Cover Page

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Letter from Mayor

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This plan could not have been completed without the input of community members, the dedication of committee volunteers, and the commitment of City Staff.

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Contents

Introduction

The City of Saint Paul completed its first Climate Action and Resilience Plan (CARP) in 2019. Since the adoption of the CARP, the City has made a lot of progress working toward its goals to reduce emissions and strengthen resilience. At the same time, global emissions have continued to rise along with surface and sea temperatures, increasing the urgency to respond to climate change. The original CARP called on the City to update its plan every five years to ensure the City 1) stays on track with its goals, 2) makes any necessary adjustments to advances in science, and 3) takes advantage of new innovations and incentives. This Plan Update addresses each of these items and includes a detailed five-year Priority Action Plan to support and accelerate the City's progress.

The original CARP includes a goal to reduce emissions 50% by 2030 from business-as-usual projections. Since the CARP's adoption, emissions have declined 26% (35% from 2030 business-as-usual projections). Reductions can be attributed to a cleaner electric grid, improved efficiency, and a reduction in travel since the 2020 pandemic. The City has implemented numerous initiatives aimed at reducing emissions, adapting to climate change, improving the lives of Saint Paul residents, and creating better economic conditions for our businesses. Nevertheless, there is much work to be done to stay on track and the science of climate change necessitates that we do more to reduce emissions faster.

Climate data is analyzed by scientists all over the world. The findings are shared in reports that are issued by the Intergovernmental Panel on Climate Change (IPCC). In the most recent report, scientists made it clear that the world needs to cut its emissions in half by about 2030 and achieve zero emissions by 2050. Additionally, we will need to remove carbon from the atmosphere, which can be done via natural methods like planting more trees and restoring peatlands and prairies, or through mechanical equipment like direct air capture. Finally, the report underscored the fact that the climate is already changing due to global warming and that we will need to adapt to these new conditions.

While emissions reductions targets need to be met globally, scientists acknowledge that some countries have historically contributed a much larger share of emissions and should set reduction targets proportionate to what they have emitted. These targets are called "fair share" targets. The City of Saint Paul recognizes that, as an American city, it has contributed a larger share of emissions relative to other parts of the world. For that reason, Saint Paul has updated its emissions reductions target to reflect its fair share and will aim to **reduce emissions 63% by 2030** (from a 2018 baseline) and achieve carbon neutrality by 2050. While the pace of reduction is accelerated from the previous CARP, it remains achievable. The new goal is illustrated in Figure 1 below.

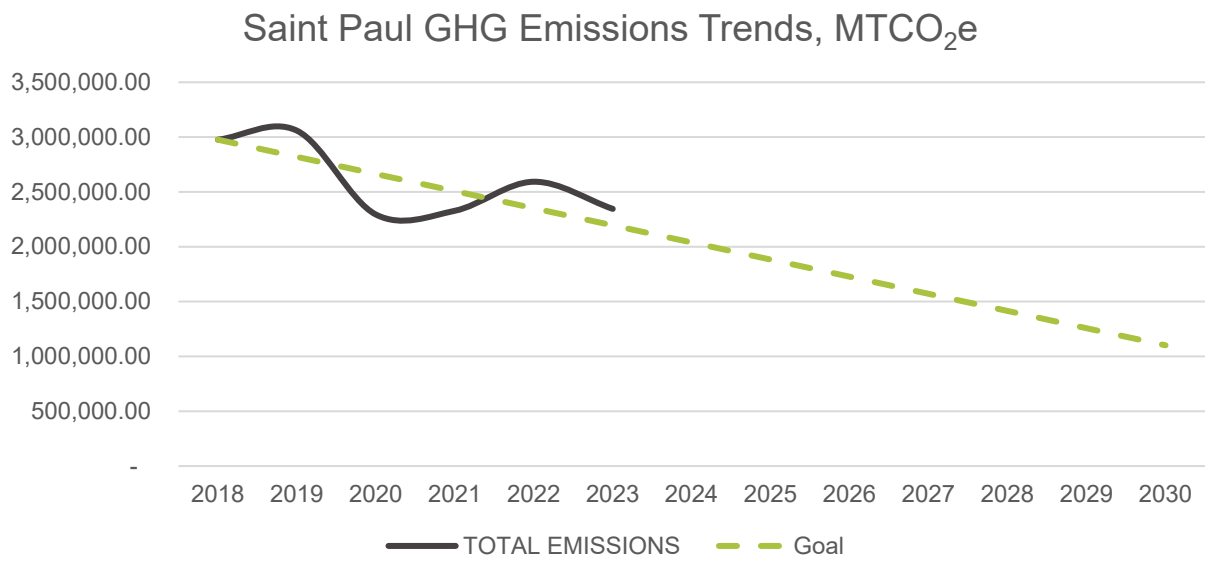

Figure 1 Annual GHG emissions and 2030 Goal.

Much of the emissions reductions that have occurred in recent years are largely due to cleaner electricity generation and improved efficiency. The City is still behind in its goals to reduce emissions from natural gas used in buildings and mobile fuel sources from our cars and trucks. Fortunately, there have been recent advances in technologies and available resources to assist the City in its efforts to reduce emissions. For example, building energy technologies like thermal energy networks and cold climate heat pumps can substantially decrease emissions from gas used to heat buildings and water. Transportation electrification coupled with land-use changes, improved transit operations, and the addition of active transportation infrastructure will help reduce emissions from driving.

Since the start of the COVID-19 pandemic, the City and region have seen a decrease in transit ridership. Many factors contribute to this decline including more people working from home, reduced routes and services, and concerns about safety. Fortunately, there are many improvements that will be made soon to enhance transit. New funding made available from the state sales tax will support increased frequency and expanded transit options that will make riding the bus or train more convenient. Metro Transit is planning to increase transit service in Saint Paul by more than 70% between 2024 and 2027, including the new Gold and B Lines and the future G Line Arterial Bus Rapid Transit projects. The City is also working with Metro Transit to support *last mile* services like carshare, bikeshare, and other modes to help people get to their desired destinations without owning a car.

Adoption rates of these technologies will be boosted with assistance from state and federal resources. In 2022, Congress passed the Inflation Reduction Act (IRA), which marked the largest investment in clean energy and climate action in the country to date. More than $369 billion was made available in the form of tax incentives, rebates, loans, and grants. This investment has made it possible for governments, businesses, and residents to substantially reduce greenhouse gas emissions in the coming years. Subsequently, the State of Minnesota also passed legislation to provide additional incentives to help accelerate the transition to clean energy. Unfortunately, many of the federal grants and tax incentives have since been canceled

and will no longer be available, beginning in 2026. It is anticipated, however, that the State will issue rebates for a wide range of efficiency and electrification technologies.

There are many reasons to be hopeful about local climate action. The City is building on years of investment and momentum that will continue to demonstrate growing benefits. Reduced energy and transportation costs will help stabilize energy bills as costs continue to increase. Cleaner indoor and outdoor air will support healthier communities and decrease vulnerabilities. This Plan Update builds on and expands the City's efforts to lead on climate action, working toward the 2050 Vision of a resilient Saint Paul and the goal to achieve carbon neutrality.

Saint Paul as a Leader and Model

While Saint Paul's government buildings and operations account for a small percentage of the City's total greenhouse gas emissions (about two percent) the City has taken significant action to reduce emissions from its operations. In this way, Saint Paul leads by example, encouraging business, industrial, institutional, educational, and residential communities to implement aggressive strategies of their own. Highlights of City accomplishments are included below. More information can be found on the City's Climate Dashboard.

Municipal Buildings: Between 2015 and 2024, the City has reduced emissions from its building portfolio by 46% through efficiency and the purchase of clean electricity. The City recently completed a plan to decarbonize all City buildings, prioritizing 11 buildings over the next five years. The City is in the process of decarbonizing the Como Park Zoo and Conservatory using geothermal technology, and the new Hamline Midway Library will be heated and cooled with geothermal energy and include rooftop solar. The new North End Community Center, opened in 2025, also uses geothermal energy and rooftop solar.

Clean Electricity: In 2024 the City purchased more than 6,300 MWh of clean electricity from community solar gardens. The City has installed multiple rooftop solar arrays on its buildings, which produced nearly 85,000 kWh of clean electricity during 2024.

Clean Fleet: The City is installing Level 2 electric charging infrastructure at several City facility locations and working to develop an electrification plan for its fleet. In 2023, the City announced the purchase of the first all-electric fire truck in Minnesota which was put into service in 2025.

Resilience: Saint Paul staff have been working to increase green infrastructure projects throughout the community. Notable accomplishments include adding infiltration trenches and tree plantings along the Green Line corridor; installation of shared, stacked green infrastructure at the Highland Bridge and Allianz Field developments; and rainwater capture at Allianz Field and CHS Field.

City Commitments and Rankings: The City continues to reinforce its commitment to climate action through Mayoral initiatives and Council resolutions. Under the Mayor's direction, the City continues to report emissions and action through CDP (a climate registry) and the American Council for an Energy-Efficient Economy (ACEEE) City Scorecard where the City consistently ranks among the top twenty in the country. In 2022, the City Council passed a resolution declaring a climate emergency that calls state and federal support to support local climate action.

Vision 2050

As a capital city with a thriving economy, Saint Paul is a leader in cross-sector approaches to emissions reductions, adaptation, and resilience and a model for both urban and rural communities in Minnesota. Our air, water, and urban landscape are clean and safe. Uncertainty is viewed as an opportunity, challenging us to innovate with changing technology to adapt to continued advances in sustainable transportation, energy efficiency, and renewable energy. All residents have a manageable energy cost burden.

As a carbon-neutral and zero-waste city, transit-oriented, walkable, bike-friendly neighborhoods with easy access to high frequency transit that accommodates all work schedules mean fewer trips by car. Electric vehicles are the norm now that infrastructure to support them is standard. Carbon-free movement of goods by truck, train, barge, and people by plane help reduce overall emissions. Homes and businesses are powered and cooled by clean electricity and heated by carbon-free thermal energy sources such as geothermal, waste heat, and electric heat pumps. These choices and our robust social connections make all of Saint Paul's neighborhoods strong and resilient.

By preserving, growing, and diversifying our urban canopy and land cover on both public and private spaces and cultivating urban agriculture we continue to prepare for, and adapt to, the effects of climate change. Native plantings are as commonplace as turf lawns. Neighborhood parks and trails help make Saint Paul a healthy and safe place for all.

Politically engaged residents empowered to make decisions help sustain long-term involvement. Our youth benefit from a strong network of educational resources and are engaged in every aspect of decision-making. A clear focus on innovation, workforce participation, and opportunities for all students in green jobs of the present and future ensure access to green workforce training at the secondary and post-secondary levels. Environmental stewardship and human health are the hallmarks of Saint Paul's climate action and adaptation efforts.

Goals

Under the original CARP, the City established goals to reduce emissions 50% from a business-as-usual scenario by 2030 and to achieve carbon neutrality by 2050. Since the adoption of that plan, the science and current state of global emissions require that the City reset its goal to be more aggressive and ambitious, recognizing our responsibility to minimize our contributions to climate change.

This Plan Update re-establishes our commitment to reduce carbon emissions and improve the quality of life for all residents. We aim to reduce emissions **63% by 2030 (from 2018), and to achieve net zero emissions by 2050**. This will require steeper reductions over the next 5 years, challenging the City and its businesses and residents to accelerate our efforts to achieve this ambitious feat. Progress toward these goals will be tracked using interim targets that guide the action in the five-year Priority Action Plan. To stay on track, the City will prioritize implementation of actions where it has the greatest control and influence to advance our efforts.

Plan Update and Five-Year Priority Action Plan

The following Plan Update was developed over the past year, with regular staff input and deep community engagement. The process involved reviewing progress made to date, evaluating new technologies, adjusting goals, and engaging community members to build support and incorporate their priorities into the updated list of actions as well as the five-year Priority Action Plan.

This section highlights progress and key projects that have been implemented as part of the original CARP. These accomplishments serve as the foundation for actions going forward and help to inform where the City should focus efforts to continue the momentum toward reaching its goals. Many of the actions are beginning to realize benefits, which will only grow as programs become more established and transformative initiatives take root throughout the community.

In addition to documenting progress, the Plan Update involved deep engagement with community members and staff, and that input is reflected in the refined actions as well as the five-year Priority Action Plan. The community involvement process is described in this section, including engagement opportunities, and summaries of input collected throughout the process. The City intends to keep community members informed and involved in the implementation of the Plan Update.

The remainder of the Plan Update includes context-setting information about the state of climate change and its projected impacts on the City, climate vulnerabilities including population, natural systems, and built infrastructure. The remaining sections include actions that will help the city equitably reduce emissions and strengthen resilience. The long-range plan includes objectives, targets, and specific actions that will be implemented as the City works toward its 2050 goals. The City will continue to review and refine this list of actions as it revisits the plan after five years. The final section includes the five-year Priority Action Plan. that consists of twenty-five high-priority initiatives the City will implement in the near term. These priority actions include initiatives where the City has the greatest authority, those that will be more impactful, as well as those that are the highest priority among residents.

Progress

Since the adoption of the original Climate Action and Resilience Plan, the City has started to implement 94% of the actions included in the Plan. Of those, nearly one third of the actions have been completed. The City tracks actions on Saint Paul Climate Dashboard. Users can use the dashboard to see where the City is making progress across each sector. Below is a summary highlighting the City's success in working toward its climate goals.

Sustainable Transportation

The City has implemented several actions that enable residents and visitors to make more climate-friendly travel choices.

Better Transit The City partners with Metro Transit, Ramsey County, and other partners to improve transit service frequency, reliability, and access, including projects like the Gold Line Bus Rapid Transit, B Line, and G Line.

Evie Carshare. Along with Minneapolis, Saint Paul offers the country's largest City-owned EV carshare program that is also powered by 100% renewable energy.

Bike Lanes. Saint Paul has added more than 54 miles of new bike lanes, working toward its target of 85 miles by 2030.

Zoning. The City uses zoning to guide growth toward high-capacity transit lines, increase development density, and increase the mix of land uses to reduce car dependence. The City has eliminated minimum parking requirements and single-family zoning. These changes will reduce overbuilding of parking spaces and increase density, enabling better use of more efficient transportation options.

Speed Limits. Speed limits have been reduced across the city, helping to make the roads safer for all users.

City Fleet Electrification The City has begun to transition its passenger vehicle fleet to EV's and hybrids and purchased the State's first all-electric fire engine in 2024, and as second electric fire engine was ordered in 2025.

Energy Use in Buildings

Key initiatives aimed at reducing emissions in the building energy sector are highlighted below.

Energy Benchmarking Ordinance: Since 2019, Saint Paul has required owners of large commercial and multi-family buildings to benchmark their energy and water use. In 2024, the program achieved a record 93% compliance rate where 656 buildings reported energy use, representing 61% of citywide building energy and 27% of citywide GHG emissions. The program has demonstrated an 11% decrease in energy use intensity in those buildings from 2019 to 2023. This program was moved into the State's program beginning in 2025.

Sustainable Building Ordinance: The Sustainable Building Ordinance applies to newly constructed City buildings and new and renovated private buildings that receive more than $200,000 in financial support from City public funding sources. The ordinance requires buildings to receive certification through one of several eligible green building standards (e.g., LEED, GreenStar, MN B3, etc.). The ordinance was adopted in 2009 and updated in 2018 and has been applied to over 100 projects throughout the community. Another update to the ordinance is planned in 2026.

Highland Bridge Sustainability: Highland Bridge is a 135-acre mixed-use development located on the site of the former Ford Motor Company assembly plant in the Highland Park neighborhood, near the Mississippi River. The development is designed with sustainability at the forefront, including affordable housing, walkability, park access, and quality transportation services. The site is subject the Sustainable Building Ordinance.

The Heights: The Heights is a 112-acre redevelopment site located on the former Hillcrest Golf course. The Saint Paul Port Authority, the lead developer of the site, aims for the Heights to be one of the first Net Zero communities in the country, and the development has already received a Platinum LEED Communities certification. The Heights Community Energy, a new nonprofit utility, in partnership with the City and the Saint Paul Port Authority was awarded the first ever loan from MnCIFA, the State's new green bank, in 2024. The loan will help finance the state's largest networked geothermal heating and cooling district system that will serve future multi-family and light industrial development on the site. Habitat for Humanity is building 140 all-electric, ultra energy

efficient homes on site, and Xcel Energy is relocating its natural gas headquarters to a building on the site that will use geothermal heating and cooling.

Solid Waste

Some of the actions the City has implemented to reduce emissions include:

Food Scraps: Ramsey County operates seven 24/7 food scraps (organics) collection sites in Saint Paul. These sites enable residents to bring food scraps from home and reduce the amount of organic material that end up in landfills.

Recycling & Energy Center: Education and sophisticated sorting at the Ramsey/Washington Recycling & Energy Center move the City toward its waste diversion targets by removing recyclable materials from the waste stream.

Education: In 2022, the Garbage Program received a grant to promote the use of backyard and drop-off composting sites through educational events and distribution of compost bins.

Mattress Recycling: Beginning in 2024 the City began partnering with a local business that recycles mattresses, and to date we have seen the diversion of more than 9,000 mattresses from incineration.

To Go Packaging Ordinance: The city passed a To Go Packaging ordinance that requires to-go food and beverages to be packaged in environmentally friendly containers that can be composted, recycled, or returned/reused.

Community Resilience

The City has initiated several programs to adapt to climate change and strengthen community resilience, including the following efforts:

Climate Forums: Each year, the City hosts a Climate Forum to bring community members together to discuss progress and gather support for climate initiatives.

Climate Dashboard: The City uses the Climate Dashboard to provide updates to the community regarding actions the city is taking to work toward its climate goals.

Ash removal and replanting: The City has completed its efforts to remove all Ash trees from the public rights-of-way and will begin replanting to recover the tree canopy.

Crosby Farm Regional Park Silvicultural Study: Silviculture is the process of planting and maintaining trees to establish a health forest. In 2020, the Parks Department partnered to begin a twenty-year long study at Crosby Farm Regional Park to research how a floodplain forest in an urban setting is responding to climate change.

Green Infrastructure: The City has used a technique called shared, stacked green infrastructure along the Green Line corridor, Highland Bridge, and Allianz Field to control flooding, manage runoff, and improve water quality. This technique is a design approach that integrates multiple green infrastructure practices that benefit multiple users and reduce future flood risk down river.

Ramsey County Green/ Construction Careers Committee: This committee aims to tackle systemic barriers and implement apprenticeship readiness programs through

leveraging the skills, networks, and resources of partners. The City played a key role in the formation of this Committee, which grew out of an ad hoc City-organized initiative.

Community Involvement

During the development process for the original CARP, the City created multiple opportunities to listen to community voices and perspectives on the development of the Plan. Five in-person public forums were held across Saint Paul during the Spring of 2019. The meetings were held largely in coordination with regularly scheduled events, and emphasis was placed on pursuing meeting spaces with where diverse resident voices would be heard and engaged. The meetings were held across the community in Frogtown, West Side, Payne-Phalen, Dayton's Bluff, and Mac-Groveland neighborhoods. Across all five meetings, City staff were able to interact with, and gather input from a total of 175 community members.

An outcome of the original CARP was the Climate Justice Advisory Board (CJAB). This group was established to help ensure implementation of the CARP results in equitable and just outcomes that center equality and inclusion in decision-making. CJAB has played a significant role in the City's climate emergency declaration and assisting the City in identifying priorities for implementation. Recommended priorities include sustainable transportation, addressing energy burden, growing a green workforce, emergency preparedness, and community education.

CJAB was also instrumental in the development of the Plan Update and the Priority Action Plan. In addition to discussing plan updates at regular committee meetings, the CARP Update Advisory Committee (the Committee) was created as a working group under CJAB that included board representatives and a broader group of community members. The purpose of the Committee was to provide guidance and feedback on the community engagement and technical aspects of the update. The Committee was formed in the fall of 2024 and met ten times over the course of the planning process. The Committee was made up of 26 members who brought a diversity of backgrounds and experiences to inform the plan. Committee members provided valuable feedback on the actions included in the Plan Update and priorities to include in the five-year Priority Action Plan.

Along with Wilder Foundation, the City conducted a concurrent engagement process to expand outreach efforts to hear from more community voices. The engagement process was designed around six learning questions that were used to gauge community support and concerns across key climate-related topics. These learning questions were embedded into several engagement methods to hear from people in different formats and settings. The process included multiple

opportunities to hear from community members about their thoughts on City climate action. Methods include:

Community Conversation Kit: A toolkit that residents were able to utilize to host their own climate conversations. The toolkit provided a set of suggested discussion questions, tips for facilitation, and instructions for sharing notes and comments with the City. The City received eleven responses from this method.

Online Survey: The City hosted an online survey on its website to solicit top concerns related to climate changes, as well as priorities for the Plan Update and Priority Action Plan. Nearly 400 people submitted responses through the survey.

Event-based Activities: Wilder staff attended and tabled various community events to collect responses regarding climate action and increase awareness around the plan update and climate impacts in Saint Paul. More than two hundred people were engaged at these events.

Climate Forum: The City hosted its second Climate Forum in March 2025. Attendees participated in small group discussions to provide input on climate initiatives and priorities. More than 120 people attended this event.

Listening sessions: Wilder hosted listening sessions in areas of the City that are more vulnerable to climate hazards due to increased risk and higher percentages of vulnerable populations. These sessions enabled deeper conversations where residents could share how they are personally affected by climate change and what they would like to see from the City to support localized efforts. Wilder engaged 39 residents in 3 neighborhoods.

Responses from each engagement method were synthesized into a single report, which can be found in the appendix. The following summarizes themes and findings that emerged from the engagement process.

A. Prioritize Healthy Communities

Many residents are concerned about how the impacts of climate change affect health, identifying poor air quality as a top concern. To combat the effects of hazardous air pollution and extreme heat, residents would like to see increased investment in safe options for active transportation (e.g., biking and walking), more compact neighborhoods, expanded access to green spaces, and to plant more trees and native vegetation hotter areas of the city, prioritizing vulnerable neighborhoods.

B. Expand Resilience Efforts

Financial loss and ability to recover from extreme weather events is a primary concern for residents. They question their own capacity as well as the City's capacity to be prepared for unexpected costs on top of existing financial stressors, like high grocery costs and utility bills. Many don't have access to insurance to cover such expenses. To improve resilience, residents would like to see the City provide financial and material support for localized efforts. This could include investment in resilience hubs, supporting community-led initiatives, and facilitating deeper community connections.

C. Increase Clean and Efficient Energy

Many residents would like to see greater investments in clean energy and efficiency, especially for households with modest incomes. Clean energy, like rooftop solar, offer many benefits like reduced electricity bills and backup power when paired with batteries. Improved insulation and air sealing can also help to reduce costs, and clean heating and cooking appliances can reduce poor indoor air quality. These home energy improvements come with high upfront costs and residents would like to see the City alleviate some of the financial burden.

D. Low-Impact Transportation

Low-emission modes of transportation are important to many residents. Improving public transportation services and safety is a top priority for many. Residents would also like to see expansion of the Evie carshare programs and support for vehicle electrification, like increased access to public charging stations.

E. Improve Waste Management

A key area of concern that emerged during the engagement process is waste management and an increase in composting options. Many residents would like to see expanded curbside pickup and/or additional locations with more convenient operating hours to drop off food and yard waste. There is also support for reducing the amount of waste generated and limiting single-use plastic materials. Residents would like the City to support small businesses by reducing or removing barriers to implementing sustainable practices.

Residents are ready for the City to take bigger actions to address climate change and realize local benefits, like improved health, job creation, lower utility bills, more access to green spaces, and expanded transportation options. They would like to see a strong push from the City on sustainable practices, and greater opportunities for community members to engage in implementation.

The community engagement conversations demonstrate that Saint Paul residents are eager to support local climate initiatives and would like to see the City continue to take bold action. Insight from community members serves to both inform the Plan Update and build support for plan implementation. As we continue to face challenges posed by a changing climate, it will be increasingly important for more people to be involved in the solutions.

What Causes Climate Change?

Since the Industrial Revolution, humans have used fossil fuels (coal, oil, and natural gas) as the primary energy inputs for travel, space heating, electricity, and industrial processes. The acts of extracting, processing, and burning these fuels result in the release of greenhouse gases (GHGs), predominantly carbon dioxide (CO_2). These gases rise into the atmosphere where they can stay for thousands of years, trapping heat as it bounces off Earth's surface — agricultural practices and deforestation are also major causes of increased atmospheric CO_2.

As more GHGs accumulate in the atmosphere, more heat is trapped. Over the past 150 years, enough GHGs have been released into the atmosphere to increase global average temperature by nearly 1.5 degrees Celsius (2.7 degrees Fahrenheit). Increasing temperatures have been changing the climate worldwide and, if left unchecked, threaten to dramatically disrupt our current way of life, locally and globally.

The following details the most common sources of emissions that are generated within or due to activity in cities:

Electricity: Generation of electricity from fossil fuels (e.g., coal or gas-fired power plants) that is used in homes, business, industry, outdoor lighting, and increasingly transportation produces greenhouse gas emissions.

Space and Water Heating: Appliances like water heaters, boilers, and furnaces that use gas, propane, or heating oil produce emissions from the combustion of those fuels. Indoor combustion of these fuels also contributes to poor indoor air quality that can have adverse effects on health.

Industrial and manufacturing processes: Intensive manufacturing or other industrial processes generate emissions by combusting fossil fuels or the chemical reactions that occur during production of goods and materials.

Transportation: Vehicles that combust fuel (e.g., gasoline or diesel) produce greenhouse gas emissions and other pollutants. This includes most cars, trucks, freight, planes, boats, off-road vehicles, and more. Combustion from vehicles contribute to poor air quality, especially in high-traffic areas like interstates and disproportionately affects the health of lower-income households that are more likely to be located near arterial roads. Mobile equipment like lawn mowers and leaf blowers also contribute to emissions.

Generation and disposal of waste: Emissions are generated in the production and transportation of purchased goods. Additional emissions are released after the disposal of goods either from methane as organic material breaks down in a landfill or from the combustion of waste at incinerators.

In Saint Paul, most emissions come from energy used in buildings (67%). Of those emissions, roughly 40% come from electricity and 60% come from natural gas. Transportation makes up the next largest share of emissions at 32% (Figure 2). Finally, while waste only makes up approximately 1% of total emissions, this only includes emissions from landfills and incineration, i.e., post-consumer waste. It is important to consider the emissions that go into producing and transporting the goods that are purchased in Saint Paul, as those emissions are much greater.

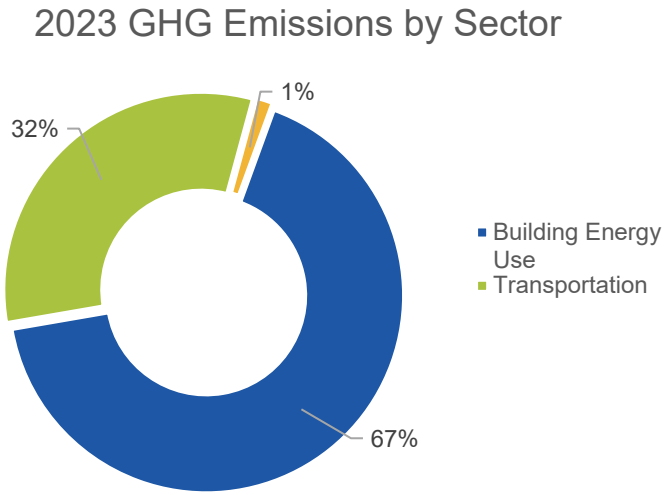

Figure 2 Breakdown of citywide emissions by sector, 2023.

Local Climate Impacts and Projections

Saint Paul is already feeling the effects of climate change. Since the adoption of the original CARP, global sea and air temperatures have achieved record highs and climate disasters continue to increase around the world, sometimes having local impacts. Globally, 2024 was the warmest year on record with an average global temperature of 15.1°C (59.2°F), and was 1.6°C (2.9°F) warmer than the pre-industrial level, making it the first year to exceed the 1.5°C target set through the Paris Climate Accord (Copernicus, Global Climate Highlights 2024).

Locally, the City experienced notable climate-related changes in the past two years. The summer of 2023 saw a record number of days over 90°F (33 days, compared to an average of 13), and the latest date where the temperature exceeded 90°F in October, leading to the cancellation of the Twin Cities Marathon. That summer, Saint Paul was also impacted by a record-setting number of days (52) with poor air quality, largely due to smoke from Canadian wildfires. In August of 2023, the summer's drought was alleviated with late season storms, one of which caused more than $1 billion in hail damage across the Twin Cities.

Above average temperatures continued into the 2023-2024 winter, which saw little precipitation and consistently warm temperatures, earning the title of the *Lost Winter* (Minnesota DNR). Heavy rain events in late spring and early summer of 2024 led to river flooding, affecting Lowertown and surrounding areas where water covered roads and damaged buildings.

Looking ahead, Saint Paul can expect to see an acceleration of climate hazards, especially as warmer global temperatures affect precipitation patterns and heatwaves. The University of Minnesota created an interactive online tool, CliMAT, that provides localized climate projections for communities in Minnesota. Using the tool, the Mid-century/High-emissions scenarios include the following projections (https://app.climate.umn.edu/).

> **Warmer summers:** Average summer high temperatures are expected to increase 5.5°F to 87.0°F; and the annual number of days that exceed 90°F is projected to increase by 24.5 days above (from 13 to 37.5) the historical average (1995-2014).
>
> **Warmer winters:** The daily average high temperature is projected to be 24.2°F, 5.5°F above the historical average (1995-2014). The daily average low temperature is projected to be 17.5°F, 6.4°F above the historical average (1995-2014).
>
> **Precipitation patterns:** Annual maximum precipitation for a single day in Ramsey County is projected to be 3.6 inches. Precipitation is not expected to change uniformly throughout the year, rather winter and spring precipitation are projected to increase, while summer precipitation is expected to decrease, leading to wider extremes of wet and dry periods.

While it is more challenging to project the frequency and intensity of extreme storms, the changing conditions (higher temperatures and increased water vapor) are favorable to thunderstorms, tornadoes, and high wind events occurring more frequently (Climate Central). The changes in weather patterns and extreme events will have an impact on community members, property, natural systems, and infrastructure. The next section looks at the how people, nature, and our infrastructure may be vulnerable to various hazards to help understand how the City can better prepare for these changes.

Climate Vulnerabilities

According to Ramsey County Public Health, *vulnerability* refers to the characteristics and circumstances of a person or group that reduces their ability to anticipate, endure, adapt to, and recover from the effects of a climate hazard. Natural systems, such as trees, wetlands, and surface waters can also be susceptible to climate hazards, potentially increasing risk to populations and property. Similarly, built infrastructure like roads, bridges, and sewers can be vulnerable to depending on their age, condition, and if they were designed and constructed to withstand projected climate hazards.

The climate hazards most likely to affect Saint Paul were discussed previously. This section examines vulnerabilities across populations, natural systems, and built infrastructure. To determine population vulnerabilities, data was sourced from Ramsey County Vulnerable Assessment maps that illustrate areas of Saint Paul where people are vulnerable to various hazards. Many of these communities overlap with environmental justice neighborhoods. The Minnesota statute defines environmental justice areas as census tracts where:

- At least 40% of the population is people of color.
- At least 35% of households have income at or below the 200 percent of the federal poverty level.
- At least 40% of the population has limited proficiency in English
- Are located in federally recognize tribal reservations and other Indigenous lands.

The MPCA created a map that shows Environmental Justice areas by census tract. According to this map, most of Saint Paul falls under these definitions. Different populations experience varying levels of risk depending on the type of hazard. Using Minnesota Compass data derived from the U.S. Census, this plan identifies the percentage of residents who are considered vulnerable for each type of hazard.

Assessments have not been completed to determine which natural features or built infrastructure are most vulnerable to climate hazards. However, it is generally understood that diseased trees or impaired surface waters have reduced capacity to respond to shocks and stressors posed by different climate hazards. Similarly, aging built infrastructure and infrastructure that was not designed for future climate conditions face greater risk for damage or failure. This section looks at the relationship between climate hazards and their impact on vulnerable populations, natural systems, and built infrastructure.

1. **Extreme Heat and Urban Heat Island.** The urban heat island effect is caused by dark surfaces (e.g., rooftops and asphalt) absorbing the sun's heat and slowly releasing it through higher temperatures in low-vegetation urban areas relative to surrounding communities. An increase in the number of days above 90°F and greater frequency of prolonged heatwaves will have adverse effects on people's health, while stressing natural systems and infrastructure. The greatest risk of exposure to extreme heat is prevalent in areas across the city with less dense vegetation and tree canopy cover.

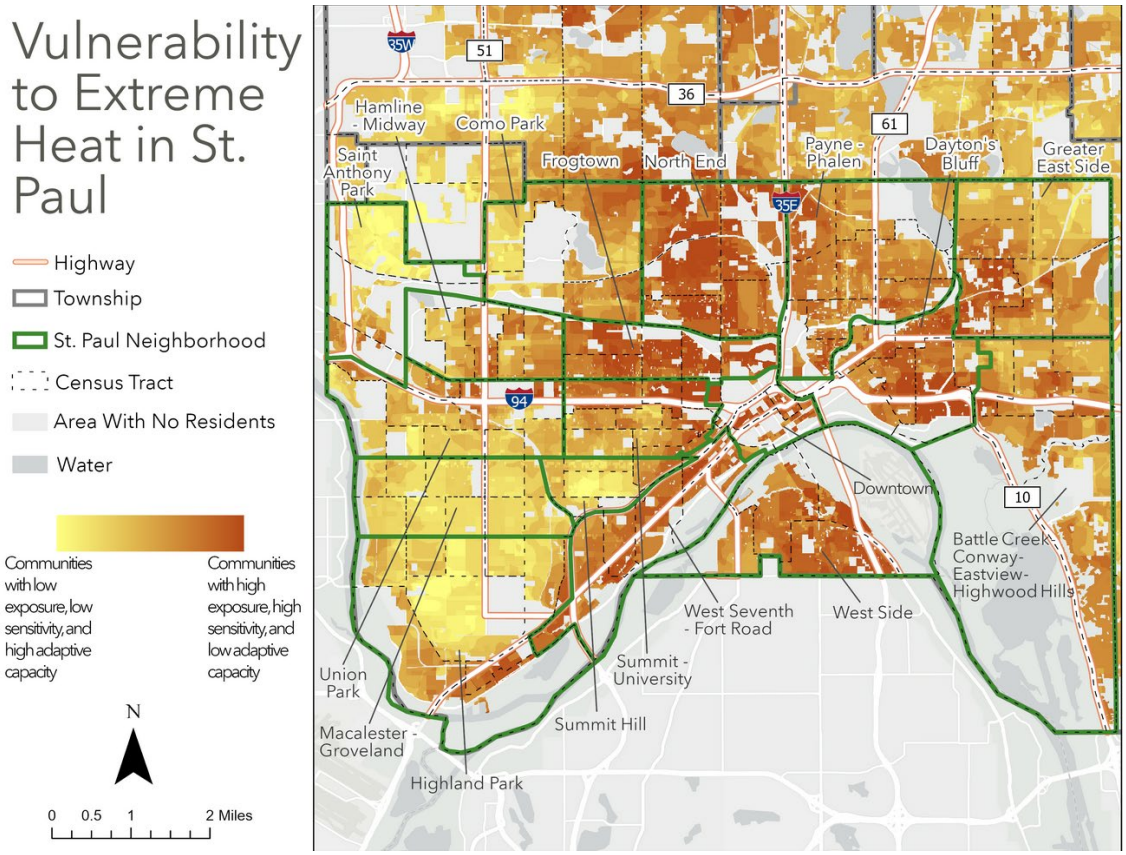

Figure 3 Vulnerability to Extreme Heat in Saint Paul, Ramsey County

Vulnerable Neighborhoods: Hamline Midway, Frogtown, Summit-University, North End, Payne Phalen, Dayton's Bluff, Greater East side, Downtown, West Side.

Vulnerable Populations:

- **Adults over 65 (12.2% of all residents)** are more likely to suffer from heat-related illnesses like heat stroke and dehydration. Isolated adults who lack air conditioning and have limited social support are most vulnerable to prolonged heat events.
- **Young children (6.3% of all residents),** when playing outside, are unable to self-regulate or understand symptoms of heat exhaustion. In schools without air conditioning, high indoor air temperatures can be disruptive to children's ability to learn.
- **Low-income households (64% earn less than 80% of the median income for a family of four: 15.7% with income below poverty)** may have competing priorities for their expenses and may choose not to run expensive air conditioning units.
- **Renters (43.8% of all housing units are renter-occupied)** may lack access to adequate or efficient cooling appliances.
- **People with disabilities (12.5% of all residents)** may have limited mobility making it difficult to get to cooling centers or other places to access air conditioning, if needed.

- **Outdoor workers (2.8% construction workers)** are exposed to heat throughout the work day and face dehydration or heat exhaustion without sufficient time for breaks and the ability to cool off.
- **Non-English speakers (13.1% speak English less than "very well")** may have language barriers that prevent them from accessing or understanding community resources or alerts.

Natural Systems: Just like people, extreme and prolonged heat can impact the health of trees and vegetation. When trees are stressed, they can lose water faster than they are able to store it making them susceptible to disease or illness. Tree loss can impact the urban canopy further amplifying the urban heat island effect.

Infrastructure: Extreme heat can stress infrastructure, degrading roads by causing cracks or buckling. Increased frequency in infrastructure damage will continue to grow and stress the City's capital budget, adding costs for taxpayers.

2. **Severe Storms & Power Outages.** Severe storms can cause significant damage to property, infrastructure, and natural systems through high winds, hail, and heavy precipitation. These events also pose risks to the health and safety of community members. Power outages resulting from severe weather can limit access to heating and cooling, compromise medical equipment, and disrupt communication systems. Neighborhoods with high tree canopy, aging infrastructure, and high social vulnerability are most susceptible to the impacts of extreme weather events.

   Vulnerable Neighborhoods: Hamline Midway, Frogtown, Summit-University, North End, Payne-Phalen, Dayton's Bluff, West Side (FEMA National Risk Index, Strong Wind).

   Vulnerable Residents:

   - **Renters (43.8% of all housing units are renter-occupied)** may not have insurance to cover personal property damage and may face difficulties finding temporary or new housing if this their building is damaged.
   - **Adults over 65 (12.2% of all residents)** may rely on medical equipment that needs electricity. Mobility limitations, chronic health conditions, and social isolation can make it more difficult to evacuate if needed.
   - **People with disabilities (12.5% of all residents)** may have limited mobility making it difficult to evacuate or change location during an emergency. Power outages can disrupt the functioning of medical equipment that needs electricity.
   - **Low-income households (64% earn less than 80% median of the income for a family of four; 15.7% with income below poverty)** may lack financial resources to recover from a storm, including repairing damage, replacing spoiled food, or securing temporary housing.
   - **Non-English speakers (13.1% speak English less than "very well")** may face barriers accessing timely emergency warnings, evacuation instructions, and recovery resources. Miscommunication can delay action and increase exposure to hazards.
   - **People without reliable transportation (12.6% of all households do not have a vehicle)** may be limited in their ability to evacuate, seek assistance, or get supplies in preparation for or after an extreme weather event.

Natural Systems: High winds and heavy precipitation can damage trees, shrubs, and other plants, reducing tree canopy cover and increasing soil erosion that can lead to landslides. Extensive damage to natural systems can reduce their capacity to protect communities from future hazards. In the winter, heavy precipitation can fall in the form of ice or snow. With warmer winters, the risk of ice accumulation can damage trees by causing branches to break or uprooting trees.

Infrastructure: Extreme weather events can damage roads, bridges, utilities, and buildings. Power outages can disrupt essential services including water treatment, traffic signals, and communication networks. An increase in freeze/thaw cycles damages roads, degrading the structure and performance, leading to an increase in potholes and associated maintenance costs.

3. **Flooding & Water Damage.** The risk of river and flash flooding varies across Saint Paul and is influenced by topography, watersheds, and land use. Areas that are more susceptible to flash flooding tend to be low-lying with high levels of impervious surfaces, like roads and parking lots. Flooding can happen quickly or gradually, due to heavy precipitation in a short period of time, frequent precipitation during a period of high soil saturation. River flooding can happen after snow melt or heavy, multi-day rain events that occur locally or upriver.

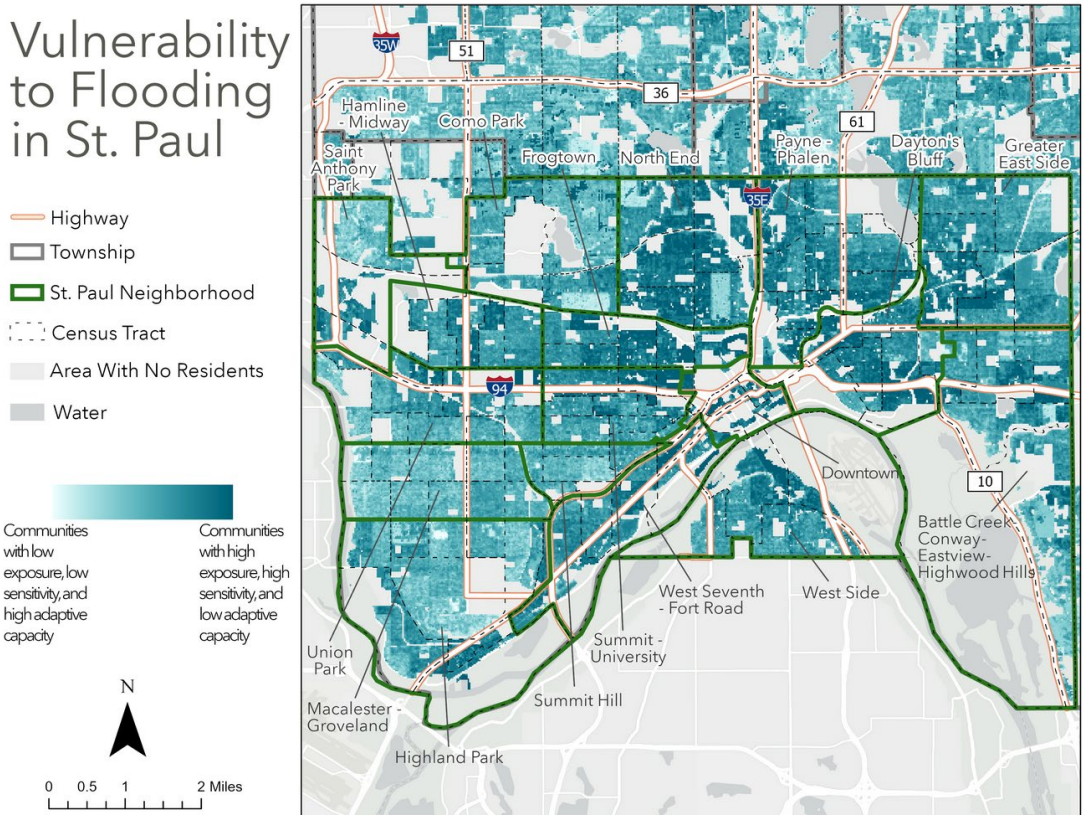

Figure 4 Vulnerability to Flooding in Saint Paul, Ramsey County

Vulnerable Neighborhoods:

River flooding: FEMA designated floodplain which includes Lowertown, Childs Road, Barge Channel Road and Harriet Island.

Flash flooding: Hamline Midway, Frogtown, North End, Payne Phalen, Dayton's Bluff, East Side, West Side.

Vulnerable Residents:

- **Low-income households (64% earn less than 80% median of the income for a family of four; 15.7% with income below poverty)** may not have insurance and/or the ability afford damages, or easily re-locate.
- **Renters (43.8% of all housing units are renter-occupied)** may not have renters' insurance and may have difficulty re-locating.
- **Non-English speakers (13.1% speak English less than "very well")** may face barriers accessing timely emergency warnings, evacuation instructions, and recovery resources. Miscommunication can delay action and increase exposure to hazards.
- **People with disabilities (12.5% of all residents)** may have limited mobility making it difficult to evacuate or change location during an emergency.

Natural Systems: River and flash flooding can saturate and erode soils, damage vegetation, and uproot trees. Floodwaters can carry sediments, pollutants, and other debris into rivers and lakes, harming water quality and ecosystems.

Infrastructure: Roads, bridges, and stormwater infrastructure can be damaged, disrupting travel and increasing maintenance and repair costs.

4. **Air Quality & Wildfire Smoke.** Air quality in cities can be affected by the concentration of activities such as industrial processing and vehicle travel, which release particulates and other pollutants into the atmosphere. These pollutants can have serious effects on respiratory and cardiovascular health. Increasingly, wildfires in Minnesota, other parts of the United States and Canada are also degrading local air quality. Communities that are located near major roads, highways, and industrial areas face greater exposure to air pollution. While wildfire smoke affects the entire city, areas with higher tree coverage experience some relief, as the trees filter pollutants.

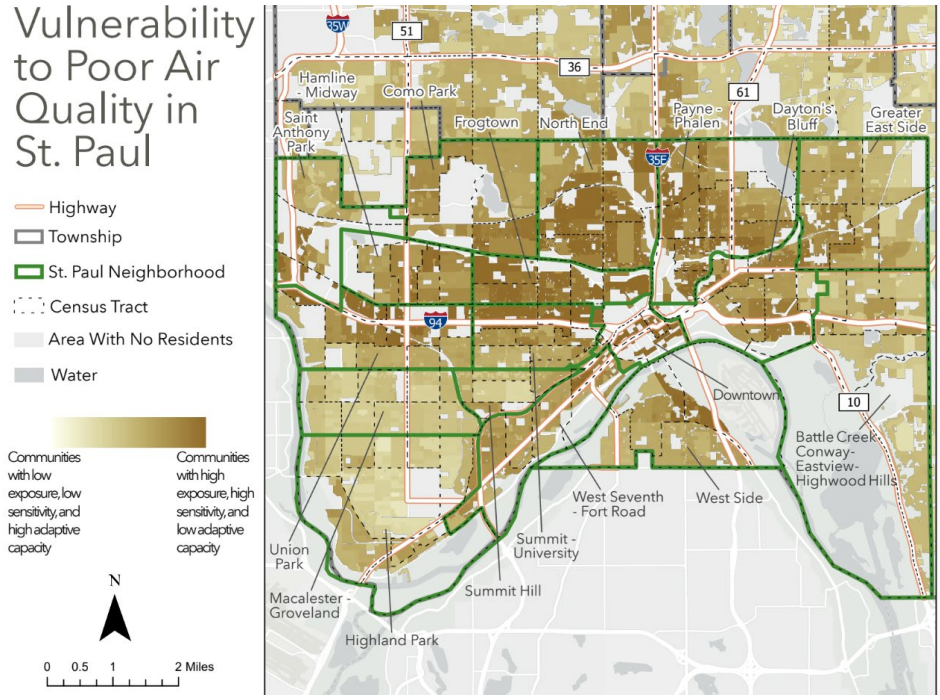

Figure 5 Vulnerability to Poor Air Quality in Saint Paul, Ramsey County

Vulnerable Neighborhoods: Hamline Midway, Frogtown, North End, Payne Phalen, Dayton's Bluff, Downton, and Westside.

Vulnerable Residents:

- **Children under 15 (19.7% of all residents)** are still developing their lungs, making them more sensitive to air pollution. Prolonged exposure to air pollution can increase the risk of asthma and other respiratory illnesses.
- **Adults over 65 (12.2% of all residents)** are more likely to have underlying health conditions, such as heart or lung disease, which makes them more susceptible to poor air quality.
- **People with preexisting health conditions (12.5% of all residents)**, especially asthma, COPD, cardiovascular disease, or other respiratory conditions are at higher risk of severe health impacts due to poor air quality.
- **Outdoor workers: 2.8% construction workers** can spend extended periods of the day outside, exposed to poor air quality and increasing the risk of respiratory irritation or more serious illness.

Natural Systems: Air pollution can negatively impact forests, lakes, and other ecosystems. For example, Sulfur dioxide (a common pollutant from combustion of fossil fuels) can acidify lakes and streams, and damage trees and forest soils.

Infrastructure: Air pollutions can gradually degrade infrastructure and increase maintenance needs and costs. Pollutants such as sulfur dioxide can dissolve and corrode buildings materials like metal, concrete, stone, and paint. Fine particulate matter can accumulate on buildings, increasing cleaning and maintenance costs.

Objectives, Targets, and Actions

This section includes the full list of Objectives, Targets, and Actions that Saint Paul will be implementing to work towards its climate goal of carbon neutrality by 2050 and to strengthen the resilience of community members, natural spaces, and built infrastructure. This section is organized by the following categories:

- Implementation, Funding, and Partnerships.
- Energy Use in Buildings
- Transportation and Mobility
- Waste Management
- Water Services and Wastewater
- City Buildings and Operations
- Community Resilience and Emergency Preparedness
- Nature-based Solutions

Each category includes summary background information, objectives that guide the desired outcomes, targets that are measurable and help track progress, and specific actions to work toward the targets and achieve the objectives. Targets were selected based on their potential impact and the availability of reliable data. By monitoring these targets, we can assess progress toward longer-term goals and understand the broader community-wide impacts of the Plan's implementation.

While these actions are comprehensive and are intended to support long-term goals, they are not all-inclusive. There may be technology or policy changes that occur in the future that necessitate updates to the action list. The City will continue to refine and improve upon these actions as we work toward our goals. Progress and updates will be shared on the City's Climate Dashboard and through other communications channels.

The Plan Update concludes with the Priority Action Plan, a five-year plan focused on what the City aims to accomplish in the near term. The initiatives in included in this section were selected based on feedback from community members, the Advisory Committee, and staff. Additionally, many of the actions included in the five-year work plan are initiatives that the City is already pursuing as well as those where the City has the greatest control and influence. The Priority Action Plan follows this suite of actions.

Implementation, Funding, and Partnerships

To be successful, the City needs to strengthen its internal capacity, foster partnerships, and empower the community to take action. Strengthening internal capacity will require increased awareness and collaboration across City departments as well as allocating adequate resources toward Plan implementation. Many institutions, organizations, and businesses are also seeking to reduce emissions and implement sustainable practices. Through expanded partnerships, the City can maximize the impact of shared resources across the community and accelerate climate action. Finally, continued engagement of community members will help to ensure that residents are aware of and can take advantage of opportunities to realize the benefits of climate action.

The implementation of the Plan Update and Priority Action Plan will also require additional funding from the City that leverages other sources. Implementation of the Plan Update includes a target where climate-specific spending is equal to or greater than 1% of the City's general budget (based on the 2026 projected budget). Much of the City's existing climate budget comes from utility franchise fees. Reinvestment of these dollars will result in financial and health benefits for Saint Paul community members, with an emphasis on assisting those who are most affected by cost increases.

Implementing climate action now is an investment in the future. The social cost of carbon is a metric used to capture the net harm to society from each ton of carbon emitted. Harms might include effects on human health, property damage, risk of conflict, agricultural productivity, environmental damage, and other factors. As time goes by, the cost of inaction rises. Investing in emissions reductions strategies and preparing for climate change will result in a safer, healthier, and more affordable future for everyone in Saint Paul.

Equitable Outcomes: The Plan Update and Priority Action Plan will prioritize directing climate programs to those most affected by climate impacts and rising costs. Through inclusive engagement and equitable implementation, the City can work to reduce cost burdens, minimize vulnerabilities, and increase access to high-quality jobs, working toward a better future for everyone.

Objective I: Build internal capacity and funding to implement the CARP.

Objective II: Track, measure, and share progress via the Saint Paul Climate Action Dashboard.

Objective III: Strategically partner with other government bodies, utilities, the private sector, clean tech accelerators, and community-based organizations to advance the City's climate action and resilience goals.

Objective IV: Help educate community members about the actions they can take to contribute to the City's climate goals.

Objective V: Within 3 years, win commitments of major institutions (e.g., higher education, hospitals) to achieve carbon neutrality by 2050.

2030 Implementation, Funding, and Partnership Targets

- Dedicate at least one percent of City annual funding (using 2026 general fund as the baseline) to support City climate action.

- Bring in external funding equivalent to at least one percent of the City's annual budget to support climate action.
- All City Departments have successfully implemented relevant CARP actions.
- Partner to implement two new pilot projects involving clean-tech start-ups by 2030.

Actions:

1. **Staff Capacity:** Identify gaps in staffing resources and provide adequate funding and personnel to ensure successful plan implementation.
2. **Department Plan Integration:** Work with department heads to identify how each department can lead CARP implementation and data tracking in their respective areas.
3. **Policy and Regulatory Barriers:** Review City policies and ordinances to remove barriers that may limit climate actions taken by residents and businesses.
4. **Internal Funding:** Use the franchise fee or other mechanisms to expand funding for implementing CARP programs.
5. **External Funding:** Seek outside funding and financing opportunities to support implementation. Options might include but are not limited to: Minnesota Climate Innovation Finance Authority, bonding, philanthropy, federal tax incentives/direct pay, state and federal grants.
6. **CJAB:** Continue working with the Climate Justice Advisory Board (CJAB) to implement the CARP and expand community connections to increase engagement while prioritizing the needs of our most vulnerable residents and neighborhoods.
7. **Education and Outreach:** Share materials and resources that equip and empower community members, businesses, and institutions to implement climate measures.
8. **Communicate Progress:** Communicate progress toward City goals using tools such as the City's Climate Action Dashboard to track.
9. **Convene Institutional Leaders:** Meet with institutional leaders annually to advance mutually beneficial climate initiatives.
10. **Emerging Technology:** Partner to pilot and advance new technologies that help reduce emissions or support climate resilience.
11. **Workforce Development:** Partner with Ramsey County and community-based organizations to implement workforce development programs that help Saint Paul residents benefit from the transition to clean energy.

Energy Use in Buildings

Emissions from building energy use is the largest contributor to the City's total greenhouse gas emissions, making up 67% of emissions (1.6 million $MTCO_2e$) in 2023. Emissions primarily come from the electricity and gas used in residential, commercial, and industrial buildings. In 2018, gas surpassed electricity as a greater share of buildings emissions. The GHG emissions that come from electricity have decreased 42% between 2018 and 2023. This is largely due to cleaner electricity generation as well as efficiency measures. Electricity emissions are anticipated to continue to decline as more clean energy is added to the grid, while gas is expected to increase.

Overall, building emissions decreased 22% between 2018 and 2023 (436,893 $MTCO_2e$). To achieve the City's goal of a 63% reduction by 2030, an additional 824,292 $MTCO_2e$ will need to be reduced. This can be done through improved building efficiency, electrification of gas appliances, clean electricity generation, and decarbonizing the energy inputs of the district heating and expanding the system.

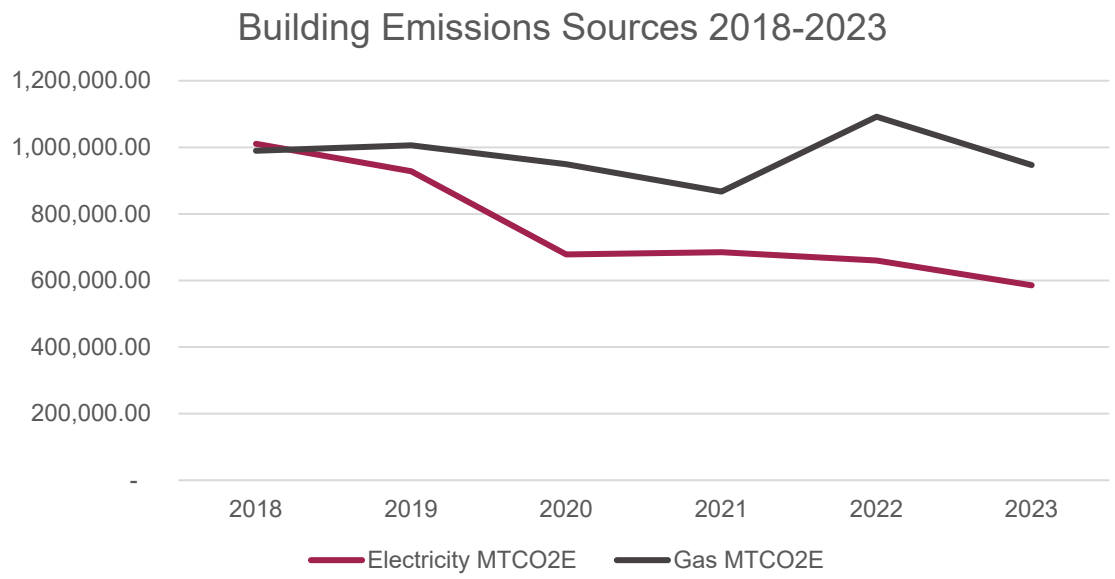

Figure 6 Gas and electricity emissions comparisons, 2018-2023.

Energy Use in Buildings includes a focus on residential, multi-family, and commercial energy use. Each category has specific targets that are supported by implementable actions that are relevant to that sector.

Equitable Outcomes: Energy burden is defined as the percent of household income spent annually on energy (i.e., gas and electricity bills). An energy burden of 6% is considered high and 10% or greater is considered severe. The average energy burden in Minnesota is 2%. In Saint Paul, there are 20 census tracts where the average energy burden is greater than 6% for households with 80% or less of the area median income. Reduced energy use and increasing access to cleaner energy technologies will help to reduce and stabilize utility bills, as well as improve indoor air quality. Ensuring that residents with lower incomes and renters are prioritized in program implementation will help alleviate energy burden and lead toward better health outcomes.

Objective I: Inspire and equip our community to transition to clean and efficient energy use.

Objective II: Alleviate residential energy burden with a focus on the lowest-income households.

Objective III: Ensure all new construction is designed and constructed to be carbon neutral.

Residential Building Energy Use

Residential Targets

- 40% annual increase of households with energy efficiency improvements (i.e., weatherization) making them electrification ready.
- 3% annual reduction of energy-burdened households.
- 10% of residential electricity used is met by on-site renewable energy sources by 2030.
- 10% annual increase of LMI households with access to rooftop solar or solar garden subscription.
- 10,000 additional households are served by a thermal energy network by 2030.

Actions:

1. **Work Group:** Continue supporting the energy burden working group that coordinates outreach and resources among local community entities and trusted leaders.
2. **Home Energy Improvements:** Launch and implement the Healthy Homes program to address pre-weatherization and weatherization projects, and the Power of Home program to support residential electrification.
3. **Energy Retrofits:** Create a comprehensive deep energy efficiency retrofit program that systematically reaches every 1–4-unit building in the city, with a focus on energy-burdened neighborhoods and households.
4. **Rental Housing:** Pilot and then expand programs targeting 1-4 unit rental properties for energy efficiency retrofit.
5. **Utility Bill Credits:** Support permanent implementation of Xcel Energy's electricity bill credit pilot for income-qualified households and expanding the program to gas customers.
6. **Energy Data:** Partner with Xcel Energy to improve data collection to better direct home energy programs and resources to energy-burdened households.
7. **Education:** Partner with community-based organizations to provide resources and coaching to residents about energy efficient appliances, clean energy, and electrification opportunities as well as available incentives.
8. **Thermal Energy Decarbonization:** Continue to pilot thermal energy network applications for new developments and build on existing networks, such as District Energy Saint Paul.
9. **Thermal Energy Plan:** Complete a citywide thermal energy plan that assesses current heating systems and identifies appropriate technology options to decarbonize fossil fuels used for building energy.

Multi-Family and Commercial Building Energy Use

Multi-family & Commercial Targets

- 10% annual increase in proportion of new development all-electric by 2040.
- 20% of commercial electricity used is met by on-site solar and/or solar garden subscriptions by 2030.
- 20% annual increase in multi-family and commercial buildings completing energy efficiency, clean energy, and electrification projects.

Actions:

1. **Small business energy.** Partner with community-based organizations and others to provide technical assistance and resources—in multiple languages—to small businesses looking to improve efficiency, electrify appliances and equipment, reduce emissions from refrigeration, and install clean energy, prioritizing businesses in low-income communities.
2. **Financing:** Promote financing and rebate opportunities, such as commercial Property Assessed Clean Energy (PACE), utility rebate programs, and state and federal incentives.
3. **Incentives:** Create an incentive program for commercial and multifamily properties to implement energy efficiency and renewable energy projects.
4. **Sustainable Building Policy.** Update Saint Paul's Sustainable Building Policy to strengthen requirements with a focus on the biggest contributors to greenhouse gas emissions.
5. **Thermal Energy Networks.** Assess feasibility of expanding thermal energy networks in Saint Paul that could serve commercial and multi-family buildings.
6. **Refrigerants.** Provide educational resources for businesses to replace refrigerants in compressors, heat pumps, AC units, and commercial coolers and freezers with lower global warming potential (GWP) refrigerants.
7. **Data Centers.** Create and adopt an ordinance that directs future data center development to be located where waste heat can be recovered and utilized in neighboring buildings and/or added to district energy systems; and ensure safeguards to protect water resources, utilize reclaimed water, and have adequate access to clean electricity.
8. **Solar Thermal:** Identify opportunities for businesses with significant hot water loads (e.g., laundromats and hospitals) to install solar thermal technology.

Transportation and Mobility

Transportation makes up 31% of the City's total GHG emissions. In 2018, 964,433 of $MTCO_2e$ were emitted by vehicles within the boundaries of Saint Paul and 749,161 of $MTCO_2e$ were emitted in 2023, a 15% reduction (Figure 7). To achieve a 63% reduction by 2030, the City will need to reduce transportation emissions by an additional 392,538 $MTCO_2e$. This can be achieved through less driving, more efficient vehicles, and electrifying cars, trucks, and buses.

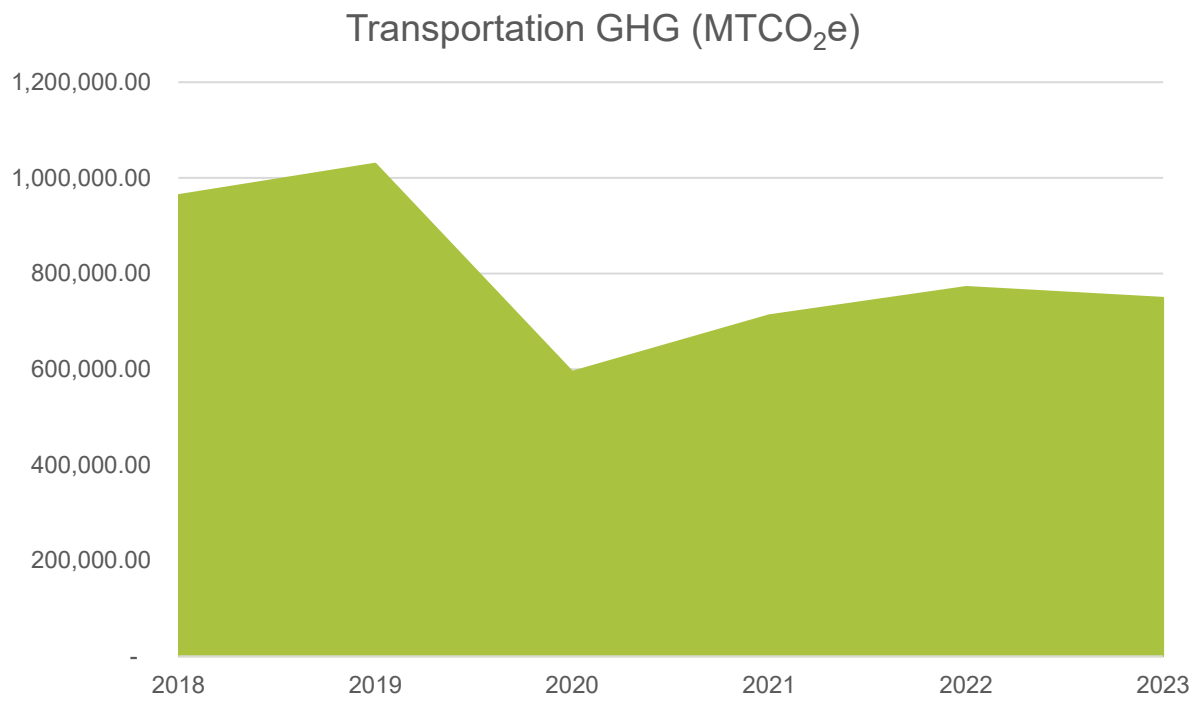

Figure 7 Transportation emissions, 2018-2023.

Actions in this section are organized into two categories: Transportation Options and Land Use Changes, and Transportation Decarbonization. The first category focuses on how the City can accommodate multiple modes of transportation that would replace car trips. This involves making walking, biking, and transit more accessible through land use changes, infrastructure improvements, and greater availability of multiple options. Transportation decarbonization includes targets and actions aimed at supporting electric vehicles, including personal cars, fleets, and buses.

Equitable Outcomes: After housing costs (rent, mortgage, utilities, etc.), transportation costs make up the next largest share of household expenses at 17% of average annual expenditures (Consumer Expenditures, 2023, Bureau of Labor Statistics). In recent years, the costs of car ownership have increased to the point where the average annual cost of owning new vehicle is nearly $11,600 (AAA Your driving Costs, 2025), per vehicle. High transportation costs can be alleviated by providing reliable and affordable alternatives and reducing car dependency. Additional benefits realized from these actions include more active and healthier lifestyles and reduced air pollution.

Objective I: Prioritize world-class infrastructure to make walking, biking (including e-bikes), and rolling convenient and safe travel modes for everyone.

Objective II: Partner to increase public transit reliability, frequency, and availability to make transit an attractive, convenient, and safe option for everyone.

Objective III: Partner to increase the availability of shared mobility options including carshare, bikeshare, and e-scooters to make car ownership and use less necessary.

Objective IV: Increase development density and the mix of land uses, consistent with the Comprehensive Plan, to enable more active and sustainable transportation that is less car dependent and leverage major investments in high frequency transit.

Objective V: Make EV use and ownership more feasible by expanding access to public and home charging infrastructure and continuing to support EVie carshare.

Objective VI: Support commercial and fleet vehicle decarbonization, including heavy-duty vehicles, among other government agencies and the private sector.

Transportation Options and Land Use Changes

Transportation Options and Land Use Targets

- 65% of residents are within half a mile of high frequency transit lines by 2030; 80% by 2035
- 1.8% annual reduction in total VMT from a 2018 baseline
- 40% of all trips are taken by non-car options (e.g., bike, bus, walking, etc.) by 2030.
- All residents live within 1/4 mile of separated active transportation facilities by 2035.
- 5,000 new residential units added within ½ mile of high frequency transit lines by 2035.

Actions:

1. **High-Frequency Transit:** Support new high-frequency rapid transit, particularly in underserved parts of the city.
2. **Last Mile:** Support transit with last-mile solutions, including electric car-share, micro-transit, bikes, e-scooters, and sidewalks.
3. **Accessibility:** Improve accessibility at, as well as to and from, transit stops for those in wheelchairs or with limited mobility, prioritizing environmental justice neighborhoods.
4. **Transit Education:** Partner to promote the use of transit and direct passengers to resources that can enable them to easily use transit services.
5. **Transit Shelter Improvements:** Partner with Metro Transit to upgrade and refurbish highly used transit stops to include amenities such as benches, shelters, waste receptacles, shade, vegetation, way-finding signs, and lighting.
6. **Bike Plan Implementation:** Accelerate the implementation of the bicycle network in the Saint Paul Bicycle Plan, with a focus on separated bikeways and filling current bicycle network gaps.
7. **Regional e-Bike Share:** Partner to implement a robust regional e-bikeshare system designed to prioritize the transportation needs of Saint Paul residents.
8. **Secure Bike Storage:** Create a complete system of secure bicycle storage and e-bike charging, prioritizing mixed-use areas and the needs of renters.

9. **Employer Incentives:** Encourage employers to incentivize employees to reduce commuting by privately-owned cars through incentives and workplace amenities (e.g., secure bike racks, showers, transit passes, carpools, etc.).
10. **Street Design:** Redesign streets and intersections to be safer for people through treatments that prioritize walking, biking, and using transit. Update the Street Design Manual to reflect current best practices.
11. **Safe Routes to School:** Continue to support and fund strategies to ensure the safety of children walking, biking, and rolling to school.
12. **Sidewalk Connectivity:** Fill in sidewalk gaps, focusing on the high-priority areas identified in the City's Pedestrian Plan, including those in proximity to high-frequency transit stops.
13. **Sidewalk and Bikeway Maintenance:** Ensure sidewalk and bikeway accessibility including year-round maintenance.
14. **Highway Conversion and Mitigation:** Work with community groups, Ramsey County, MNDOT, and Met Council to minimize and mitigate the negative impacts of highways, and prioritize transit, walking and biking, along and across highways, including Interstate 94.
15. **Land Use:** Remove regulatory barriers and direct resources toward compact land uses to promote walkability especially in proximity to high-frequency transit routes.
16. **Housing Production:** Work with stakeholders to identify and remove barriers to accelerating energy efficient housing production.
17. **Parking:** Structure the cost and availability of parking to incentivize the use of transportation alternatives.
18. **Traffic and Parking:** Enforce traffic and parking laws to ensure the safety of people walking, rolling, and biking.
19. **Slow Streets:** Pilot and then implement a Sunday street closure program to encourage more biking and walking to share in the enjoyment of public spaces.

Transportation Decarbonization

Transportation Decarbonization Targets

- 25% of on-road vehicles are electric or plug-in hybrid by 2030
- 15% annual increase of Level 2 and DCFC chargers deployed (starting in 2025)
- 90% of residents are within a quarter mile of a publicly accessible Level 2 or higher charger, electric carshare services, or both by 2040.

Actions:

1. **EV Access:** Continue to increase access to shared electric vehicles in partnership with car-sharing service providers, Xcel Energy, and other local and regional governments.
2. **Public Charging:** Develop a framework for the expansion of publicly accessible charging in City rights-of-way.
3. **EV-ready Parking:** Implement policies that encourage or require new developments to have wiring capacity to charge electric vehicles and reserve a percentage of new parking spots for EV use.
4. **Private Fleet Decarbonization:** Work with community partners to support businesses, institutions, and other non-City entities in decarbonizing fleets and providing EV charging equipment.

5. **Bus Decarbonization:** Support partners and other stakeholders to convert to electric school and Metro Transit buses.
6. **Sustainable Aviation:** Support local efforts to create opportunities for the use of sustainable aviation fuels, including at Holman Field.

Waste Management

Solid waste makes up a small percentage of overall City greenhouse gas emissions. Emissions from waste comes from methane produced at landfills and the combustion of waste at incinerators. In the most recent year, 2023, approximately 29,000 $MTCO_2e$ were emitted from waste management.

Approximately 50% of Saint Paul's wasted is recycled. Improving material and organics recycling can help reduce emissions from waste. While not included in Saint Paul's greenhouse gas inventory, it is nonetheless important to consider upstream emissions that result from the extraction of raw materials, and the energy inputs that go into the manufacturing and transporting of goods before they are purchased. These emissions are much greater than post-consumer waste and underscore the importance of reducing consumption.

Actions in the section are focused on waste prevention and better diversion practices. This includes reducing consumption, maximizing reuse, and improving diversion rates through increased recycling and composting. Success will require behavioral changes as well as programmatic improvements to make sustainable choices the easy choice.

Equitable Outcomes: Renters, especially in apartment buildings, tend to have fewer options to recycle or compost their waste. Expanding education and outreach, along with expanding programs that meet the needs of renters can help reduce the disparities of accessing sustainable waste management practices.

Objective I: Implement programs and services that align with Ramsey County waste goals established in the Solid Waste Management Master Plan.

Objective II: Reduce waste sent to the waste energy facility through decreased consumption and increased diversion practices such as reuse, recycling, and composting.

Waste Management Targets

- Increase annual diversion rate by 5% to achieve a 70% diversion rate by 2033.
- Reduce annual tons of solid waste collected from 1-4-unit properties by 2%.
- Achieve a 15% diversion rate of organic materials from residential 1-4-unit properties by 2032.
- Reuse 30% of bulky items and illegally dumped materials collected by 2035.

Actions:

1. **Waste Study:** Complete a waste characterization study every three years (first was completed in 2025) and incorporate findings into citywide waste prevention plan.
2. **Plastic Bags:** Explore the adoption of a new ordinance that places a fee on single-use plastic shopping bags.

3. **Drop-off Sites**: Promote Ramsey County compost and yard waste drop off sites.
4. **Organics Collection:** Partner with Ramsey County on the promotion of a household organics collection program.
5. **City Facilities:** Implement recycling and organics collection in all city-owned public facilities by 2030.
6. **Recycling Collection:** Implement an ordinance requiring recycling haulers to bring collected materials to the City's contracted processing facility.
7. **Construction Materials:** Explore deconstruction and diversion ordinance to require the reuse and/or recycling of construction materials; ensure safe handling of hazardous materials (e.g., asbestos, lead, etc.).
8. **Packaging Ordinance:** Enforce and promote the "to go" packaging ordinance requiring containers to be recyclable or compostable.
9. **Anaerobic Digestion:** Coordinate with Ramsey and Washington Counties to support anaerobic digestion of organic materials, or other GHG-reducing practices.
10. **Expand Recycling:** Implement a recycling drop-off for items not collected curbside and create an education center at the new Solid Waste and Recycling Facility by 2028.
11. **Dumped Items:** Establish furniture recycling and reuse for bulky and illegally dumped items collected under the coordinated collection program by 2028.
12. **Recycling Dumped Items:** Evaluate illegally dumped materials for reuse and recycling.
13. **Public Waste Receptacles:** Increase access to recycling and decrease litter by evaluating public space waste needs and purchasing new trash and recycling bins for optimal placement.
14. **Events:** Implement waste permitting process for events to require waste management in compliance with the city waste ordinance by 2030.

Water Services and Wastewater

Water holds historical and cultural significance, including as the homeland and scared sites of the Dakota people. Saint Paul has more shoreline along the Mississippi River than any other city in the country. Its network of creeks, lakes, and wetlands supports biodiversity, offers recreation, and helps to manage flooding from excessive stormwater runoff. Through conservation efforts, improved stormwater practices and street maintenance, the City can safeguard our water resources for future generations.

A reliable and affordable water supply is one of Saint Paul's most vital public resources. Maintaining and modernizing the water delivery system ensures residents and businesses will have access to clean, sustainable water for decades to come. While emissions from the distribution and treatment of water are relatively small and are included in City Operations, there are meaningful opportunities to reduce them and innovate around the role of water in our decarbonization efforts. Opportunities to reduce emissions from Water Services include increased clean electricity generation, efficiency measures, and building decarbonizations. Finally, water and wastewater infrastructure can also play an important role in capturing and utilizing waste heat and enabling thermal storage, contributing to broader emissions reductions.

Equitable Outcomes: Keeping water prices stable and affordable is core to the City's Water Services. The City will continue to deliver high quality water to homes and businesses, as well as parks and other community spaces. Building decarbonization that utilizes waste heat and/or thermal storage will be inclusive of income-qualified homes and multi-family buildings, helping to stabilize heating costs.

Objective I: Efficiently use water to reduce energy consumption and conserve resources.

Objective II: Maximize the potential of the wastewater system to serve energy goals.

Water Services and Wastewater Targets

- 2% annual reduction of non-revenue water pumped.
- At least one thermal energy pilot project utilizes waste heat from the wastewater system by 2030.

Actions:

1. **Conservation Education:** Provide resources to community members to reduce leaks and encourage efficient indoor water usage.
2. **Water Usage Monitoring:** Continue to implement real time water usage monitoring for all customers.
3. **Irrigation:** Encourage efficient outdoor water usage at homes, businesses, and institutions through practices such as native plantings, smart water meters, and advanced irrigation systems.
4. **Wastewater Heat Capture:** Partner with Met Council and District Energy to utilize thermal energy from waste heat generated at the wastewater treatment plant to supplant the use of fossil fuels.

City Buildings and Operations

Saint Paul owns and operates more than 150 municipal buildings totaling over 2.4 million square feet. In 2024, natural gas accounted for 61% of total energy use, making it the largest source of building-related GHG emissions. Among the City departments, the Parks and Recreation building portfolio accounts for more than half of municipal building emissions. Since 2015, the City has reduced building-related emissions by 46%, driven by cleaner electricity, strategic facility closures, and improved energy efficiency.

In 2025, the City developed a Municipal Buildings Decarbonization Plan to chart a path toward carbon neutrality, prioritizing accelerated reductions in eleven municipal buildings. The Plan describes a balanced scenario as the proposed roadmap to reach carbon neutrality. Strategies are organized into each of the following categories: new construction, cleaner electricity grid, building efficiency and electrification, on-site solar, off-site renewable energy, and carbon offsets.

Similarly, the City is currently working to complete a fleet decarbonization study that will create an implementation schedule for replacing vehicles with low- or no-carbon vehicles and adding sufficient charging infrastructure. The City is leading by example in its efforts to rapidly reduce emissions from City Operations.

Equitable Outcomes: Reduced energy use, decreased reliance on volatile energy sources, and improved maintenance will help to stabilize capital costs for City operations, lessening the burden on taxpayers.

Objective I: Achieve carbon neutrality for City-owned and operated facilities.

Objective II: I Achieve carbon neutrality for City fleet vehicles.

Objective III: Incorporate future climate impacts in the planning and design of infrastructure systems and all new City-owned buildings.

City Buildings and Operations Targets

- 9% decrease annually in operational GHG emissions of city-owned and operated buildings during 2025-2030.
- 5% annual reduction of weather-normalized gas consumption for city-owned and operated buildings during 2025-2035.
- 100% LED Conversion for streetlights.
- Increase on-site solar capacity at city-owned buildings by 650 kW total by 2030 (average 130 kW annually during 2025-2030).
- 25% of City fleet vehicles are electric or plug-in hybrid vehicles 2030.
- 100% of City capital projects consider climate impacts.

Actions:

1. **Building Energy Benchmark:** Maintain annual energy benchmarking for City-owned and operated facilities. Analyze energy data to identify opportunities to improve building energy performance.
2. **Decarbonization Fund:** Maintain a decarbonization fund ("green energy fund') to support projects that improve energy efficiency, expand the use of renewables, and invest in the electrification of City-owned and operated facilities.
3. **Efficient, Smart Streetlights:** Convert municipal streetlights to LEDs. Explore other opportunities for smart lighting.
4. **Leased City Properties.** Incorporate decarbonization and other sustainability requirements into lease and management agreements with third-party operators of City-owned facilities.
5. **Green Purchasing:** Continue to improve upon the citywide green purchasing policy by 2028.
6. **Carbon Sequestration:** Explore opportunities to utilize wood waste for anaerobic digestion, biochar, and other alternatives to combustion.
7. **Clean Thermal Energy:** Continue to identify opportunities to deploy renewable thermal technologies (district heating, solar thermal, etc.).
8. **Clean Electricity:** Increase on-site solar installations and purchases of off-site clean electricity for City-owned and operated buildings to support the Sustainable Building Ordinance requirements and decrease operational emissions for the municipal building portfolio.
9. **Fleet Decarbonization Plan:** Develop a municipal fleet decarbonization plan to reduce emissions through right-sized, electric, and more efficient vehicles and operational practices.
10. **Employee Commute:** Encourage employees to reduce commuting by privately-owned cars through incentives and workplace amenities (e.g., secure bike racks, showers, transit passes, etc.).
11. **Asset Management:** Include life-cycle costs and carbon emissions when preparing asset management plans to inform the selection and purchase of construction materials and equipment for City projects.
12. **Capital Improvement Planning:** Explicitly incorporate climate goals and actions into the capital improvement planning process.

13. **Critical Infrastructure:** Identify critical infrastructure facilities and ensure there is reliable, clean back-up energy in case of a power outage.
14. **Assess City Infrastructure:** Assess City-owned buildings and sites for vulnerabilities to extreme weather and prioritize needed improvements.
15. **Invest in Resilient Infrastructure:** Invest in materials for city infrastructure that are robust enough to withstand extreme weather events.
16. **Battery Storage Pilot:** Pilot opportunities to test, analyze, and demonstrate the potential for increased resilience and cost savings of battery storage technologies.
17. **Low-carbon Paving Materials:** Pilot the use of innovative low-carbon materials in streets, sidewalks, and/or trails by 2030.
18. **Impervious Surfaces**: Reduce impervious surfaces by using permeable materials and/or converting underutilized pavement to native plantings or other natural land covers.
19. **Cool Pavement:** Use lighter colored and reflective materials for pavement to lessen the impact on urban heat island effect.
20. **Cool Roof:** Install cool roof materials on low slope municipal rooftops to reflect heat from the sun and reduce urban heat island effect.
21. **Debris Management:** Coordinate with the County to plan for emergency debris management.
22. **Water Supply:** Support regional efforts to address groundwater usage and recharge.

Community Resilience and Emergency Preparedness

Building community resilience and strengthening emergency preparedness are essential to protecting residents and businesses from the increasing risks from climate hazards. Acute shocks include sudden, intense events like heatwaves, floods, and extreme storms that can cause property damage that requires expensive repairs and pose risks to health and safety. Chronic stressors are on-going conditions that weaken the ability to withstand shocks. This can include prolonged events like freeze and thaw cycles, and droughts. Stressors can strain the local economy, stress aging infrastructure, and impact the mental health and well-being of community members.

To build resilience, the City will work to lessen vulnerabilities by providing resources to meet the needs of residents before, during and after climate-related events. This includes supporting social connectedness through neighborhood-based preparedness efforts, expanding access to resilience hubs as well as cooling and heating centers, and improving communication and emergency alert systems. Equipping residents with tools, resources, and skills can help ensure more people are prepared to respond to disruptive events and withstand longer-term stressors.

Equitable Outcomes: Ramsey County completed a social vulnerability assessment that identifies neighborhoods that are most vulnerable to climate change. The assessment includes risk and exposure to climate hazards overlaid with social indicators of vulnerable populations (e.g., age, mobility, health, income, etc.). Efforts to strengthen resilience will be prioritized in communities with the greatest vulnerabilities.

Objective I: Support and enhance community resilience to prepare people in Saint Paul to withstand and adapt to climate-related impacts.

Community Resilience Targets

- Two resilience hubs are planned.

- Improve Social Vulnerability Index score by 5 points.
- 75% of residents receive climate resources.
- 10 air quality monitors installed in environmental justice neighborhoods.

Actions:

1. **Education and Outreach:** Partner to share multi-lingual and culturally relevant resources on climate resilience and emergency preparedness.
2. **Home Checklist:** Develop a checklist that can be used by homeowners and renters to improve resilience; include resources for battery back-up power, metal roofing, resilient landscaping, appropriate insurance, and funding and technical assistance resources.
3. **Food Security:** Encourage equitable distribution of community assets to improve food security, including urban farms and foraging, community gardens, food markets, and healthy food options.
4. **Social Connections:** Collaborate with faith, civic, and other community groups to strengthen social connectedness through relationship-building among community members across age, ethnicity, income, and other demographic differences.
5. **Nature Connections:** Continue programs that encourage people to connect with nature with a focus on communities that have historically had less access to ecological spaces.
6. **Cultural Knowledge:** Facilitate and promote opportunities to gain knowledge and learn traditional ecological practices from local cultures and community members.
7. **Existing Resilience Hubs:** Identify and designate existing community buildings that have or could incorporate resilience features (e.g., temporary shelter, cooling/warming services, food distribution, internet access, and back-up power, etc.).
8. **New Resilience Hubs:** Incorporate/Build in resilience hub features into future community buildings, prioritizing locations in environmental justice neighborhoods.
9. **Cooling and Heating Centers:** Designate and map buildings that are accessible to the public during times of extreme heat or cold; ensure people with disabilities have transportation to and from cooling and heating centers.
10. **Transportation Access:** Coordinate mobility services for vulnerable populations during times of emergency.
11. **Disaster Recovery:** Partner with the State and other actors to identify strategies for addressing growing costs of insurance and disaster recovery.
12. **Air Quality Monitors:** Partner with the Minnesota Pollution control agency and local groups to install air quality monitors to collect data on particulates and other pollutants, prioritizing environmental justice neighborhoods.

Nature-Based Solutions

Our natural systems offer many benefits to the community, including providing habitat, supporting recreation, and improving mental and physical health. Nature can also be useful in lessening the impacts of severe weather like flooding and extreme heat. In urban areas, however, many natural systems have been replaced with asphalt, concrete, and buildings. These materials absorb, store, and slowly release heat, contributing to urban heat island effect. They can also limit the water's ability to infiltrate the ground, increasing stormwater runoff and the risk of flash flooding, while sending unfiltered pollutants directly into rivers and lakes.

Sustainable management and restoration of ecosystems can enhance natural systems in a way that benefits people and nature while mitigating the effects of climate change. Nature-based

solutions like expanding the tree canopy, integrating green infrastructure, and restoring native vegetation and wetlands can help to improve air and water quality, provide shade, and keep neighborhoods cooler. Actions in this section are centered around expanding nature-based solutions to mitigate the effects of climate change and improve quality of life for everyone.

Equitable Outcomes: Underinvestment in environmental justice neighborhoods and neighborhoods disproportionately impacted by emerald ash borer are more exposed to extreme heat and flash flooding. They also tend to be located near arterial roads compounding the impacts of air pollution. These neighborhoods will be prioritized for engagement and investment in nature-based solutions that help residents to prepare for and adapt to climate change.

Objective II: Protect, enhance, and restore natural infrastructure to mitigate weather and climate impacts.

Nature-Based Solutions Targets

- At least two green infrastructure projects are installed to mitigate stormwater
- 1-acre annual (4acres total) increase in new private and public land cover conversion to native plants and/or tree plantings.
- Improve tree equity score in at least the three lowest block groups.
- Plant 4,500 trees annually, prioritizing block groups with lowest tree equity score.

Actions

1. **Environmental Stewardship:** Foster environmental stewardship, community health, and cultural and ecological learnings along the Mississippi River and throughout the city.
2. **Protect Natural Infrastructure:** In partnership with Watershed Districts and other entities, protect, enhance, and restore natural infrastructure to mitigate weather and climate impacts, such as extreme and heavy precipitation.
3. **Urban Tree Canopy:** Update the citywide urban tree canopy assessment every ten years and maintain a current street tree inventory.
4. **Tree Replacement:** Accelerate biodiversity and tree replacement programming in neighborhoods that are most impacted by urban heat island effect and Emerald Ash Borer. Enforce the tree preservation ordinance.
5. **Tree Care:** Build relationships and trust with community members to provide resources and support for tree placement, care, and other maintenance needs.
6. **Soil Restoration:** Promote the use of high-quality soil amendments such as compost or biochar from organics collection to businesses and residents to help improve soil quality.
7. **Manage Heat:** Expand vegetative land cover, especially in communities that are susceptible to the urban heat island effect.
8. **Stormwater Management:** Working with partners to implement land cover best practices to minimize stormwater runoff, reduce flash flooding, maximize infiltration, and stabilize slopes.
9. **Climate Resilient Landscaping:** Encourage community members to convert turf and hardscapes to climate-friendly native plants that provide pollinator habitat, are drought resilient, and/or support stormwater management.
10. **Parks and Open Space:** Improve the ecological functionality and resiliency of parks and open space through green infrastructure, best practices for stormwater management, and increased plant diversity and pollinator-friendly corridors.

Five-year Priority Plan

The City of Saint Paul has made a lot of progress toward completing the actions that are included in the original Climate Action and Resilience Plan. The City will continue to implement the updated actions to work toward 2030 targets and the goal to be carbon neutral by 2050. To demonstrate progress, the City has identified 25 priority initiatives that it intends to implement over the next five years. These initiatives were selected based on community and staff input, initiatives that are already planned, and those where the City has the greatest authority to implement.

The initiatives are organized by the same categories that are found in the main body of the Climate Action and Resilience Plan Update. Due to the relatively small impact of water actions, Initiatives that impact water quality are incorporated into other categories. Details of the initiatives include:

City's Authority to Implement: This indicates the City's ability to implement the initiatives by noting the City's ability to "control" and/or "influence" the outcomes.

Project Location: Geographic location in the City, noting where some initiatives are citywide or will occur in specific areas of the City.

Department Lead: The City department that is dedicated to lead the initiative, although other departments and partners may support efforts.

Type: Initiatives vary in terms of duration (ongoing vs. one-time) and type (project, program, plan, or policy).

Brief Summary: Includes a high-level overview of each of initiative.

Anticipated Funding Need: The funding needs are either derived from existing programs or the estimated funding needed for new initiatives. Funding can be expenditures (e.g., capital expenses, consulting fees) or staff time.

Anticipated Funding Sources: Describes internal and external funding sources that are available to support the various initiatives.

Project Partners: Initial list of potential partners who can help implement specific initiatives. These lists are not meant to be exhaustive.

Timeframe: The timeframe the initiative is anticipated to be implemented. On-going programs and policies will span the timeframe, where one-time projects will occur at a point within the timeframe.

Progress will be tracked internally and shared publicly through maintenance of the City's Climate Dashboard. Many initiatives involve residents, businesses, and institutions. Successful implementation of this plan will require participation from as many community members as possible. Everyone in the City is encouraged to find out how they can support the plan and take actions to reduce emissions and adapt to a changing climate.

The following details the priority initiatives to move Saint Paul to climate-friendly and resilient City.

Implementation and Funding

Initiative 1: Grow the City's Climate Fund

City Authority: Control

Project Location: Citywide

Department Lead: Office of Financial Services

Type: Ongoing program

Brief Summary: The City currently uses Franchise Fee dollars to fund part of its climate efforts. The City has a target to spend at least 1% of its budget directly on climate actions. While this funding will be supported by other capital expenditures, it is critical to grow this fund to adequately address climate change in the City. Staff will explore and pursue various funding sources to equitably grow the climate fund to sustain its climate work.

Anticipated Funding Need: $8,800,000 (based on the projected 2026 budget)

Anticipated Funding Source(s): Franchise Fee, state and foundation grants, other sources

Project Partners: State of Minnesota, potential funders

Timeframe: 2026-2031

Initiative 2: Climate Communications and Engagement Plan

City Authority: Control

Project Location: Citywide

Department Lead:

Type: Ongoing program

Brief Summary: Create an engagement plan that increases internal and external awareness about the Plan Update and Priority Action Plan. The plan(s) will outline strategies to communicate opportunities and progress, highlight successes, and build a shared understanding of the benefits of action. Internally, the engagement plan will promote collaboration across City departments to ensure staff are informed and equipped to integrate climate goals into their work, where appropriate. Externally, the plan will provide an opportunity for the City to engage residents, businesses, and other institutions and organizations through accessible materials and public events, helping to build shared ownership of achieving the City's climate goals.

Anticipated Funding Need: $50,000-$100,000

Anticipated Funding Source(s): State and foundation grants, city budget

Project Partners: City Departments, community-based organizations, institutions, businesses.

Timeframe: 2026-2031

Building Energy Use

Initiative 3: Decarbonize Downtown

City Authority: Influence

Project Location: Downtown and adjacent neighborhoods

Department Lead: Mayor's Office

Type: One-time Project

Brief Summary: Downtown Saint Paul buildings are served by a district heating system, operated by District Energy St. Paul. The system currently uses heat from the combustion of biomass and natural gas. There is an opportunity to capture waste heat from the nearby wastewater treatment facility operated by the Metropolitan Council and reduce emissions by approximately 85%. This initiative will pursue funding to launch and complete this project.

Anticipated Funding Need: $250,000,000

Anticipated Funding Source(s): Green Bank (MNCIFA), bonding, State and federal grants and incentives

Project Partners: District Energy St. Paul, Xcel Energy, Met Council, Minnesota Department of Commerce

Timeframe: 2026-2031

Initiative 4: Complete the Mt. Airy Geothermal Study

City Authority: Influence

Project Location: Downtown

Department Lead: Office of Financial Services

Type: One-time Study and Pilot Project

Brief Summary: Mt. Airy Homes is a family housing development located near downtown Saint Paul that is owned by the Saint Paul Public Housing Authority. The buildings rely on District Energy St. Paul for space and water heating services. The City of Saint Paul and District Energy St. Paul applied for and received a grant from the Minnesota Department of Commerce to study the possible deployment of a geothermal system that would supplement the existing district system. The geothermal system would help to stabilize energy bills and reduce greenhouse gas emissions.

Anticipated Funding Need: $150,000 for the study

Anticipated Funding Source(s): Minnesota Geothermal Planning Grant

Project Partners: District Energy St. Paul, Saint Paul Public Housing Agency, Minnesota Department of Commerce

Timeframe: 2026-2028

Initiative 5: Implement Residential Energy Programs

City Authority: Control

Project Location: Citywide, pre-approved income-qualified areas

Department Lead: Planning and Economic Development

Type: Ongoing Programs

Brief Summary: Saint Paul will launch two programs aimed at residential energy use. Each of these programs are described here:

> The Saint Paul Power of Home program will replace gas furnaces, water heaters, stovetops, and clothes dryers with new, efficient electric models in qualified single-family owner-occupied homes. Switching from fossil fuel (natural gas) appliances to electric counterparts can reduce dangerous indoor air pollution, improve comfort, reduce greenhouse gas emissions, and potentially reduce utility costs.
>
> The Healthy Homes program of Saint Paul offers both pre-weatherization (health and safety) and weatherization (insulation and air-sealing) services. The program targets qualified households that need critical repairs before weatherization can take place. By making these repairs possible, the program helps homeowners enjoy improved comfort, safety, and cost savings.

Anticipated Funding Need: $300,000 annually (Power of Home) and $800,000 one-time funding (Healthy Homes)

Anticipated Funding Source(s): Franchise Fee, utility rebates, State and federal incentives

Project Partners: Community-based organizations, Xcel Energy, Center for Energy and Environment

Timeframe: 2026–on-going

Initiative 6: Complete a Citywide Thermal Energy Plan

City Authority: Control

Project Location: Citywide

Department Lead: Mayor's Office

Type: One-time Plan

Brief Summary: The City of Saint Paul is looking to a complete a citywide Thermal Energy Plan to strategically deploy new technologies and equitably decarbonize our buildings. Developing a Thermal Energy Plan will involve the engagement of key stakeholders, identifying the highest priority areas of the City, and the most cost-efficient opportunities to decarbonize buildings using thermal energy sources like waste heat, renewable energy, and ambient energy from the air, earth, and aquifers. The Plan will prioritize an approach that is equitable, improves community resilience, and increases access to clean energy for all Saint Paul residents and businesses.

Anticipated Funding Need: $500,000

Anticipated Funding Source(s): Foundation and State grants

Project Partners: Xcel Energy, District Energy

Timeframe: 2026-2028

Initiative 7: Update the Sustainable Building Ordinance

City Authority: Control

Project Location: Citywide, new development

Department Lead: Planning and Economic Development

Type: Policy

Brief Summary: The City adopted its Sustainable Building Ordinance in 2010. The ordinance requires that certain construction projects be built to a high green standard and comply with the Saint Paul Overlay. The ordinance applies to construction projects that either receive more than $200,000 in City/HRA funding; or is owned by the City or HRA; or is built with the intent of the having the City or HRA become the sole tenant. Under this plan, the ordinance will be updated to strengthen requirements with a focus on the biggest contributors to greenhouse gas emissions.

Anticipated Funding Need: Staff time

Anticipated Funding Source(s): City budget

Project Partners: Saint Paul Housing Redevelopment Authority (HRA)

Timeframe: 2026-2031

Initiative 8: Develop a Data Center Policy

City Authority: Control

Project Location: Citywide

Department Lead: Planning and Economic Development

Type: Policy

Brief Summary: Create and adopt an ordinance that directs future data center development to be located where waste heat can be recovered and utilized in neighboring buildings and/or added to district energy systems; and ensure safeguards to protect public health, water resources, utilize reclaimed water, and have adequate access to clean and sustainable electricity sources.

Anticipated Funding Need: Staff time

Anticipated Funding Source(s): City budget

Project Partners: Minnesota APA, League of Minnesota Cities, energy nonprofits

Timeframe: 2026-2031

Transportation

Initiative 9: Zoning for Transit Investment

City Authority: Control

Project Location: Citywide

Department Lead: Planning and Economic Development

Type: Multi-phase project

Brief Summary: City of Saint Paul Planning staff will conduct analysis and propose zoning amendments that provide comprehensive, consistent development flexibility on properties located along some of Saint Paul's primary commercial and mixed-use transit corridors. Easing and diversifying development along transit corridors will contribute to the City's goals for vibrant, walkable neighborhoods and increased access to rapid transit.

Anticipated Funding Need: Staff time

Anticipated Funding Source(s): City Budget

Project Partners: Metro Transit/Metropolitan Council

Timeframe: 2026-2031

Initiative 10: Invest in Transit Improvements

City Authority: Support

Project Location: High-frequency transit routes

Department Lead: Public Works

Type: Ongoing projects

Brief Summary: The City will partner with Met Council and others to support transit by improving areas surrounding bus and train shelters, adding more last-mile solutions, and enhancing accessibility at, as well as to and from, transit stops for individuals using wheelchairs or who have limited mobility. Transit shelters along high frequency routes in environmental justice communities will be prioritized.

Anticipated Funding Need: TBD

Anticipated Funding Source(s): TBD

Project Partners: Metro Transit, Ramsey County, local businesses, community-based organizations, and District Councils.

Timeframe: 2026-2031

Initiative 11: Continue Bicycle Infrastructure Improvements

City Authority: Control

Project Location: Downtown, citywide

Department Lead: Public Works

Type: Ongoing project

Brief Summary: The City continues to build out its Planned Bicycle Network to improve user experience and safety. In the next five years, the City anticipates completing the Capital City Bikeway and adding at least 25 miles of separated bike lanes.

> Capital City Bikeway: A network of bicycle facilities throughout downtown Saint Paul. This project connects major bikeways within downtown as well as connecting to other routes outside of the downtown core.
>
> Bicycle Plan: There are currently more than 229 miles of bikeways in Saint Paul. The Bicycle Plan includes 337 new miles of bikeways in the City. At least twenty-five miles of new bikeways will be added in the next five years.

Anticipated Funding Need: $400,000 annually

Anticipated Funding Source(s): Capital Improvement Budget, Parks and Recreation budget, federal grants

Project Partners: N/A

Timeframe: 2026-2031

Initiative 12: Improve Regional Bikeshare System

City Authority: Influence/Control

Project Location: Saint Paul and neighboring cities

Department Lead: Public Works, Planning and Economic Development

Type: Program

Brief Summary: Saint Paul currently contracts with multiple bike-share companies to allow for scooters and e-bikes to be rented in the City. There are limitations to these services that can be improved upon with a regional bikeshare program. Like the BIXI program in Montreal, a regional bike share program would improve availability and reliability of shared mobility, enable easier access to neighboring communities, and implement a sustainable funding model. This initiative involves partnering with other governmental entities to explore the creation of a regional bikeshare program and funding mechanisms to support it.

Anticipated Funding Need: TBD

Anticipated Funding Source(s): TBD

Project Partners: Minneapolis, Ramsey County, Falcon Heights, Roseville, St. Anthony Park, Maplewood, Schools, Higher Education

Timeframe: 2026-2031

Initiative 13: Expand Transportation Safety Improvements

City Authority: Control

Project Location: Citywide

Department Lead: Public Works

Type: Multiple Ongoing Projects

Brief Summary: The City completed the Transportation Safety Action Plan in 2024 in response to the high number of crash-related fatalities and injuries in the City. The plan includes policy recommendations for future street designs and a roadmap for implementing strategies on a timeline that corresponds to the climate action plan. Designing the City's streets to be safer for all users—especially pedestrians and cyclists—will encourage more people to walk and bike, supporting transportation targets in the CARP.

Anticipated Funding Need: $250,000 annually

Anticipated Funding Source(s): Capital Improvement Plan

Project Partners: Minnesota Department of Transportation, Ramsey County, Metro Transit, Metropolitan Council, District Councils, businesses, community organizations

Timeframe: 2026-2031

Initiative 14: Provide Transportation Education

City Authority: Influence

Project Location: Citywide

Department Lead: Planning and Economic Development

Type: On-going program

Brief Summary: The City will partner with schools, local organizations, businesses, and District Councils to promote sustainable transportation options for residents and employers. This may include transit rider information to easily use transit services, rider education to share the current and future bicycle network, safe routes to schools, and traffic education to improve safety for all users.

Anticipated Funding Need: Staff time

Anticipated Funding Source(s): City Budget

Project Partners: Saint Paul Schools, local businesses and organizations, Move Minnesota, Metro Transit, and District Councils.

Timeframe: 2026-2031

Initiative 15: Increase Publicly Accessible EVs and Charging

City Authority: Control/Influence

Project Location: Citywide

Department Lead: Public Works – Transportation and Public Safety

Type: On-going Program

Brief Summary: The EV Spot Network is the largest renewably-powered, municipally-owned electric vehicle network in the country. Evie Carshare includes a fleet of more than 170 vehicles that are available through various subscription plans. EV Spot Charging includes more than 280 on-street charging spaces across Saint Paul and Minneapolis, available to the Evie fleet and the public. The Network was awarded over $3 million in funding from the US Department of Energy,

Met Council, and others to support expansion east, focusing electric vehicle access along Metro Transit's Gold Line.

Anticipated Funding Need: $3,000,000

Anticipated Funding Source(s): Regional and federal grants, city budget

Project Partners: Minneapolis, Xcel Energy, HOURCAR, District Councils

Timeframe: 2026-2031

City Buildings and Operations

Initiative 16: Decarbonize City Buildings

City Authority: Control

Project Location: City Buildings

Department Lead: Office of Financial Services – Real Estate

Type: Multiple One-time Projects

Brief Summary: In 2025, the City completed a Municipal Buildings Decarbonization Plan that explored various scenarios to reduce building energy emissions. The City will work to implement the first phase of recommendations from the plan to decarbonize City buildings. This will include increasing building energy efficiency, expanding electrification, and meeting electricity demand with on-site renewable energy generation at a minimum of 10 priority buildings. The City will also improve internal policies and processes to require all-electric new construction of municipal facilities.

Anticipated Funding Need: TBD

Anticipated Funding Source(s): City funding, State bonding and grants, federal tax incentives, utility rebates

Project Partners: Xcel Energy

Timeframe: 2026-2035

Initiative 17: Complete a Municipal Fleet Decarbonization Plan

City Authority: Control

Project Location: City operations

Department Lead: Office of Financial Services

Type: One-time plan

Brief Summary: The City will complete a Municipal Fleet Decarbonization Plan that will provide an actionable framework for decarbonization of the City's fleet. The Plan will focus on the passenger fleet, as well as some medium- and heavy-duty vehicles for which viable all-electric options are readily available. This plan will help the City move toward a carbon neutral fleet operations by transitioning to electric and/or other non-fossil fuel vehicles and extensive expansion of clean fueling infrastructure.

Anticipated Funding Need: $75,000

Anticipated Funding Source(s): State grant funding, City matching funds

Project Partners: Xcel Energy, Department of Administration

Timeframe: 2026-2031

Community Resilience:

Initiative 18: Prepare Residents and Businesses for Climate Hazards

City Authority: Influence

Project Location: Citywide

Department Lead: Emergency Management

Type: On-going program

Brief Summary: The Saint Paul Emergency Management Department works to prepare the community to respond to and recover from environmental and man-made disasters. Readiness planning focuses on all hazards, including weather-related disasters. Residents can access many resources from the City's website to prepare their homes and communities for potential disruptions. The City will also develop and implement an outreach campaign to ensure that community members are prepared for disruptions. Resources will include information on how to increase the resilience of homes and resources to help recover after an event.

The City will also investigate funding sources to assist in disaster recovery efforts that can complement state and federal emergency funds to help residents and businesses cover the costs of repairs and assist with waste and debris removal.

Anticipated Funding Need: Staff time, TBD

Anticipated Funding Source(s): City budget, City Climate Fund

Project Partners: District Councils, community-based organizations, and schools.

Timeframe: 2027—on-going

Initiative 19: Heating/Cooling Centers and Resilience Hubs

City Authority: Control

Project Location: Environmental Justice Neighborhoods, Citywide

Department Lead: Planning and Economic Development, Saint Paul GIS staff

Type: On-going program

Brief Summary: Resilience Hubs use existing or future community spaces that can be adapted to meet the needs of residents during a disaster or disruption. Often, they are spaces like community centers, libraries, or faith-based facilities that can operate in three different phases:

normal, disruption, and recovery. Most of the time, these buildings will operate during their regular hours and provide typical services. In times of disruption from storms, power outages, or other events, these spaces can be adapted to accommodate people in need of shelter, power, food, and other supplies. The City will identify at least two facilities that can be modified to serve as resilience hubs, by adding clean back-up power, staffing, emergency protocols, basic shelter, resource distribution, among other Resilience Hubs attributes.

Extreme heat or cold can be dangerous for those who have limited access to air conditioning or adequate heat. The City will also explore creating and sharing map to help residents easily find public and private locations that provide water and space to cool off or warm up. The map will include additional resources to assist residents with extreme temperatures as well as other climate hazards.

Anticipated Funding Need: TBD (resilience hub), staff time (mapping)

Anticipated Funding Source(s): TBD (resilience hub), City Budget (mapping

Project Partners: Public libraries, Saint Paul Parks, schools, faith-based institutions, community organizations, higher education institutions, Ramsey County, and local businesses.

Timeframe: 2026-2031

Initiative 20: Install Air Quality Sensors

City Authority: Control/Influence

Project Location: Communities vulnerable to poor air quality

Department Lead: Saint Paul–Ramsey County Public Health

Type: Ongoing project

Brief Summary: Air quality sensors measure pollutants from vehicles, industrial process, combustion of natural gas or wood, and environmental causes like wildfires. The Minnesota Pollution Control Agency (MPCA) has installed six sensors in Saint Paul that are used to track pollution in the city to inform air quality standards and health benchmarks. The MPCA plans to install an additional sensor as part of its network plan. Saint Paul will identify gaps in communities that are vulnerable to poor air quality, per the Ramsey County vulnerability assessment, and seek funding to install additional sensors that can support the State's monitoring efforts.

Anticipated Funding Need: $25,000

Anticipated Funding Source(s): State grants, City funds.

Project Partners: Minnesota Pollution Control Agency, Ramsey County, local organizations and businesses, schools, District Councils

Timeframe: 2026-2031

Nature-based Solutions:

Initiative 21: Increase Tree Canopy Coverage

City Authority: Control/Influence

Project Location: Citywide, urban heat island, Emerald Ash Borer impacted communities

Department Lead: Parks and Recreation – Natural Resources

Type: On-going program

Brief Summary: The City aims to plant 4,000 trees per year, prioritizing areas that have been affected by Emerald Ash Borer and are residential areas in urban heat islands. Planting and tree care programs will have a job development component, helping to grow our workforce and ensure long-term sustainable management of our urban forests. The City will also provide educational resources for residents to care for trees on private properties.

Anticipated Funding Need: $300,000/year

Anticipated Funding Source(s):

Project Partners: Tree Trust, District Councils,

Timeframe: 2026-2031

Initiative 22: Promote Climate Resilient Landscaping

City Authority: Influence

Project Location: Citywide

Department Lead: Parks and Recreation

Type: On-going program

Brief Summary: The City will provide resources to residents and businesses that want to convert turf grass and/or hardscapes to climate-friendly and drought-tolerant native plants. Resources will include educational materials, local experts, and potential funding. The City will also lead by example and convert turf or pavement on public land to native plants and/or trees.

Anticipated Funding Need: TBD

Anticipated Funding Source(s): TBD

Project Partners: Watershed Districts, Metro Bloom, Board of Water and Soil Resources (Lawns to Legumes program)

Timeframe: 2026-2031

Waste:

Initiative 23: Food Scraps Pickup Program

City Authority: Control

Project Location: Citywide

Department Lead: Public Works – Garbage and Recycling

Type: On-going program

Brief Summary: Currently, Saint Paul residents can bring their food scraps to several drop-off sites for organics recycling. The City is partnering with Ramsey County to provide food scraps collection with regular garbage service. The program will be free and available to all residents.

Anticipated Funding Need: TBD

Anticipated Funding Source(s): TBD

Project Partners: Ramsey County

Timeframe: 2026-2031

Initiative 24: Provide Waste Education and Resources

City Authority: Influence

Project Location: Citywide

Department Lead: Public Works – Garbage and Recycling

Type: On-going programs

Brief Summary: The City will partner with County and State entities to provide educational opportunities to residents, students, and businesses to reduce consumption and increase diversion practices like reusing materials, recycling, composting, and disposing of hazardous materials. This may include online resources, mailers, in-person workshops, fix-it clinics, and facility tours.

Anticipated Funding Need: $100,000

Anticipated Funding Source(s): State and County grants, City funding and staff time

Project Partners: Ramsey County, Minnesota Pollution Control Agency

Timeframe: 2026-2031

Initiative 25: Create a Furniture Re-Use Center

City Authority: Control

Project Location: Citywide

Department Lead: Public Works – Garbage and Recycling

Type: On-going program

Brief Summary: Many items that are thrown away or dumped can be salvaged and reused, especially large furniture. Saint Paul is developing a program where the City will make disposed furniture that is in usable condition available for reuse through a furniture re-use center.

Anticipated Funding Need: TBD

Anticipated Funding Source(s): TBD

Project Partners: Ramsey County

Timeframe: 2026-2031