>

For More Information (click icon):



GHG  
Inventory



Ground  
Cover



[Click here to return to TOC](#)

## ACTIONS

- LF 1-1 Collaborate with the Saint Paul–Ramsey County Food and Nutrition Commission to complete a Food Security Assessment, identify underserved areas, and develop strategies to improve food access—especially for vulnerable populations.
- LF 1-2 Partner with organizations like Good Acre, the University of Minnesota, Gibbs Farm, and St. Paul Farmer’s Market to create or expand farmers market access in Falcon Heights. Pursue grant opportunities to support these efforts.
- LF 1-3 Work with partners to promote subsidy programs that provide local produce at reduced prices for qualifying residents.
- LF 1-4 Offer City facilities or parking lots as pickup sites for Community Supported Agriculture (CSA) programs that accept SNAP and EBT payments.

## ACTIONS

- LF 2-1 Identify and map potential sites for community gardens or farms, prioritizing underserved populations and food-insecure areas. Include parks and public lands, and collaborate with partners to implement garden locations.
- LF 2-2 Plant fruit and nut trees on City-owned land, boulevards, and rights-of-way. Partner with groups like Every Meal to collect and distribute the harvest.
- LF 2-3 Establish a “Grow Falcon Heights” program to expand community garden plots and create a market garden that offers youth training and internships. Collaborate with local restaurants, food shelves, and organizations to distribute produce to food-insecure residents.

## STRATEGY LF1:

**Enhance access to local food, especially for low-income and food-insecure individuals.**

### Strategy Co-Benefits



U.S. agriculture faces regional climate risks.<sup>7</sup> Pacific states face less water, warmer winters, and variable springs. Extreme weather, heat, and flooding threaten Plains and Midwest grain. Livestock in the Plains and Southeast faces weather and supply risks.

Low-income and food-insecure groups will be hit hardest by the effects of these impacts. Strong local food systems boost resilience, food security, jobs, and community wealth.<sup>8,9</sup>

## STRATEGY LF2:

**Increase production of local food, particularly serving low-income and food-insecure individuals.**

### Strategy Co-Benefits



Some Falcon Heights residents face economic stress, limited transportation, and live over ½ mile from a grocery store (see the Falcon Heights Climate Baseline Assessment).<sup>10</sup> Others face food insecurity from lack of money, culturally appropriate foods, or resources. Improving food access reduces insecurity and strengthens climate resilience.



## STRATEGY LF3:

**Reduce food waste and hunger, achieve a 50% decrease in food insecurity Citywide by 2035.**

### Strategy Co-Benefits



Nationally, 30-40% of food is wasted.<sup>11</sup> Falcon Heights generates about 480 tons of food waste yearly, based on the State's 2013 Waste Study.<sup>12,13</sup> This waste emits greenhouse gases and costs \$1 million annually.<sup>14</sup> It also wastes resources like land, water, and energy, and could have helped families in need. Reducing food waste supports sustainability and may reduce food insecurity.

## ACTIONS

LF 3-1 Collaborate with the Saint Paul–Ramsey County Food and Nutrition Commission to complete a Food Security Assessment. Identify food-insecure areas, especially vulnerable populations, and develop strategies to improve food access in the city.

LF 3-2 Work with Ramsey County, the University of Minnesota, and the State Fair to explore creating a Food Recovery Network that improves surplus food collection and distribution from large events and facilities to food-insecure and elderly populations.

LF 3-3 Coordinate with local food banks to support edible food donations from City and community events. Expand partnerships with food retailers and restaurants, and share food bank resources on the City's website.

# The Plan:

## Greenspace and Ecosystems

Trees and natural vegetation are vital to community well-being, helping improve air and water quality, lowering building energy use, and supporting climate action efforts.<sup>1</sup> Research also links exposure to nature, like time spent in parks, with better physical and mental health and reduced stress.<sup>2</sup> Additionally, trees help clean the air by removing pollutants such as carbon dioxide, particulate matter, and ground-level ozone—substances that can worsen asthma and other respiratory conditions when present at high levels.<sup>3</sup>

### Prairie Grass and Climate Action

Switching from traditional lawns to native grasses and wildflowers strengthens climate resilience. Native plants require less water and upkeep, cutting down on irrigation, chemical fertilizers, pesticides, and emissions from lawn maintenance.<sup>4</sup> Their deep roots enhance soil stability, improve water absorption, reduce flooding risks, and sequester carbon. Native grasses also promote biodiversity by providing essential habitats for wildlife.<sup>5</sup>

### Impervious Surfaces and Heat

More pavement and buildings increase the urban heat island effect, where cities become hotter than surrounding rural areas due to heat absorption by man-made surfaces. This effect worsens extreme heat events, raising health risks and discomfort. Research shows that areas with more impervious surfaces and fewer trees experience significantly higher temperatures.<sup>6</sup>



## QUICK FACTS

**22.5%**

average tree canopy  
coverage citywide

**38.7%**

average impervious  
surface coverage  
citywide

**27.8%**

manicured lawn coverage  
citywide

**7.7 °F**

Falcon Heights is hotter  
than nearby rural areas  
on hot days.

For More Information (click icon):



Vulnerability



Ground  
Cover



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## STRATEGY GE1:

**Increase tree cover, particularly in the priority neighborhoods, from 22.5% to 25% by 2035.**

### Strategy Co-Benefits



Our tree canopy reduces runoff, cleans water, cools urban heat islands, lowers building energy use, stores carbon, and supports economic growth.<sup>7,8,9</sup> Expanding canopy coverage boosts climate adaptation.<sup>10,11</sup>

Prioritizing tree canopy expansion enhances equity, benefits more households, and reduces heat island effects. Suggested neighborhood increases and criteria are outlined in the City's 2024 Ground Cover Study.

## STRATEGY GE2:

**Enhance pollinator habitats and replace 15% of turf with native grasses and wildflowers citywide by 2035.**

### Strategy Co-Benefits



Replacing lawns with native grasses and wildflowers creates a natural landscape and helps address climate change. Native plants support wildlife, improve water quality, reduce air pollution, protect biodiversity, and increase carbon sequestration.<sup>12,13,14</sup>

In Falcon Heights, 99% of grasslands are lawns, presenting turf reduction opportunities. Replacing turf boosts stormwater uptake, reduces water use, and increases soil carbon.<sup>15,16,17</sup> Areas with more grass have the greatest potential for native plant restoration.<sup>18</sup>

## ACTIONS

GE 1-1 Adopt a No Net Loss policy that ensures every removed public street or space tree is replaced with a seedling or sapling. If replanting on-site isn't feasible, a tree should be planted in a nearby space or within a tree bank established by or designated by the City.

GE 1-2 Partner to create or expand an annual tree giveaway or discount program for residents. Example: grow and distribute 400 seedlings or saplings each year.

GE 1-3 Update the City's Landscape Ordinance to establish minimum tree and native/pollinator planting coverage standards based on lawn or impervious surface area. Ensure planting islands are included in parking lots for new or expanded developments. Promote diversity in native trees, shrubs, and pollinator-friendly groundcovers.

GE 1-4 Collaborate with partners to share educational resources on climate-adaptive trees, promotion of tree and plant diversity, carbon gardening, tree care, and other sustainable greenspace practices such as reducing fertilizer use, biochar amendments, and polyculture lawns. Post resources on the City website.

## ACTIONS

GE 2-1 Complete a Land Conversion Opportunity Study to identify turf and impervious areas suitable for conversion to native grasslands, wetlands, shrubs, or forests. Develop an implementation plan by census tract, explore incentives, and launch outreach to promote turf conversion.

GE 2-2 Establish a policy for City properties to reduce impervious surfaces and enhance natural diversity by incorporating pavement reduction, permeable pavement, green roofs, and replacing turf with native wildflowers and prairie grasses to support pollinators.

GE 2-3 Collaborate with partners like the University of Minnesota Bee Lab, Capitol Region and Rice Creek Watershed Districts to develop and share resources on selecting appropriate native and pollinator-friendly plants.

GE 2-4 Partner with the University of Minnesota Master Gardeners to create a greenspace ambassador and education program.

## ACTIONS

- |        |                                                                                                                                                                                                                                                                 |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GE 3-1 | Collaborate with partners to create an incentive program supporting the conversion of underutilized paved and turf areas into sustainable green spaces, following the City's Land Conversion Opportunity Study.                                                 |
| GE 3-2 | Encourage or require commercial developments receiving City funding, PUD approval, or Conditional Use Permits to implement heat island reduction strategies, including cool surfaces, solar-friendly shading, impervious surface reduction, and breeze capture. |
| GE 3-3 | Collaborate with partners to develop and promote best practices for reducing heat island effects on commercial properties.                                                                                                                                      |
| GE 3-4 | Collaborate with partners to create a cool roofs and pavements incentive program and develop a Falcon Heights demonstration project featuring a cool roof, green roof, green/live wall, or vertical garden.                                                     |

## STRATEGY GE3:

**Reduce heat island effect by decreasing dark impervious surfaces 10% citywide by 2035, prioritizing high-impact neighborhoods.**

### Strategy Co-Benefits



The heat island effect causes urban areas to be warmer than nearby rural regions due to human activities and infrastructure. This increases discomfort and health risks, especially during heat waves, which are expected to grow more frequent and intense in Falcon Heights.<sup>19,20</sup> Dark-colored impervious surfaces contribute significantly to this effect.<sup>21</sup> Reducing these surfaces can help lessen heat island impacts.



## QUICK FACTS

6

Climate Action Plan  
Sectors

23

strategies to achieve  
GHG reduction and  
climate resilience goals

92

detailed actions outlining  
a menu of steps that can  
be taken to support  
strategies

10 Year

implementation  
timeframe

# Implementation

The initial years following the adoption of the Falcon Heights Climate Action Plan (CAP) are crucial for setting a successful trajectory. Clarifying roles and securing funding early will be essential to achieving ambitious greenhouse gas reduction and climate resilience goals.

### Everyone Has a Role

Climate change affects many aspects of community life, requiring a comprehensive response. Some actions will be led directly by Falcon Heights' elected officials, city leadership, or municipal departments. Other efforts will depend on local government support and active participation from residents, families, and businesses. Building a resilient future demands commitment from both city officials and the entire community.

### Climate Action is a Continuous Process

Implementing a multi-year plan comes with uncertainties, especially regarding future technologies and opportunities. To accommodate this, the CAP will follow annual or biennial implementation cycles. Each cycle will identify and prioritize actions across sectors for the upcoming period, ensuring alignment with city initiatives, current projects, and budget planning. Actions will be flexible and adaptable, with refinements made as implementation progresses. Policy changes, new ordinances, or city-funded initiatives will require City Council approval.

The City will prioritize CAP implementation through collaboration among city departments, the Environment Commission, and community stakeholders. This approach ensures integration of climate actions into annual planning and budgeting processes, promoting consistency with broader city efforts.



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## Organizational Actions

The following actions outline steps the City can take to organize the implementation of the climate action plan:

- |       |                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I 1-1 | Create a City "CAP Implementation Team" comprised of the Environment Commission with the Staff/Council liaisons to meet quarterly, prioritize and track progress, and develop two-year work plans outlining tasks, timelines, resources, and staffing needs. The team will provide annual progress updates to the Environment Commission and City Council.                                       |
| I 1-2 | Explore the potential and benefits of the Environment Commission forming a Falcon Heights Climate Action Collaboration Team with members from local government, nonprofits, community groups, and residents. The team could meet regularly to coordinate CAP implementation, pursue joint initiatives, share lessons, support cross-jurisdictional projects, and identify funding opportunities. |
| I 1-3 | Create a process to review city policies and plans for consistency with the Climate Action Plan.<br>Resource: paleBLUEDot example CAP Alignment Memo                                                                                                                                                                                                                                             |
| I 1-4 | Implement a cohesive annual communication and education campaign that addresses the communication and educational needs of each CAP section. Enhance the City's Energy Action Hub to disseminate CAP resources and foster community action.                                                                                                                                                      |
| I 1-5 | Regularly evaluate CAP progress and impacts (every 1-2 years), including updated community-wide and municipal GHG inventories. Review strategies for effectiveness and relevance, adjusting actions as necessary.                                                                                                                                                                                |

## Implementation Support Tools

To aid the City's initial implementation, the paleBLUEDot team has developed supportive tools:

**Implementation Matrix:**  
Excel tool for action implementation and monitoring.

**Example Programs, Policies and Ordinances**  
Example programs, policies, and ordinances supporting the City's Climate Action Plan strategies: <https://palebluedot.llc/falcon-heights-cap-policies>

**Example Policy Alignment Memo**  
For use in reviewing policy items against Climate Action Plan goals: [Plan Alignment Statement Memo Falcon Heights.pdf](#)



# What You Can Do

Our success in building a sustainable and resilient future depends on all of us. The City has initiated this planning effort, but now we need everyone's involvement to keep the momentum going. Here are some simple steps you can start taking today!



## Transportation and Land Use

- Keep vehicles tuned and tires properly inflated.
- Limit idling to 30 seconds, even in winter.
- Walk or bike instead of driving short distances.
- Use public transit regularly for commuting or errands. Plan your trip [here](#).
- Telecommute or carpool to reduce driving.
- Fly less; vacation locally or use remote meetings.
- Consider becoming a one-car household. Explore how to make the change [here](#).
- Choose an electric or hybrid vehicle for your next car. Search models available [here](#).



## Buildings and Energy

- Switch all home lighting to energy-efficient LED bulbs.
- Adjust your thermostat slightly higher in summer, lower in winter.
- Check out State of Minnesota's [energy savings tips](#) for summer and winter.
- Get a [home energy audit](#) to identify efficiency improvements.
- Weatherize your home by [sealing drafts](#) and [adding insulation](#).
- Replace older appliances with [ENERGY STAR®](#) efficient models.
- Take advantage of incentives from [Xcel](#), the [State of Minnesota](#), and the [US Government](#).
- Replace gas appliances with efficient electric alternatives.
- Install rooftop solar or subscribe to clean electricity through [Xcel](#) or a [community solar garden](#).



## Waste Management

- Follow Ramsey County [recycling guidelines](#).
- Purchase durable, reusable products to reduce waste.
- Choose reusable bags, bottles, and containers to avoid single-use plastics.
- Repair items instead of discarding; donate or sell usable goods.
- Buy second-hand or borrow items rather than purchasing new.
- Plan meals carefully and shop to reduce food waste.
- Dispose of hazardous waste like batteries and electronics at proper facilities.
- Participate in Ramsey County [food scraps program](#) to easily divert scraps from the landfill.
- Participate in Ramsey County's [yard waste drop off program](#).



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### Water and Wastewater

- Reduce indoor water use by shortening showers and turning off faucets promptly. See other tips [here](#).
- Repair leaks immediately to avoid unnecessary water loss.
- Keep gutters and storm drains clear to keep your home storm ready. Check out other rain-ready tips [here](#).
- Use rain barrels to collect rainwater for gardening or lawn care.
- [Water lawns and gardens](#) infrequently and only during cool parts of the day.
- Install [WaterSense](#) water efficient fixtures like low-flow toilets, faucets, and showerheads.
- Install a [rain garden](#) to absorb stormwater runoff and reduce flooding.
- Understand your home's flood risk and have a [preparedness plan](#).



### Local Food and Agriculture

- Plan meals to use groceries fully and minimize waste.
- Incorporate more [plant-based meals](#) into your diet.
- Choose seasonal foods [grown locally](#) to reduce transport emissions.
- Select ethically-produced [climate-friendly](#) items, such as [fair-trade](#) coffee or chocolate.
- Support [restaurants](#) and stores selling locally-grown food products.
- Purchase food directly from local farmers through [markets](#) or [CSA programs](#).
- Start a small garden at home to grow fruits, vegetables, or herbs.
- Join or start a [community garden](#) if space at home is limited.
- [Plant fruit or nut trees](#) and shrubs suitable for Minnesota's climate.



### Greenspace and Ecosystems

- Avoid chemical pesticides and herbicides; use natural yard-care methods.
- Volunteer locally to assist with [tree plantings](#) or [gardens](#).
- Create a pollinator-[friendly garden](#) with native plants and wildflowers.
- Reduce lawn size by planting drought-tolerant grasses and native species. Apply for [funding to help](#).
- Plant and care for trees to provide shade and absorb carbon emissions.
- Design your yard to support local wildlife habitats.
- Replace unnecessary pavement with permeable surfaces or greenery.
- Consider installing a green [roof](#) to manage stormwater and reduce heat.

# Appendix A

## References



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The following are sources and additional references used in the Climate Action Plan.

## Introduction

1 Estimating the Health-Related Costs of 10 Climate-Sensitive US Events During 2012:

<https://www.nrdc.org/resources/bitter-pill-high-health-costs-climate-change>

2 Stop Climate Change, Save Lives:

<https://www.nrdc.org/stop-climate-change-save-lives>

3 World Health Organization Building Capacity on Climate Change for Human Health Toolkit:

<https://www.who.int/activities/building-capacity-on-climate-change-human-health/toolkit/cobenefits>

4 United Nations Economic Commission for Europe:

[https://unece.org/DAM/Sustainable\\_Development\\_No\\_2\\_Final\\_Draft\\_OK\\_2.pdf](https://unece.org/DAM/Sustainable_Development_No_2_Final_Draft_OK_2.pdf)

5 Bollen, J. et al. (2009), Co-benefits of Climate Change Mitigation Policies: Literature Review and New Results,

[https://www.oecd-ilibrary.org/economics/co-benefits-of-climate-change-mitigation-policies\\_224388684356](https://www.oecd-ilibrary.org/economics/co-benefits-of-climate-change-mitigation-policies_224388684356)

6 City of Falcon Heights Community GHG Inventory, 2024;

<https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/>

7 City of Falcon Heights Climate Vulnerability Assessment:

<https://view.publitas.com/palebluedot/falcon-heights-climate-vulnerability-assessment/>

8 i Parry, I, Veungh, C. and Heine, D. (2014), How Much Carbon Pricing is in Countries' Own Interests? The Critical Role of Co-Benefits;

<https://www.imf.org/external/pubs/ft/wp/2014/wp14174.pdf>

9 UNC Gillings School of Global Public Health, "Reducing greenhouse gases benefits air quality, saves lives"; <https://sph.unc.edu/sph-news/reducing-greenhouse-gases-benefits-air-quality-saves-lives/>

10 Mapping the co-benefits of climate change action to issues of public concern in the UK: a narrative review:

[https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(20\)30167-4/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(20)30167-4/fulltext)

11 Union of Concerned Scientists, Top 10 Benefits of Climate Action:

<https://www.ucsusa.org/resources/top-10-benefits-climate-action>

12 Based on existing average economic value per acre of tree canopy cover. City of Falcon Heights Ground Cover, Heat Island, and Carbon Sequestration Study:

<https://view.publitas.com/palebluedot/falcon-heights-ground-cover-heat-island-and-carbon-sequestration-study/>

13 City of Falcon Heights, Climate Action Plan Community Survey;

<https://view.publitas.com/palebluedot/falcon-heights-community-survey-report/>

14 US EPA, "What Climate Change Means for Minnesota";

<https://19january2017snapshot.epa.gov/sites/production/files/2016-09/documents/climate-change-mn.pdf>



15 State of Minnesota, Interagency Climate Adaptation Team, Building Resiliency to Extreme Precipitation in Minnesota; [https://bwsr.state.mn.us/sites/default/files/2018-12/Building\\_Resiliency\\_to\\_Extreme\\_Precipitation\\_in\\_Minnesota-ICAT\\_White\\_Paper%20%282%29.pdf](https://bwsr.state.mn.us/sites/default/files/2018-12/Building_Resiliency_to_Extreme_Precipitation_in_Minnesota-ICAT_White_Paper%20%282%29.pdf)

16 NASA, Global Temperature (Global Avg Temperature); <https://climate.nasa.gov/vital-signs/global-temperature/?intent=121>

17 US Climate Resilience Toolkit Climate Explorer: <https://toolkit.climate.gov/tool/climate-explorer-0>

18 U.S. Global Change Research Program, Climate Science Special Report: <https://science2017.globalchange.gov/>

19 US National Oceanic and Atmospheric Administration, National Centers For Environmental Information, Climate Data Online: <https://www.ncdc.noaa.gov/cdo-web/>

20 Projections assume global greenhouse gas emissions are not reduced in line with the recommendations of the International Panel on Climate Change. Reductions in greenhouse gas emissions can positively effect the projected climate impacts, particularly in the second half of the century. Projections use climate model RCP 8.5 which is recommended by Woodshole Research Center and others as the best match through mid-century under current and stated policies with still highly plausible through 2100. "RCP8.5 tracks cumulative CO<sub>2</sub> emissions" Christopher R. Schwalm University of California, Los Angeles: <https://www.pnas.org/doi/full/10.1073/pnas.2007117117#data-availability>

21 Unless noted otherwise, projections are based on U.S. Climate Resilience Toolkit CLIMATE EXPLORER, NOAA: <https://crt-climate-explorer.nemac.org/>

22 Assumes 60% of decrease of days <32° F occur during frost-free season with balance occurring during winter months. All numbers are shown as change over baseline column.

23 University of Minnesota, Changing Seasons: <https://climate.umn.edu/our-changing-climate/changing-seasons>

24 Argonne National Laboratory, Center for Climate Resilience and Decision Science: <https://disgeoportal.egs.anl.gov/ClimRR/>

25 Increases are due to increased air conditioning needs. Calculations are based on US Environmental Protection Agency's "Climate Change Indicators: Residential Energy Use": <https://www.epa.gov/climate-indicators/climate-change-indicators-residential-energy-use> and an estimated average of 16.9% of total residential electric use for air conditioning based on US Energy Information Administration "Use of energy explained": <https://www.eia.gov/energyexplained/use-of-energy/electricity-use-in-homes.php>

26 University of Minnesota Climate Adaptation Partnership; <https://climate.umn.edu/our-changing-climate/extreme-events>

27 NASA, Global Temperature (Global Avg Temperature); <https://climate.nasa.gov/vital-signs/global-temperature/?intent=121>

**28** State of Minnesota MPCA, Climate Change Impacts; <https://www.pca.state.mn.us/air-water-land-climate/climate-change-impacts>

29 UN Intergovernmental Panel on Climate Change (IPCC), AR6 Synthesis Report Climate Change 2023; <https://www.ipcc.ch/report/ar6/syr/>

30 United Nations, The Paris Agreement (2015), 2.1.a, [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf)

31 UN Intergovernmental Panel on Climate Change, IPCC AR6 Synthesis Report;  
<https://www.ipcc.ch/report/ar6/syr/figures/figure-spm-5>

## The Plan - Transportation

1 US Energy Information Administration, International Energy Outlook 2016  
<https://www.eia.gov/outlooks/ieo/pdf/transportation.pdf>

2 City of Falcon Heights Community GHG Inventory, 2024;  
<https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/>

3 The Influence of Urban Form on GHG Emissions in the U.S. Household Sector (Lee, S., and Lee, B. 2014 )  
[https://www.researchgate.net/publication/270952371\\_The\\_influence\\_of\\_urban\\_form\\_on\\_GHG\\_emissions\\_in\\_the\\_US\\_household\\_sector](https://www.researchgate.net/publication/270952371_The_influence_of_urban_form_on_GHG_emissions_in_the_US_household_sector)

4 National Academies, "Transportation's Role in Equity and Justice: Restoring and Revitalizing Neighborhoods and Communities":  
<https://www.nationalacademies.org/news/2021/07/transportations-role-in-equity-and-justice-restoring-and-revitalizing-neighborhoods-and-communities>

5 City of Falcon Heights Climate Action Baseline Assessment and Strategic Goal Recommendations, 2024:  
<https://view.publitas.com/palebluedot/city-of-falcon-heights-climate-action-baseline-assessment/>

6 US Census accessed via Deloitte Data USA:  
<https://datausa.io/profile/geo/Falcon-Heights-mn>

7 US Census, On The Map:  
<https://onthemap.ces.census.gov/>

8 AAA "Your Driving Costs, 2023":  
<https://newsroom.aaa.com/wp-content/uploads/2023/08/YDC-Fact-Sheet-FINAL-8.30.23-1.pdf>

9 Social Explorer Tables (SE), Environmental Summaries 2011, Social Explorer; National Historical Geographic Information System (NHGIS)

10 US Census <https://data.census.gov/>

11 TRB *Special Report 298: Driving and the Built Environment: Effects of Compact Development on Motorized Travel, Energy Use, and CO2 Emissions* Impacts of Land Use Patterns on Vehicle Miles Traveled Evidence from the Literature  
<https://www.nap.edu/read/12747/chapter/5#88>

12 New York Times, "E.V.s Start With a Bigger Carbon Footprint. But That Doesn't Last";  
<https://www.nytimes.com/2022/10/19/business/electric-vehicles-carbon-footprint-batteries.html>

13 EV HUB:  
<https://www.atlasevhub.com/materials/state-ev-registration-data/>

14 US EPA, Automotive Trends Report, 2023;  
<https://www.epa.gov/automotive-trends>

15 US Department of Transportation, Electric Vehicle Charging Infrastructure;  
<https://www.transportation.gov/sites/dot.gov/files/2024-12/EV%20Charging%20Infrastructure%20-%20Climate%20Strategies%20that%20Work.pdf>

16 US Department of Energy, Alternative Fuel Data Center, Electric Vehicle Benefits and Considerations;  
<https://afdc.energy.gov/fuels/electricity-benefits>

17 US Energy Information Administration, Carbon Dioxide Emissions Coefficients:  
[https://www.eia.gov/environment/emissions/co2\\_vol\\_mass.php](https://www.eia.gov/environment/emissions/co2_vol_mass.php)

18 Metropolitan Council Community Profiles;  
<https://stats.metc.state.mn.us/profile/>

## The Plan – Buildings and Energy

1 City of Falcon Heights Community GHG Inventory, 2024;  
<https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/>

2 US Department of Energy, Residential Program Solution Center:  
<https://rpssc.energy.gov/energy-data-facts>

3 City of Falcon Heights, residential and non-residential construction permit history, 2021, 2022, and 2023.

4 Social Explorer, Market Profile Data 2022 based on US Census American Census Survey;  
<https://www.socialexplorer.com/data/EASI2025/documentation/7933fdf1-4c9b-4cb2-ad82-5a8e949ac78f>

5 US Census Bureau ACS 5 year estimates;  
<https://data.census.gov/table/>

6 State of Minnesota House of Representatives, “State establishes standard of 100% carbon-free electricity by 2040”  
<https://www.house.mn.gov/NewLaws/story/2023/5473>

7 City of Falcon Heights Climate Action Baseline Assessment and Strategic Goal Recommendations, 2024:  
<https://view.publitas.com/palebluedot/city-of-falcon-heights-climate-action-baseline-assessment/>

8 US Department of Energy, Benefits of Residential Solar Electricity:  
<https://www.energy.gov/energysaver/benefits-residential-solar-electricity>

9 ACEEE Understanding Energy Affordability:  
<https://www.aceee.org/sites/default/files/en-ergy-affordability.pdf>

10 City of Falcon Heights Renewable Energy Potentials Study, 2024:  
<https://view.publitas.com/palebluedot/falcon-heights-renewable-potentials-study/>

11 Xcel Energy, Renewable Energy Opportunities:  
<https://mn.my.xcelenergy.com/s/renewable>

12 Dakota Electric Association, Renewable Energy:  
<https://www.dakotaelectric.com/renewable-energy/>

13 US Department of Energy, Renewable Energy Certificates:  
<https://www.epa.gov/green-power-markets/renewable-energy-certificates-recs>

14 Savings calculated on Falcon Heights average commercial electricity rate as reported by Electricity Local (<https://www.electricitylocal.com/>) and Natural Gas Local (<https://naturalgaslocal.com/>)

## The Plan – Waste Management

1 US EPA, Understanding Global Warming Potentials;  
<https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>

2 Northwestern Global News, How cities can cut transportation emissions. New Northeastern research reveals key strategies;  
<https://news.northeastern.edu/2025/03/19/climate-plan-city-research/>

3 Lawrence University, The Impact of Recycling on Environmental Sustainability;  
<https://blogs.lawrence.edu/careercenter/2024/10/the-impact-of-recycling-on-environmental-sustainability.html>

4 US EPA National Recycling Strategy:  
<https://www.epa.gov/circulareconomy/national-recycling-strategy>

- 5 MPCA, Waste planning and recycling:  
<https://www.pca.state.mn.us/air-water-land-climate/waste-planning-and-recycling>
- 6 MPCA, Understanding Solid Waste;  
<https://www.pca.state.mn.us/air-water-land-climate/understanding-solid-waste>
- 7 City of Falcon Heights Community GHG Inventory, 2024;  
<https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/>
- 8 MPCA Waste Planning and Recycling;  
<https://www.pca.state.mn.us/air-water-land-climate/waste-planning-and-recycling>
- 9 Minnesota Chamber of Commerce, WasteWise program:  
<https://www.mnchamber.com/sites/default/files/Waste%20Wise%20Annual%20Report.pdf>
- 10 North Carolina State University Extension, How Your Business Can Cut Costs by Reducing Waste:  
<https://content.ces.ncsu.edu/how-your-business-can-cut-costs-by-reducing-wastes>
- 11 ReFed, A Roadmap To Reduce US Food Waste by 20 Percent:  
[https://www.refed.com/downloads/ReFED\\_Report\\_2016.pdf](https://www.refed.com/downloads/ReFED_Report_2016.pdf)
- 12 Agency for Toxic Substances and Disease Registry:  
<https://www.atsdr.cdc.gov/hac/landfill/html/ch2.html>
- 13 City of Falcon Heights Climate Action Baseline Assessment and Strategic Goal Recommendations, 2024:  
<https://view.publitas.com/palebluedot/city-of-falcon-heights-climate-action-baseline-assessment/>
- 14 State of Minnesota, 2013 Statewide Waste Characterization;  
<https://www.pca.state.mn.us/sites/default/files/w-sw1-60.pdf>

## The Plan – Water and Wastewater

- 1 City of Falcon Heights Climate Vulnerability Assessment:  
<https://view.publitas.com/palebluedot/falcon-heights-climate-vulnerability-assessment/>
- 2 Center for Climate and Energy Solutions, “Resilience Strategies for Drought”;  
<https://www.c2es.org/wp-content/uploads/2018/10/resilience-strategies-for-drought.pdf>
- 3 Aspen Public Radio, “How Landscaping Plays a Key Role in The Fight Against Climate Change”;  
<https://www.aspenpublicradio.org/2023-10-17/how-landscaping-plays-a-key-role-in-the-fight-against-climate-change>
- 4 Climate Central, “Overflow: Climate Change, Heavy Rain, And Sewage”;  
[https://assets.climatecentral.org/pdfs/Overflow\\_sewagereport\\_update.pdf](https://assets.climatecentral.org/pdfs/Overflow_sewagereport_update.pdf)
- 5 Johnson T, Butcher J, Santell S, Schwartz S, Julius S, LeDuc S. A review of climate change effects on practices for mitigating water quality impacts. J Water Clim Chang. 2022 Mar 22;  
<https://iwaponline.com/jwcc/article/13/4/1684/87748/A-review-of-climate-change-effects-on-practices>
- 6 City of Falcon Heights Climate Action Baseline Assessment and Strategic Goal Recommendations, 2024:  
<https://view.publitas.com/palebluedot/city-of-falcon-heights-climate-action-baseline-assessment/>
- 7 Argonne National Laboratory, Center for Climate Resilience and Decision Science,  
<https://disgeoportal.egs.anl.gov/ClimRR/>
- 8 Defined as Days Per Year with > 1" Rainfall, U.S. Climate Resilience Toolkit CLIMATE EXPLORER, NOAA; <https://crt-climate-explorer.nemac.org/>

9 WUFT, "Why the risk for flash flooding increases after a drought";  
<https://www.wuft.org/weather/2022-08-12/why-the-risk-for-flash-flooding-increases-after-a-drought>

10 American Public Health Association, "Climate Changes Health: Water Quality and Accessibility";<https://www.apha.org/topics-and-issues/climate-health-and-equity/water-quality>

11 US EPA, National Menu Best Management Practices:  
<https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater>

## The Plan – Local Food and Agriculture

1 H. Nabipour Afrouzi, J. Ahmed, B. Mobin Siddique, N. Khairuddin, Ateeb Hassan, A comprehensive review on carbon footprint of regular diet and ways to improving lowered emissions, Results in Engineering, Volume 18, 2023;  
<https://doi.org/10.1016/j.rineng.2023.101054>

2 Conner, David & Knudson, William & Hamm, Michael & Peterson, H.. (2008). The Food System as an Economic Driver: Strategies and Applications for Michigan.  
[https://www.researchgate.net/publication/247521128\\_The\\_Food\\_System\\_as\\_an\\_Economic\\_Driver\\_Strategies\\_and\\_Applications\\_for\\_Michigan](https://www.researchgate.net/publication/247521128_The_Food_System_as_an_Economic_Driver_Strategies_and_Applications_for_Michigan)

3 North Carolina State Extension, Research & Benefits of Community Gardens:  
<https://nccommunitygardens.ces.ncsu.edu/resources-3/nccommunitygardens-research/>

4 USDA Climate Indicators for Agriculture:  
[https://www.usda.gov/sites/default/files/documents/climate\\_indicators\\_for\\_agriculture.pdf](https://www.usda.gov/sites/default/files/documents/climate_indicators_for_agriculture.pdf)

5 US Department of Health, Office of Disease Prevention and Health Promotion, Food Insecurity:  
<https://odphp.health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/food-insecurity>

6 US Global Change Research Program, Fifth National Climate Assessment, Agriculture, Food Systems, and Rural Communities Chapter;  
<https://nca2023.globalchange.gov/chapter/11/>

7 Lengnick, Laura. (2015). The vulnerability of the US food system to climate change. Journal of Environmental Studies and Sciences.  
[https://www.researchgate.net/publication/282499666\\_The\\_vulnerability\\_of\\_the\\_US\\_food\\_system\\_to\\_climate\\_change](https://www.researchgate.net/publication/282499666_The_vulnerability_of_the_US_food_system_to_climate_change)

8 Cleveland Foundation, ParkWorks, Kent State University Cleveland Urban Design Collaborative, Neighborhood Progress Inc., Cleveland-Cuyahoga County Food Policy Coalition:  
<https://docs.google.com/viewerng/viewer?url=https://community-wealth.org/sites/clone.community-wealth.org/files/downloads/report-masi-et-al.pdf>

9 American Planning Association, Local Food Systems Key to Healthy, Resilient, Equitable Communities:  
<https://www.planning.org/planning/2021/winter/local-food-systems-key-to-healthy-resilient-equitable-communities/>

10 USDA Food Access Research Atlas;  
<https://www.ers.usda.gov/data-products/food-access-research-atlas/>

11 USDA, Why Should You Care About Food Waste:  
<https://www.usda.gov/foodlossandwaste/why>



12 State of Minnesota, 2013 Statewide Waste Characterization;  
<https://www.pca.state.mn.us/sites/default/files/w-sw1-60.pdf>

13 City of Falcon Heights Community GHG Inventory, 2024;  
<https://view.publitas.com/palebluedot/falcon-heights-ghg-inventory/>

14 ReFed, A Roadmap To Reduce US Food Waste by 20 Percent:  
[https://www.refed.com/downloads/ReFED\\_Report\\_2016.pdf](https://www.refed.com/downloads/ReFED_Report_2016.pdf)

## The Plan – Greenspace and Trees

1 US EPA, Using Trees and Vegetation to Reduce Heat Islands;  
<https://www.epa.gov/heatislands/using-trees-and-vegetation-reduce-heat-islands>

2 Dahlia Stott, et al, Interactions with Nature, Good for the Mind and Body: A Narrative Review, Int J Environ Res Public Health. 2024 Mar; 21(3): 329. Published online 2024 Mar 12; <https://www.mdpi.com/1660-4601/21/3/329>

3 US EPA, Throwing Shade Exploring Benefits of Trees;  
<https://www.epa.gov/sciencematters/throwing-shade-exploring-benefits-trees>

4 US EPA, Landscaping with Native Plants;  
[https://archive.epa.gov/greenacres/web/html/conf\\_knowledge.html](https://archive.epa.gov/greenacres/web/html/conf_knowledge.html)

5 Audubon, Why Native Plants Matter;  
<https://www.audubon.org/content/why-native-plants-matter>

6 Comparison of impervious surface area and normalized difference vegetation index as indicators of surface urban heat island effects in Landsat imagery. Fi Yuan and Marvin Bauer, February 2007:  
<https://doi.org/10.1016/j.rse.2006.09.003>

7 Francisco J. Escobedo, Timm Kroeger, John E. Wagner, Urban forests and pollution mitigation: Analyzing ecosystem services and disservices, Environmental Pollution, Volume 159, Issues 8–9, 2011:  
<https://www.sciencedirect.com/science/article/abs/pii/S0269749111000327>

8 T Elmqvist, H Setälä, SN Handel, S van der Ploeg, J Aronson, JN Blignaut, E Gómez-Baggethun, DJ Nowak, J Kronenberg, R de Groot, Benefits of restoring ecosystem services in urban areas, Current Opinion in Environmental Sustainability, Volume 14, 2015:  
<https://www.sciencedirect.com/science/article/pii/S1877343515000433>

9 USDA Forest Service, Carbon Storage and Sequestration by Urban Trees in the USA:  
<https://research.fs.usda.gov/treearch/15521>

10 US EPA, Using Trees and Vegetation to Reduce Heat Islands:  
<https://www.epa.gov/heatislands/using-trees-and-vegetation-reduce-heat-islands>

11 USDA Forest Service, Trees Reduce Building Energy Use in US Cities:  
<https://research.fs.usda.gov/treearch/53420>

12 US EPA, Green Landscaping: Greenacres, a Source Book on Natural Landscaping for Public Officials:  
<https://archive.epa.gov/greenacres/web/html/chap2.html>

13 Fight Climate Change at Home: Landscaping with Native Grasses, Lindsay Ifill: <https://wildrootsnj.com/blog/ecological-landscaping-with-native-grasses-climate-change>

- 14 Tallgrass Ontario: Tallgrass Prairie and Carbon Sequestration:  
<https://tallgrassontario.org/wp-site/carbon-sequestration/>
- 15 University of Minnesota, "The Potential of Turfgrass to Sequester Carbon and Offset Greenhouse Gas Emissions";  
<https://turf.umn.edu/news/potential-turfgrass-sequester-carbon-and-offset-greenhouse-gas-emissions>
- 16 Resource Central, Unearth the Turf: Outdoor Water Savings;  
<https://resourcecentral.org/unearth-the-turf-outdoor-water-savings/>
- 17 US EPA, Know Your Roots;  
[https://cfpub.epa.gov/npstbx/files/KSMO\\_KnowYourRoots.pdf](https://cfpub.epa.gov/npstbx/files/KSMO_KnowYourRoots.pdf)
- 18 City of Falcon Heights Ground Cover, Heat Island, and Carbon Sequestration Study:  
<https://view.publitas.com/palebluedot/falcon-heights-ground-cover-heat-island-and-carbon-sequestration-study/>
- 19 US EPA, Climate Change and Heat Islands:  
<https://www.epa.gov/heatislands/climate-change-and-heat-islands>
- 20 City of Falcon Heights Climate Vulnerability Assessment:  
<https://view.publitas.com/palebluedot/falcon-heights-climate-vulnerability-assessment/>
- 21 Comparison of impervious surface area and normalized difference vegetation index as indicators of surface urban heat island effects in Landsat imagery. Fi Yuan and Marvin Bauer, February 2007:  
<https://linkinghub.elsevier.com/retrieve/pii/S0034425706003191>



# Potential Cumulative Community Cost Savings From Plan Implementation

The following documents the calculations and source references used for estimating the potential cumulative communitywide cost savings of the actions included in the Climate Action Plan.

## Summary of Estimated Cumulative Savings of Modeled Reductions City of Falcon Heights

### Notes Transportation

#### VTM Reductions (public transit, bike, walk, etc)

##### Formula:

**Cumulative vehicle miles saved x Average vehicle operation cost per mile = Gross VMT savings**

|                                                     |                    |
|-----------------------------------------------------|--------------------|
| VTM saved (goal year)                               | 1,366,663          |
| Cumulative vehicle miles saved (through goal year): | 8,199,979          |
| 1 Average vehicle operating cost per mile:          | \$0.820            |
| <b>Gross VMT savings</b>                            | <b>\$8,199,979</b> |

1 Savings per VMT based on AAA estimates ( <https://newsroom.aaa.com/wp-content/uploads/2023/08/YDC-Fact-Sheet-FINAL-8.30.23-1.pdf> , <https://www.slashgear.com/aaa-says-it-costs-about-74-cents-per-mile-to-drive-23496316/> )

#### Increased Public Transit Use

##### Formula:

**Cumulative increased public transit mileage x Average public transit cost per mile = Increased spending on public transit**

|                                                                     |                     |
|---------------------------------------------------------------------|---------------------|
| Increased public transit miles (goal year)                          | 1,093,331           |
| Cumulative increased public transit miles (through goal year):      | 6,559,983           |
| 2 Annual increased public transit pass costs (goal year):           | -\$230,208          |
| Cumulative increased public transit pass costs (through goal year): | -\$1,381,248        |
| <b>Increased spending on public transit</b>                         | <b>-\$1,381,248</b> |

2 Annual increased public transit pass costs calculated based on increased percentage of population using public transit (target increased public transit percentage) multiplied by cost of monthly transit pass. Negative numbers indicate increased consumer spending. ( <https://www.census.gov/programs-surveys/sis/resources/data-tools/quickfacts.html> <https://www.metrotransit.org/fares-passes> )

#### EV and Alt Fuel Conversions

##### Formula:

**Cumulative VMT converted to EV/alt fuel x Average vehicle operation cost savings per mile = Gross EV VMT savings - Gross EV purchase spending difference = Net EV VMT Savings**

|                                                                  |                    |
|------------------------------------------------------------------|--------------------|
| VTM converted to EV/Alt fuel (goal year)                         | 1,366,663          |
| Cumulative VMT converted to EV/alt fuel (through goal year)      | 8,199,979          |
| 3 Average fuel savings per mile:                                 | \$0.121            |
| 4 Average vehicle maintenance savings per mile:                  | \$0.040            |
| Cumulative Gross EV VMT savings (through goal year)              | \$1,317,255        |
| 5 Spending difference per vehicle on EV purchase vs ICE purchase | -\$390             |
| New electric vehicle purchases                                   | 470                |
| Gross EV purchase spending difference (through goal year)        | -\$183,337         |
| <b>Net EV VMT savings</b>                                        | <b>\$1,133,918</b> |

3 Fuel Savings per VMT based on average reported gasoline costs ( <https://gasprices.aaa.com/state-gas-price-averages/> ) divided by current average MPG (Federal Highway Administration: <https://www.fhwa.dot.gov/policyinformation/quickfinddata/qftravel.cfm> ) compared against average fuel cost per mile using current kWh rate ( <https://www.electricitylocal.com/> ) and average kWh/100 mile data ( <https://www.fueleconomy.gov/feg/byfuel/EV2024.shtml> ; <https://ev-database.org/cheatsheet/energy-consumption-electric-car> )

4 Maintenance savings per mile based on US Department of Energy FOTW #1190, June 14, 2021: Battery-Electric Vehicles Have Lower Scheduled Maintenance Costs than Other Light-Duty Vehicles: ( <https://www.energy.gov/eere/vehicles/articles/fotw-1190-june-14-2021-battery-electric-vehicles-have-lower-scheduled> )

5 Average EV purchase price increase per vehicle on Kelly Blue Book average EV purchase price compared to average gasoline vehicle purchase price ( <https://www.coxautoinc.com/market-insights/february-2025-atp-report/> ) with a \$7,500 tax credit applied. The total cost difference is then divided by an assumed 5-year financing term to arrive at an estimated annualized cost difference. Negative numbers indicate increased consumer spending ( <https://www.nerdwallet.com/article/taxes/ev-tax-credit-electric-vehicle-tax-credit> )

Potential Total Cumulative Transportation Cost Savings

Formula:

Transportation sector savings - Transportation sector cost increases = Potential Total Cumulative Transportation Cost Savings

|                                                        |              |
|--------------------------------------------------------|--------------|
| Transportation Sector Savings                          |              |
| Gross VMT savings                                      | \$8,199,979  |
| Gross EV VMT savings                                   | \$1,317,255  |
| Total Gross Transportation Savings                     | \$9,517,233  |
| Transportation Sector Cost Increases                   |              |
| Increased spending on public transit                   | -\$1,381,248 |
| Gross EV purchase spending difference                  | -\$183,337   |
| Total Gross Transportation Cost Increases              | -\$1,564,585 |
| Potential Total Cumulative Transportation Cost Savings | \$7,952,649  |



## Summary of Estimated Cumulative Savings of Modeled Reductions

### City of Falcon Heights

#### Notes Energy - Residential

##### Residential Savings - grid electricity to customer owned solar

###### Formula:

**Cumulative kWh converted to solar x Average cost savings per kWh = Residential solar savings**

|    |                                                             |                  |
|----|-------------------------------------------------------------|------------------|
|    | Residential kWh converted (goal year)                       | 1,166,795        |
|    | Cumulative residential kWh converted (through goal year)    | 7,000,768        |
|    | Average net solar cost savings per solar kWh                | \$0.058          |
| 6a | Average solar installation cost per KW                      | \$3,116.50       |
| 7  | Average kWh produced annually per solar pv KW installed     | 1,287            |
|    | Estimated installed solar PV KW installed (goal year)       | 907              |
|    | Estimated total solar installation costs                    | \$2,825,420      |
| 8  | Est average lifespan kWh produced per solar pv KW installed | 38,429           |
| 8  | Estimated cumulative lifespan kWh produced                  | 34,839,759       |
| 9  | Estimated value of cumulative lifespan kWh produced         | \$4,840,145      |
|    | Average solar cost savings per kWh produced                 | \$0.058          |
|    | <b>Residential solar savings</b>                            | <b>\$404,843</b> |

6a Recent average cost per KW is 1000x the per watt cost reported by Solar Reviews <https://www.solarreviews.com> Value includes assumed financing costs based on 20% initial payment and 80% financed through 10 year loan with 3.5% annual interest rate. Potential savings from tax credits, depreciation, or grants are not included and would reduce these costs.

7 Calculations are based on the geographic energy production factor ( <https://www.nrel.gov/docs/fy04osti/35297.pdf> ) multiplied by an average performance ratio of 78% ( <https://www.nrel.gov/docs/fy13osti/57991.pdf> )

8 Based on an assumed average useful life of 32.5 years according to NREL research with an average degradation rate of 0.5% ( <https://www.nrel.gov/docs/fy24osti/90042.pdf> )

9 Savings per kWh based on average electricity cost per kWh ( <https://www.electricitylocal.com/> ) calculated to the solar array's midlife (year 16) using an estimated average electrical cost inflation of 2% annually

##### Residential Savings - community solar

###### Formula:

**Cumulative kWh converted to community solar x Average cost savings per kWh = Residential community solar savings**

|    |                                                          |            |
|----|----------------------------------------------------------|------------|
|    | Residential kWh converted (goal year)                    | 0          |
|    | Cumulative residential kWh converted (through goal year) | 0          |
| 10 | Average community solar cost savings per kWh             | \$0.010    |
|    | <b>Residential solar savings</b>                         | <b>\$0</b> |

10 The average cost savings per kWh of community solar subscription is estimated at 10%.

##### Residential Savings - utility purchased renewable

###### Formula:

**Cumulative kWh converted to utility purchased renewable x Average cost/savings per kWh = Residential utility purchased cost/savings**

|    |                                                          |                  |
|----|----------------------------------------------------------|------------------|
|    | Residential kWh converted (goal year)                    | 1,166,795        |
|    | Cumulative residential kWh converted (through goal year) | 7,000,768        |
| 11 | Average utility purchased cost/savings per kWh           | -\$0.013         |
|    | <b>Residential utility purchased cost/savings</b>        | <b>-\$88,840</b> |

11 The average cost/savings per kWh of utility purchased renewable energy subscription is based on utility fee information. Negative numbers indicate increased consumer spending

##### Residential Savings - electrical energy efficiency

###### Formula:

**Cumulative kWh saved from energy efficiency x Average cost per kWh = Gross Residential electrical energy efficiency savings - Residential Efficiency Upgrade Costs = Net Residential Electrical Energy Efficiency Savings**

|  |                                                      |           |
|--|------------------------------------------------------|-----------|
|  | Residential kWh saved (goal year)                    | 648,219   |
|  | Cumulative residential kWh saved (through goal year) | 3,889,316 |

|     |                                                               |                  |
|-----|---------------------------------------------------------------|------------------|
| 12a | Average cost per kWh                                          | \$0.101          |
|     | <b>Gross Residential electrical energy efficiency savings</b> | <b>\$393,599</b> |
| 13  | Residential Electrical Efficiency Upgrade Costs               | -\$346,367       |
|     | <b>Net Residential Electrical Energy Efficiency Savings</b>   | <b>\$47,232</b>  |

12a Energy efficiency savings per kWh saved based on average electricity cost per kWh: ( <https://www.electricitylocal.com/> )

13 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12% (

<https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency> ) Negative numbers indicate increased consumer

#### Residential Savings - natural gas energy efficiency

##### Formula:

**Cumulative therms saved from energy efficiency x Average cost per therm = Gross Residential natural gas energy efficiency savings - Residential Natural Gas Efficiency Upgrade Costs = Net Residential Electrical Natural Gas Efficiency Savings**

|        |                                                                  |                  |
|--------|------------------------------------------------------------------|------------------|
| 14     | Residential therms saved (goal year)                             | 58,767           |
| 14     | Cumulative residential therms saved (through goal year)          | 352,604          |
| 15     | Average cost per therm                                           | \$1.848          |
|        | <b>Gross Residential natural gas energy efficiency savings</b>   | <b>\$651,612</b> |
| 14, 16 | Residential Natural Gas Efficiency Upgrade Costs                 | -\$573,419       |
|        | <b>Net Residential Electrical Natrual Gas Efficiency Savings</b> | <b>\$78,193</b>  |

14 Includes fuel switching from fossil fuel heat to electric

15 Energy efficiency savings for natural gas is based on average natural gas cost per therm ( <https://naturalgaslocal.com/> )

16 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12% (

<https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency> ) Negative numbers indicate increased consumer spending

## Potential Total Cumulative Residential Energy Cost Savings

##### Formula:

Residential solar savings + Residential community solar savings + Residential utility purchased renewable + Residential electrical efficiency savings + Residential natural gas energy efficiency savings - Residential increased electrical costs = Potential Total Cumulative Residential Energy Savings

|                                                         |                  |
|---------------------------------------------------------|------------------|
| Residential solar savings                               | \$404,843        |
| Residential community solar savings                     | \$0              |
| Residential utility purchased renewable cost/savings    | -\$88,840        |
| Residential electrical efficiency savings (net)         | \$47,232         |
| Residential natural gas energy efficiency savings (net) | \$78,193         |
| Potential Total Cumulative Residential Energy Savings   | <b>\$441,428</b> |

## Summary of Estimated Cumulative Savings of Modeled Reductions City of Falcon Heights

Notes

### Energy - Non Residential

#### Non-Residential Savings - grid electricity to solar

##### Formula:

**Cumulative kWh converted to solar x Average cost savings per kWh = Non-Residential solar savings**

|    |                                                                   |                  |
|----|-------------------------------------------------------------------|------------------|
|    | Non-Residential kWh converted (goal year)                         | 1,554,891        |
|    | Cumulative Non-Residential kWh converted (through goal year)      | 9,329,346        |
|    | Average solar cost savings per kWh                                | \$0.050          |
| 6b | Average solar installation cost per KW                            | \$1,978.00       |
| 7  | Average kWh produced annually per solar pv KW installed           | 1,287            |
|    | Estimated installed solar PV KW installed (goal year)             | 1,208            |
|    | Estimated total solar installation costs                          | \$2,389,724      |
| 8  | Estimated average lifespan kWh produced per solar pv KW installed | 38,429           |
| 8  | Estimated cumulative lifespan kWh produced                        | 46,428,071       |
| 9  | Estimated value of cumulative lifespan kWh produced               | \$4,712,200      |
|    | Average solar cost savings per kWh produced                       | \$0.050          |
|    | <b>Non-Residential solar savings</b>                              | <b>\$466,683</b> |

6b Recent average cost per KW is 1000x the per watt cost reported for commercial solar arrays by NREL ( <https://www.nrel.gov/docs/fy21osti/77324.pdf> <https://www.nrel.gov/solar/market-research-analysis/solar-installed-system-cost.html> ) Value includes assumed financing costs based on 20% initial payment and 80% financed through 10 year loan with 3.5% annual interest rate. Potential savings from tax credits, depreciation, or grants are not included and would reduce these costs.

7 Calculations are based on the geographic energy production factor ( <https://www.nrel.gov/docs/fy04osti/35297.pdf> ) multiplied by an average performance ratio of 78% ( <https://www.nrel.gov/docs/fy13osti/57991.pdf> )

8 Based on an assumed average useful life of 32.5 years according to NREL research with an average degradation rate of 0.5% ( <https://www.nrel.gov/docs/fy24osti/90042.pdf> )

9 Savings per kWh based on average electricity cost per kWh ( <https://www.electricitylocal.com/> ) calculated to the solar array's midlife (year 16) using an estimated average electrical cost inflation of 2% annually

#### Non-Residential Savings - community solar

##### Formula:

**Cumulative kWh converted to community solar x Average cost savings per kWh = Non-Residential community solar savings**

|    |                                                              |            |
|----|--------------------------------------------------------------|------------|
|    | Non-Residential kWh converted (goal year)                    | 0          |
|    | Cumulative Non-Residential kWh converted (through goal year) | 0          |
| 10 | Average solar cost savings per solar kWh                     | \$0.01     |
|    | <b>Commercial solar savings</b>                              | <b>\$0</b> |

10 The average cost savings per kWh of community solar subscription is estimated at 10%.

#### Non-Residential Savings - utility purchased renewable

##### Formula:

**Cumulative kWh converted to utility purchased renewable x Average cost/savings per kWh = Non-Residential utility purchased cost/savings**

|    |                                                              |                   |
|----|--------------------------------------------------------------|-------------------|
|    | Non-Residential kWh converted (goal year)                    | 1,554,891         |
|    | Cumulative Non-Residential kWh converted (through goal year) | 9,329,346         |
| 11 | Average utility purchased cost/savings per kWh               | -\$0.013          |
|    | <b>Non-Residential utility purchased cost/savings</b>        | <b>-\$118,389</b> |

11 The average cost/savings per kWh of utility purchased renewable energy subscription is based on utility fee information. Negative numbers indicate increased consumer spending

#### Non-Residential Savings - electrical energy efficiency

##### Formula:

**Cumulative kWh saved from energy efficiency x Average cost per kWh = Gross Non-Residential electrical energy efficiency savings - Non-Residential Efficiency Upgrade Costs = Net Non-Residential Electrical Energy Efficiency Savings**

|     |                                                              |                    |
|-----|--------------------------------------------------------------|--------------------|
|     | Commercial kWh saved (goal year)                             | 2,591,485          |
|     | Cumulative commercial kWh saved (through goal year)          | 15,548,909         |
| 12b | Average cost per kWh                                         | \$0.074            |
|     | <b>Gross Commercial electrical energy efficiency savings</b> | <b>\$1,149,583</b> |
| 13  | Commercial Electrical Efficiency Upgrade Costs               | -\$1,011,633       |
|     | <b>Net Commercial Electrical Energy Efficiency Savings</b>   | <b>\$137,950</b>   |

12b Energy efficiency savings per kWh saved based on average electricity cost per kWh reported for commercial and industrial with a weighted average (2/3rds commercial rate, 1/3rd industrial rate) reflecting typical non-residential electric consumption patterns ( <https://www.electricitylocal.com/> )

13 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12% ( <https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency> ) Negative numbers indicate increased consumer spending

#### **Non-Residential Savings - natural gas energy efficiency**

**Formula:**

**Cumulative therms saved from energy efficiency x Average cost per therm = Gross Non-Residential natural gas energy efficiency savings - Non-Residential Natural Gas Efficiency Upgrade Costs = Net Non-Residential Electrical Natural Gas Efficiency Savings**

|        |                                                                    |                  |
|--------|--------------------------------------------------------------------|------------------|
| 14     | Non-Residential therms saved (year 10)                             | 177,945          |
| 14     | Cumulative Non-Residential therms saved                            | 1,067,670        |
| 15     | Average cost per therm                                             | \$0.431          |
|        | <b>Gross Non-Residential natural gas energy efficiency savings</b> | <b>\$460,166</b> |
| 14, 16 | Non-Residential Natural Gas Efficiency Upgrade Costs               | -\$404,946       |
|        | <b>Net Non-Residential Natural Gas Energy Efficiency Savings</b>   | <b>\$55,220</b>  |

14 Includes fuel switching from fossil fuel heat to electric

15 Energy efficiency savings for natural gas is based on average natural gas cost per therm <https://naturalgaslocal.com/>

16 Assumed energy efficiency upgrade costs are calculated assuming an average ROI of 12% ( <https://www.aceee.org/blog/2019/05/existing-homes-energy-efficiency> ) Negative numbers indicate increased consumer spending

### **Potential Total Cumulative Non-Residential Energy Cost Savings**

**Formula:**

Non-Residential solar savings + Non-Residential community solar savings + Non-Residential utility purchased renewable + Non-Residential electrical efficiency savings + Non-Residential natural gas energy efficiency savings - Non-Residential increased electrical costs = Potential Total Cumulative Non-Residential Energy Savings

|  |                                                                  |                  |
|--|------------------------------------------------------------------|------------------|
|  | Non-Residential solar savings                                    | \$466,683        |
|  | Non-Residential community solar savings                          | \$0              |
|  | Non-Residential utility purchased renewable cost/savings         | -\$118,389       |
|  | Non-Residential electrical efficiency savings                    | \$137,950        |
|  | Non-Residential natural gas energy efficiency savings            | \$55,220         |
|  | <b>Potential Total Cumulative Non-Residential Energy Savings</b> | <b>\$541,463</b> |

## Potential Total Cumulative Energy Cost Savings (Residential + Non-Residential)

### Formula:

Energy sector savings - Energy sector cost increases = Potential Total Cumulative Energy Cost Savings

#### Energy Sector Savings

|                                               |             |
|-----------------------------------------------|-------------|
| Total solar energy savings                    | \$871,526   |
| Total community solar energy savings          | \$0         |
| Total energy efficiency savings - electricity | \$1,543,181 |
| Total energy efficiency savings - natural gas | \$1,111,778 |
| Total Gross Energy Savings                    | \$3,526,485 |

#### Energy Sector Cost Increases

|                                                     |                                                    |
|-----------------------------------------------------|----------------------------------------------------|
| Total solar PV installation costs                   | (included in estimated Total Solar Energy Savings) |
| Total utility purchased renewable cost/savings      | -\$207,229                                         |
| Total energy efficiency upgrade costs - electricity | -\$1,358,000                                       |
| Total energy efficiency upgrade costs - natural gas | -\$978,365                                         |
| Total Gross Energy Cost Increases                   | -\$2,543,594                                       |

|                                                |                  |
|------------------------------------------------|------------------|
| Potential Total Cumulative Energy Cost Savings | <b>\$982,892</b> |
|------------------------------------------------|------------------|



## Summary of Estimated Cumulative Savings of Modeled Reductions City of Falcon Heights

### Notes Solid Waste - Residential

#### Residential savings - Food Waste Reduction

##### Formula:

**Cumulative tons of food waste reduced and diverted x Average cost savings per ton = Residential food waste savings**

Residential food waste reduced (goal year) 31

Cumulative residential food waste reduced (through goal year) 188

17 Average cost savings per ton reduced \$2,469

**Residential food waste savings \$463,869**

17 Value per ton of residential food waste avoided is based on average for Prevent and Recover strategies by ReFED "A Roadmap To Reduce U.S. Food Waste" ( <https://refed.com/downloads/the-roadmap-to-reduce-u-s--food-waste/> ). Food waste share of total organics diverted is calculated based on available waste sort data (see Baseline Assessment document)

## Potential Total Cumulative Residential Solid Waste Reduction Cost Savings

**Residential food waste savings \$463,869**

### Notes Solid Waste - Non-Residential

#### Non-Residential savings - Solid Waste Reduction

##### Formula:

**Cumulative participant/years x Average reported cost savings per participant/year = Non-Residential solid waste savings**

Participating businesses (goal year) 50

Cumulative participant/years (through goal year) 550

18 Average cost savings per participant/year \$431

**Commercial solid waste savings \$1,422,300**

18 Savings per business engaged in waste reduction programs are based on MN WasteWise reported average business savings (\$431) escalated to 5 year (mid point) Cumulative savings assume businesss reduction strategies remain in force ( <https://www.mnchamber.com/your-opportunity/waste-wise> )

#### Commercial savings - Food Waste Reduction

##### Formula:

**Cumulative tons of food waste reduced and diverted x Average cost savings per ton = Non-Residential food waste savings**

Commercial food waste reduced (goal year) 37

Cumulative non-residential food waste reduced (through goal year) 221

19 Average cost savings per ton reduced \$494

**Commercial food waste savings \$108,908**

19: Average cost savings per ton of food waste avoided is based on an assumed 20% wholesale share of value per ton of residential food waste average for Prevent and Recover strategies by ReFED "A Roadmap To Reduce U.S. Food Waste" ( <https://refed.com/downloads/the-roadmap-to-reduce-u-s--food-waste/> ) Additionally, the World Resources Institute conducted a study which found that for every \$1 invested in food waste reduction, businesses saved \$14 in operational costs ( <https://www.wri.org/news/release-new-research-finds-companies-saved-14-every-1-invested-reducing-food-waste> )

Potential Total Cumulative Solid Waste Savings

Formula:  
Residential Food Waste Savings + Commercial Solid Waste Savings + Commercial Food Waste Savings = Potential Total Cumulative Solid Waste Savings

|                                                |                    |
|------------------------------------------------|--------------------|
| Residential Food Waste Savings                 | \$463,869          |
| Non-Residential Solid Waste Savings            | \$1,422,300        |
| Non-Residential Food Waste Savings             | \$108,908          |
| Potential Total Cumulative Solid Waste Savings | <b>\$1,995,078</b> |



[Click here to return to TOC](#)

## Appendix C

# Abbreviations and Glossary of Terms

The following are abbreviations and terms used in the Climate Action Plan as well as others common to sustainability and climate action concepts.

## Abbreviations

|                      |                                                                |                 |                                                       |
|----------------------|----------------------------------------------------------------|-----------------|-------------------------------------------------------|
| ADU                  | Accessory Dwelling Unit                                        | NZE             | Net-Zero Emissions                                    |
| BAU                  | Business as usual forecast                                     | O <sub>3</sub>  | Ozone                                                 |
| BEV                  | Battery electric vehicle                                       | ODS             | Ozone Depleting Substances                            |
| BIPOC                | Black, Indigenous, people of color                             | PACE            | Property Assessed Clean Energy                        |
| C&D                  | Construction and demolition                                    | PFC             | Perfluorocarbons                                      |
| CAP                  | Climate Action Plan                                            | PHEV            | Plug-in hybrid electric vehicle                       |
| CE                   | Carbon Equivalent                                              | PM2.5           | Particulate matter of 2.5 micrometer diameter or less |
| CDP                  | Carbon Disclosure Project                                      | POC             | People of color                                       |
| CFC                  | Chlorofluorocarbons                                            | PPA             | Power Purchase Agreement                              |
| CH <sub>4</sub>      | Methane                                                        | PUB             | Public Utilities Board                                |
| CHP                  | Combined Heat and Power                                        | PV              | Photovoltaic (solar photovoltaic)                     |
| CO <sub>2</sub>      | Carbon dioxide                                                 | REC             | Renewable Energy Credit                               |
| CO <sub>2</sub> e    | Carbon dioxide equivalent                                      | RCP             | Representative Concentration Pathway                  |
| CSG                  | Community Solar Garden                                         | SO <sub>2</sub> | Sulfur Dioxide                                        |
| DCFC                 | Direct Current Fast Charger                                    | SF <sub>6</sub> | Sulfur Hexafluoride                                   |
| DOE                  | U.S. Department of Energy                                      | SULEV           | Super ultra-low emission vehicle                      |
| EMS                  | Emergency medical services                                     | t               | Ton equivalent to 2,000 lbs (United States)           |
| EPA                  | U.S. Environmental Protection Agency                           | TOG             | Total Organic Gasses                                  |
| EV                   | Electric vehicle                                               | USGS            | U.S. Geological Survey                                |
| EVSE                 | Electric vehicle supply equipment                              | VMT             | Vehicle miles traveled                                |
| FEMA                 | Federal Emergency Management Agency                            | VHT             | Vehicle hours traveled                                |
| FTE                  | Full-time equivalent                                           | ZEV             | Zero emission vehicle                                 |
| GCoM                 | Global Covenant of Mayors                                      | ZNEB            | Zero Net Energy Building                              |
| GDP                  | Gross Domestic Product                                         |                 |                                                       |
| GHG                  | Greenhouse gas                                                 |                 |                                                       |
| GWP                  | Global warming potential                                       |                 |                                                       |
| HFC                  | Hydrofluorocarbons                                             |                 |                                                       |
| HVAC                 | Heating, Ventilation, and Air Conditioning                     |                 |                                                       |
| ICE                  | Internal Combustion Engine vehicle                             |                 |                                                       |
| IPCC                 | Intergovernmental Panel on Climate Change                      |                 |                                                       |
| kWh                  | Kilowatt-hour                                                  |                 |                                                       |
| LEED                 | Leadership in Energy and Environmental Design                  |                 |                                                       |
| LEV                  | Low emission vehicle                                           |                 |                                                       |
| LIDAC                | Lower Income and Disadvantaged Community                       |                 |                                                       |
| MWH                  | Megawatt hour – 1,000 Kilowatt-hours                           |                 |                                                       |
| MSW                  | Municipal Solid Waste                                          |                 |                                                       |
| MT                   | Metric ton equivalent to 1,000 kg (also known as Metric Tonne) |                 |                                                       |
| MMT                  | Million Metric tons                                            |                 |                                                       |
| MMBTU                | Million British Thermal Units                                  |                 |                                                       |
| MT CO <sub>2</sub> e | Metric tons of carbon dioxide equivalent                       |                 |                                                       |
| NGO                  | Non-Governmental Organization                                  |                 |                                                       |
| N <sub>2</sub> O     | Nitrous Oxide                                                  |                 |                                                       |
| NO <sub>x</sub>      | Nitrogen Oxides                                                |                 |                                                       |
| NOAA                 | National Oceanic and Atmospheric Administration                |                 |                                                       |

## **A**

### **Accessory Dwelling Unit (ADU)**

Accessory dwelling unit means a second dwelling unit contained within a single-family dwelling or within a detached building located on the same lot as a single-family dwelling.

### **Action**

Specific tasks set out to realize the objectives and methods highlighted in a given plan.

### **Activity Data**

Information regarding the scale of human actions that lead to emissions or removals within a specified timeframe. This includes data like energy consumption, metal production, land coverage, management procedures, and usage of lime, fertilizers, and waste generation.

### **Adaptation**

Refer to "Climate Readiness or Resilience"

### **Adaptive Capacity**

The combination of societal, technological, and monetary abilities that individuals or groups possess to initiate and sustain actions against climate change.

### **Aerosols**

Airborne particles, either solid or liquid, typically ranging between 0.01 and 10 micrometers. These particles, which can be of natural or human-made origin, can persist in the atmosphere for extended periods. They can affect climate by directly interfering with radiation or indirectly by influencing cloud properties.

### **Afforestation**

The process of establishing forests on lands that weren't previously forested.

### **Air Pollutant**

Any substance, either originating from human activities or naturally, present in the atmosphere that might have detrimental impacts on humans, fauna, flora, or materials.

### **Anthropogenic**

In relation to greenhouse gas records, "anthropogenic" denotes emissions and removals

directly stemming from human actions or from natural processes influenced by human activities.

## **Atmosphere**

The layer of gases encasing the Earth. It mainly consists of nitrogen and oxygen, along with trace gases like argon, helium, and certain greenhouse gases like carbon dioxide and ozone. The atmosphere also encompasses varying amounts of water vapor and contains other components like clouds and aerosol particles.

## **B**

### **Baseline Emissions**

A reference point, either through measurement, calculation, or a specific timeframe, for making comparisons. It represents emission levels in scenarios devoid of policy changes or project implementations. Such evaluations are crucial to gauge the impact of emissions-reducing measures.

### **Base Year**

The initial year used for data gathering. Emission-reducing goals are often set with this year as a reference.

### **Beneficial Electrification**

Beneficial electrification is the process of replacing fossil fuels with electricity to reduce energy costs and greenhouse gas emissions. It can be applied to many sectors, including transportation, residential buildings, and commercial buildings.

### **Biogenic**

Derived from the biological activities of living entities. The term "biogenic" exclusively pertains to recently formed biological materials. The IPCC suggests categorizing peat as fossil carbon due to its lengthy replacement cycle.

### **Biogeochemical Cycle**

The continuous transfer of essential chemicals, crucial for life, within Earth's systems, including carbon, nitrogen, oxygen, and phosphorus.

### **Biomass**

Refers either to (1) the combined weight of all living organisms within a designated area or species, usually represented as dry weight or (2) Organic substances originating from or recently derived from

living beings, excluding peat, and encompasses derived products and waste.

#### **Biomass Waste**

Biological, non-fossil substances of biological origin that are either residual or discarded. This definition includes biogenic municipal waste, landfill gas, and other forms of biomass but excludes certain fuels and biofuels. EIA's data on "biomass waste" also count energy crops produced specifically for power generation.

#### **BIPOC**

Defined as "Black, Indigenous, and people of color", this U.S.-specific term emphasizes the experiences of Black and Indigenous communities, showcasing or influencing the broader socio-economic dynamics encountered by all non-white individuals.

#### **Black Carbon**

A type of aerosol characterized based on its capacity to absorb light, its chemical reactivity, and/or thermal resistance; comprises elements like soot and charcoal.

#### **Blue Carbon**

Carbon that's absorbed and retained by coastal ecosystems and wetlands, aiding in countering climate change impacts.

#### **British Thermal Unit (BTU)**

A conventional measure of thermal energy, representing the energy needed to elevate the temperature of a pound of water by a single degree Fahrenheit.

#### **Business As Usual Forecast (BAU)**

The Intergovernmental Panel on Climate Change (IPCC) describes this as the predicted emission levels if upcoming trends emulate historical ones and no additional policy amendments are enacted. This projection presumes no further emission-curbing actions will be adopted beyond existing or committed measures. BAU forecasts do include anticipated reductions resulting from existing requirements or commitments, such as federal vehicle fuel efficiency standards and electric utility carbon-reduction commitments, which are outside the scope of this plan.

## **C**

### **Carbon Cycle**

The systematic flow and storage of carbon across different reservoirs. This involves four primary carbon storage areas: the atmosphere, the terrestrial environment (including freshwater systems), oceans, and sediments (which encompass fossil fuels). The carbon exchanges between these reservoirs are driven by a mix of chemical, physical, geological, and biological factors. Though the ocean holds a significant amount of near-surface carbon, its exchange with the atmosphere is relatively slow.

### **Carbon Dioxide (CO<sub>2</sub>)**

A gas found naturally in the environment, but also produced from burning fossil fuels, biomass, through land-use alterations, and various industrial activities. As the main human-induced greenhouse gas, it impacts the Earth's ability to reflect heat. Other greenhouse gases are often measured relative to CO<sub>2</sub>, which has a Global Warming Potential set at 1.

### **Carbon Dioxide Equivalent (CO<sub>2</sub> e)**

A standard for comparing the emissions from different greenhouse gases based on their potential to warm the planet. It's determined by equating the amount of a gas emitted to the amount of CO<sub>2</sub> that would have the same global warming impact.

### **Carbon Disclosure Project (CDP)**

A global initiative allowing organizations and cities to publicly share their environmental impacts, notably related to climate risks. CDP stands as one of the recognized disclosure platforms endorsed by GCoM.

### **Carbon Emissions**

The process of releasing carbon dioxide into the atmosphere, primarily through human activities like burning fossil fuels for energy.

### **Carbon Equivalent (CE)**

A metric for comparing emissions from various greenhouse gases based on their capacity to influence global warming. Carbon equivalents are derived from carbon dioxide equivalents using a specific conversion factor related to molecular weights.

### **Carbon Free**

Activities, systems, or products that don't emit carbon dioxide or other greenhouse gases. Often



associated with sustainable or renewable energy discussions, not every "carbon free" source is renewable. For instance, while both wind and nuclear energy are carbon-free, only wind is renewable.

### **Carbon Intensity**

The ratio of carbon emitted for every unit of energy used. A typical measure of this is the carbon weight per British thermal unit (Btu) of energy. When considering a single fuel type, carbon intensity and the emission coefficient are the same. With multiple fuels, it's an aggregate value.

### **Carbon Neutral / Carbon Neutrality**

Achieving a balance where the amount of CO<sub>2</sub> produced annually is equal to the amount removed or offset, leading to net-zero CO<sub>2</sub> emissions by a specific date. Carbon Neutrality is also sometimes applied to all greenhouse gas emissions. In those instances the term is sometimes used interchangeably with "Net Zero" or "Climate Neutral"

### **Carbon Offsets**

Mechanisms to counterbalance carbon dioxide or other greenhouse gas emissions by funding equivalent reductions elsewhere. They are quantified in metric tonnes of CO<sub>2</sub> -equivalent and can be traded to neutralize emissions from an entity's operations.

### **Carbon Sinks**

Natural environments, such as forests or oceans, recognized for their ability to absorb and store carbon dioxide from the atmosphere.

### **Carbon Sequestration**

The process of capturing and storing CO<sub>2</sub>, either in oceans, terrestrial environments like forests and soils, or in geological formations underground.

### **Chlorofluorocarbons (CFCs)**

Gases, regulated under the 1987 Montreal Protocol, used in several applications like refrigeration and air conditioning. Since they don't break down in the lower atmosphere, they reach the upper atmosphere and can deplete ozone. Their usage is being phased out in favor of alternative compounds, some of which are greenhouse gases under the Kyoto Protocol.

### **Circular Economy**

A sustainable economic model that deviates from the traditional linear approach (produce, use, discard) by focusing on reducing resource inputs and waste. It emphasizes durable product design, repair, reuse, and recycling to minimize waste.

### **Clean Energy**

Clean, or "carbon-free," energy is electricity produced by facilities that do not release greenhouse gases, like carbon dioxide, during the generation process.

### **Climate**

Often described as the "typical weather" of an area, climate is a statistical representation of weather patterns over extended periods, typically 30 years as per World Meteorological Organization (WMO) standards. It encompasses averages and variability of factors like temperature and precipitation. On a broader scale, climate is the comprehensive state of the climate system, including statistics.

### **Climate Adaptation or Resilience**

The ability of ecosystems or communities to anticipate, stand against, respond, and recover from disruptive events. It involves adjusting to changing climate conditions to lessen risks and vulnerabilities.

### **Climate Action Plan**

A comprehensive strategy detailing steps that a municipality, business, or government will take to decrease greenhouse gas emissions and prepare for climate change, fostering sustainable and resilient growth.

### **Climate Change**

Any significant, lasting change in the average or variability of climate conditions over extensive periods. It can stem from natural processes, persistent changes in atmospheric composition due to human activities, or alterations in land use.

### **Climate Hazard**

A climate event or situation that can negatively affect human health, resources, or livelihoods, encompassing sudden shifts in climate systems like heavy rainfall or prolonged droughts.

**Climate Migration**

The relocation of individuals due to the effects of climate change impacting their way of life or degrading their living conditions. This can result from changing water supplies, altered agricultural yields, or factors like rising sea levels and increased storm intensity.

**Climate Model**

A mathematical representation used to simulate the key components of climate, including the atmosphere, oceans, land, and ice. These models are used to forecast potential future climate changes.

**Climate Neutral / Climate Neutrality**

Achieving a balance where the amount of all GHG emissions produced annually is equal to the amount removed or offset, leading to net-zero GHG emissions by a specific date. "Climate Neutral" is sometimes used interchangeably with "Carbon Neutral", however, "Carbon Neutral" often interpreted as addressing CO<sub>2</sub> emissions only, whereas "Climate Neutral" is intended to address all GHG gases.

**Climate Scenario**

A structured and logical narrative of potential future climatic conditions, built on a set of assumptions about potential future events.

**Climate Risk**

The potential negative outcomes due to climatic changes, where valuable assets are at risk. The risk is calculated based on the likelihood of certain climate events or changes happening and the potential impact of those changes. It is a product of the system's vulnerability and the climate hazards faced.

**Climate Vulnerability**

The extent to which a system is at risk from adverse climate changes, including climate variability and extremes. It depends on how exposed the system is to these changes, its inherent sensitivity, and its ability to adapt. Vulnerability can be described as the potential negative impact minus the system's adaptive capacity.

**Climate Vulnerability Assessment**

An analysis aiming to pinpoint and categorize the threats posed by climate change. It guides the creation of strategies to address these threats and

can cover diverse areas like food security, socio-economic factors, and extreme weather patterns.

**Co-Benefit**

Additional advantages or benefits (e.g., health, economic, societal) that arise indirectly from climate adaptation and mitigation measures.

**Co-generation**

A facility or system that simultaneously and efficiently produces multiple forms of energy, usually heat and power, in an integrated manner.

**Community Choice Aggregation (CCA)**

CCA programs, or sometimes known as "Community Power Aggregation", empower local governments to source power for their citizens, businesses, and municipal facilities from alternative providers, while still utilizing the distribution services of their existing utilities. Setting up a CCA generally needs state-level legislation. For more details, one can visit EPA's dedicated CCA website: [EPA's CCA webpage <https://www.epa.gov/green-power-markets/community-choice-aggregation> ]

**Combined Heat and Power (CHP)**

A system designed to concurrently generate electricity and useful heat, aiming for optimal energy use. Some utilities might sell the heat produced for public use, while certain industries might sell surplus electricity to other businesses or utility companies.

**Community Power Aggregation**

Refer to "Community Choice Aggregation"

**Community Solar / Community Solar Garden (CSG)**

Shared solar installations that allow community members to benefit from solar energy without installing panels on individual properties. Participants receive bill credits based on their share of the generated power. Generally, the electricity from community solar farms is priced lower than traditional utility rates.

**Complete Streets**

A street design concept that ensures streets are made to accommodate all users safely and efficiently, regardless of their mode of transportation or age.

**Consistency**

Ensuring that an inventory remains uniform in its methodologies and data over time. If the same methods and datasets are consistently applied over years, then the inventory is considered consistent.

**Continuous Emission Monitor (CEM)**

A monitoring system placed within smokestacks or other emission sources that continuously measures and reports air emissions.

**Cool Roof**

Roofing materials engineered to reflect more sunlight and absorb less heat, thereby reducing the heat transferred to the building or its surroundings.

**Cool Pavement**

Pavement materials designed to reflect sunlight and decrease heat absorption, minimizing heat transfer to the nearby environment.

**Criteria Air Pollutant**

Specific air pollutants for which permissible exposure levels are determined, and corresponding air quality standards are established. Examples include carbon monoxide, ozone, and various particulates. The term arises from the U.S. EPA's obligation to define these pollutants and their impacts on health and the environment. Standards can be reviewed and updated based on new scientific information.

**D****Decarbonization**

The transition towards reducing carbon emissions by adopting cleaner energy sources, enhancing energy efficiency, or capturing and storing released carbon. The ultimate aim is to minimize the climate impact and move towards a carbon-neutral society.

**Deforestation**

The conversion of forested areas into non-forest uses. Deforestation is often linked to the amplified greenhouse effect for two main reasons: the combustion or decay of wood releases carbon dioxide, and the removed trees no longer absorb atmospheric carbon dioxide through photosynthesis.

**Demand Side Management (DSM)**

Initiatives designed to modify consumer energy consumption patterns using methods like education

and financial incentives. DSM seeks to reduce energy consumption, particularly during peak demand periods, and shift usage to times when demand is typically lower.

**Direct Current Fast Charger (DCFC)**

DCFC charging is designed to deliver more power at faster speeds than Level 2 chargers with outputs ranging from 50 kW to 350 kW. They can recharge an EV battery to 80% in anywhere from 15 minutes to 45 minutes, depending on the vehicle's voltage capacity. DCFC is also sometimes known as "Level 3 charging", or "Rapid Charging".

**Distillate Fuel Oil**

A category of petroleum products obtained through standard distillation processes. This encompasses diesel fuels and fuel oils, including types like No. 1, No. 2, and No. 4 diesel fuel. These products are used in various engines, from road vehicles to trains and agricultural equipment. Additionally, No. 1, No. 2, and No. 4 fuel oils are typically employed for heating spaces and generating electricity.

**District Heating**

A system that distributes heat, generated at a centralized point, via a network of pipes to provide heating for homes and businesses in a specified area or community.

**E****Ecosystem Services**

The benefits ecosystems offer to human welfare. These benefits range from tangible resources like water and food to services like air purification, flood control, and climate stabilization.

**Electric Vehicle (EV)**

A vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source. An EV includes both a vehicle that can only be powered by an electric motor that draws electricity from a battery (all-electric vehicle) and a vehicle that can be powered by an electric motor that draws electricity from a battery and by an internal combustion engine (plug-in hybrid electric vehicle).

**Electric Vehicle Supply Equipment (EVSE)**

The infrastructure that allows electric vehicles to charge from an electricity source. It's also known as

an EV charging station, EV charger, or charging dock. EVSE takes electrical power from the grid and transfers it to the vehicle's battery.

**Emissions**

The act of discharging certain substances, often gases in the context of climate change, into the environment.

**Emission Factor**

A value that signifies the amount of a gas emitted or removed per unit of activity. This coefficient is usually derived from a collection of measurement data and provides a representative emission rate for a set of specific conditions.

**Emission Inventory**

A calculation of the total pollutants released into the atmosphere from various significant sources, measured over a defined period, such as daily or annually.

**Emission Rate**

The quantity of a specific pollutant released over a set duration, commonly expressed in units like tons per year.

**Energy Burden**

The fraction of a household's total income spent on energy costs. An "high" energy burden is identified when energy costs comprise 6% or more of the household income, while it's deemed "severe" if above 10%.

**Energy Savings / Energy Efficiency**

Refers to the sustainable reduction in the amount of energy consumed for the same level of output or performance. For instance, a modern heater that requires less energy to provide the same warmth results in energy efficiency improvements.

**Energy Tariff**

A pricing structure, or utility tariff, that dictates how consumers are charged by energy providers for their electric or gas consumption. Energy tariffs are subject to government approval and review.

**Environmental Justice**

The equitable treatment and active participation of all individuals, regardless of their race, ethnicity,

income, or origin, in the processes related to environmental laws, policies, and regulations.

**Equity**

Being just and fair in treatment, acknowledging that people have diverse circumstances and providing them with the necessary resources and opportunities to achieve equal outcomes. In terms of climate change, equity encompasses both shielding from environmental hazards and ensuring access to environmental benefits, irrespective of socio-economic factors.

**F****Federal Emergency Management Agency (FEMA)**

A federal agency that leads the country's response to disasters, including natural disasters, man-made incidents, and terrorist events.

**Fluorocarbons**

Molecules made up of carbon and fluorine, which can also include elements like hydrogen, chlorine, or bromine. Some well-known types are chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

**Flux**

(1) Materials, like limestone and dolomite, used to moderate the heat or energy demands of mineral processing, like metal smelting. They can also function as agents to produce slag. (2) The rate or volume of a liquid or gas moving across a specific area over time, such as the "CO<sub>2</sub> absorption rate by forests".

**Fossil Fuel**

Deposits of hydrocarbons formed from ancient organic matter, including coal, oil, and natural gas.

**Fuel Combustion**

The intentional burning of materials in a device designed to provide heat or mechanical energy. This process can be for direct application or use elsewhere.

**Fuel Switch (see also "Beneficial Electrification")**

The process of transitioning from one energy source to another, commonly from non-renewable sources

like fossil fuels to renewable ones like wind or solar, to reduce both costs and emissions.

#### **Fugitive Emissions**

Unintentional leaks of gases from surfaces such as seals or underground pipelines due to deterioration or faults.

#### **G**

##### **Geologic Carbon Sequestration**

The practice of capturing CO<sub>2</sub>, often from sources like coal-powered plants, and injecting it deep underground for storage. With careful site selection and management, this approach has potential in reducing atmospheric CO<sub>2</sub> levels.

#### **GHG**

Refer to "Greenhouse Gas"

##### **Global Environmental Change**

Significant, accelerated alterations to Earth's natural systems, encompassing climate shifts, biodiversity loss, resource depletion, pollution, and other large-scale environmental disruptions.

##### **Global Warming**

The average rise in atmospheric temperature near the Earth's surface and within the troposphere, which can lead to shifts in global climate. This warming can arise from both natural phenomena and human activities. Typically, "global warming" is used to refer to the temperature increase resulting from the enhanced emissions of greenhouse gases due to human actions. See also Climate Change.

##### **Global Warming Potential (GWP)**

An index that calculates the radiative effects of greenhouse gases, considering their ability to trap heat compared to carbon dioxide over a specified timeframe. The GWP evaluates the cumulative effect of these gases in the atmosphere based on their longevity and their potential to absorb infrared radiation. The Kyoto Protocol uses GWPs derived from 100-year timespan emissions.

##### **GCoM Global Covenant of Mayors**

GCoM represents the world's largest alliance dedicated to urban climate leadership. Comprising over 10,000 city and local governments, GCoM's goal is to encourage and support action on climate and energy at the grassroots level globally.

##### **Green Streets**

An urban design approach that incorporates plant life, soil, and engineered structures to manage, slow, and purify stormwater runoff from surfaces that don't absorb water.

##### **Greenhouse Effect**

A natural process where specific gases in the atmosphere trap heat near the Earth's surface, leading to a warming effect. If concentrations of these greenhouse gases increase, this effect intensifies, leading to a gradual increase in the Earth's temperature.

##### **Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories**

A comprehensive and transparent framework adopted globally for cities and local governments to consistently measure, calculate, and report their greenhouse gas emissions.

##### **Greenhouse Gas**

A gas that can absorb and emit infrared radiation, contributing to the greenhouse effect. Some common greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxide, and certain industrial gases like hydrofluorocarbons.

##### **Greenhouse Gas Reduction**

Efforts aimed at diminishing the amount of greenhouse gases released into the atmosphere, thereby mitigating potential adverse climate impacts.

##### **Green Infrastructure**

Green infrastructure encompasses a diverse array of green spaces and features, both in urban and rural areas, that serve to enhance the well-being of communities and provide environmental advantages. It extends beyond traditional open spaces like parks and playing fields to include a range of measures that use plant or soil systems, permeable pavement and surfaces, stormwater harvest and reuse, or landscaping to manage stormwater and reduce flows to sewer systems or to surface waters. This approach helps counter water pollution in urbanized areas caused by stormwater carrying contaminants.

**Green Roof**

A roof that incorporates vegetation over a waterproof layer. Green roofs can be categorized as extensive, intensive, or semi-intensive based on the depth of planting medium and amount of maintenance they require. They offer benefits like mitigating the heat island effect, managing stormwater, and enhancing green space in urban areas.

**Green Wall**

This is a vertical extension of the green roof concept, where vegetation is grown on building exteriors.

**Gross Domestic Product (GDP)**

The total value of goods and services produced within a country's borders in a specific timeframe, typically a year. It doesn't account for the depreciation of assets or depletion of natural resources.

**Groundwater**

Water located beneath the Earth's surface, filling the spaces between soils and rocks.

**H****Halocarbons**

A group of organic compounds composed partially of halogens. They encompass chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), halons, and more. Many halocarbons have significant Global Warming Potentials and some also contribute to ozone layer depletion.

**Hazard**

The potential for an event, whether natural or human-induced, to cause harm to people, property, infrastructure, or the environment.

**Heat Island**

An urban area that exhibits higher temperatures than its surrounding rural areas due to human activities. This phenomenon is attributed to factors like heat-absorbing surfaces and structures. See also "Micro Heat Island".

**Heating, Ventilation, and Air Conditioning (HVAC)**

Systems that regulate and move heated and cooled air throughout buildings. HVAC systems are used to

improve air quality and maintain a comfortable indoor climate.

**Hydrocarbons**

Compounds made up of only hydrogen and carbon atoms. The term can also refer to petroleum compounds which might contain elements like sulfur, nitrogen, or oxygen. Unsaturated hydrocarbons contain either double or triple carbon-carbon bonds.

**Hydrofluorocarbons (HFCs)**

Molecules made up of hydrogen, fluorine, and carbon. These were developed as replacements for ozone-depleting substances and are used in a variety of industrial processes. While HFCs don't deplete the ozone layer, they are potent greenhouse gases with varying Global Warming Potentials.

**I****ICLEI Local Governments for Sustainability**

An association of local governmental entities focused on reducing carbon emissions and fostering sustainable urban growth. ICLEI members, along with a team of specialists, collaborate through capacity building, partnerships, and peer interaction to effect change towards urban sustainability.

**Impact**

A consequence or effect that arises due to climate change on any system's structure or functioning. Examples include severe heatwaves, sea-level rise, or alterations in rainfall causing floods or droughts.

**Indicator**

A numerical representation highlighting a specific facet of vulnerability to climate change. For instance, a forecasted alteration in annual average temperature or the count of species at risk.

**Internal Combustion Engine Vehicle (ICE)**

Vehicles which ignite and combust fuel within an internal combustion engine. Fuels used in ICE vehicles are typically gasoline and diesel.

**Intergovernmental Panel on Climate Change (IPCC)**

Founded in 1988 by the World Meteorological Organization and the United Nations Environment Programme, the IPCC is tasked with evaluating scientific and technical information related to all aspects of climate change. The IPCC informs



governments about the state of knowledge of climate change by examining all the relevant scientific literature on the subject. The IPCC is scientific entity and is not a legislative body.

## **K**

### **Kilowatt Hour (kWh)**

A unit representing electrical energy consumption, equivalent to using 1,000 watts continuously for an hour.

### **Kyoto Protocol**

A supplement to the United Nations Framework Convention on Climate Change (UNFCCC) ratified in Kyoto, Japan, in 1997. This protocol incorporates legally binding obligations to reduce greenhouse gas emissions. Countries listed in the Protocol's Annex B pledged to reduce their emissions of six major greenhouse gases by at least 5% from 1990 levels between 2008 and 2012. The Protocol became effective on February 16, 2005.

## **L**

### **Land Use and Land Use Change**

Land use pertains to the human activities performed on a certain type of land cover. Meanwhile, land use change denotes alterations in how land is managed or utilized by humans, which can influence land cover. Changes in land cover and land use can affect climate properties such as surface albedo and greenhouse gas sources/sinks, potentially influencing climate on various scales.

### **Leadership in Energy and Environmental Design (LEED)**

LEED is a certification system for evaluating and promoting sustainable building and design practices. Developed by the U.S. Green Building Council (USGBC), LEED provides a framework for environmentally responsible construction, aiming to improve energy efficiency, reduce water usage, and decrease greenhouse gas emissions. Buildings can earn LEED certification at different levels (Certified, Silver, Gold, or Platinum) based on their performance across several criteria, including energy use, indoor environmental quality, and sustainable site development.

### **Level 1 Charger**

An electric vehicle charging device that provides charging through a common residential 120-volt

(120V) AC outlet. Level 1 chargers can take 40-50+ hours to charge a BEV to 80 percent from empty and 5-6 hours for a PHEV.

### **Level 2 Charger**

An electric vehicle charging device with a higher AC charging capacity than Level 1 chargers. They typically operate at 240V for residential use or 208V for commercial use. Level 2 chargers can charge a BEV to 80 percent from empty in 4-10 hours and a PHEV in 1-2 hours.

### **LIDAC Communities**

Low Income / Disadvantaged Communities (LIDACs): Communities where residents have low incomes, limited access to resources, and face disproportionate environmental or climate burdens.

### **Living Streets**

"Living streets" amalgamate the principles of green streets and complete streets while emphasizing the enhancement of residents' life quality in urban areas.

## **LULUCF**

An abbreviation for "Land Use, Land Use Change, and Forestry," a category in greenhouse gas inventory documentation.

## **M**

### **Megawatt Hour (MWH)**

An electrical energy unit denoting the consumption of a million watts over an hour.

### **Methane (CH<sub>4</sub>)**

A hydrocarbon that acts as a greenhouse gas with a global warming potential estimated to be 28 times stronger than carbon dioxide. Methane arises from several sources, including decomposition in landfills, flooded rice fields, digestion in animals, and fossil fuel production. The GWP value is sourced from the IPCC's Fifth Assessment Report (AR5).

### **Metric Ton**

Equivalent to a Megagram or 1,000 kilograms, a metric ton, sometimes referred to as a metric tonne, is a standard international unit for mass.

### **Micro Heat Island**

Smaller localized zones within urban environments experiencing elevated temperatures in comparison

to surrounding areas. Such hotspots might include asphalt roads, non-green roofs, or barren parking lots. The microclimate and unique built environment conditions heavily influence these micro heat islands. Refer also to "Heat Island".

**Million Metric Tons (MMT)**

A standard measurement often utilized in greenhouse gas documentations, equivalent to a Teragram (Tg).

**Mitigation**

Efforts to reduce or curb the extent or speed of long-term climatic warming and its associated effects. Mitigation typically encompasses the reduction of human-induced greenhouse gas emissions.

**Mobile Sources**

Transportation means that emit pollutants, including cars, motorbikes, trucks, off-road vehicles, boats, and planes.

**Mode Share**

The proportion of travelers opting for a specific mode of transportation. Mode share serves as a vital metric when shaping sustainable transportation strategies in a city or region, as it highlights the prevalent use of different transport options. This metric showcases the effectiveness of infrastructures, policies, investments, and urban designs in facilitating various transport modes.

**Model**

A model serves as a numerically-based representation of real-world scenarios, often omitting or simplifying certain details to emphasize core elements.

**Municipal Power Aggregation**

Refer to "Community Choice Aggregation."

**Municipal Solid Waste (MSW)**

Waste originating from homes and certain non-hazardous industrial, institutional, and commercial sources. Typically, this waste is directed to municipal disposal sites.

**N****National Oceanic and Atmospheric Administration (NOAA)**

A US agency responsible for weather forecasting, monitoring oceanic and atmospheric conditions, charting the seas, conducting deep-sea exploration, and managing fishing and protection of marine mammals and endangered species in the US exclusive economic zone.

**Natural Sources**

Emission sources that aren't human-induced, including biological, geological sources, wildfires, and dust carried by the wind.

**Net Energy Metering (NEM)**

Net Energy Metering, commonly referred to as Net Metering, enables residential and business consumers generating their own solar energy to sell their surplus electricity back to the grid. The rate schedule for NEM determines compensation for this electricity. While net metering laws exist in many states, in others, utilities may offer these programs either voluntarily or due to regulatory decisions.

**Net Zero Emissions (NZE)**

Pertains to a community, business, institution, or building that produces the same amount of energy it consumes through renewable and GHG emission-free sources, resulting in zero net emissions over a year. With a net zero target, only a small portion of residual emissions, no more than 5-10%, should be offset using high-quality carbon removal methods.

**Nitrogen Fixation**

The process where atmospheric nitrogen gas transforms into forms beneficial for plants and other organisms, achieved through lightning, bacteria, and blue-green algae. This process is integral to the nitrogen cycle.

**Nitrogen Oxides (NOx)**

Gaseous compounds comprising nitrogen and oxygen. These gases emerge from vehicle exhaust and power generation. As they can form photochemical ozone, impact visibility, and harm health, they're deemed pollutants.

**Nitrous Oxide (N<sub>2</sub>O)**

A potent greenhouse gas with a warming potential 265 times greater than carbon dioxide. Key sources

encompass soil management practices, fossil fuel burning, and biomass combustion. Its global warming potential is derived from the IPCC's Fifth Assessment Report (AR5).

#### **Non-Governmental Organization (NGO)**

A group that works independently of governments to improve social conditions. NGOs are often non-profit institutions that are established at the community, national, or international level.

### **O**

#### **Ozone (O<sub>3</sub>)**

A gaseous compound composed of three oxygen atoms. In the troposphere, ozone forms naturally and through photochemical reactions involving human-produced gases. In the stratosphere, it forms when solar UV radiation interacts with diatomic oxygen. While tropospheric ozone is a greenhouse gas, stratospheric ozone is vital for blocking harmful UV radiation.

#### **Ozone Depleting Substances (ODS)**

Compounds causing the depletion of the stratospheric ozone layer. This category includes substances like CFCs, HCFCs, halons, and more. These substances, predominantly stable in the troposphere, degrade in the stratosphere under UV radiation, releasing ozone-depleting chlorine or bromine.

### **P**

#### **Perfluorocarbons (PFCs)**

Man-made compounds solely composed of carbon and fluorine. Used as substitutes to ozone-depleting substances and emitted during certain industrial processes. Despite not depleting the ozone, they are formidable greenhouse gases. (IPCC's Fourth Assessment Report (AR4))

#### **Phantom Load**

Refers to the power consumed by electronic devices and appliances even when switched off. Devices drawing "phantom loads" constantly utilize electricity.

#### **Photosynthesis**

A biological process where plants absorb carbon dioxide to produce carbohydrates, releasing oxygen in the process. The mechanism varies based on

different atmospheric carbon dioxide concentrations.

#### **Plug-in hybrid electric vehicle (PHEV)**

A type of vehicle that combines features of both gasoline-powered and electric vehicles. PHEVs use batteries to power an electric motor, and another fuel, such as gasoline or diesel, to power an internal combustion engine or other propulsion source. PHEVs can charge their batteries through charging equipment and regenerative braking.

#### **Plug Load**

Refers to the energy consumption of devices plugged into electrical outlets. In offices, major plug loads include computers, printers, and copiers. As buildings become more energy efficient, the relative importance of plug loads increases.

#### **POC**

An acronym for "people of color" or "person of color", encompassing all non-white demographic groups. See also "BIPOC."

#### **Point Sources**

Specific locations emitting pollutants into the atmosphere, like industrial smokestacks.

#### **Power Purchase Agreement (PPA)**

A contract where one party, the generator, produces electricity, and the other, the buyer, agrees to purchase it. Individual or grouped customers can forge PPAs with energy developers. PPAs enable long-term renewable energy commitments and can serve as direct renewable energy investments.

#### **Property-Assessed Clean Energy (PACE)**

A financial structure allowing property owners to fund renewable energy and energy efficiency improvements. Eligible properties include residential, commercial, and industrial sites. Upgrades can be geared toward energy efficiency, renewable energy, and water conservation.

#### **Process Emissions**

These are emissions resulting from chemical transformations in industrial processes that are distinct from burning.

## **R**

### **RCP 8.5**

A Representative Concentration Pathway climate model frequently considered the climate model representing “business as usual” forecasts if global GHG emissions are not reduced and fossil fuels are continued to be used.

### **Radiative Forcing**

A shift in equilibrium between incoming sunlight and outgoing infrared radiation. Ordinarily, the Earth's incoming and outgoing radiations are almost balanced. However, the introduction of greenhouse gases captures more infrared radiation, reflecting it back to Earth's surface, leading to a warming effect.

### **Reforestation**

The act of reintroducing forests on lands that once held forests but were later repurposed.

### **Regeneration**

The process of reestablishing young trees, either naturally or through human intervention, typically preserving the existing forest type after the previous forest has been removed.

### **Renewable Energy**

Energy sourced from naturally renewable elements such as the sun, wind, water, and geothermal heat.

### **Renewable Energy Credits (RECs)**

Certificates representing the benefits and attributes of electricity generated from renewable sources. Each REC represents one megawatt-hour (MWh) of renewable electricity dispatched to the grid. The largest reduction in Evanston's emissions is attributed to REC purchases.

### **Representative Concentration Pathway (RCP)**

climate change scenarios to project future greenhouse gas concentrations. These pathways describe future greenhouse gas concentrations and have been formally adopted by the IPCC. There are a range of RCP climate models from RCP 2.6 to RCP 8.5 reflecting a range of potential human-made GHG emission scenarios. The numbers represent the expected change in radiative forcing through the end of the 21st century.

### **Residence Time**

The typical duration a single atom or molecule remains in a particular storage area. In the context of greenhouse gases, it generally refers to the duration a molecule lingers in the atmosphere.

### **Resilience / Resiliency**

The capacity to foresee, ready for, counteract, and promptly bounce back from climate-induced threats, ensuring minimal damage to society, economy, and natural settings.

### **Resilience Hub**

A resilience hub is a community-serving facility that supports residents and communities before, during, and after emergencies. Resilience hubs can also provide resources to support communities in reducing greenhouse gas emissions.

### **Reservoir**

Either (1) a part of the climate system where a greenhouse gas or its precursor is housed; or (2) human-manipulated water bodies where significant variations in water area might occur due to water regulation.

### **Respiration**

A biological process where living entities transform organic substances into carbon dioxide, using up oxygen and releasing energy in the process.

### **Retro-commissioning**

A comprehensive approach to enhance a building's operational efficiency by ensuring its control systems operate optimally and align with the building's intended and actual usage.

### **Ride-share**

A system where individuals share transport means, usually through carpooling or joining a vanpool. Typically facilitated by a platform connecting drivers with potential riders.

## **S**

### **Scope 1**

Refers to emissions discharged directly within the city's boundaries due to fossil fuel combustion and the decomposition of waste in landfills and wastewater facilities.

**Scope 2**

Refers to emissions generated outside the city resulting from the city's consumption of electricity.

**Scope 3**

Pertains to emissions linked to local government functions that can be quantified and disclosed but don't fall under Scope 1 or 2. Examples include outsourced activities and commuting of employees.

**Short Ton**

A standard ton measurement in the U.S., equivalent to 2,000 lbs or about 0.907 metric tons.

**Sink**

Any activity, process, or mechanism responsible for removing a greenhouse gas, aerosol, or their precursor from the atmosphere.

**Social Cost of Carbon**

An estimation of the economic damage due to climate change effects, calculated as the monetary value of total damages arising from emitting a single ton of carbon dioxide.

**Solar Radiation**

The sun's emitted electromagnetic waves. This radiation, also known as shortwave radiation, has wavelengths mainly in the visible spectrum due to the Sun's temperature.

**Solar Photovoltaic (PV)**

A system that directly transforms sunlight into electricity using semiconductors, primarily silicon. Suitable for homes, businesses, and large-scale operations, solar PV systems can be roof-mounted, ground-based, or integrated into building structures to produce renewable energy.

**Source**

Any process or activity that introduces greenhouse gases, aerosols, or their precursors into the atmosphere.

**Stationary Sources**

Fixed locations like power stations, manufacturing plants, and refineries that emit pollutants into the air.

**Strategy / Strategic Goal**

Detailed directions built upon the foundation of the sustainability vision and GHG reduction objectives that guide future policy decisions, community investments, and initiatives.

**Sulfur Dioxide (SO<sub>2</sub>)**

A molecule made of one sulfur atom and two oxygen atoms. Released both naturally and by human activity, it can transform into sulfate aerosols in the atmosphere. These aerosols can cool the Earth's surface, contribute to acid rain, and decrease visibility.

**Sulfur Hexafluoride (SF<sub>6</sub>)**

A colorless gas that mixes well with alcohol and ether but less so with water. It's an extremely potent greenhouse gas, with a global warming potential much higher than carbon dioxide (CO<sub>2</sub>). SF<sub>6</sub> is predominantly used in electricity transmission and as an insulator in electronics. Its global warming potential is derived from the IPCC's Fourth Assessment Report (AR4). It is a potent greenhouse gas with a warming potential 23,500 times greater than carbon dioxide.

**T****Terrestrial Carbon Sequestration**

The process where trees, plants, and crops absorb carbon dioxide (CO<sub>2</sub>) from the atmosphere through photosynthesis and store it as carbon in biomass (like tree stems, branches, and roots) and soil. This stored carbon creates "sinks" which counteract emissions when the absorbed carbon is greater than the released carbon over time.

**Therm**

A unit of energy equivalent to 100,000 British Thermal Units, roughly akin to the energy in 100 cubic feet of natural gas. Commonly used to gauge natural gas consumption for billing.

**Total Organic Gases (TOG)**

Organic gases that encompass both reactive and relatively non-reactive compounds, such as methane.

**Transparency**

Clear presentation of methodologies and assumptions used in an inventory so users can easily replicate and evaluate the inventory. Transparency is

crucial for effective communication and consideration of information.

### **Tree Bank**

A designated location, such as a school or public park, where property owners or developers may donate and plant a portion of zoning ordinance-required trees if planting them within their own project site is not practical.

### **Trend**

A measure of a quantity's change over time. A positive trend signifies growth, while a negative one indicates a decline. It's expressed in percentage or fractional terms concerning the quantity's initial value.

## **U**

### **Urban Tree Canopy**

The composition and traits of trees in urban settings.

### **U.S. Department of Energy (DOE)**

A federal agency that oversees the nation's nuclear infrastructure, energy policy, and funds scientific research in the field.

### **U.S. Environmental Protection Agency (EPA)**

A federal agency tasked with safeguarding human health and the environment. It offers technical support for recovery planning, long-term cleanup, and environmental surveillance. This includes assistance with public health infrastructure, such as wastewater treatment plants, and addressing threats through monitoring, assessment, and decontamination efforts.

## **V**

### **Vehicle Miles Traveled (VMT)**

Represents the distance traveled by vehicles, be it cars, trucks, or motorcycles. Each mile is counted as one vehicle mile, irrespective of the number of passengers.

### **Vision Zero**

A strategy focused on eliminating severe injuries and fatalities from traffic accidents, aiming to provide safe and equal mobility for all individuals.

## **Vulnerability**

The extent to which a system is exposed to, sensitive to, or unable to handle the adverse impacts of climate change. This encompasses:

- Exposure: The presence of assets or organisms in areas potentially adversely impacted by climate change.
- Sensitivity: The level at which assets or organisms are impacted by climate change.
- Adaptive capacity: The capability of systems, assets, or organisms to adjust to detrimental impacts.

## **W**

### **Water Vapor**

The predominant greenhouse gas present in the form of water in its gaseous state in the atmosphere. Water vapor is a natural part of the greenhouse effect. Its concentration is not significantly altered by human activities, but it amplifies the greenhouse effect due to positive feedback mechanisms. Water vapor also plays a vital role in climate regulation by forming clouds and precipitation.

## **Weather**

Weather represents the immediate atmospheric conditions at a specific time and place, while climate refers to the long-term average of these conditions in a particular region over an extended period. In simpler terms, weather is what you experience outdoors on any given day, while climate describes the typical weather patterns you'd anticipate for a particular season and location.

## **Z**

### **Zero Emission Vehicles (ZEV)**

A vehicle that doesn't release harmful pollutants during its operation. Examples include electric cars, hydrogen-fueled vehicles, and bicycles. These emissions, when released, can have detrimental effects on both the environment and human health.

### **Zero Net Energy Building (ZNEB)**

Also known as a Net-Zero Energy Building is one that is optimally efficient, and over the course of a year, generates renewable energy onsite equal to or greater than the total amount of energy consumed onsite.



**Zero Waste**

An approach focusing on the efficient utilization of resources through responsible production, consumption, and recovery. This means products, packaging, and materials are reused and recycled without causing harm to the environment or health, and without resorting to incineration or releases to land, water, or air.



# Appendix D

## Acknowledgements

We are deeply grateful for the community collaboration and input that went into this plan. Below are some of the main contributors that made the City of Falcon Heights' Climate Action Plan possible:

### City of Falcon Heights Project Lead

Hannah B. Lynch  
City of Falcon Heights,  
Community Development  
Coordinator / Planner

### Climate Action Planning Team

|                        |                                                         |                           |                                                                |
|------------------------|---------------------------------------------------------|---------------------------|----------------------------------------------------------------|
| Adam Keester           | Resident, Environment Commissioner                      | Mark Miazga               | Resident                                                       |
| Beth Mercer-Taylor     | Resident, Environment Commissioner                      | Megan Cunningham          | UMN Institute on the Environment Undergraduate Leaders Program |
| Colin Callahan         | City of Falcon Heights, Public Works Director           | Mike Dockry               | Resident                                                       |
| Daryl Richard Lawrence | Facilities Manager at the Bell Museum                   | Olivia Siebert            | City of Falcon Heights, Minnesota GreenCorps Member            |
| Erin McCabe            | Local business representative - Crocus Hill Acupuncture | Paula Mielke              | City of Falcon Heights, Council Member                         |
| Georgiana May          | Resident, California Ave. and Northome Block Group      | Pedro De Filippo Vannucci | Resident, Environment Commissioner                             |
| Gregory Goodwine       | Ramsey County                                           | Ron Eggert                | Resident, Former Mayor                                         |
| Janelle Barlan         | UMN Student, Institute on the Environment               | Sammy Nelson              | Gibbs Farm/Ramsey County Historical Society                    |
| Jen Schnabel Smith     | Resident                                                | Shirley A. Reider         | Resident                                                       |
| Jennie Betchwars       | Resident                                                | Susan Harding             | Resident                                                       |
| Kristen Swanson        | Resident                                                |                           |                                                                |

## Climate Action Plan Advisory Group

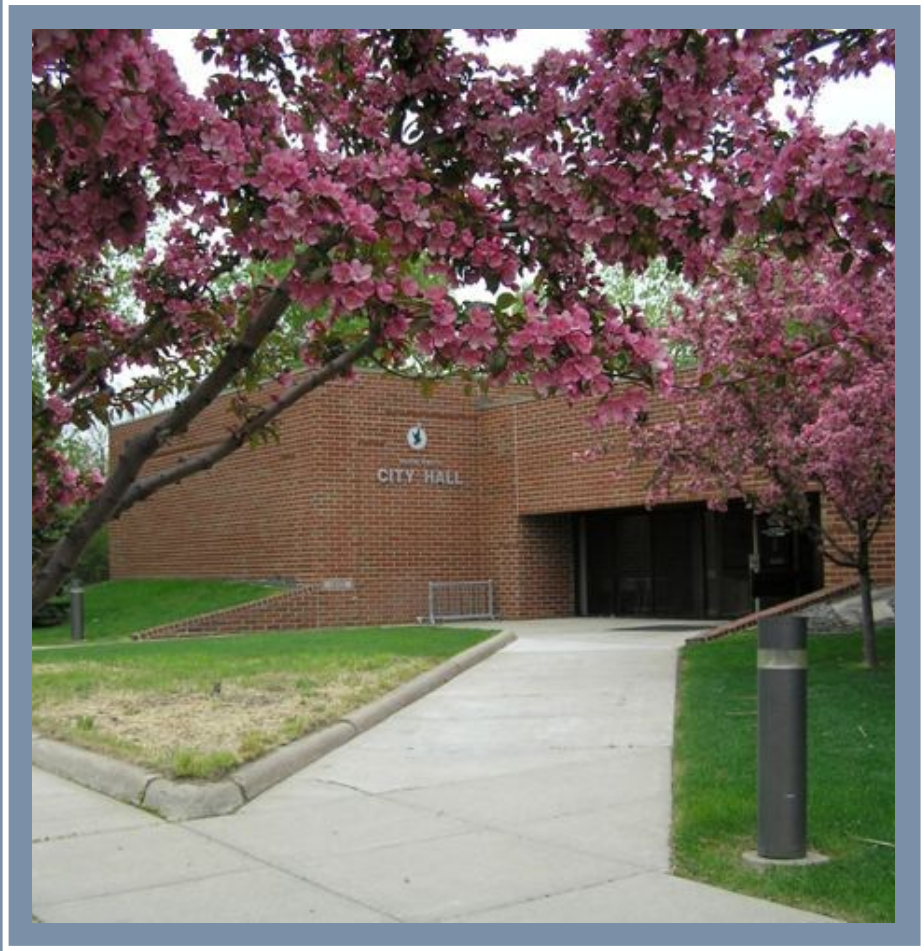
|                  |                                                                        |
|------------------|------------------------------------------------------------------------|
| Rachel Funke     | Capitol Region Watershed District                                      |
| Nate Zwonitzer   | Capitol Region Watershed District                                      |
| Kate Nelson      | University of Minnesota, Twin Cities Director of Campus Sustainability |
| Christine Noonan | Minnesota State Fair                                                   |
| Elisa Rasmussen  | Xcel Energy                                                            |
| Peter Lindstrom  | Clean Energy Resource Teams (CERTS)                                    |
| Deirdre Coleman  | Center for Energy and Environment                                      |

## Consultant Team

### Climate Action Planner:



Funding for this project was provided through a 2024 State of Minnesota Pollution Control Agency (MPCA) Local Climate Action Planning Grant



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|---------------------|----------------------------------|
| <b>Meeting Date</b> | May 7, 2025                      |
| <b>Agenda Item</b>  | Policy C2                        |
| <b>Attachment</b>   | See below                        |
| <b>Submitted By</b> | Jack Linehan, City Administrator |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Item</b>          | Review of State Fair Task Force Recommendations on ParkMobile Parking Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Description</b>   | <p>At the April 2<sup>nd</sup> workshop meeting, the City Council directed that a subgroup of the City Council and State Fair Task Force (SFTF) meet to develop recommendations for the SFTF to review at their April meeting. The subgroup presented the findings of their models at the April SFTF 16th meeting.</p> <p>Following the subgroup presentation at the April SFTF meeting, the task force made three recommendations to the City Council:</p> <ol style="list-style-type: none"> <li>1) For resident passes: <ol style="list-style-type: none"> <li>a. Use hang tag passes with one pass mailed to all eligible residential properties abutting designated Pay-by-Mobile parking streets, a second pass can be mailed to residents who request one via online form, and third and fourth passes may be provided upon completion of a hardship waiver form and staff approval. Approved 9-0.</li> </ol> </li> <li>2) Price the program to be \$25 for all parking zones – Hoyt to Roselawn, Snelling to Hamline. Approved 9-0.</li> <li>3) Making Albert, Pascal and Arona in the Northome neighborhood Parking by State Fair Resident Permit Only. Approved 9-0</li> </ol> <p>The City Council is requested to review these recommendations and provide direction to staff. Staff will include the proposed recommendations and final policy decisions on the program as part of the Wednesday, May 14<sup>th</sup> regular City Council meeting agenda. The proposed direction from the City Council will be sent to residents in email format on Friday, May 9th using our listserv. Additionally, the website has been updated to reflect this message and includes an updated FAQ based on the current status of the proposal as of Friday, May 2<sup>nd</sup>.</p> |
| <b>Budget Impact</b> | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Attachment(s)</b> | <ul style="list-style-type: none"> <li>• Proposal from State Fair Task Force</li> <li>• Review of Models from SFTF /City Council Subgroup</li> <li>• Updated FAQ 5.2.25</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                |                                                                                                                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Action(s)<br/>Requested</b> | Staff recommends the City Council review the proposals from the State Fair Task Force and provide direction to staff on how to proceed with the next steps in the program. |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## Recommendations from the State Fair Task Force based on discussion at April 16 meeting

### Key assumptions:

1. Safety for visitors and residents alike
2. Recommendations based in part on feedback of residents
3. In this initial roll-out, keep it simple and easy to understand for all involved
4. Cover expenses incurred by the City during the State Fair
5. Consistency with permit parking areas in other neighborhoods.

| Recommendation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Discussion Points                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b><i>Format for resident permit/parking pass, number of hang tags per household on impacted streets, distribution process</i></b></p> <p>Recommendation to provide one (1) hang-tag pass to be mailed to all <u>households on impacted streets</u>, with information on how to obtain a second one through online form , <u>mailing back a form, or other mechanisms determined by staff</u>. Residents can then request a 3rd and/or 4th pass by completing a hardship waiver form in-person at City Hall, reviewed by staff. Approved 9-0</p> | <p>The rationale is that hang tags allow residents to move parking permit among vehicles and will be easy for Parking Ambassadors to spot. SFTF also discussed having a unique identifier number on each tag, and re-using hang tags in the future using a dated sticker.</p> <p>Our approach here is _to "under promise/over deliver" by keeping the process as simple as possible while engaging residents in thinking about how many hang tags <u>they</u> need.</p> <p>The process for requesting additional passes is similar that currently used for parking permits in other parts of FH.</p> |
| <p><b><i>Pricing for those using Park Mobile</i></b></p> <p>Motion to make \$25 the cost city-wide. Approved 9-0</p>                                                                                                                                                                                                                                                                                                                                                                                                                                | <p>The rationale was to keep the program simpler in this first year to make communication of price clear to visitors, then gather data on use and visitor responses during the State Fair 2025. Because the implications for income associated with differential pricing across areas of FH are not easy to predict, the desire for simplicity was the primary motivation for a single pricing system.</p>                                                                                                                                                                                           |

***North/South Streets in Northome  
(Arona, Pascal and Albert)***

Motion to make Albert, Pascal and parts of Arona in the Northome neighborhood State Fair Parking by Resident Permit Only (to address alleyway access concerns). Approved 9-0.

- Hang-tag permits would apply. Staff would still mark alleyways distances to avoid obstructions.

In response to residents' concerns about the safety of exiting driveways and alleys on N/S streets in Northome during the State Fair, it was considered whether to eliminate visitor parking on the west side of Pascal and Albert streets where it is currently allowed. The SFTF suggested instead to consider designating the non-water side of these N/S streets be State Fair Permit Parking only, with the hang tag parking passes working as the permit on these streets.

Arona:

There are stretches on the east side of Arona, both south and north of Larpenteur, that are already permit parking only during the State Fair. In addition parking is currently allowed on the west side of Arona south of Larpenteur. These spots could be retained for residents in the townhomes and apartments.

\* FH Staff could contact apartment and townhome managers to discuss the best way to identify residents/households that may need parking on Arona.

We also noted residents' concerns about speeding, blowing stop signs, etc. on these streets. These concerns will not necessarily be resolved by resident-only parking. We request that the Council and City Administrator discuss such issues with SAPD.

### Report of budget model sub-group (May, Meyer, Prather, Wassenberg)

We compared budget models with made differing assumptions about the number of passes per resident household, the turn-over rates (how many times a spot might be used), number of parking places, and how much they are used.

NOTE: All of our discussions assumed that we would use hangtags. As per Council and other TF discussions, using hangtags would reduce the hassle to households, allow exchange of the resident parking passes within households and among neighbors, thus facilitating SF parties. We were not too concerned with fraud.

| More optimistic assumptions                       | Moderately optimistic assumptions                     |
|---------------------------------------------------|-------------------------------------------------------|
| Lower use north of Garden                         | Lower use north of Ruggles                            |
| Most residents do not use passes all day          | Most residents use passes all day                     |
| Residents use passes for 3 days of Fair           | On average, residents use passes 6 days of Fair       |
| All visitor parking places turn over one time/day | Half of visitor parking places turn over one time/day |
| > 800 parking places                              | ~ 700 parking places                                  |
| <b>Gross:</b>                                     | <b>Gross:</b>                                         |
| <b>\$200,000 - \$250,000</b>                      | <b>\$100,000 – 150,000</b>                            |

#### 1. We discussed how does variable pricing based on distance affect revenue?

We were mixed on whether to use differential pricing and what effect it would have on income. Possible effects are that it could drive traffic and parking north, \$25 is too much for driving so far north, how would we communicate the price, would this cost more for ParkMobile?

\*\* Task Force should make a recommendation and Council could decide.

#### 2. How many passes per household?

“Man on the street” estimates suggest that ~ 40% of residents need 0 – 2 hangtags, but that some need more.

**3. Distribution** - We discussed how many hangtags to give out initially (1 or 2) and how many should be available upon request (up to 3, 4?), and how to distribute these?

\*\* Our consensus was to send out 1 hangtag initially with the mailing about the program, allow residents to check a box on a postcard (or other means such as phoning) and get 1 more automatically.

- If a resident feels that they need more than 2, they request in person and explain their “hardship”.

\*\**An alternative* – mail out postcard, residents check whether they want 1 or 2, send it back to City Hall and we mail those. Those who want >2, come to City Hall and request these in person.

\*\* *We thought staff should pick what's easiest to administer.*

### **What action did the City Council take at the March 26 City Council meeting?**

- Following the public hearing at the March 26 City Council meeting, the City Council unanimously approved two motions:
  - o Approved Ordinance 25-01, which modifies Chapter 46 of City Code to include Sec 46-29 Establishment of Parking Zones using electronic payment systems (now referred to as “pay-by-mobile parking”).
  - o Approved Resolution 25-25, which authorizes the City to negotiate with ParkMobile to serve as the vendor for pay-by-mobile parking.

### **Did resident testimony during the public hearing make any impact on the proposal?**

- Yes, City Council Members commented during the discussion that resident concerns need to be further evaluated in the next steps, which will include:
  - o Amending the Administrative Manual Section on Parking (better known as the State Fair Guidelines—no lawn parking/vendors allowed, no hydrant side parking, etc.) to clarify:
    - How many resident passes each impacted household would be eligible for and who would be eligible.
    - How and in what format passes will be distributed (i.e. e-passes, hang tags or other).
    - Whether passes are tied to a license plate or are in another format.
  - o Adopting an annual resolution specifying where pay-by-mobile parking will be implemented and during which times it is in effect.
  - o Amending the fee schedule to set the rate for visitor parking.
  - o Adjusting the annual budget to reflect the projected revenues and expenses for the program.

### **Did the City Council approve authorizing one pass per household?**

- The City Council will continue to review the testimony provided and work with the State Fair Task Force to consider modifications of the plan as originally presented. The City Council will hold a work session on State Fair parking on May 7 and will vote on additional measures later in May.

### **When is the next discussion on pay-by-mobile parking?**

- City Council will discuss the feedback from the public hearing as well as the next steps at its workshop meeting on Wednesday, May 7 at 6:30 p.m. This will be a live-streamed meeting available here [[Falcon Heights Meetings - NineNorth](#)].

### **Why do we want fairgoers to pay for parking?**

- “Free Parking” is not really “free.” The impacts of increased traffic, such as trash, are borne by the City and our residents.
- State Fair attendance numbers have increased dramatically in recent years.
- Charging fairgoers for parking will help cover the increasing costs of hosting the Fair that are not reimbursed by the governing body of the State Fair.
- Any new revenue will be used to benefit all Falcon Heights residents.

**Does pay-by-mobile parking mean that we are not a welcoming city for visitors?**

- We will continue to welcome fairgoers, and charging for parking should not change our attitude toward visitors.
- Parking Ambassadors will roam the affected areas and aid fairgoers while they navigate our neighborhoods.
- We hope to improve fairgoers' experience – such as adding porta-potties, trash cans and wayfinding services!

**What areas will have pay-by-mobile parking and why?**

- This has not been voted on yet. The proposal includes the Northome and Northeast quadrants, exclusive of major streets.
- Parking would only be allowed on the side of the street without fire hydrants, where State Fair parking is currently allowed.
- These large, contiguous areas are currently highly impacted by State Fair parking and have more than 800 parking places available.

**What is the projected revenue?**

- Conservative estimates are \$100,000 to \$200,000 net per State Fair.

**How specifically will these revenues benefit residents?**

- The collected revenues from the ParkMobile Parking Program will help cover the City's increasing expenses in hosting the Fair within Falcon Heights, which the City is not reimbursed by the governing body of the State Fair for. Any revenue collected over and above immediate expenses connected to hosting the Fair will go into the General Fund, to benefit all residents equally, whether it helps in offsetting expenses related to Pavement Improvement Projects, which are currently assessed to and paid by impacted residents, or by adding City services and amenities. The collected revenue will increase the funds in which the City has available to operate from and help to offset or lessen tax increases to residents.

**How will fairgoers know they need to pay for parking?**

- ParkMobile provides temporary signs that will be installed throughout designated Parking Zone areas during the State Fair. These signs will be removed after the fair is over.
- Signage will be consistent with other metro cities who use ParkMobile, including Minneapolis.
- We will communicate extensively through our own channels and through the media.
- Parking Ambassadors will be hired to directly help visitors.

**Will we charge a daily rate? Hourly rate?**

- The proposal is a daily rate that expires at 11:59 p.m. each day of the State Fair, which is easier to enforce, and fairgoers can enjoy their day at the fair without worrying that the meter has expired.

**If a visitor doesn't stay the whole day, will a different visitor still have to pay to park in the newly open spot?**

- Each new vehicle will need to pay the parking fee.

**When will the meters be enforced?**

- The meters will be enforced from 8 a.m.-8 p.m. each day during the State Fair.
- Parking ambassadors will be working during the same timeframe.

**Could rates vary based on proximity to the fairgrounds? Or for residents?**

- There are a lot of options via ParkMobile to set different rates. There could be a discounted rate for residents, but the overall goal is to generate a new revenue source for the city, improve parking rule compliance in our neighborhoods, and reduce the burden of hosting the State Fair on our city and residents.

**Will residents need to pay to park?**

- The State Fair Task Force proposed that each household in affected areas may obtain one resident pass for one vehicle, good for all 12 days from the fair. The Task Force and City Council will use input from residents to evaluate the number and format of passes provided.

**Can I sell/transfer my pass(es)? Can passes be transferred throughout the week?**

- Resident passes are proposed to be hang tags, which will not be tied to one vehicle by license plate number so that residents have flexibility in moving hang tags between vehicles during the State Fair. The hang tags may have a unique identifier on them so that they can be re-used in future years. Lost or misplaced tags may require purchasing a new tag at the cost of the tag, and any lost, misplaced or stolen tags will be removed from the list of eligible tags. Vehicles using a lost or stolen tag may be found in violation of ordinances and will be prosecuted accordingly.

**Can residents purchase passes for a discounted rate?**

- There is not currently a proposed option to allow for reduced rates for purchasing passes outside of the proposed passes offered to residents.

**How will the city know whether a person has paid?**

- ParkMobile generates that data and makes it accessible to police and Parking Ambassadors.
- Cybersecurity and Minnesota Data Practice protocols will be fully accounted for.

**How will parking violations be handled?**

- Law enforcement will ticket cars parked in violation of code or those that have failed to pay. The current policy that parking fines double during the State Fair will continue.
- Vehicles that cause safety hazards will be ticketed and towed in accordance with historical policy and practice.

**How much will it cost our city to implement?**

- ParkMobile provides the system and signage at no capital expense. There is a processing fee of about 20% for each transaction.

- All administrative and staffing costs will be covered by revenues. At this exploration stage, the numbers are being calculated along with the policy considerations and will be discussed with as much transparency as possible.
- We anticipate that this will generate \$100,000 to \$200,000 net revenue each year during the State Fair.

#### **Why ParkMobile?**

- We explored installing temporary parking meters, but this is a much simpler and more efficient option. Many people are familiar with using apps to pay for parking in city lots. Several cities across Minnesota work with ParkMobile, and there are 1.5 million Minnesota users. People who don't want to install an app can pay via the ParkMobile website, by text or by calling ParkMobile.

#### **How long is the contract with ParkMobile?**

- We are considering a one-year agreement, with the option to renew for two additional years.

#### **Some of our streets are permit parking only during the fair. How will this be handled if we switch to paid parking?**

- There are no proposed changes to State Fair Parking Permits issued in 2024.

#### **Will streets continue to be parking on one side only during the fair?**

- Yes, the pay-by-mobile parking zones would be installed where we currently allow parking during the fair. We need to ensure emergency vehicles can get through our neighborhoods.

#### **Will the program be full-time, year-round?**

- This proposal is just for during the Minnesota State Fair, starting in 2025. In the future, it may be expanded to other major events that bring visitors to our streets, such as car shows.
- We will NOT charge for parking on neighborhood streets year-round.

#### **Will pay-by-mobile signs be up all year long?**

- No. We plan to install signs prior to the Minnesota State Fair and remove them following the 12 days each year. While this does create additional work for staff, we feel it is important not to confuse motorists by adding additional signage in the neighborhoods when not in use.

#### **How will this impact neighboring cities?**

- More people may look for free parking spots beyond Falcon Heights.

#### **How will this impact business properties in our city that sell parking in their lots?**

- We already compete with business properties that sell parking by providing free parking.
- The city collecting parking revenue will likely have no adverse impact on our business parking revenues.

#### **Will people who have parked on our streets for years when attending the fair be angry?**

- Paying for event parking in residential areas near large regional attractions is not unusual in communities throughout Minnesota and the nation.



- The city will conduct a communications campaign to get the word out and explain why Falcon Heights has chosen to charge for parking on our neighborhood streets. We realize that our communications won't reach everyone, so there will also be a lot of signage to help explain.

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| <b>Meeting Date</b> | May 7, 2025                      |
| <b>Agenda Item</b>  | Policy C3                        |
| <b>Attachment</b>   | N/A                              |
| <b>Submitted By</b> | Jack Linehan, City Administrator |

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Item</b>        | City Hall Summer Hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b> | <p>Historically, the City of Falcon Heights has employed a modified schedule during the summer months. This practice was halted in 2020 and 2021 due to the limited public access to City Hall during the height of the pandemic, but brought back in 2022. Staff has again expressed support for the practice this year.</p> <p>During the summer months, especially on Fridays, the amount of walk-in and phone call requests for service drops off dramatically. Most afternoons in non-summer months, the City sees approximately 3-4 visitors and a few calls Monday-Thursday. There are very few Friday afternoon visits.</p> <p>Many cities use this as an opportunity to employ alternative hours of operation, commonly known as “Summer Hours”.</p> <p>Currently, normal hours of operation are Monday – Friday, 8:00 a.m. – 4:30 p.m. Historically, Summer Hours have occurred between Memorial Day and Labor Day. Because staffing is more critical in the days leading up to and during the Minnesota State Fair, Staff are proposing that the City of Falcon Heights use a modified schedule for 2025, instead making Summer Hours effective to begin earlier (one or two weeks) and to end earlier (two weeks).</p> <p>Summer Hours could go into effect, dependent upon the Council’s preference:</p> <ul style="list-style-type: none"> <li>• Beginning Monday, May 12, by giving authority to the City Administrator verbal authority to modify City Hall hours administratively until it can formally be approved on May 14th.</li> <li>• Or, if the Council so chooses, they could wait to begin Summer Hours on Monday, May 19, so that formal consent may be given during the May 14 City Council meeting.</li> </ul> <p>Summer Hours would be in effect through Friday, August 15 and would be the following:</p> |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | <p>Monday – Thursday      7:30 am – 5:00 pm<br/> Friday                      8:00 am - noon</p> <p>This would allow for City Hall to still be open a similar number of hours per week (42 vs 42.5 during non-summer hours) and for employees to still work the same number of total hours (40, with one ½ hour break each day, except on Fridays, when staff would prefer to start thirty minutes later and to also not to take a break). On Mondays through Thursdays, it would allow City Hall customers the ability to come in both a ½ hour earlier and later in the day to conduct business. And, this will allow City Hall to be staffed at its regular business hours leading up to and during the State Fair. Supervisors will work with their employees to modify their schedules as best works for their divisions to be flexible with employees’ needs while maintaining necessary coverage.</p> <p>We will publicize our approved Summer Hours through our normal methods (email, website, flyers, newsletters, and social media). We would also insert a notice on all permit applications so that contractors and/or residents do not come to City Hall on Friday afternoons hoping to pick up permits for their weekend projects. Notice will also be given to those who rent facilities that building keys will need to be picked up before noon on Friday.</p> |
| <b>Budget Impact</b>       | N/ A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Attachment(s)</b>       | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Action(s) Requested</b> | Staff recommends that the Falcon Heights City Council consider and discuss adopting the summer hours schedule explained above at an upcoming City Council meeting. Additionally, the Council is requested to consider whether to start the program two weeks earlier or to wait until after formal council approval is provided.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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| <b>Meeting Date</b>  | May 7, 2025                      |
| <b>Agenda Item</b>   | C4                               |
| <b>Attachment(s)</b> | Final Draft Report               |
| <b>Submitted By</b>  | Jack Linehan, City Administrator |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Item</b>                | Discussion of 2025 City Council Goal Setting Process Draft Report                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Description</b>         | <p>Staff is requesting Council review and provide feedback on the updated final draft of the Goal Setting Process Report prepared by DDA HR, Inc., based on the March 2025 individual interviews and group facilitation session, as well as preliminary feedback from a Council Goal-Setting Session on March 4. A preliminary draft was then drafted and shared at Council Workshop on April 2, which then provided further suggestions and feedback in drafting this formal report.</p> <p><b>Background:</b><br/>In March 2025, the City Council and Administrator participated in a goal-setting process facilitated by DDA HR, Inc. This process included individual interviews with each Councilmember and a collaborative workshop on March 4. The Council then reviewed a preliminary draft at a Council Workshop on April 2 and provided additional feedback, which then helped inform this final version of the report. The attached final draft report is more visually engaging and clearly formatted.</p> <p><b>Next Steps:</b><br/>Staff worked with the DDA to develop a semi-final version of the report that is more visually engaging and clearly formatted. Now, we are asking the City Council to:</p> <ol style="list-style-type: none"> <li>1. Review the final report.</li> <li>2. Identify any areas where clarification, additions, or edits may be needed.</li> <li>3. Provide feedback on priorities, goals, or strategies that may be missing or underdeveloped to update in the final version of the report.</li> </ol> <p>If there are no changes, the City Administrator will present the 2025 Goal Setting Document at the Wednesday, May 14<sup>th</sup> meeting for consideration of adoption.</p> |
| <b>Budget Impact</b>       | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Attachment(s)</b>       | <ul style="list-style-type: none"> <li>• Draft Goal Setting Document</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Action(s) Requested</b> | The City Council is requested to review the semi-final draft report and provide feedback to staff and DDA before a final draft is prepared.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

# City of Falcon Heights, Minnesota



## 2025 Goal Setting Process Report

April 28, 2025





# Process

The City of Falcon Heights undertook a goal setting process in March of 2025. The process included the consultant having individual meetings with the Mayor, City Council, and City Administrator as well as a facilitated group session on Tuesday, March 4th. The session included:

- A fun interactive kick off activity.
- Presentations by the Mayor, Council, and City Administrator regarding their priorities and recent accomplishments.
- Discussion on and reaction to the priorities, goals, and strategies that came forward from the individual meetings with Consultant Bart Fischer, and presentations.
- Presentation of this summary report on the discussion and actionable steps to move the priorities, goals, and strategies forward.

## Falcon Heights Officials

- Mayor Randy Gustafson
- Councilmember Melanie Leehy
- Councilmember Eric Meyer
- Councilmember Paula Mielke
- Councilmember Jim Wassenberg
- City Administrator Jack Linehan

## Consultants

- Bart Fischer, DDA HR, Inc.
- Liza Donabauer, DDA HR, Inc.



This report summarizes the discussions from the individual meetings and facilitated session. It is intended to be a working document that is fluid as it elicits continued discussion on the priorities, goals, strategies, projects, and action steps for Falcon Heights.

# Priorities/Goals/Strategies/Action Steps

The following represents the priorities, goals, strategies, and action steps that came out of the group discussion during the goal setting session. This list is meant to be fluid and adaptable. It is recommended that the Falcon Heights Team regularly discuss target timelines and lead people/persons for each priority, goal, strategy, and action step. The following are listed in no particular order of importance.

## Explore Opportunities to Provide Value Added Services for Residents

(Lead: City Administrator. Target Date: End of Quarter 3, 2025)

**Purpose:** To provide excellent service in the core service areas and in how those services are delivered.

Some service areas to consider are:

- Communications
- Plowing early and often
- Quality street sweeping
- A more accessible staff
- Outsource Falcon Heights' Public Works service



## Continue to collaborate with St. Anthony Village (SAV) to ensure a smooth and transparent transition to policing services provided by the SAV Police Department (SAPD)

(Lead: Council and staff from both communities and the SAPD. Target Date: Ongoing)

**Purpose:** To provide excellent policing service and ensure the FH community are engaged in the successful transition of this vital public safety service.

- Engage the Community via Communication Channels
  - Use Facebook and other official City platforms to share information and invite open feedback from residents about policing services and the transition process.
- Receive Regular Updates from SAPD Leadership
  - Request the SAPD Chief or designated representative to attend City Council meetings regularly and present an annual report that includes measurable data and progress on the transition.
- Host Community Engagement Events
  - Organize "Coffee with a Cop" and similar informal gatherings to build relationships between residents and officers. Share outcomes and community feedback with the City Council.
- Hold Public Listening Sessions
  - Schedule listening sessions where community members can ask questions, share concerns, and provide input about policing services and public safety priorities.
- Ensure SAPD Presence at Community Functions
  - Invite an SAPD officer or representative (not limited to the Chief) to participate in community events, including the State Fair Task Force and various commission meetings.
- Support the Role of the Community Engagement Officer
  - Collaborate with SAPD to identify and promote opportunities for the Community Engagement Officer to interact with residents, once the position is in place.





## Support the Enhancement and Development of City/Community Facilities

(Lead: City Administrator, City Engineer, Public Works Director. Target Date: End of 2025)

**Purpose:** To ensure continued momentum takes place on existing and planned projects.

- Complete Key Park Improvement Projects
  - Finalize the planned upgrades at Community Park.
  - Continue updates and improvements at Curtiss Field, Grove Park, and the Falcon Heights Elementary outdoor facilities, which are utilized as public park space.
- Develop a Comprehensive Parks and Facilities Master Plan
  - Hire a consultant to lead the creation of a citywide Master Plan that identifies priority projects, balances community wants vs. needs, and aligns funding sources with specific initiatives.
  - Incorporate community input to determine desired services and amenities.
  - Establish a framework to measure community need and demand.
- Expand Access and Amenities Across the City
  - Explore the addition of pocket park amenities in neighborhoods with limited access to current park space.
  - Improve and enhance walkability and pedestrian safety where feasible, especially in high-traffic or under-served areas.
- Improve Pedestrian Safety through Targeted Infrastructure
- Partner with Ramsey County to evaluate and implement traffic-calming measures, including reduced speed limits, pedestrian crossings, or bump-outs at the following intersections:
  - Hamline & Hoyt
  - Hoyt & Cleveland
  - Larpenteur & Fry
  - Larpenteur & Albert
  - Crawford & Arona
  - Falcon Crossing
- Evaluate and Plan for Future Facility Use
  - Conduct a space study of underused or non-essential City spaces to explore opportunities for reconfiguration or redevelopment.
  - Inventory all City-owned land and facilities to inform future investments and long-term planning.
  - Explore potential uses for the large lawn space in front of City Hall to serve evolving community needs.



### Explore Additional and Creative Funding Options and Opportunities for Projects and Initiatives

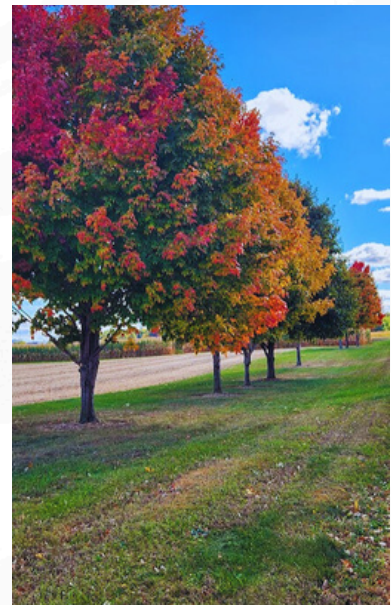
**Purpose:** To encourage City staff and Council to proactively identify funding mechanisms that reduce reliance on the tax levy and special assessments, thereby lessening the financial burden on community members.

- Explore funding opportunities related to City incurred costs due to the State Fair.  
(Lead: City Administrator, State Fair Task Force (SFTF), Council Liaison to the SFTF. Target Date: Start of 2025 State Fair)
- Explore funding sources and opportunities for street improvement and maintenance projects in an effort to decrease the amount of street assessments or amount of property taxes spent on infrastructure.  
(Lead: City Administrator, Finance Director, Assistant Finance Director, Public Works Director, City Engineer. Target Date: End of 2025)
- Prioritize the recommendations coming from the Environment Commission's Energy Action Plan and Climate Action Plan and seek funding sources to complete these actions.  
(Lead: Community Development Coordinator, GreenCorp Member and EC Council Liaison. Target Date: End of 2025)

### Develop a Multi-Year Capital Improvement Plan (CIP)

(Lead: City Administrator, City Engineer, Finance Director, Public Works Director.  
Target Date: End of 2025 Quarter 3)

- Develop and enhance the multi-year Capital Improvement Plan.
- Develop a multi-year road and long-term pavement management program.







### **Continue to Explore Development and Re-Development Opportunities**

(Lead: City Planner, City Administrator. Target Date: Ongoing)

**Purpose:** Determine how the City can assist with development and re-development.

- Economic development opportunities
  - Former dry-cleaning business on Larpenteur - “Get Pressed”
    - Currently zoned B-1. Explore and identify new zoning
    - Explore potential to purchase the property
    - Clean up the property utilizing MPCA grants
    - Evaluate future re-development for the site
  - U of M Les Bolstad Golf Course
    - Review existing plan as well as plan from U of M students/class
    - Re-engage with U of M liaison and assign a City liaison
  - Re-develop other areas and sites along the Larpenteur and Snelling corridors as opportunities present themselves.
- Business engagement and retention
  - Work with the local business community to encourage them to acknowledge they are in Falcon Heights and not St. Paul, Roseville, or other surrounding community.
- Update ordinance language to reflect both the needs of the City and business community







## Falcon Heights Leadership to Continue to Improve on External Communications to Engage Residents and Community Partners

(Lead: Communications Coordinator, City Administrator, Other Staff. Target Date: Ongoing)

**Purpose:** To strengthen trust, transparency, and collaboration by enhancing the clarity, consistency, and accessibility of information shared with residents and community partners.

- Conduct a community survey on all City services. Benchmarking services such as policing, plowing, use of public spaces, preferred communications, other? Enhancements to the City's website.  
(Lead: Administrative & Communications Coordinator, City Administrator. RFP underway. Target Date for new website: Quarter 1, 2026)
- Send push notifications and texts to city residents and business members. (e.g. public hearings, city events, street improvement project updates/notifications, street sweeping, plowing.
- Include an Economic Development column in the newsletter along with other City communications. Also advertise open commercial spaces through these channels.
- Communicate the Falcon Heights Story – why do residents choose to live here. This messaging can help to instill community pride and market the Community.
- Utilize a coordinated communications effort to continually tap into, engage, and involve the talent and energy within the community.
  - Embrace and acknowledge differences as part of the community culture. Weave this acknowledgement into the fabric of the community and as part of what the City of Falcon Heights as an organization does and is.
- Publish the multi-year CIP and Master Space Study information on the City's website and via other communication tools.
- Explore electronic signage at City Hall.





## Support the Rental Community Within Falcon Heights

(Lead: City Administrator, City Planner, Administrative Services Director, Fire Marshal.  
Target Date: End of Quarter 3, 2025)

**Purpose:** To ensure safe, and well-maintained rental housing by establishing ordinances that support tenants, promote responsible property management, and reflect the needs of both renters and landlords in the community.

- Strengthen City Rental Ordinances.
- Create/Enhance Rental Inspection & Licensing Program.

## Continue and Enhance Strong Partnerships With Key Stakeholders

(Lead: All Staff and Council. Target Date: Ongoing)

- **Minnesota State Fair**
  - Collaborate with the State Fair to explore opportunities for keeping fairgrounds gates open more regularly to improve neighborhood walkability and connectivity.
- **University of Minnesota**
  - Officially thank the University for its support and contributions to Community Park.
  - Collaborate with the University to coordinate and market a list of U of M attractions located in Falcon Heights, such as the Bell Museum, The Raptor Center, and the Dairy Store.
  - Engage through interaction on the Climate Action Plan.
  - Re-establish regular communication with the University's designated liaison and appoint a corresponding City liaison to ensure consistent and proactive collaboration.
  - Identify and engage residents who work at the University to serve as informal ambassadors and strengthen community ties.
  - Create meaningful engagement opportunities for U of M students, such as volunteer initiatives, community events, or internship programs.
  - Maintain regular communication and strategic alignment with the University's Intergovernmental Relations team to advance mutual goals.
- **City of Lauderdale**
  - Continue to partner on cost-effective shared services—such as street sweeping, snow plowing, and other operational efficiencies—to maximize resources and benefit both communities.
- **City of St. Anthony Village**
  - Continue to partner with SAV on the smooth transition of its policing services.
  - Actively work to strengthen and enhance the overall relationship with St. Anthony Village through regular communication, shared goals, and mutual support.
- **City of Roseville**
  - Continue expanding the relationship for engineering services.
  - Explore new partnership opportunities, such as parks & recreation, to enhance community services.
- **City of St. Paul**
  - Continue to develop and promote the partnership for fire and emergency medical services.
  - Explore approval of a new, longer-term contract for fire and emergency medical services.
- **Schools – Falcon Heights Elementary and Brimhall Elementary**
  - Rebuild and maintain strong connections with area schools, especially as changes in leadership and points of contact may have affected past interactions.
  - Attend District meetings.
  - Continue the partnership on communication and marketing of both City and School events.
- **County**
  - Continue working with the County on projects and funding for those projects.



## Enhance Internal Operations and Staff Professional Development

(Lead: City Administrator and City Council. Target Date: End of 2025)

**Purpose:** To improve the efficiency, effectiveness, and responsiveness of City operations by investing in staff professional development, fostering a culture of continuous learning, and streamlining internal processes to better serve the community.

- Ensure that staff understands they are valued
  - Conduct a Comp & Class study and have a policy discussion around where Council is willing to target salaries: top, mid, low range of comparables. Also have job descriptions updated as part of this process.
  - Enhance onboarding and retention activities.
  - Increase and improve internal communications.
  - Upgrade timeclock and payroll systems and streamline other technology for better efficiency.
  - Update how records management and retention are accomplished.
  - Simplify the open enrollment process and develop a one-sheet Benefits Summary.
  - Review and improve HR and finance policies and processes to ensure efficiency and clarity.
- Council & Commissions enhancements
  - Continue providing resources for Council members and Commissioners to attend relevant training sessions.
  - Consider implementing a Bring Your Own Device (BYOD) option to facilitate paperless packets.
  - Clarify and formalize position descriptions for Council members and Commissioners, outlining their roles and responsibilities.
  - Formalize and expand the onboarding process for new Council members to ensure smooth integration.
  - Offer per diems for Council members and Commissioners to support their involvement in City-related activities.
  - Bring Commission Chairs together regularly to provide updates, discuss Council goals, and determine ownership of projects and community events.
  - Celebrate and formally recognize the work and contributions of Commissioners and their respective commissions.
- Focus on cyber security/protection.
- Foster a team environment across the organization including between Council and staff.
  - Hold formal and informal meetings and gatherings of staff and Council on a regular basis. Create space for both Council and staff to share updates, thoughts, and feedback, encouraging open dialogue and active listening.

## Explore Organized Trash Collection

(Lead: City Administrator and City Council. Target Date: End of 2027)

**Purpose:** A long-term proposition to reduce emissions from haulers and reduce wear and tear on the streets.

- Check-List of items to be done:
  - Review State Statutes.
  - Talk to other communities that have successfully implemented organized trash collection.
  - Talk to existing haulers.
  - Inventory haulers and the percentage of the community they service.
  - Begin conversations with the public around how recycling pick-up, which is a single hauler, has gone.
  - Work this through staff.
  - Schedule a future workshop to determine first/next steps.





## Continue to Explore Options to Enhance Community Within Falcon Heights

(Lead: All Staff and Council. Target Date: Ongoing)

**Purpose:** To reduce polarization locally by cultivating a caring community through the strengthening of community connections.

- Identify who takes ownership of the various community events/activities:
  - Annual Ice Cream Social
  - Spring Together
  - Multi-Cultural Food Festival
  - Fall Festival
  - Explore co-hosting with various community partners Falcon Heights Nights at locations throughout the City
- Provide opportunities for teens and pre-teens to feel as though they are a valuable member of the Community (i.e. youth camps)
- Coordinate the Parks & Community Engagement Commissions to work together
  - How to connect the 11 Falcon Heights neighborhoods.
  - Promote Falcon Heights' multi-culturalism and diversity.
  - Seek to find common themes that draw people together such as knitting groups and musicians.
  - Look to complete and enhance walking paths to connect.
- Park & Rec programming for youth
  - There are quality competing programs through community ed, senior programming, and surrounding cities.
  - Have the policy conversation around if Falcon Heights facilitates existing partner and surrounding programs or create in-house programming with limited staff.

## Priorities/Goals/Strategies/Action Steps

The following chart represents the priorities, goals, strategies, and action steps that came out of the group discussion during the session. This list is in no order of importance and is meant to be fluid and adaptable. It is recommended that the Falcon Heights Team regularly discuss target timelines and lead people/persons for each priority, goal, strategy, and action step

| PRIORITIES / GOALS / STRATEGIES / ACTION STEPS                                                                                                                                                            | TARGET DATE              | LEAD                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------|
| Explore opportunities to provide value added services for residents                                                                                                                                       | End of Quarter 3, 2025   | City Administrator                                                                                     |
| Continue to partner with St. Anthony Village (SAV) and the SAV Police Department (SAPD) on the smooth transition of policing services to SAPD                                                             | Ongoing                  | Council and staff from both communities, SAPD                                                          |
| Continue to enhance, maintain, and develop city/community facilities and develop a multi-year Capital Improvement Plan                                                                                    | End of 2025              | City Administrator, City Engineer, Public Works Director                                               |
| Explore additional and creative funding options and opportunities for projects and initiatives                                                                                                            |                          |                                                                                                        |
| • Explore funding opportunities related to City incurred costs due to State Fair                                                                                                                          | Start of 2025 State Fair | City Administrator, State Fair Task Force (SFTF), Council Liaison to the SFTF                          |
| • Explore funding sources and opportunities for street improvement and maintenance projects in an effort to decrease the amount of street assessments or amount of property taxes spent on infrastructure | End of 2025              | City Administrator, Finance Director, Assistant Finance Director, Public Works Director, City Engineer |
| • Prioritize the recommendations coming from the Environment Commission's Energy Action Plan and Climate Action Plan and seek funding sources to complete these actions                                   | End of 2025              | Community Development Coordinator, GreenCorp Member, EC Council Liaison                                |
| • Develop and enhance the multi-year Capital Improvement Plan                                                                                                                                             | End of Quarter 3, 2025   | City Administrator, City Engineer, Finance Director, Public Works Director                             |
| Development and re-development (the general discussion related to this topic was around how the City can help or assist with development and re-development)                                              | Ongoing                  | City Planner, City Administrator                                                                       |
| Continue to improve on external communications to engage residents and partners                                                                                                                           | Ongoing                  | Communications Coordinator, City Administrator, other staff                                            |
| Support the rental community within Falcon Heights through new ordinances                                                                                                                                 | End of Quarter 3, 2025   | City Administrator, City Planner, Administrative Services Director, Fire Marshal                       |
| Continue and enhance strong partnerships with key stakeholders                                                                                                                                            | Ongoing                  | All staff, City Council                                                                                |
| Enhance internal operations and staff professional development                                                                                                                                            | End of 2025              | City Administrator, City Council                                                                       |
| Explore organized trash collection                                                                                                                                                                        | End of 2027              | City Administrator, City Council                                                                       |
| Continue to explore options to enhance community within Falcon Heights                                                                                                                                    | Ongoing                  | All staff, City Council                                                                                |





## Summary/Conclusion

The following are the key takeaways of the discussion from the session participants:

- All worked together well.
- We have more in common than we have different.
- A better understanding of operations.
- Encouraged by everyone's commitment to the City. We are forward thinking in how to improve operations within the Community
- All are onboard with how we can provide the best services to our residents while keeping funding and expenses reasonable.
- Excited! We have low hanging fruit we can tackle right away, which will make a big difference.
- It was good to spend a chunk of time discussing these initiatives.
- We are aligned on values and approach.
- It was good to spend informal time together.

The 2025 Falcon Heights Goal Setting Process allowed the City Council and City Administrator to discuss priorities, goals, strategies, and action steps for Falcon Heights. The process allowed for listening and better understanding of individual goals in an effort to collaborate and move forward with a list of group strategies, priorities, goals, and action steps.

It is recommended that opportunities are created throughout the year for updates and continued discussion by the Falcon Heights Team on the priorities, goals, strategies, and action steps as laid out in this document. This will be vital in keeping the lines of communication open for collaboration, understanding, the building of trusting relationships, and the continued momentum in maintaining and creating a successful future for the community.

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| <b>Meeting Date</b>  | May 7, 2025                      |
| <b>Agenda Item</b>   | Policy C5                        |
| <b>Attachment(s)</b> | Sample Policy                    |
| <b>Submitted By</b>  | Jack Linehan, City Administrator |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Item</b>          | Voluntary Early Retirement Incentive Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Description</b>   | <p>The City is in a unique position in 2025 with a strong fund balance of approximately 107% of annual expenditures, and projections that our police costs under our contract with St. Anthony Village will come in under estimates (\$1.3 million in estimated expenses vs \$1.6 million budgeted) due to the ramp-up costs of staffing. Looking forward, however, there are serious concerns over the state of economic conditions. The City receives approximately 20-25% of general fund revenues in the form of intergovernmental revenues, with most of that coming from the State of Minnesota's Local Government Aid (LGA). For consideration this legislative session are cuts to LGA, which would negatively impact the City's financial position. Additionally, uncertainty over national and international economic conditions could further impact the City's long-term financial position.</p> <p>To avoid future budgetary savings measures such as layoffs and to prioritize costs to occur in 2025 rather than future years, administration can offer a voluntary early retirement incentive program (VERIP). The League of Minnesota Cities recommends a VERIP as a proactive measure that can provide a win-win for the employees who elect to participate as well as the City's long-term financial costs.</p> <p>Under the proposed VERIP, employees who retire during a set window will receive a far greater financial incentive for retirement than they would without the program. The City can offer a variety of proposed perks, which could include paying health insurance premiums for a period and/or increasing the compensation of unused sick time beyond the City's current policy (50% of unused sick time paid upon separation/retirement).</p> <p>Staff requests the City Council discuss the merits of the program <b><u>without discussing individual employees</u></b>. Under the League's proposed definition of eligibility combined with PERA eligibility, there are multiple employees who could be eligible if they elected to participate in the program if offered.</p> |
| <b>Budget Impact</b> | The costs of this program would be absorbed in the 2025 budget. If employees elect to participate, staff will run the analysis of the short term costs vs. long-term savings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

|                            |                                                                                                                                                                      |
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|                            | under the program if positions were not backfilled or were filled with part-time or contractual employees.                                                           |
| <b>Attachment(s)</b>       | <ul style="list-style-type: none"> <li>• Sample LMC Early Retirement Incentive Program</li> </ul>                                                                    |
| <b>Action(s) Requested</b> | The City Council is requested to discuss and provide guidance to staff whether to pursue and offer a voluntary early retirement incentive program for all employees. |



## Early Retirement Incentive for All Employees, LMC Model Policy

City of \_\_\_\_\_, Minnesota

### Early Retirement Incentive Offering Paid Health Insurance Coverage for X Years

An employee who has been with the City for at least ten years and has met age and service requirements necessary to be eligible for full PERA retirement benefits may retire and receive the city's contribution toward single health coverage for the lowest cost provider offered by the city to its active employees for X years (XX months).

Employees can choose to continue family health coverage by paying for the difference between the cost of family coverage and the city's contribution toward single coverage.

Retired employees may have the City reimburse them for health coverage that they obtain on their own. The reimbursement rate will be the same amount that the city would have paid toward its own group insurance plan. The reimbursement will be made on a quarterly basis. Retirees who choose this option will not be able to return to any of the City's health plans.

Eligibility for health insurance coverage or reimbursement will cease if the retired employee is covered under another employer's group health plan or the City terminates group insurance coverage for all its employees.

This early retirement incentive program is only available to employees who retire between Month Day, 20 and Month Day, 20.



*NOTE: This program could probably also be handled as a lump sum payment to the employee or to the employee's post-employment health plan. Another alternative would be to offer an across-the-board increase in sick leave/severance payout. For example, if the city's usual policy is to pay off 1/3 of all accumulated sick leave up to a certain maximum amount, the city could offer to pay off a higher percentage of sick leave or to increase the maximum. The city should consult its post-employment health plan provider for information about what constitutes an acceptable payment to that plan. Be aware of required tax withholdings. In general, lump sum amounts not tied to an eligible program will be taxable income for the employee. If a city is contemplating alternatives to laying off employees in a bargaining unit, it should consider meeting and conferring with the exclusive representative of the bargaining unit.*

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|---------------------|-----------------------------------------------------------------------------------|
| <b>Meeting Date</b> | May 7, 2025                                                                       |
| <b>Agenda Item</b>  | C6                                                                                |
| <b>Attachment</b>   | Elected Official Out-of-State Travel Policy; City's Travel Policy; Travel Request |
| <b>Submitted By</b> | Jack Linehan, City Administrator                                                  |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Item</b>          | Elected Official Out-of-State Travel Policy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Description</b>   | <p>One member of council has expressed interest in attending an upcoming out-of-state conference so this is an opportunity to now discuss policies and procedures related to out-of-state conference travel, and to provide direction to staff on how to proceed.</p> <p><u>Background:</u><br/>In 2005, the Minnesota State Legislature passed a requirement that cities adopt a policy that regulates out-of-state travel by elected officials. The Falcon Heights City Council adopted the attached policy on November 9, 2005. One provision of the statute is that the policy be reviewed annually by the City Council, which was most recently done on January 8, 2025.</p> <p>The Elected Official Out-of-State Travel Policy sets forth conditions under which out-of-state travel will be reimbursed by the City.</p> <p><u>General Guidelines:</u><br/>Must be approved in advance by the City Council, passed by resolution detailing exactly what is being approved and include an estimated cost of the travel. And, it must also NOT be affiliated with political parties. The City may pay in advance for airfare, lodging and registration if specifically approved by the council. Otherwise, payments will be made as reimbursements to the elected official. The City will reimburse for transportation, lodging, meals, registration, and incidental costs using the same procedures, limitations, and guidelines in the City's Travel Policy.</p> <p>As the only recent precedent, in 2018, City Council approved out-of-state travel for two councilmembers and the City Administrator to the Kettering Foundation. At that time, there were funds in the budget to cover education/conferences and the Kettering Foundation paid for the hotel, flight and transportation.</p> |
| <b>Budget Impact</b> | Estimated \$1,000. Funds for council training and professional development are budgeted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

|                                |                                                                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Attachment(s)</b>           | <ul style="list-style-type: none"> <li>• Elected Official Out-of-State Travel policy</li> <li>• City's Travel Policy</li> <li>• Travel Request</li> </ul> |
| <b>Action(s)<br/>Requested</b> | Staff recommends that the Falcon Heights City Council consider the attached request for out-of-state travel at an upcoming City Council Meeting.          |

## **City of Falcon Heights**

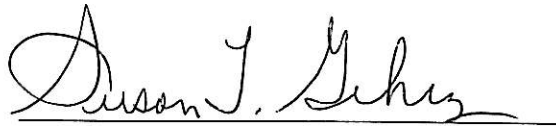
### **ELECTED OFFICIAL OUT-OF-STATE TRAVEL POLICY**

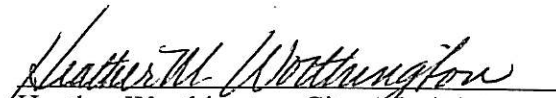
Purpose: The City of Falcon Heights recognizes that its elected official may at times receive value from traveling out of the state for workshops, conferences, events and other assignments. This policy sets forth the conditions under which out-of-state travel will be reimbursed by the City.

General Guidelines:

1. The event, workshop, conference or assignment must be approved in advance by the City Council at an open meeting and must include an estimate of the cost of the travel, and the use of a resolution detailing what exactly is being approved.
2. No reimbursements will be made for attendance at events sponsored by or affiliated with political parties.
3. The city may make payments in advance for airfare, lodging and registration if specifically approved by the council. Otherwise all payments will be made as reimbursements to the elected official.
4. The City will reimburse for transportation, lodging, meals, registration, and incidental costs using the same procedures, limitations and guidelines outlined in the city's Travel Policy.

Adopted November 9, 2005

  
Susan L. Gehrz, Mayor

  
Heather Worthington, City Administrator

2. Further, any political activity in the workplace must be pre-approved by the city to avoid any conflict of interest or perception of bias such as using authority or political influence to compel another employee to apply for or become a member in a political organization.
3. If any employee is elected or appointed to the City Council, the employee must resign or obtain a leave of absence.

## **TRAVEL**

### **POLICY**

#### **APPROVAL AND ADVANCES**

1. All travel and seminar attendance by City employees require prior approval by the City Administrator or the City Administrator's designee. All travel and seminar attendance by the City Administrator must be in accordance with the City's adopted budget.
2. Approval for travel must be obtained prior to seminar registration or other final travel arrangements. Approval must be requested at least 72 hours prior to departure.

#### **ALLOWABLE EXPENSES**

4. Accommodations must be selected at reasonable cost, consistent with the facility available and convenient to location of the conference or business meeting attended. An employee may claim only the actual and necessary cost of single occupancy where a double or multiple-occupancy has occurred.
5. Allowable transportation costs will include reimbursement for: mileage accumulated on personal vehicle at prevailing mileage rate; actual round trip coach rate airfare; or actual receipted expenses for City-owned vehicles, as required and as approved.
6. Reimbursement for meals will be made at reasonable cost, as required and as approved. A per diem amount of up to \$40 per day will be reimbursed to employees for actual costs of meals. There is no reimbursement for alcoholic beverages. An explanation must be included for cost of meals exceeding per diem guideline. Other miscellaneous expenses may be authorized, as required and as approved.
7. Reimbursement for long distance telephone calls will be allowed as follows:
  - City business



- One call to a family member per day of 10 minutes or less

## **EMPLOYEE EXPENSE REPORTS**

8. Within five (5) working days upon return to work, an employee must submit an Employee Expense Report for approval by the employee's supervisor and the City Administrator or the City Administrator's designee. Receipts for expense items must accompany each expense report.

## **USE OF VEHICLES**

### **POLICY**

1. An employee using a City vehicle must have a valid driver's license in the appropriate class. Any violation of this provision shall subject the employee to disciplinary action up to and including termination.
2. Employees using City vehicles must be particularly mindful of all traffic regulations and courtesies of the road. Abuses and violations may subject the employee to disciplinary action, up to and including termination.
3. Unless approved by the City Administrator, the use of City vehicles for personal reasons is prohibited. Violation of this provision may subject the employee to disciplinary action.
4. The mileage rate for reimbursement shall be the rate approved by the City Council and the IRS. Claims shall be submitted on an Employee Expense Report provided by the Finance Director, and shall be itemized, showing the date, destination, purpose of the trip, and mileage, and be signed by the person making the claim. Mileage reimbursement shall be made upon the City Administrator's or immediate supervisor's approval of the claim. Employees using their personal vehicle and claiming mileage reimbursement on City business shall assume liability through the employee's own vehicle insurance carrier for personal injury, property damage, and comprehensive/collision damage to their vehicle. Any traffic violations incurred while on City business are the responsibility of the employee to satisfy. Use of the employee's private vehicle for City business must also meet requirements of the U.S. Internal Revenue Service as to the reporting of claims for mileage paid by the City.
6. An accident while on City business with either a City vehicle or a private vehicle shall be immediately reported verbally to the supervisor and to the City Administrator. This initial report shall be followed up with completion of the

Councilmember Mielke would like to attend the Strong Towns National Gathering in Providence, R.I., June 9 to 11. She requests applying the costs for attending League of MN State Annual Conference in Duluth (\$1,000) to attend this event instead. She will personally cover the cost difference.

Strong Towns Conference topics of interest:

- Strong Towns 101
- Building Strong Towns as an Elected Official
- Taking Problem Intersections from Quick Build to Permanent Transformation
- Building Support for Housing in Inner Ring Suburbs
- How a Block Party Can Change the World

Estimated costs for attending League Conference:

Registration: \$425

Hotel: \$400

Mileage: \$189

Registration to the Strong Towns National Gathering is \$350, flights are \$250-\$500, and hotels in downtown Providence, RI vary from \$150-\$200 per night.