Saint Anthony Village

CLIMATE PLAN 2023

Table of Content

Vision & Mission

The City of St. Anthony Village (SAV) is building on the history of sustainability leadership by developing this Climate Action Plan. According to the goals established in the SAV 2040 Comprehensive Plan, the City aims to reduce city-wide CO_2 emissions by 80% and city facility CO_2 emissions by 100% over a 2005 baseline by 2040. This plan identifies the next steps in achieving these goals.

*Reduce city-wide CO_2 emissions by **80%** and city facility CO_2 emissions by **100%** by 2040. (2040 Comprehensive Plan)*

The Climate Plan will focus on the next 1-5 years of implementation work in categories important to SAV, including water, waste, energy, and transportation. The proposed initiatives have been built through input from leaders, residents, and business owners in the City, and utilizing best practices in the industry. It is envisioned that new initiatives will be added as prior ones are achieved, while other initiatives will be ongoing with future target dates. The plan encompasses City operations and the City's entire footprint, including the impact and potential role of residents and businesses.

The action steps identified in this Climate Plan are not the sole responsibility of City staff to enact, but rather a collective effort amongst all community members to engage SAV in climate-friendly practices. The City will continue to expand SAV's status as an exemplary sustainable community by pursuing these achievable solutions.

Historical Progress

Minnesota GreenStep Cities

SOLSMART

TREE CITY USA

2009	Implemented Tiered water rates policy
2011	Joined MN GreenSteps[1] Cities program
2012	Sustainability Plan written by University of MN students for SAV Installed LED Pedestrian crossing-Silver Lake Rd.
2013	Regional Indicators Initiative participant Carp removal project at Silver Lake to improve water quality
2014	Installed Central Park Bio-filtration Storm water Treatment, including pollinator habitat
2015	Implemented organized collection for waste and recycling with three haulers. Installed Salo Pond/Silver Lake Stormwater Treatment System Installed second LED Pedestrian crossing-Kenzie Terrace
2016	2nd city ever to receive Sustainable City Award Became a Tree City USA Joined Community Solar Subscriber Collaborative Partnered with MWMO on St. Anthony Regional Stormwater Treatment and Research Facility
2017	Completed installation of the advanced Oxidation Process Water Treatment Plant Achieved Step 5 GreenSteps, one of the first cities to achieve this top tier
2018	Organics food scraps recycling drop-off site launched
2019	Achieved SolSmart Silver Community recognition
2020	Adopted 2040 Comprehensive Plan that established greenhouse gas emission goals
2023	Implemented single hauler for waste and recycling Set a goal to create this Climate Action Plan for the City

[1]Minnesota GreenStep Cities is a voluntary program hosted through the Minnesota Pollution Control Agency (MPCA) that assists cities in achieving their sustainability and quality-of-life goals.

Greenhouse Gas Inventory

St. Anthony Village participates in the Regional Indicators Initiative (RII) created by LHB Inc. to gain a deeper understanding of the greenhouse gas (GHG) emissions created by energy, travel, waste/recycling, and more. The data collected through the RII reflects SAV's annual GHG emission trends and helps the City identify specific areas for improvement.

Figure 1 shows the GHG emission data for waste, travel, and energy in SAV from 2007 to 2021. As seen in the chart, energy usage results in 74% of emissions in SAV, with travel being the second largest contributor at 22%.

GREENHOUSE GAS EMISSIONS

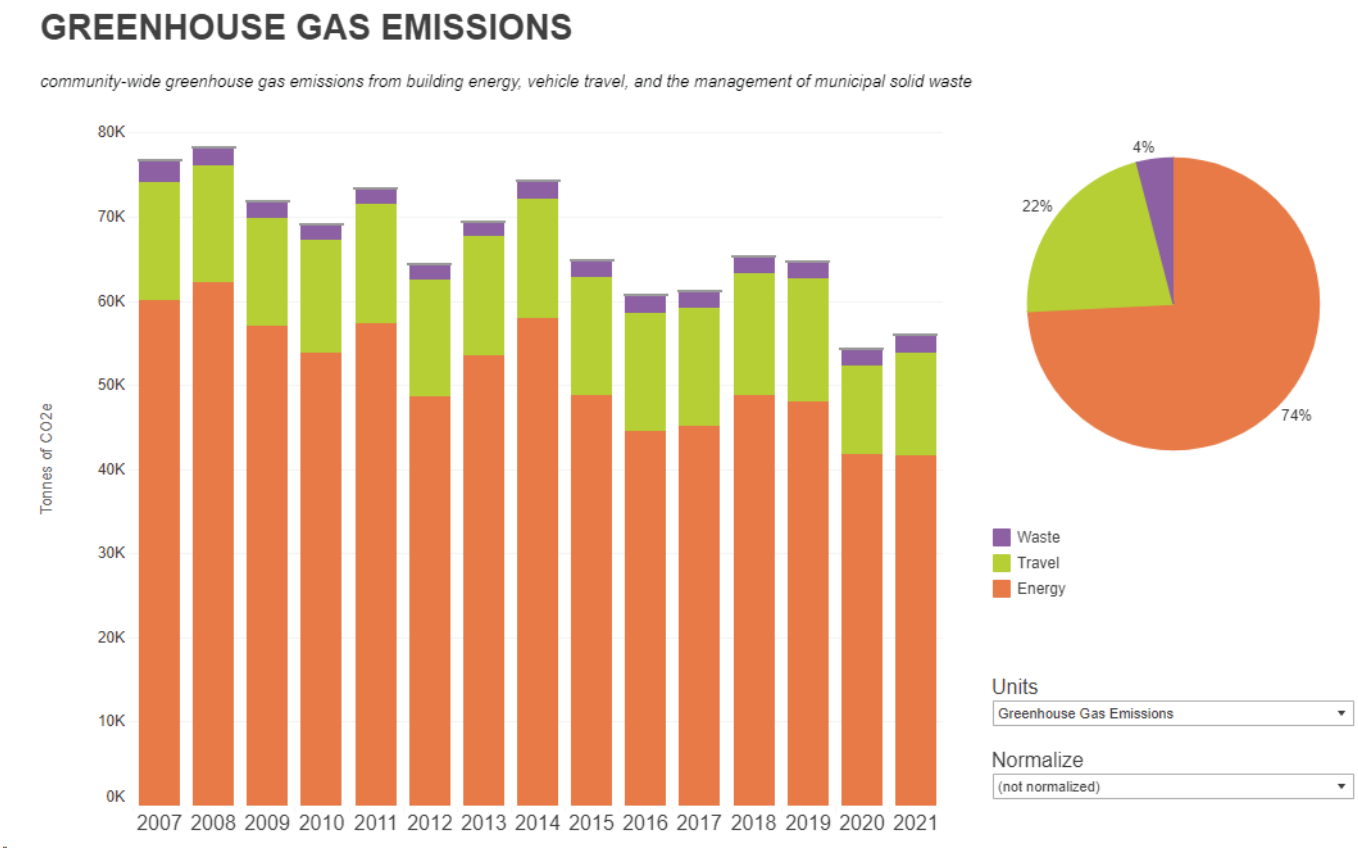


Figure 1: Greenhouse Gas Emissions breakdown. Source: Regional Indicators Initiative, 2023

SAV's RII GHG inventory revealed that almost 75% of the community's GHG footprint originates from building energy usage. SAV has cut overall GHG emissions by 27% since 2007, notably decreasing electricity emissions by 54% through reduced consumption and cleaner energy sources.

Greenhouse Gas Inventory

As illustrated in Figure 2, Energy-related emissions from natural gas now surpass those from electricity, due to lower greenhouse gas-emitting energy sources being used for electricity. Travel-related emissions held steady until COVID-19. During the pandemic, there was a rapid increase in isolation which led to a reduction in travel emissions. Meanwhile, SAV's recycling rate continues to steadily rise.

The RII program provides cities with personalized recommendations for action steps based on GHG data. The action steps presented to SAV include electrifying buildings, weatherizing homes, commissioning commercial buildings, reducing reliance on vehicle travel, and supporting electric vehicles. The initiatives identified in this plan integrate these impactful changes.

RECOMMENDED RII ACTION STEPS: electrify buildings, weatherize homes, reduce reliance on vehicle travel, support electric vehicles.

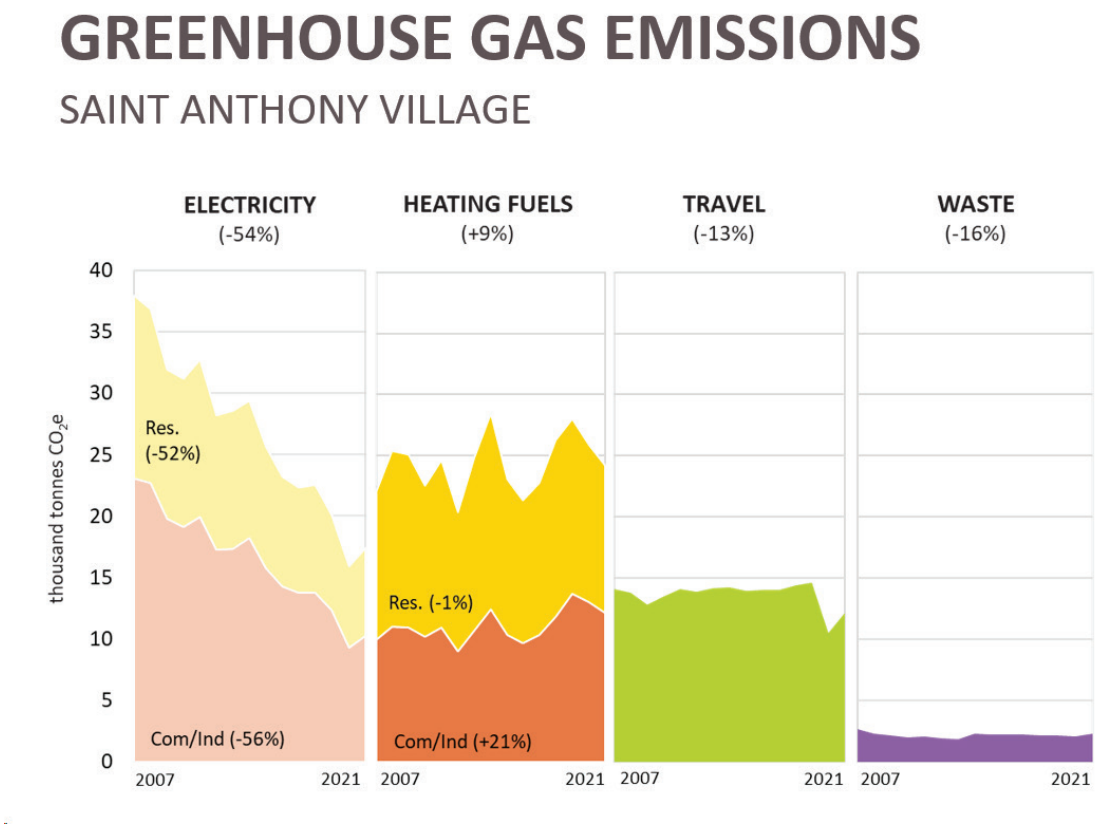


Figure 2: August 14, 2023 Parks and Environmental Meeting packet, presentation on Regional Indicators Initiative

Stakeholder Engagement

This report was informed by stakeholder feedback from the community, including elected officials, residents, business owners, and guests in the City. They shared their thoughts in a variety of ways including the 2040 Comprehensive Plan, the Climate Plan Survey, and at City Council and Parks & Environmental Commission meetings.

2040 Comprehensive Plan

The 2040 Comprehensive Plan identifies sustainability efforts that the City has either recently established or plans to pursue in the coming years. When the Comprehensive Plan was adopted in 2020, the City engaged residents in different focus groups to gather diverse perspectives on community goals for the future of SAV. Amongst the initiatives identified through this public engagement are impactful climate solutions that helped inform the action steps recommended for this plan.

2023 Parks & Environmental Commission

During the plan development process, the 2023 Environmental Commission played a vital role in distributing the survey and gathering insights from participants. The Commission's full communication schedule is outlined as Appendix B.

Key themes gathered from the community by the Commission included concerns about city walkability and bike-ability, the potential of curbside organics pickup, and a strong interest in energy efficiency, electrification, solar energy, and electric vehicles. Commissioners also shared that they heard concerns for outdoor air quality, reducing single occupancy vehicle reliance, and preparing for weather extremes. The RII was referenced by the Commission for initiatives like building electrification, weatherization, travel reduction, and EV support.

Climate Plan Survey

Climate Plan Survey

The SAV Climate Plan Survey aimed to understand community perspectives and priorities concerning climate change mitigation and adaptation. It sought valuable insights from residents on their awareness of climate issues, willingness to participate in sustainable initiatives, and suggestions for building a resilient and climate-conscious community. The survey was widely distributed among residents, and the comprehensive data collected played a crucial role in formulating community-driven policies and action plans to lower the City's climate impact and foster a more prosperous future for the City.

Results from the survey indicate a strong awareness and concern for sustainability with over 350 respondents, with the majority supporting the adoption of renewable energy and other reductions in carbon emissions. The survey also revealed key areas for improvement in the community's efforts, such as transportation and waste management. Participants highlighted the importance of walkable/bikeable paths, increased recycling in homes and businesses, and enhanced energy efficiency to reduce overall energy consumption. Overall, the survey reflects a supportive attitude towards climate action and a collective desire to make a significant difference in SAV's climate impact.

>>> Over 80% of respondents believe it's important or very important for SAV to take action on climate change.

How to Use This Plan

This plan is divided into 4 focus areas. Under each focus area is an overarching vision and three strategic initiatives to achieve that vision. Multiple actions are listed in detail under each initiatve with the intent that they will be the focus of this plan for the next one to five years. The Climate Plan actions will be reviewed for consideration during the City's annual strategic planning process. The group as a whole will identify which actions to prioritize for the following year. This procedure will help ensure that the proper staff and budgetary resources are allocated to the pursuit of climate action in SAV. The plan will be a road map and guide that will stay nimble. New initiatives will be added to each focal area as prior ones are achieved. Some initiatives will be ongoing with a future target date.

The initiatives are designed to be specific, measurable, achievable, relevant, and timely. Several focus areas also include a Community Action section with ideas for how the community can collectively make progress. The efforts of everyone - the City government, citizens, and local businesses - are needed to achieve these initiatives. Appendix A shows a breakdown of action steps by policy, operations, and education.

Each initiative in this Climate Plan will be achieved through the following:	
1 – Data Compilation	Compile community baseline data.
2 – Barriers Identification	Consider barriers to engagement and implementation and identify strategies to overcome these barriers
3 – Staff & Financial Resources	Assess staff and financial resources.
4 – Implementation Strategies	Identify and prioritize an implementation strategy for each policy.
5 – Community Engagement	Identify strategies to continually engage the community throughout implementation of each policy.
6 – Review Process	Include a process to review progress on goals and outcomes.

FOCUS >>>

INITIATIVES BY FOCUS

This plan sorts climate initiatives into four categories. Each focal point includes an overarching vision for that category to help the City achieve overall goals.

THE FOUR FOCUS AREAS INCLUDE:

- Water
- Waste
- Energy
- Transportation

Each category focuses on 3 impactful initiatives.

This plan is a dynamic document and is focused on the top priorities to pursue in the next 1-5 years.

FOCUS >>>

VISION: Increase the strength of the community by protecting and preserving the City's water resources.

OVERARCHING VISION FOR WATER:
Increase the strength of the community by protecting the City's water resources.

FOCUS >>>

Current Progress: St. Anthony Village is served by two watershed districts, that both hold the City accountable for proper water resource management through regulations and permitting requirements. The City promotes mindful water use through water conservation measures such as lawn watering restrictions and rain barrel programs.

Public Works also uses a collection and reuse system to water the Central Park and City Hall landscapes. Aligning with GreenSteps' best practices, St. Anthony Village focuses on effective storm water management, efficient water use, and regular water usage assessments.

In 2022, the city code related to Natural Landscapes was amended to allow low watering and low-maintenance lawn options such as pollinator and rock gardens.

The forward-looking 2040 Comprehensive Plan emphasizes water use reduction, rain gardens, storm water control, sustainable landscapes, and states that current water main leak levels were at 7.23% in 2020 (target: 10%). Notably, the 2017 Comprehensive Water Supply Plan outlines future water demands and infrastructure enhancements, while the Comprehensive Storm water Management Plan of the same year safeguards water quality via diverse strategies.

Stakeholder Feedback: The survey results showed a high willingness among residents to decrease water usage in their homes and/or businesses by regularly inspecting for leaks and reducing the watering of lawns and gardens. Residents are also open to alternative types of turf and installing rain barrels for watering.

ANNUAL WATER CONSUMPTION TRENDS

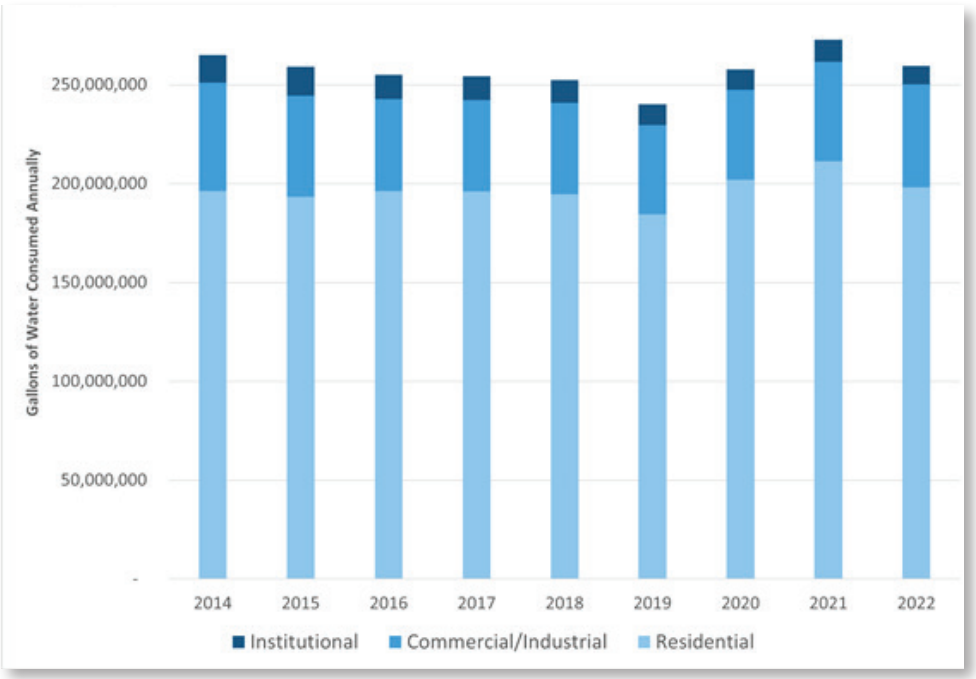


Figure 3: Annual Water Consumption Trends. Source: Saint Anthony Village Public Works, 2023

Almost 70% of survey respondents expressed a high willingness to decrease water usage in homes and businesses.

FOCUS >>> INITIATIVE 1

CONTINUE TO REDUCE DRINKING WATER CONSUMPTION IN HOMES AND BUSINESSES

DESCRIPTION: In collaboration with residents, business owners, and local organizations, the City could increase enforcement of existing policies, incentivize water conservation practices, and sponsor home improvements that support water conservation.

TIMELINE: 2024 - ONGOING

ACTIONS:

- Water restrictions-enforcement and fees for non-compliance.
- Add code language to specify that rain sensor is required on new watering systems and put in place a mitigation plan/promotion to encourage existing systems install a rain sensor.
- Review city use of sprinklers to ensure behavior and compliance to minimize water usage and adhere to same standards we will hold residents to.
- Educate community on water saving practices. Such as: low maintenance lawn seeds, and low flow fixtures, focus on rental properties.
- Expand water conservation campaign beyond 4th grade. We should deliver similar training throughout the village. Consider a campaign to incentivize people to take the training. (e.g. how to save money on your water bill)
- Offer a water bill consulting service where residents can get advice based on their water usage trends. Develop a checklist of the most common questions/check points for homeowners to adopt.
- Create information statistics about spray head volumes (e.g. micro/drip spray heads in gardens) and adequate/appropriate zone coverage.
- Enhance leak detection with water meters.
- Integrate repairs of water meters into infrastructure projects.
- Educate property owners on leak detection and repairs.
- Do more to promote rainwater harvesting. We should resume an annual rain barrel workshop and seek out ways to recognize and promote homeowner actions.
- Create mechanism for residents to self-report progress in water reduction.

>>> In 2009 SAV implemented a tiered water rate structure to promote water conservation

METRICS: Monitor water usage rates and track changes. Use water meters throughout the system to track unaccounted water loss

FOCUS >>> INITIATIVE 2

REDUCE EXCESS IMPERVIOUS SURFACES TO IMPROVE WATER INFILTRATION AND QUALITY

DESCRIPTION: Impervious surfaces such as roads and parking lots restrict the natural infiltration of groundwater. While these facilities are necessary in some capacity, the City can reduce the strain on storm water management systems and enhance climate co-benefits by allowing more water to infiltrate the ground. The City could establish zoning policies; limiting the construction of new impervious surfaces and incentivizing property owners to remove unused impervious surfaces by educating about the benefits of doing so.

TIMELINE: 2024 - 2027

ACTIONS:

- Use of permeable surfaces in new developments and re-developments.
- Incentive for property owners to remove unused impermeable surfaces.
- Zoning policy establishing a maximum allowable area of new impervious surfaces in commercial district.
- Revisit recent ordinance change not recognizing pervious pavers.

METRICS: Monitor city-wide changes in the area of impermeable surfaces.

FOCUS >>> INITIATIVE 3

ESTABLISH A REVEGETATION PROGRAM TO REPLACE LOST TREE COVER.

DESCRIPTION: Trees are the ultimate tool for combating climate change because they sequester carbon and produce clean air. Additionally, they improve water quality by creating a strong soil structure for infiltration. In recent years, a significant portion of the City's tree cover has been lost to invasive beetle species and drought. A revegetation program would help residents replace lost trees with a more hardy species and remove dead trees. Sustainable mowing practices can also help preserve water from irrigation and support biodiversity. Exploring these practices and their effectiveness within the City will advance SAV's climate aciton goals.

TIMELINE: 2024 - 2026

ACTIONS:

- Share existing information with residents and property owners about the climate benefits of trees and the roles that yards play in supporting pollinators and biodiversity.
- Share resources about adopting mow-less behavior throughout the summer.
- Explore developing a catalog of trees throughout the community that need to be removed and/or replaced.
- Examine grants at the state and federal level to help with climate-friendly municipal forestry.
- Determine what tree species would be resilient and most affordable to replace dead trees.
- Consider establishing a revegetation fund to help residents pay to have dead trees removed and replaced with more hardy species.
- Use the city's RFP process to negotiate a reduced rate for homeowners who choose to use a single vendor for tree removal.

METRICS: Monitor tree removal and planting progress in the catalog. Track resident engagement with sustainable mowing.

FOCUS >>> COMMUNITY

ENLIST COMMUNITY IN INITIATIVE TO REDUCE WATER USE

COMMUNITY ACTIONS:

- Consider replacing unused portions of the lawn with native grasses that do not require irrigation.
- Check toilets and faucets for leaks and fix any that are in disrepair.
- Consider replacing older toilets, showerheads and washing machines with low flow/energy efficient models.
- Check sprinkler system to ensure that spray heads are properly oriented. Every year check to see how long the system needs to operate to provide one inch of water over the service and set the weekly timer accordingly.
- Install rain barrels to store runoff from the downspout system and reuse the water.
- Pick up pet feces promptly from your yard

FOCUS >>>

VISION: Protect the health and viability of St. Anthony Village well into the future by reducing the volume of waste sent to landfills.

FOCUS >>>

OVERARCHING VISION FOR WASTE:
Protect the health and viability of SAV well into the future by reducing the volume of waste sent to landfills.

Current Progress: In 2015, St. Anthony implemented organized waste and recycling collection with three haulers for residential dwellings with up to three units. In the spring of 2023, St. Anthony consolidated to a single hauler for Curbside Waste Collection and Recycling with Aspen Waste Systems. This unified service streamlines curbside collection of waste, benefiting road longevity and consumer safety. Waste is directed to Ramsey/Washington Recycling & Energy Center and the Hennepin Energy Recovery Center, both of which use waste-to-energy technology to generate electricity. Yard waste drop-off at Ramsey County sites is extended to all residents, while Aspen Waste Systems offers combined yard waste, garbage, and recycling pickup for a small additional fee. Organics recycling through Ramsey County is available at City Hall, with SAV's compost site averaging 3764 lbs of organic food scraps weekly in 2022. According to the 2040 Comprehensive Plan, the City aims to host an electronics recycling event twice annually and wants to purchase recycling and organics containers to rent out for public events. SAV also hosts an Annual Clean-Up Day at the Public Works facility for residents to dispose of bulk and hazardous waste.

Over 70% of survey respondents expressed a willingnesss to increase participation in composting and over 65% expressed an interest in reducing usage of materials overall.

The RII Report

50% of municipal waste in SAV (*based on per capita data from Hennepin County*) is incinerated and the other 50% ends up in the landfill. Although SAV saw a decrease in CO_2 emissions from waste between 2014 and 2020, the City nearly returned to the 2014 value in 2021.

>>> 50% of Hennepin County waste currently ends up in landfill.

Stakeholder Feedback: The survey responses repeatedly indicate an interest among residents to increase participation in composting and implement curbside compost pick-up. An overall sentiment in stakeholder feedback was the desire to significantly reduce waste production, especially for single-use plastics. Residents also expressed a desire to see zero waste events at schools, the community center, and Villagefest.

FOCUS >>>

WASTE PRODUCTION & DISTRIBUTION TRENDS FOR ST. ANTHONY VILLAGE

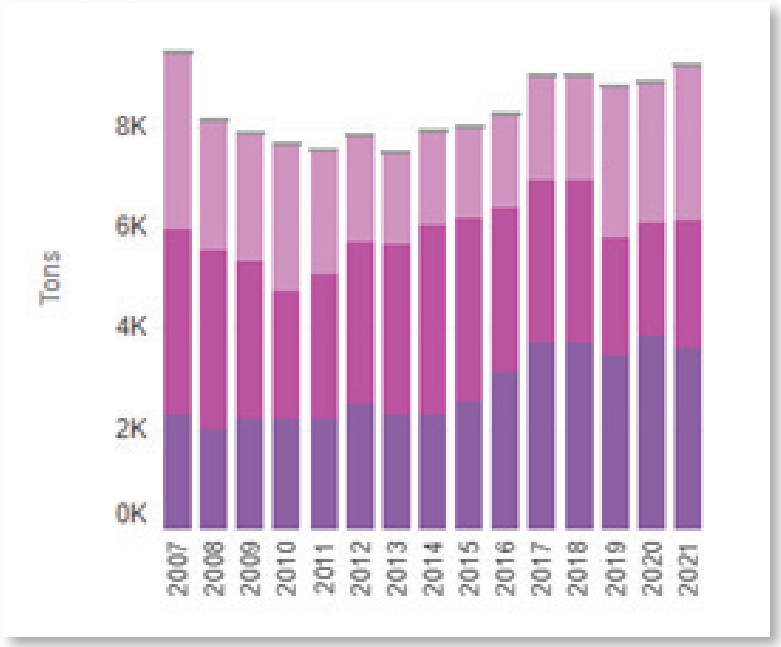


Figure 4: Waste production trends for St. Anthony Village based on per-capita data from Hennepin County. Source: Regional Indicators Initiative, 2023

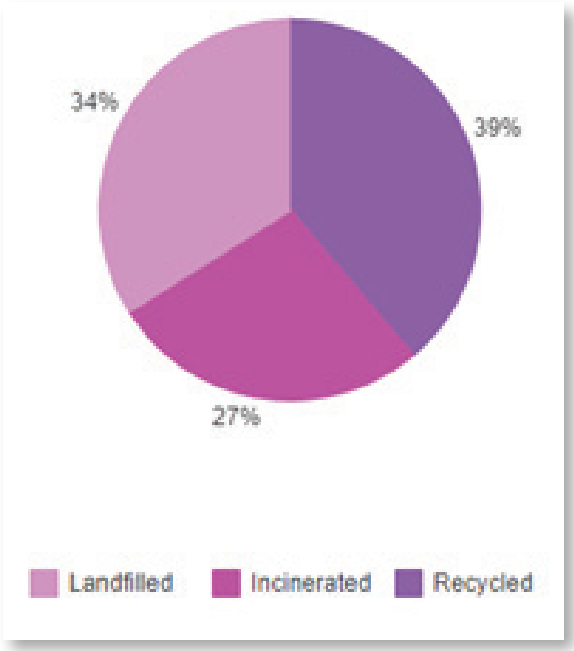


Figure 5: Waste distribution for St. Anthony Village based on per-capita data from Hennepin County. Source: Regional Indicators Initiative, 2023

FOCUS >>> INITIATIVE 1

INCREASE PARTICIPATION IN ORGANICS COMPOSTING

DESCRIPTION: To increase participation in organics composting city-wide, the City can motivate residents to take advantage of free resources available through Ramsey County and integrate composting into regular public facility maintenance. Additionally, the City can explore the potential for curbside composting pickup to address the barrier of traveling to City Hall to dispose of organic waste.

TIMELINE: 2024 - 2027

ACTIONS:

- Encourage residents to look into existing composting resources through Ramsey County such as at St. Anthony City Hall or a county yard waste site. Free compostable bags are also available for residents along with a beginner video with instructions.
- Promote Hennepin County Food Waste Challenge.
- Consider integrating compost management into regular public facility maintenance, including in schools and at City Hall. Purchase mobile composting and recycling containers for community members to rent for events at public facilities.
- Apply for Hennepin County recycling grant to secure larger compost and recycling bins for use at community events and in all city facilities, including park pavilions, community services, and city hall.
- Organize an annual compost give-away for residents to share in the benefit of composting.
- Monitor counties programs for feasibility of providing residents with curbside compost removal.
- Adopt ordinance that says community event organizers need to use recyclable and compostable products and properly collect and dispose of waste. Additionally, change the current policy that does not allow events to use the drop at city hall (e.g. we were not allowed to use the site for a waste free event at school sponsored by Green Team).

>>> SAV compost site averaged 3,764 lbs of organic food scraps weekly in 2022.

METRICS: Track materials shared with residents through City communications channels. Communicate with Ramsey County to continue receiving data on compost collection volumes.

FOCUS >>> INITIATIVE 2

PARTNER WITH LOCAL ORGANIZATIONS TO HOST MULTIPLE ANNUAL EVENTS FOR PROPER DISPOSAL OF HAZARDOUS WASTE, INCLUDING ELECTRONICS AND APPLIANCES

DESCRIPTION: Through the Annual Clean-Up Day and electronics recycling events, SAV is already making good progress in the proper management of hazardous waste. To improve the accessibility of and participation in these events, the City can increase the frequency of hazardous waste drop-off events and raise awareness of the consequences of improper disposal methods. To confront the financial barriers for residents looking to dispose of hazardous waste, the City could reduce or eliminate drop-off fees.

TIMELINE: 2024 - ONGOING

ACTIONS:

- Share existing educational materials to advertise the harmful impact of the improper disposal of hazardous waste through the City newsletter, posters near waste bins, and during events.
- Create an annual schedule for drop-off opportunities within SAV and surrounding communities. This could include Clean-Up Days, electronics recycling events, as well as new events.
- Consider establishing a fund to reduce or eliminate the financial barriers of proper hazardous waste disposal.

>>> SAV saw a decrease in CO_2 emissions from waste between 2014 and 2020, the City nearly returned to the 2014 value in 2021.

METRICS: Track materials shared with residents through City communications channels. Evaluate the participation in and frequency of proper disposal events.

FOCUS >>> INITIATIVE 3

REDUCE THE AMOUNT OF NON-RECYCLABLE WASTE SENT TO THE LANDFILL

DESCRIPTION: While 50% of non-recycled waste from SAV is incinerated to produce energy (*based on per capita data from Hennepin County*), 50% still ends up in landfills according to the RII. Although SAV has seen a 16% reduction in GHG produced by waste from 2007 to 2021, the City can continue to address waste emissions by reducing the consumption of non-recyclable materials. The City can communicate with property owners about living a minimal-waste lifestyle, avoiding single-use plastics, and choosing recyclable/ compostable alternatives.

TIMELINE: 2024 - ONGOING

>>> SAV has seen a 16% reduction in GHG produced by waste from 2007 to 2021.

ACTIONS:

- Promote existing educational materials to explain ways to live a minimal-waste lifestyle. Encourage residents to avoid fast-fashion and bulk food purchases that create unnecessary waste.
- Share information on free resources such as waste audits by MN Waste Wise Foundation.
- Promote resident engagement in existing zero-waste efforts. Propose free zero-waste events at schools and the community center. Encourage eco-conscious exhibitors at Villagefest and explore sustainable options like a Fix-it Clinic and local recycling organizations.
- Promote online resale platforms that allow people to purchase used items rather than buying new. Encourage use of online resources to repair home furniture and equipment rather than opting to replace them.
- Promote deconstruction building waste to be sorted and properly disposed of following the Minnesota Pollution Control Agency (MPCA) guidelines.
- Promote Ridwell services
- Promote Reuse Store, metal recycling facility and other entities involved in construction recovery to contractors and homeowners who are undertaking renovations.
- Collaborate with local businesses to determine feasibility and barriers associated with a single-use plastic ban. Based on stakeholder feedback, establish an ordinance addressing single-use plastics.
- Collaborate with property managers for multi-family housing units to provide compost removal facilities for tenants to dispose ● Incentivize or look at policies to reduce waste from businesses (food service providers use compostables, businesses do more to reduce use of plastic bags).
- Adopt policy for building tear down to use proper disposal techniques to reduce amount of waste and reuse/recover material.
- Create a tracking mechanism for residents to self-report progress in waste reduction.
- Encourage residents to participate in County recycling trainings.
- Promote Recycling Ambassador programs.

METRICS: Explore a partnership with Aspen Waste Systems to gather periodic waste collection volumes and track volume trends

FOCUS >>> COMMUNITY

ENLIST COMMUNITY IN INITIATIVE TO REDUCE VOLUME OF WASTE IN ST. ANTHONY VILLAGE

COMMUNITY ACTIONS:

- Use reusable bottles and cups for beverages on-the-go
- Use reusable grocery bags, and not just for groceries
- Purchase wisely and recycle
- Compost it!
- Avoid single-use food and drink containers and utensils
- Buy secondhand items and donate used goods
- Shop local farmers markets and buy in bulk to reduce packaging
- Curb your use of paper: mail, receipts, magazines

FOCUS >>>

VISION: Re-envision City-wide energy practices to reduce City-wide CO_2 emissions by 80% and City facility CO_2 emissions by 100% by 2040.

FOCUS >>>

OVERARCHING VISION FOR ENERGY:

Re-envision City-wide energy practices to reduce City-wide CO_2 emissions by 80% and City facility CO_2 emissions by 100% by 2040.

SAV commitment to solar energy earned the SolSmart Silver status in 2019.

Current Progress: In 2016, the City Council voted to obtain 25% of all energy for City operations from neighboring solar farms. The City's commitment to solar energy earned the SolSmart Silver status in 2019. This achievement involved enhancing existing solar initiatives and permitting processes, and simplifying residential and business adoption of solar technology. The City has prioritized energy efficiency by replacing public facility and parking lot lights with LED bulbs and assessing public buildings for further efficiency improvements. Home efficiency audits are promoted through the City website, connecting residents with local utility providers. The 2040 Comprehensive Plan states that St. Anthony consumed 65-gigawatt hours of electricity annually as of 2020. The plan's analysis showed that if all available rooftop solar energy potential was utilized, it could generate 69% of the City's annual electric usage.

The RII Report

Indicates that nearly three-quarters of SAV's greenhouse gas (GHG) emissions can be traced back to building energy. Examining Figure 6, it becomes apparent that SAV has experienced changes in its energy consumption trends from 2007 to 2021. During this period, there was a decline in electricity consumption but a notable increase in natural gas usage for energy generation. More specifically, natural gas accounts for 58% of energy-related emissions in SAV as of 2021, while electricity is responsible for the remaining 42%.

>>> Natural gas accounts for 58% of energy-related emissions in SAV as of 2021.

Stakeholder Feedback: Stakeholders expressed an interest in improving energy efficiency in their homes and businesses by reducing energy usage and accessing reliable, renewable energy. One popular avenue was subscribing to a renewable energy program through local energy providers, and another was installing solar panels.

FOCUS >>>

ENERGY

CO_2 EMISSION TRENDS FROM ENERGY

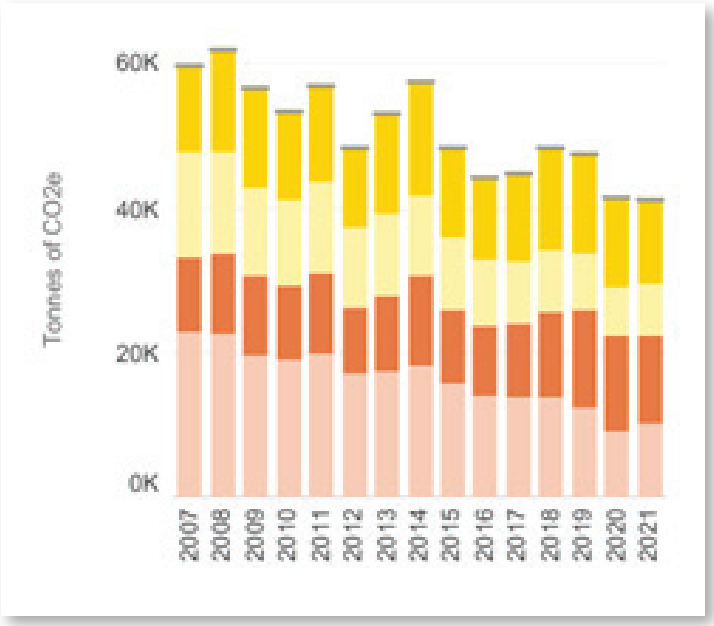


Figure 6: CO_2 Emission Trends from Energy.
Source: Regional Indicators Initiative, 2023

CO_2 EMISSION DISTRIBUTION FROM ENERGY

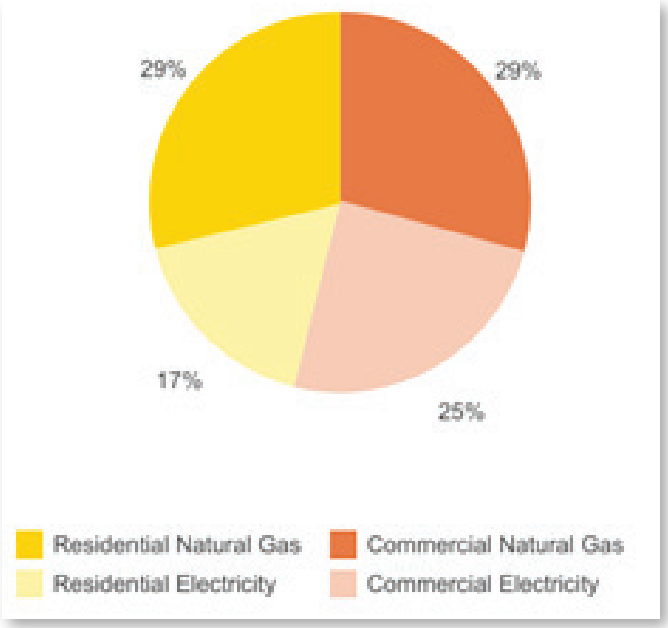


Figure 7: CO_2 Emission Distribution from Energy.
Source: Regional Indicators Initiative, 2023

FOCUS >>> INITIATIVE 1

IMPROVE THE EFFICIENCY OF HOMES, BUSINESSES, AND PUBLIC FACILITIES IN ST. ANTHONY VILLAGE

DESCRIPTION: According to the RII, the City can pursue changes to building efficiency in SAV to create a significant reduction in emissions, including electrifying buildings currently served by natural gas. The City must ensure that efficiency improvement resources are available to all residents, including low-income residents who may not have the financial resources to make the necessary changes independently.

TIMELINE: 2024 - 2029

>>> SAV has seen a decline in electricity consumption but a notable increase in natural gas usage for energy generation.

ACTIONS:

- Share existing information on resources for reducing energy use in buildings, including the Inflation Reduction Act's Home Energy Rebates, free energy audits from power companies, etc. Ensure educational resources and opportunities for home energy improvements are accessible to low-income residents.
- Consider developing incentive program or grant funding for residents to pursue a home audit. One example would be to refund residents the cost of their home audit if they address a certain number of inefficiencies identified in the home audit. Examine providing low-income residents with financial support in improving home efficiency if a home audit identifies significant issues.
- Consider adopting a sustainable building policy for all new and remodeled construction projects.
- Discuss participating in Partners in Energy Program and creating an Energy Action Plan.
- Subsidize Home Energy Audit for residents who commit to investing in some form of energy efficiency in their homes.
- Distribute educational materials explaining emerging solutions to electrify buildings that are currently served with natural gas.
- Communicate with rental property managers about improvement opportunities to decrease pressure on tenants who may be unable to make substantial changes.
- Promote installation of electric heating sources (geothermal, heat pump, water/heat pumps) in new construction (homes, housing complexes and business)
- Partner with Citizens Utility Board to provide consulting resources for homeowners looking to reduce energy costs.
- Create tracking mechanism for residents to self-report actions taken in improving energy efficiency (e.g. insulate attic, install steel rooftop, install heat pump).

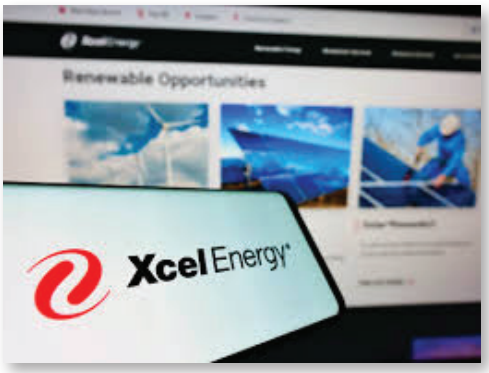
METRICS: Coordinate with local energy providers to track changes in energy consumption.

FOCUS >>> INITIATIVE 2

INCREASE USAGE OF RENEWABLE ENERGY

DESCRIPTION: St. Anthony Village is committed to advancing renewable energy for its residents. Building on solar achievements, the City can improve access to solar technology, particularly for low-to-moderate-income residents. Simultaneously, the City can promote on-site renewable energy, community solar gardens, and participation in utility green power programs that allow residents to directly support renewable energy growth and environmental benefits.

TIMELINE: 2024 - ONGOING



ACTIONS:

- Share resources with residents explaining the benefits and resources available through utility green power purchase programs and community solar gardens. Target low-to-moderate-income residents who may not have the financial resources to install solar panels but still have interest in renewable energy.
- Promote information regarding on-site, solar technology including solar benefits, funding available including through the Inflation Reduction Act and MinnPACE for commercial properties, utility programs (Xcel Energy's Solar Rewards), SAV's solar permitting requirements, and solar panel manufacturers/installers to educate residents about solar energy options.
- Discuss participating in the Partners in Energy Program and creating an Energy Action Plan.
- Address financial barriers for low-to-moderate-income residents by reducing or waiving permit submission fees for solar panels.
- Partner with Minnesota Renewable Energy Society to build Community Solar Gardens on public property (e.g. parking lot canopies) where qualifying households can apply for a subscription and save money on their monthly electric bill
- Explore solar panel installation on public facilities. Seek funding from utility providers and government programs, and integrate implementation costs into the annual budget.

METRICS: Coordinate with energy providers to collect solar energy production data from individual properties and collaborate with utility providers to gauge participation from residents.

FOCUS >>> INITIATIVE 3

INCREASE THE PURCHASING OF ELECTRIC DEVICES AND APPLIANCE ALTERNATIVES

DESCRIPTION: Modern technology is constantly evolving to make electric alternatives accessible to the general public that replace gasoline or diesel-powered devices. The City can encourage residents to pursue these changes while replacing City Public Works Department maintenance and groundskeeping equipment with electric alternatives when feasible and as budget allows benefits.

TIMELINE: 2024 - ONGOING

ACTIONS:

- Share educational materials on new and emerging electric device alternatives including available funding. Emphasize climate benefits and cost-savings associated with electric energy over gasoline power.
- Promote IRA funding for homeowners to shift from gas to heat pumps for heating, water heater and clothes dryer, and to upgrade electric box.
- Evaluate the condition of existing City equipment and develop a predicted replacement schedule.
- Work with Public Works and City Engineering Departments to incorporate electric device alternatives, as practical, into the purchasing plan and account for changes in equipment cost in financial planning. Utilize MPCA grants for alternative landscaping equipment
- Create a reporting mechanism for residents to self report when shifting from gas to electric heating, water heaters, and clothes dryers.

METRICS: Annually evaluate how well the City has aligned with the electric alternative purchasing plan.

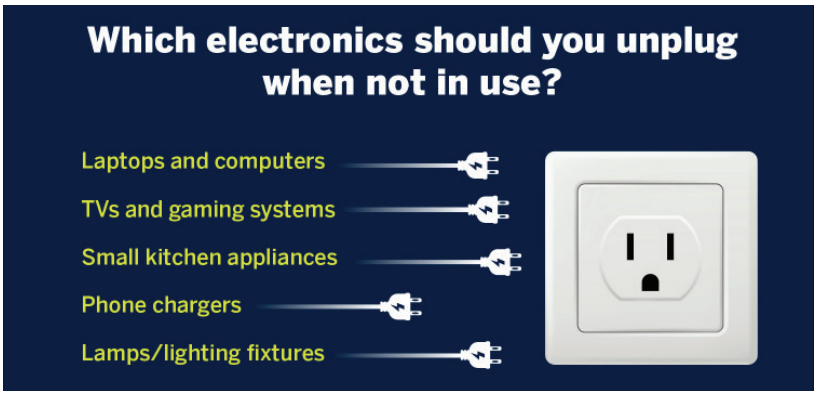
MINNESOTA POLLUTION CONTROL AGENCY

FOCUS >>> COMMUNITY

ENLIST COMMUNITY IN INITIATIVE TO INCREASE BUILDING AND HOME ENERGY EFFICIENCY

COMMUNITY ACTIONS:

- Invest in high-efficiency furnaces and heat sources
- Wrap the water heater in an insulating blanket
- Seal ductwork
- Test windows and doors; use caulking around frames, install or replace weather-stripping, add a door sweep. In cold months, apply exterior window film
- Use ceiling fans
- Run large appliances in the evening; consider using air-dry options and washing clothes on a shorter cycle
- Install a clothesline; dryers can account for up to 6% of a home's total energy use.
- Clean large appliances: backs of refrigerators and clothes dryer exhaust to help motors work more efficiently and consume less energy
- Automate usage; use a smart thermostat. Install dimmer switches and motion sensors
- Fight phantom power consumption
- Watch the chargers – unplug when not in use
- Invest in a home and business energy audit

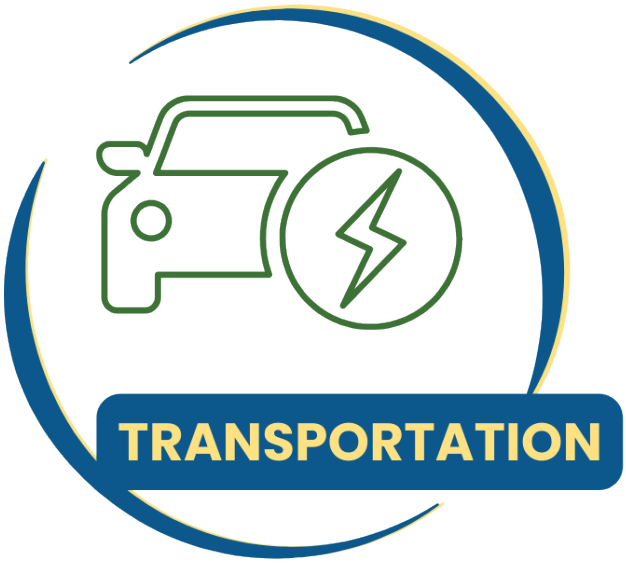


HOME ENERGY SQUAD

Xcel Energy

CenterPoint Energy

FOCUS >>>



VISION: Reduce the emissions produced from travel by enhancing multimodal transportation opportunities and improving access to EVs.

FOCUS >>>

OVERARCHING VISION FOR TRANSPORTATION:

Reduce the emissions produced from travel by enhancing multimodal transportation opportunities and improving access to EVS.

SAV stakeholders express resounding support for improved multimodal transportation infrastructure.

Current Progress: In St. Anthony Village, the non-motorized transportation network mainly consists of sidewalks and a regional trail. The Street & Utility Capital Improvement Plan outlines reconstruction and overlay projects until 2040. Public transportation options include Metro buses, Transit Link, and Metro Vanpool programs, offering limited affordable transit options. While some residents own EVs, there are no EV charging stations within City limits, with the closest stations located in Minneapolis and Roseville. As part of achieving Step 5 in the GreenSteps Cities program, the City focuses on enhancing walking, biking, and transit opportunities, traffic calming, and addressing street gaps. The 2040 Comprehensive Plan aligns with residents' aspirations to improve pedestrian and bike routes, enhancing safety and accessibility for non-motorized transportation.

The RII Report

Prior to 2020, an increase in vehicle miles traveled (VMT) was counterbalanced by a decrease in the carbon intensity of each mile driven, leading to a small net decrease in CO_2 emissions per vehicle miles traveled. VMT has begun to increase again following the COVID-19 pandemic.

VEHICLE TRAVEL & CO_2 EMISSION TRENDS

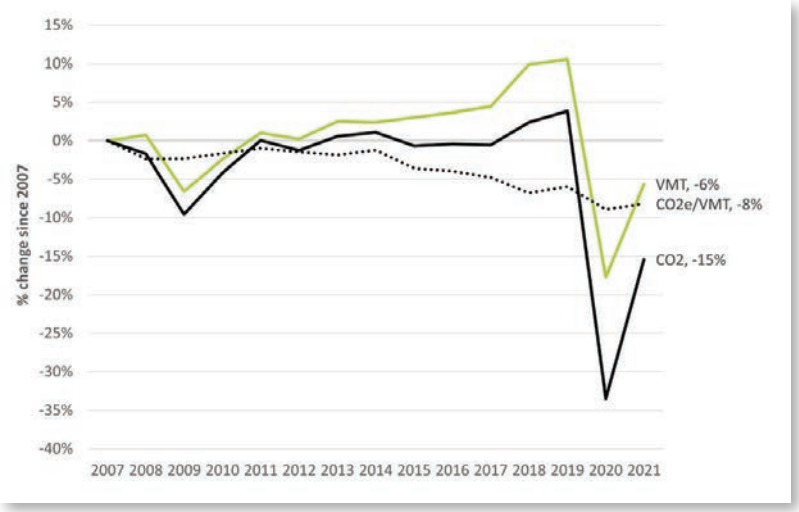


Figure 8: Vehicle Travel and CO_2 Emission Trends. Source: Regional Indicators Initiative, 2023

Stakeholder Feedback: Stakeholders expressed resounding support for improved multimodal transportation infrastructure, including pedestrian and bike routes. Other proposed ideas included reducing idling, installing EV charging stations, and encouraging residents to work from home when possible.

FOCUS >>> INITIATIVE 1

IMPROVE ACCESSIBILITY AND SAFETY OF NON-MOTORIZED TRANSPORTATION INFRASTRUCTURE

DESCRIPTION: To reduce the emissions created by vehicle miles traveled, the City can continue to address gaps in the pedestrian and bike networks and improve areas not currently in compliance with ADA standards. The City can also explore incentives for residents to use alternative modes of transportation that includes safety as a co-benefit, as represented in the Comprehensive Plan.

TIMELINE: 2024 - 2027

ACTIONS:

- Evaluate the list of pedestrian and bike route gaps identified in the 2040 Comprehensive Plan and identify routes that are currently noncompliant with ADA standards. Ensure that plans are in place to improve key intersections and routes.
- Utilize resident feedback to identify areas throughout the City where pedestrian safety could be improved. Explore ways to improve the safety in these areas.
- Evaluate the feasibility of restriping and redesigning streets that are common commuter routes to include a bike lane.
- Install or partner with local service organization to install bicycle repair station along a major biking corridor (e.g. diagonal trail)
- reate a self reporting mechanism for people to track the number of miles they spend biking to work to school and for leisure.
- Discuss incentivizing residents to use alternative modes of transportation by zoning for limited parking at facilities and event spaces that have sufficient pedestrian infrastructure connecting to existing nearby parking.
- Develop a bike and pedestrian plan to develop specific goals and infrastructure opportunities and participate in regional planning initiatives.
- Partner with schools and other local organizations to promote bike to school and bike to work days to create awareness and opportunity to get people out of their cars.

>>> The net decrease in CO_2 emissions in 2020 is increasing post-pandemic.

METRICS: Collect annual average daily traffic (AADT) and pedestrian counts throughout the improvement process to measure the impact of the changes.

FOCUS >>> INITIATIVE 2

INCREASE ELECTRIC VEHICLE OWNERSHIP ACROSS ST. ANTHONY VILLAGE

DESCRIPTION: EVs are growing rapidly in popularity as a sustainable solution to mitigating the emissions created by traditional, gasoline-powered vehicles. The City can take advantage of the growing popularity and support residents in their ownership of this increasingly-accessible technology. Additionally, the City can explore integrating EVs into its fleet and require new multi-use developments to install EV infrastructure.

TIMELINE: 2024 - 2029

ACTIONS:

- Examine creating a marketing plan to encourage residents to take advantage of the growing accessibility of EVs. Distribute existing educational materials on the tax incentives of owning an EV.
- Consider adopting a policy on publicly-facing charging infrastructure. Determine the most effective locations for EV charging stations at public facilities in SAV. Integrate predicted installation expenses into the budget. Identify a vendor and develop an installation plan.
- Consider adopting a policy encouraging or requiring new multi-use developments to install EV infrastructure.
- Evaluate the condition of the current vehicle fleet and determine which vehicles could feasibly be re-placed by EVs in coming years. Adjust predicted costs in the budget to account for making these changes.

Current Progress: In 2022 St. Anthony Village added Electric Vehicle charging stations as an allowed accessory use in the Commercial district.

METRICS: Monitor EV charger usage at public facilities once installed. Gather and monitor voluntary EV ownership data.

FOCUS >>> INITIATIVE 3

REDUCE AVOIDABLE VEHICLE EMISSIONS

TRANSPORTATION

DESCRIPTION: While there are many exciting, large-scale initiatives for the City to pursue in emission reduction, sometimes small changes can create big impacts. Simple actions like limiting vehicle idling, riding public transportation, and choosing to work from home when feasible can decrease transportation emissions. The City can educate its residents and business owners about the simple changes that they can implement to reduce their personal carbon footprint.

TIMELINE: 2024 - 2027

ACTIONS:

- Connect residents with Metro Transit route resources and encourage them to utilize public transportation whenever possible. Advertise the immense climate benefits of traveling via public transportation.
- Share educational materials about how long cars need to be warmed up during winter weather to avoid unnecessary emissions.
- Promote availability of high speed internet for all.
- Promote No-Idling for all public parking areas, including City Hall, city park parking lots, and all public facilities.
- Collaborate with Hennepin County on public transit planning, trends, and options for future services to advance goals in this plan.
- Collaborate with local schools and businesses to redesign drop-off and pick-up areas, and install signage to encourage drivers to limit idling.
- Reduce idle time when feasible and turn-off city vehicles and equipment when not in use. Also advocate for the purchase of city vehicles that have the capability to provide roadside flashing without having to continue to idle.

Metro Transit

METRICS: Collaborate with Metro Transit to gather ridership data. Gauge idling reduction from resident participation observations at schools and businesses.

FOCUS >>> COMMUNITY

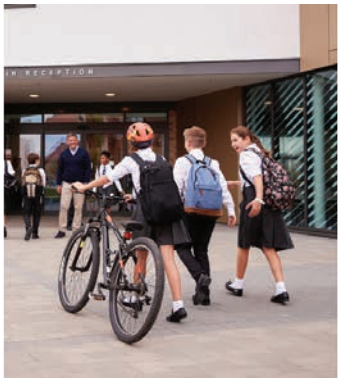
ENLIST COMMUNITY IN INITIATIVE TO REDUCE THE EMISSIONS PRODUCED FROM TRAVEL

COMMUNITY ACTIONS:

- If you drive to work, consider telecommuting or carpooling at least one day per week.
- Invite colleagues to split commute costs and reduce your carbon footprint by carpooling or vanpooling.
- Connect with Metro Transit carpooling/vanpooling portal to find ride-share opportunities
- Consider mass transit, walking, biking to work, school, shopping
- If you purchase a vehicle, consider EV.
- If you are a local business, install EV charging stations or designated EV parking spaces.
- If you are a local business, institution, or commercial operation, remove excess impervious surface and replace with vegetation.

Metro Transit

metrotransit.org/carpool-vanpool



Conclusion

This plan utilizes stakeholder feedback to propel the city toward a reputation as a model climate-conscious community.

At its core, this plan operates as a framework for practical steps the City can take to reduce the climate footprint in St. Anthony Village.

It utilizes stakeholder feedback to identify the most effective climate solutions that reflect the specific goals of the SAV community. The City will explore resources including funding to implement this plan.

The plan builds on existing programs, while simultaneously implementing new initiatives. SAV's commitment to embracing these feasible solutions propels the City community toward an enhanced reputation as a model climate-conscious community.

ACKNOWLEDGMENTS

The St. Anthony Village Climate Action Plan builds upon past work and is the culmination of efforts from City staff, Parks and Environmental Commission members, and external partners.

City Staff:
Charlie Yunker
Nicole Miller
Barb Tuominen

Additional Contributors:
Prepared by the WSB Authors:
Hannah Delker
Bart Fischer
Amy Fredregill

Sustainability Corps Intern:
Alex Goers

St. Anthony Village City Council
St. Anthony Parks and Environmental Commission

External Partners:
Greenhouse Gas Analysis by LHB, Inc.
Survey Respondents-Thank you!

Limited Resources Appendix

General:

- 2040 Comprehensive Plan
- ADA standards
- GreenSteps Cities program
- Regional Indicators Initiative (RII)

Water:

- Comprehensive Storm water Management Plan

Waste:

- Minnesota Pollution Control Agency (MPCA)
- MN Waste Wise Foundation
- Organics recycling
- Minimal-waste lifestyle

Energy:

- Inflation Reduction Act Guidebook
- MinnPACE
- Partners in Energy Program

Transportation:

- Metro buses
- Metro Vanpool program
- The Street & Utility Capital Improvement Plan
- Transit Link

2023 CLIMATE PLAN >>>

FOCUS	VISION
	Increase the strength of the community by protecting and preserving the City's water resources.
	Protect the health and viability of St. Anthony Village well into the future by reducing the volume of waste sent to landfills.
	Re-envision City-wide energy practices to reduce City-wide CO_2 emissions by 80% and City facility CO_2 emissions by 100% by 2040.
	Reduce the emissions produced from travel by enhancing multimodal transportation opportunities and improving access to EVS.