



# **SUSTAINABLE** SIOUX FALLS





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# LETTER FROM THE MAYOR



Fellow Sioux Falls Residents.

The City of Sioux Falls has a vision statement of "Taking care of today for a better tomorrow." We recognize it in everything we do, anticipating that what we do today may not directly affect us now, but it will impact future generations. This fits right into the topic of sustainability because what we do (and don't do) today will affect many generations in the future. It's why generations before us have put such an emphasis on conserving South Dakota and why we will continue to reinforce those important efforts to

protect our environment and community.

The topic of climate change, conservation, or sustainability—however you phrase it—can become a polarizing and political topic. There's a broad set of opinions that need to be considered. This was especially apparent when we released the first draft of Sustainable Sioux Falls in early 2022 that included perceived mandates and ordinance changes. Soon after release, our team quickly realized that some very key and necessary voices were left out of the conversation, so we went to work to fix that.

We didn't scrap the plan all together because conservation is an important topic that needs to be addressed, and the framework that's presented today is what's right for Sioux Falls. If there's one thing this community can expect based on my five-year mayoral track record, it's that I am a consensus-building leader that brings pragmatic solutions to challenges. We don't follow the national narrative in Sioux Falls, and I don't expect to start now. Sustainability is not a one-size-fits-all approach even if the federal government makes it seem that way with enticing grants.

Sustainability is about balance. This framework serves as a roadmap for measurable action and realistic goals from the City of Sioux Falls, public-private partnerships, and the community. It builds upon the efforts we're already leading on as a city while strengthening community well-being and supporting economic prosperity. It will truly take a One Sioux Falls effort of everyone coming together to continue our progress and achieve the goals laid out in Sustainable Sioux Falls.

Protecting our environment is something the next generation brings up often to me as a top issue they're concerned about. We're listening, we're acting, and I'm proud to present this updated framework that considers input from a big tent of necessary stakeholders while working to preserve the natural environment in our beautiful home of Sioux Falls.

Sincerely,

Mayor Paul TenHaken

## EXECUTIVE SUMMARY

For years, Sioux Falls has led many sustainability efforts, like water conservation and waste reduction, because we recognize that for the Sioux Falls community, sustainability means taking care of our natural environment, so it takes care of us. Sustainable Sioux Falls is a framework for doing just that. It includes focus areas, goals, and actions that support a healthy community and environment, align with Sioux Falls' continued growth, and help prepare the community for emerging opportunities and challenges.

Sustainable Sioux Falls builds upon and enhances the City's existing conservation efforts and is guided by the following mission and vision statements:

**Mission:** The City of Sioux Falls leads the way toward a sustainable present and future through meaningful collaboration with the community.

**Vision:** To be a thriving community today and for future generations by strengthening community well-being, protecting the environment, and supporting economic prosperity.

Sustainable Sioux Falls was developed over the course of 2.5 years. Its creation was led by a committee of dozens of representatives from key groups and included four phases of community input to ensure the framework reflected Sioux Falls' needs.

Three considerations, voiced by the community, were kept top-of-mind during the framework's development: support consumer choice, provide benefits for all, and recognize cost and affordability. Balancing social, environmental, and economic benefits and costs will be an important part of working toward the goals. The framework is meant to act as a guide for work done within the City of Sioux Falls when sustainability is part of the conversation. Actions that include City funding will involve the City's regular budget process.

The framework is organized by five focus areas that include sustainability topics, goals, and actions. The focus areas are Natural Systems, Materials Management and Waste, Community Vitality and Sustainable Living, Energy and Buildings, and Transportation and Land Use. Sustainable Sioux Falls has 10 goals that serve as a roadmap for community action in years to come:

- 1. Improve water quality and increase water conservation
- 2. Strengthen the urban forest
- 3. Protect and restore biodiversity
- 4. Reduce waste
- 5. Expand and enhance local food production and equitable access
- 6. Expand upon a culture of conservation and sustainability
- 7. Improve resilience and public health
- 8. Increase sustainable energy and buildings while maintaining reliability, affordability, and consumer choice
- Decarbonize transportation through multimodal solutions while maintaining consumer choice
- 10. Increase sustainable land use

Achieving these goals calls for local government and community collaboration. Working together, we can take care of today for a better tomorrow and balance the health and needs of our people and natural environment.

For the full list of actions associated with these goals, see implementation strategies on page 28 in Sustainable Sioux Falls.

# CHAPTER 1. INTRODUCTION



#### INTRODUCTION

Sustainable Sioux Falls is a framework of sustainability focus areas, goals, and actions that supports a healthy community and environment, aligns with Sioux Falls' continued growth, and prepares the community for emerging opportunities and challenges. Sustainable Sioux Falls was created collaboratively between the City of Sioux Falls and community stakeholders and builds on decades of successful conservation and sustainability efforts in the community.

Sustainable Sioux Falls is guided by the following mission and vision statements.

#### MISSION:

The City of Sioux Falls leads the way toward a sustainable present and future through meaningful collaboration with the community.

#### **VISION:**

To be a thriving community today and for future generations by strengthening community well-being, protecting the environment, and supporting economic prosperity.

#### What Is Sustainability?

Sustainability is based on the principle that the essentials people need to survive depend on a healthy, functioning natural environment (e.g., clean air and water, healthy soil, trees for lumber, fiber for clothes, etc.). To pursue sustainability means to create the conditions under which people and nature can productively coexist and support each other.

Taking a sustainability approach to planning and decision-making helps protect and preserve the natural environment, which allows for greater well-being, a prosperous economy, and a vibrant community for all. Figure 1 shows the three components of sustainability—planet, people, and prosperity—and their relationships with each other. The model illustrates dependence on a healthy environment to support social well-being and a strong economy.

# People Prosperity

# **FIGURE 1.**Three Components of Sustainability

# How Does Sustainable Sioux Falls Benefit the Community?

The Sioux Falls community has been addressing and incorporating conservation and

sustainability for decades. Working together, the community and City of Sioux Falls have saved billions of gallons of water, diverted millions of pounds of hazardous and electronic waste from the landfill, and moved the conversation forward to improve active transportation, density, and walkability in Sioux Falls, to name a few examples of how Sioux Falls is leading the way.

The City's first Sustainability Master Plan was created in 2012 and served as a roadmap to protect water resources, reduce waste and increase recycling, improve energy efficiency, and more. That plan helped spur advances in these areas and support a healthier community. Sustainable Sioux Falls is the next iteration of that first roadmap and sets forth goals and actions the City of Sioux Falls and community can evaluate and act on to take care of today for a better tomorrow.

It is important to note that this document sets forth goals and actions for a sustainable community, but it is also meant to be a living framework that can shift as community considerations change.

The framework outlines actions but does not rely on government mandates for implementation. Each strategy and initiative will be explored and examined to ensure social, environmental, and economic costs and benefits make sense for the community.

Implementing the actions in the Sustainable Sioux Falls framework will bring benefits to Sioux Falls that improve people's lives and the overall community (see Figure 2). These include a more connected community, promoting good health, increased local food security, and savings for consumers and businesses. For example, more efficient use of energy lowers utility and transportation costs for residents and businesses, and increasing opportunities for active transportation (e.g., walking and bicycling) improves residents' health.

Additionally, goals and actions within Sustainable Sioux Falls can benefit our City organization and community by helping them plan for Sioux Falls' growth in ways that balance the health of people, natural environment, and local economy.

Sustainable Sioux Falls also recognizes predicted challenges, like more frequent and intense weather events. Given its geography, Sioux Falls is likely to face more frequent, intense droughts and more heavy



**FIGURE 2.**How Sustainability Strengthens Sioux Falls

precipitation events. Hotter temperatures are also projected, with southeastern South Dakota facing the possibility of a 25- to 45-day increase in the number of days above 90°F by mid-century. Extreme weather events and prolonged hotter temperatures are risks to people's health and safety and can cause damage to infrastructure and property, which increases economic burden. Ways to address and prepare for these challenges are included in the Sustainable Sioux Falls framework.

#### Local Government's Role

Cities play a key role in contributing to a more sustainable society. Transportation management, infrastructure, land use patterns, building codes, and provision of safety and emergency services fall within local government's scope of duties, and all of them have implications for a healthy, thriving community. Because of this, local governments have an important role to play in integrating sustainability and leading on initiatives and investments that fall within their purview and lead to short- and long-term community benefit. The City of Sioux Falls continues to play an important role in planning for and creating a sustainable community, not only through leadership and demonstration of benefits, but also through providing education and programs for community members.

#### Community-wide Collaboration

Sioux Falls' culture has historically reflected that of the state of South Dakota, which has continually been committed to promoting and supporting conservation of natural resources and protection of the environment. The City is committed to strengthening these foundational

<sup>&</sup>lt;sup>1</sup>US Global Change Research Program (2018). National Climate Assessment: Northern Great Plains. *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II.* U.S. Global Change Research Program, Washington, DC, USA. https://nca2018.globalchange.gov/downloads/NCA4 Ch22 Northern-Great-Plains Full.pdf

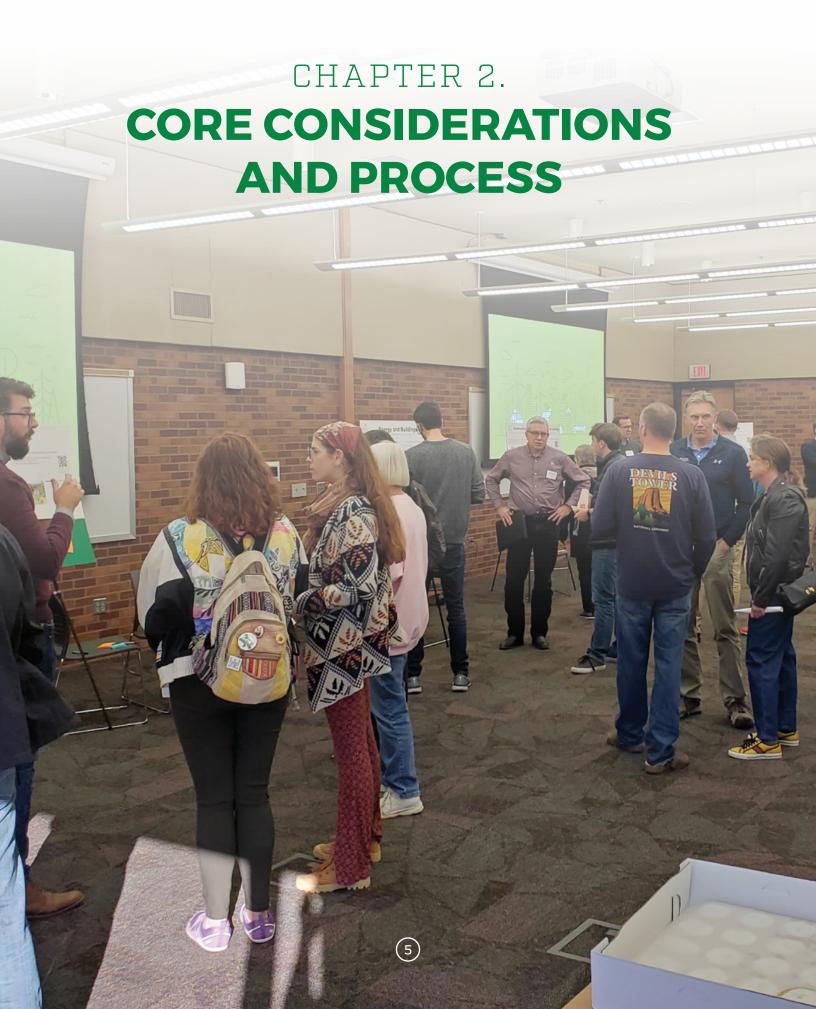
#### SUSTAINABLE SIOUX FALLS

efforts by facilitating collaboration among public, private, and non-profit sectors to promote new technologies and practices that further conserve and protect the environment. Community involvement, organizational partnerships, multi-jurisdictional collaboration, and individual actions play an important role. Working together, Sioux Falls can continue to make significant progress on promoting conservation and sustainability.

#### How to Read Sustainable Sioux Falls

Following this introduction, Chapter 2 details core considerations and process for the framework, followed by the five focus areas outlined in Chapter 3. The five focus areas include: Natural Systems, Materials Management and Waste, Community Vitality and Sustainable Living, Energy and Buildings, and Transportation and Land Use. Each area outlines the topic's importance, goals, examples of actions intended to meet the goals, and highlights of the progress and current work of the City and our community.

Chapter 4 contains implementation strategies that complement the focus areas and consolidate all goals and actions into one place. The chapter contains: goals, roles of implementing stakeholders (City operations, public-private collaboration, or community driven), actions, suggested timeframe (ongoing and in three-year increments), and key performance indicators (KPIs).



#### **CORE CONSIDERATIONS AND PROCESS**

#### **Core Considerations**

#### **Supporting Choice**

Consumer choice was an important consideration incorporated throughout the framework. Consumer choice, including energy choice, is a value held by many community members, as indicated in public feedback. Therefore, it was important Sustainable Sioux Falls reflect this as well. For example, regarding energy, the Sustainable Sioux Falls document neither mandates the type or amount of energy residents use nor does it prohibit any type of fuel. All six energy utilities (gas and electric) that directly provide service to Sioux Falls were represented on the steering committee and provided information regarding the progress each has made in the past decade on more sustainable energy generation and their plans to continue this moving forward.

#### Cost

The cost of Sustainable Sioux Falls actions was a key consideration during development of the framework. Balancing social, environmental, and economic costs and benefits will be a fundamental part of the implementation process.

The Sustainable Sioux Falls framework is not intended as a capital improvement plan and does not delineate the economic costs and benefits of each action in the framework. For community or individual actions, costs can vary widely. For example, if a resident wishes to add insulation to their home to improve energy efficiency, this can vary based on a wide number of factors (e.g., age of home, current insulation, additional issues found during retrofit, eligibility for federal incentives and/or rebates), and therefore providing a cost of this action in the plan proves difficult. The City of Sioux Falls will provide education and resources to residents to help them explore these questions and determine if actions are feasible for them.

Initiatives that include City investment will involve the regular budget process for the City of Sioux Falls. This includes studying the initiative to determine the costs and benefits of the action. If the initiative is cost-effective and makes sense to move forward on, City administration would bring the item to City Council for review during the annual budgeting process. The City Council approves the budget annually and has the authority to approve or reject components of the budget.

Moving forward, continuing to explore additional funding mechanisms to implement Sustainable Sioux Falls will be important. This may be in the form of federal and other grants through recent legislation, public-private partnerships, and other mechanisms. Efforts will be evaluated to ensure a responsible use of public funds that is in the best interest of taxpayers.

#### **Benefits for All**

Another key consideration in Sustainable Sioux Falls was to have goals and actions within the framework provide equal opportunities and benefits throughout the community while not disproportionately burdening anyone.

#### **Duration**

Sustainable Sioux Falls is intended to provide a framework for sustainability action within Sioux Falls for approximately ten years. A focused update on the document is planned for around five years. However, this is a living document, and circumstances may occur that change this original timeline and duration.

#### **Reporting Frequency**

The City of Sioux Falls plans to report to the public biennially on Sustainable Sioux Falls progress and challenges. The City encourages community stakeholders to report their own progress on framework goals to help provide a full picture of the array of sustainability-oriented work occurring in the community.

#### Process

Sustainable Sioux Falls was developed through collaboration with a diverse group of stakeholders and community involvement across more than two years, starting in early 2021. The process included planning, research, and decisions by the steering committee as well as four rounds of public input. See Figure 3.

An important note about the process and concept of sustainability: Sioux Falls is

Engagement Type	Date	Public Participation
Community Sustainability Survey	April 2021	1,300 surveys
Sustainability Open House (Sioux Falls Downtown Library)	October 2021	140 attendees
First Draft Public Input	March 2022	100 comments
Five Community Engagement Meetings (held at Sioux Falls libraries)	November 2022	70 attendees

FIGURE 3.

Sustainable Sioux Falls Community Engagement Phases

not alone in deliberating this topic. Communities from the local to global level are addressing sustainability, and with that, people have a range of opinions and ideas on the topic itself and how to approach it. Throughout the creation of Sustainable Sioux Falls, public input varied greatly. Ultimately, Sustainable Sioux Falls incorporated differing viewpoints and found middle ground by focusing on goals and actions that lean into and build upon Sioux Falls' strengths.

#### **Preliminary Development and Planning**

A key goal of the planning process was to evaluate community needs and concerns regarding sustainability. Therefore, community engagement and public participation was an essential component to Sustainable Sioux Falls' development. To begin building Sustainable Sioux Falls, a "Community Sustainability Survey" was conducted in 2021. Survey results showed 93% of respondents stated, "It is important or very important that Sioux Falls addresses sustainability and environmental issues."

An additional goal of the planning process was to review evidence-based practices in community sustainability and incorporate those that make sense for Sioux Falls.



#### **Steering Committee**

A 32-member steering committee representing multiple industries, including economic development, business, environmental, conservation, urban agriculture, affordable housing, energy (gas and electric utilities), construction, community, youth, health, and education, participated in the planning and creation of Sustainable Sioux Falls. The list of steering committee members can be found on page iii of this document.

#### **Public Input**

Following the initial planning phase, steering committee direction, and an initial round of public input, the second public engagement phase, the sustainability open house, was held in October 2021. The public was invited to attend this event at

#### SUSTAINABLE SIOUX FALLS

the Downtown Library to view initial goals and actions developed and participate in engagement activities meant to garner additional feedback that would continue to shape the document. After feedback was reviewed and incorporated, the first draft of the sustainability framework was released in March 2022 for public input. At that time, the City received more than 100 comments, which were a mix of support and concern. Concerns included perceived mandates, lack of energy choice, impact on housing, and cost of actions outlined in the framework.

As with all planning processes, community feedback is vital, and this public input helped guide the next phase of the framework development. The City expanded the steering committee to include utility, construction, and affordable housing representatives. In August 2022, the expanded 32-member steering committee began meeting to review and revise areas of the first draft to achieve a community-supported document. Many meetings were held so the steering committee could work through areas of the framework that caused the most concern. City staff also held meetings with City Council members to hear Council members' perspectives and incorporate them into the next phase of the framework. In November 2022, a fourth engagement phase took place. Five community meetings were held at five different public libraries to provide an additional touchpoint for community discussion.

In early 2023, goals and actions within the document were completed, and the final Sustainable Sioux Falls framework was released in June 2023.

# CHAPTER 3. FOCUS AREAS



#### **FOCUS AREAS**

Focus areas identify sustainability-related sectors and serve as an organizational structure to house Sustainable Sioux Falls' goals and actions. Focus areas include Natural Systems, Materials Management and Waste, Community Vitality and Sustainable Living, Energy and Buildings, and Transportation and Land Use.

#### SUSTAINABLE SIOUX FALLS FOCUS AREAS



#### **NATURAL SYSTEMS**

Protect and restore natural resources and biodiversity.



#### MATERIALS MANAGEMENT AND WASTE

Reduce waste and encourage circular economy practices.



#### **COMMUNITY VITALITY AND SUSTAINABLE LIVING**

Support local food systems, improve community health and resilience, and encourage sustainable actions.



#### **ENERGY AND BUILDINGS**

Increase sustainable energy and buildings while maintaining reliability, affordability, and consumer choice.

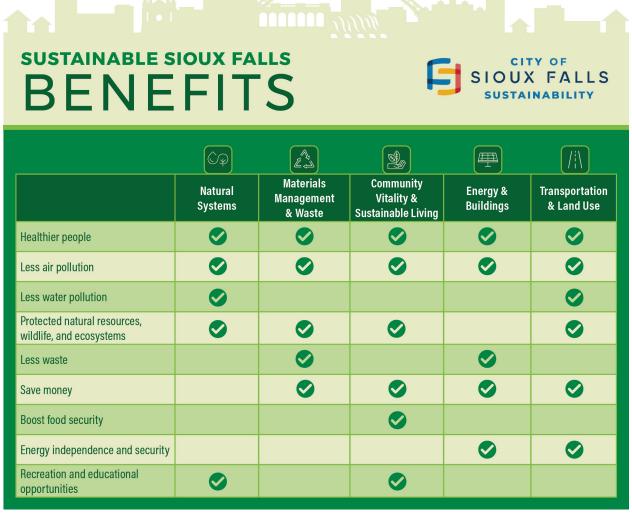


#### TRANSPORTATION AND LAND USE

Decarbonize transportation through multimodal solutions and increase sustainable land use.

This chapter of Sustainable Sioux Falls provides information about each focus area, including the focus area's importance, benefits of acting, and examples of costs. Goals and a few actions are listed, followed by highlights of progress and current work being done by the community and City of Sioux Falls. The implementation strategies in Chapter 4 details the full list of actions developed to help reach the goals in each focus area.

The goals and actions identified in each focus area result in numerous benefits for residents and the community. Figure 4 demonstrates the benefits that come from sustainability actions within the five focus areas. Sustainability initiatives often bring co-benefits, which are beneficial outcomes from an action that may not be directly related to the reason the initiative was started. For example, to save money, a household may be interested in reusing existing materials rather than buying new. Additional co-benefits from this action include reducing air pollution from less creation and transportation of goods, reducing waste, and ultimately saving room in the landfill to help it last longer, which can extend the life of infrastructure investments.



**FIGURE 4.**Benefits Across Sustainable Sioux Falls Focus Areas



# NATURAL SYSTEMS

People are dependent on a healthy, functioning environment to survive. Ecosystems fundamentally support life by providing clean air and water, healthy soil for food, and other resources important to society, such as lumber for shelter. Biodiversity, the variety of all living things on earth and how they fit together in the web of life, is critical to the function of ecosystems and the resources they provide, and thereby critical to the welfare of people.

Supporting biodiversity and healthy ecosystems at the local level in turn supports people's health, well-being, and livelihoods. For example, when people have access to green space and spend more time in nature, studies show improvements in mental health and stress reduction.<sup>2</sup>

Individuals and communities can play important roles in protecting and strengthening biodiversity and the natural environment. For individuals, taking steps to conserve water and be conservation-minded with irrigation helps dramatically. So too does limiting fertilizer application on lawns or landscaping with native grasses and wildflowers that are more tolerant to local weather conditions, support pollinators and other wildlife, protect water resources, and restore South Dakota's native plant heritage.

At the individual and community scale, taking care of trees is important. Unfortunately, the urban forest in Sioux Falls is currently at risk. The emerald ash borer, a beetle that destroys ash trees, will require thousands of trees in the community to be treated or removed in the coming years, both on public and private property. Strengthening and diversifying the urban forest will be important, since trees provide numerous benefits, including providing shade, reducing urban heat, purifying the air, and supporting biodiversity.

As a river city, Sioux Falls continues to take action to protect water resources, regarding both water quality and conservation. For many years, multiple stakeholders have been collaborating to improve the water quality of the river by working within Sioux Falls and in the broader Big Sioux River watershed. One strategy to improve water quality in the urban environment is to incorporate green infrastructure. Green infrastructure is natural elements such as rain gardens, bioswales (landscape features), vegetated roofs, trees, and more that are used to manage water in ways that

<sup>&</sup>lt;sup>2</sup> Jimenez, Marcia P., et al. (2021). Associations between Nature Exposure and Health: A Review of the Evidence. International Journal of Environmental Research and Public Health, 18(9), 4790. https://doi.org/10.3390/ijerph18094790

mimic, protect, or restore the natural water cycle. Green infrastructure captures water and allows it to soak into the ground slowly, improving water quality and reducing pollution and flood risks in urban areas while also providing social value and green space.

In addition to water quality, water conservation is important for our community. Harvesting, treating, and distributing water is an energy-intensive process. By acting wisely with our water consumption, we can save energy and money. Educating City of Sioux Falls utility customers on water use reduction translates to more water conservation and lower water and wastewater bills for customers, and extends the life of the City's existing infrastructure. Additionally, the City can help preserve its drinking water resources, and ground and surface water in the region, by partnering with entities that could reuse treated wastewater for irrigation, rather than pulling from source water or treated drinking water.



#### **Costs and Impacts**

Cost of actions in the Natural Systems focus area can vary widely, depending on initiative, approach, and scale. At an individual level, purchasing and planting a tree or installing a prairie and pollinator garden in a yard can be rather inexpensive if performed by a homeowner. But these projects can add up if designed and installed by a professional, which can cost hundreds to thousands of dollars. The City of Sioux Falls annually invests in large-scale, city-wide green infrastructure projects for stormwater maintenance, water quality and conservation, and forestry.

Still many benefits outweigh the costs, especially when thinking about the long-term environmental, economic, and social value of protected natural resources. As the Natural Systems focus area is implemented, care must be taken to explore the most impactful initiatives in the short and long term.

#### Goals

Goals for the Natural Systems focus area:

- 1. Improve Water Quality and Increase Water Conservation
- 2. Strengthen the Urban Forest
- 3. Protect and Restore Biodiversity

#### Actions

Below is a sample of actions from the Natural Systems focus area. The full list of actions is included in Chapter 4.

- Include green infrastructure strategies and sustainable, drought-tolerant landscaping on City properties where practical
- Continue partnering with agencies and implementing strategies that improve water quality throughout the watershed
- Provide education (e.g., residential tree lists) and develop partnerships and programs to expand the number and variety of trees planted and cared for annually
- Identify possible sites for new habitat spaces that encourage wildlife, provide community benefit, and allow for educational opportunities

#### HIGHLIGHTS OF CITY OF SIOUX FALLS ACTIONS TO DATE

#### **Public-Private Collaboration**

- The Big Sioux River Project partnership between the City and other local agencies has led to more than 3,000 acres enrolled in riparian buffers, which improve water quality in the Big Sioux River Watershed.
- Since 2003, 6 billion gallons of water have been conserved through the Water Conservation Program, which includes several strategies and programs, including low-flow toilet rebates for residents.
- The Sioux Empire Water Festival, Big Sioux River and Sustainability Summit, Big Sioux River Cleanup, Storm Inlet Painting Program, and other events and programs provide education on water quality and ways for community members to get involved.
- Volunteers have picked up thousands of pounds of trash along the river and recreation trail system during the Big Sioux River Cleanup annual events, preventing this waste from entering the river.

#### **City Operations**

- Native prairie restoration areas in parks and no-mow areas in parks and drainage areas increase stormwater infiltration, improve water quality, and provide habitat.
- In 2022, the Central Sioux Falls Green Infrastructure Improvements project designed and planted two large green infrastructure installations along Covell Avenue and 28th Street and Duluth Avenue and West 35th Street. These projects manage stormwater while restoring native plants, supporting pollinators, adding educational green space, and providing community value.
- The City continues to work on an alternative de-icing project to identify how to reduce salt and corrosive calcium chloride in salt mixtures on winter roads. The City has used technology, in-depth driver feedback, and monitoring to help reduce salt usage. This improvement reduces costs, improves water quality and environmental integrity, and increases the life of infrastructure.





# MATERIALS MANAGEMENT AND WASTE

Materials management refers to how we use materials throughout their life cycle, from upstream extraction of resources to downstream waste management and disposal, and everything in between. This includes everything from household goods to industrial products to food. Using resources sustainably and reducing waste is at the heart of this focus area.

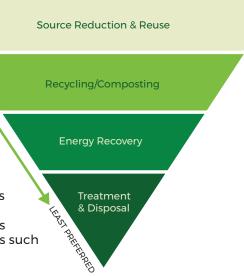
Thinking in terms of the waste management hierarchy is helpful when discussing sustainable materials management. The waste management hierarchy sets priorities for efficient use of resources (See Figure 5). The most desired course of action is preventing waste at the source, by reducing waste altogether or reusing materials. Recovering resources is next, in the form of recycling and composting. Following that is energy recovery, which is the conversion

of non-recyclable materials to usable heat, electricity, or fuel. Last are treatment and disposal, which often means sending material to the landfill.

Sustainable consumption and materials management can help us shift higher up on the waste management hierarchy and from a linear economy, where products are designed to become waste, toward a circular economy, where the value of materials is kept as long as possible in a closed-loop system.

Sustainable consumption and waste reduction help reduce pollution and protect natural resources. Reducing waste reduces the energy used for resource extraction, processing, and transportation of new goods as well as end-of-life goods transported to the landfill. Reducing waste at the source can also reduce materials overconsumption, which contributes to negative effects such as resource depletion, pollution, and habitat loss.

Reducing waste has numerous benefits for Sioux Falls. First, sustainable consumption and waste reduction can save us money at the individual and community levels. At the



**WASTE MANAGEMENT HIERARCHY** 

FIGURE 5.

Waste Management Hierarchy
Source: Environmental Protection Agency

individual scale, being intentional about consumption and reusing can reduce the money spent on new items. At the community scale, the City of Sioux Falls manages the regional landfill. It costs millions of dollars to create (excavate and line) a new landfill cell, which is a single waste-holding unit on the landfill's property. The less waste we create in Sioux Falls, the longer current landfill infrastructure investments last and the longer we have before creating a new cell or acquiring more land needed to store waste.

The Sioux Falls community has long valued waste reduction and for decades has contributed to effective recycling and waste diversion programs that the City of Sioux Falls and other entities manage. This includes the City's Household Hazardous Waste Facility, which has allowed residents to recycle electronics and correctly dispose of hazardous wastes for two decades. It also includes the single-stream recycling program, which allows residents to dispose of recyclable everyday goods that become new products. Still, there are plenty of opportunities to build upon. While many residents recycle and often do it correctly, there is an opportunity to recycle more and recycle right. Another area to build on is recent community interest in food scrap composting.



#### Costs and Impacts

Costs and benefits of actions in the Materials Management and Waste focus area vary. As noted earlier, many of the actions that promote more sustainable consumption, such as reusing, borrowing, or buying only what is needed, can save individuals money. The true cost at an individual level is time. Time it takes to rinse and sort recyclables, take household goods or clothing to reuse organizations, or diverting food waste from the landfill via composting or meal planning to avoid excess food waste. For the community, not taking actions in this focus area means more waste entering the landfill and more user expense to expand the landfill's infrastructure and footprint, which is incredibly costly.

#### Gnal

Goal for the Materials Management and Waste focus area:

1. Reduce Waste

#### Actions

Below is a sample of actions from the Materials Management and Waste focus area. The full list of actions is included in Chapter 4.

- Educate on, encourage, and increase reuse, recycling, sustainable consumption, zero-waste practices, and a circular economy, including reusable items, food waste composting and diversion, and recycling at public spaces and events
- Assess possible ways to update the solid waste and recycling programs to increase waste diversion
- Continue efforts to support responsible disposal and recycling of hazardous waste and electronics

#### HIGHLIGHTS OF CITY OF SIOUX FALLS ACTIONS TO DATE

#### **Public-Private Collaboration**

- At the Sioux Falls Regional Sanitary Landfill in 2022, more than 10,000 tons of yard waste were made into compost, which is free for residents to take.
- Paint and other household products that can be reused are available for free to residents in the City's Reuse Room.
- The City of Sioux Falls works with the Sioux Falls School District to provide recycling education to hundreds of elementary students annually through the Magic of Recycling program.
- With funding support from the City's Sustainable Community Grant in 2022, Habitat
  for Humanity ReStore was able to replace aging infrastructure for Habitat ReStore's
  waste diversion program and increase waste diversion efforts. This supported the
  organization in diverting 475 tons of construction and building material from the
  landfill annually that would otherwise be discarded, and recycling those items that
  are not able to be resold.
- With funding support from the City's Sustainable Community Grant in 2022, SoDak Compost, the first food waste composting non-profit in Sioux Falls, diverted more than 15,000 pounds of residential food waste and created compost for community use during its first year of operation in 2022-2023.
- With funding support from the City's Sustainable Community Grant in 2020, Furniture Mission of South Dakota provided 68 families with refurbished and repurposed furniture while also diverting the material from the landfill.

#### **City Operations**

- Since 2004, over 21 million pounds of electronic and household hazardous waste has been recycled or diverted through the City's hazardous and electronic waste recycling program.
- In 2022, the City's Household Hazardous Waste Facility led to the reuse of 100,000 pounds of hazardous waste, recycled 400,000 pounds of hazardous waste, and recycled 850,000 pounds of electronic waste.
- The City's SiouxperGrow Program applies approximately 3,000 tons of biosolids to local farm fields as fertilizer, supporting local agriculture and preventing this material from being landfilled. Biosolids are a byproduct of the water reclamation process. Lime sludge, a byproduct from the water treatment process used by the City to treat its drinking water, is also applied to farmers' fields as a soil additive.
- In 2022, 1,500 tons of tires, 1,600 tons of scrap metal, and 15,000 mattresses were collected at the landfill for recycling.



# COMMUNITY VITALITY AND SUSTAINABLE LIVING

The Community Vitality and Sustainable Living focus area considers the systems and actions that promote a vibrant, thriving community. Health is a key consideration here, as sustainability and health are interconnected, multi-faceted issues that support each other in a positive feedback loop. For example, a community that has clean air, clean water, and adequate green space supports healthier people. A community that focuses on health-promoting behaviors such as active transportation and food system issues such as healthy food access and food security can also support less air pollution and a resilient local food system.

Environmental changes we face have implications for residents' health. Risks such as higher temperatures and extreme weather events projected to increase<sup>3</sup> can be harmful to individuals and broader community health. It will be important to better understand the hazards the community faces by performing an assessment and utilizing the findings to address these risks and increase resilience, which refers to the community's ability to prepare for, recover from, and adapt to environmental change.

Local food production and equitable access to local, healthy food is an important component of this focus area. In the past few years, the number of food access priority areas, formerly known as food deserts, has increased in Sioux Falls. Before the pandemic, an estimated 9% of people in Minnehaha County and 5.9% in Lincoln County were food insecure. During the pandemic, estimated rates increased to 11% and 7.5%, respectively. Supporting more production of local food can help increase the healthy foods residents have access to and can be one of the approaches to address food insecurity. In addition, local food often leads to increased community connectedness, as residents congregate in farmer's markets or work together in community gardens. This supports greater community capacity, ultimately boosting resilience to withstand environmental change. Furthermore, decreasing the distance food travels also reduces air pollution and the amount of energy input required before food is on the table.

<sup>&</sup>lt;sup>3</sup> US Global Change Research Program (2018). National Climate Assessment: Northern Great Plains. *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II.* U.S. Global Change Research Program, Washington, DC, USA. https://nca2018.globalchange.gov/downloads/NCA4\_Ch22\_Northern-Great-Plains\_Full.pdf <sup>4</sup> Augustana Research Institute for Sioux Falls Thrive (2022). Food Security & Food Access in Sioux Falls, SD. Augustana Research Institute, Sioux Falls, SD. https://siouxfallsthrive.org/wp-content/uploads/2022/05/Thrive-Food-Security-Report-Update-2022-final.pdf

Promoting sustainable behaviors is another element of this focus area. During community engagement, the steering committee heard a strong interest in individual actions and behaviors that can help lead to a more sustainable community. Issues such as reusing materials, recycling, reducing plastic consumption, using LED light bulbs, biking, and driving less came up frequently. Requests for educational resources, support in living more sustainably, and a desire for additional opportunities to get involved were consistent comments as well. Actions in this focus area, and in Materials Management and Waste, were developed to meet these community needs.



#### Costs and Impacts

As with the other focus areas, costs of actions in Community Vitality and Sustainable Living vary. For individuals, growing their own food includes costs such as seeds, garden infrastructure, and watering. Buying locally grown food at a farmer's market may be cost-comparable to items transported to a grocery store, depending on the item.

Regarding sustainable, health-promoting behaviors, an individual who wants to take part in more active transportation may have only a helmet and working bicycle as initial cost considerations. For the City, investing in active transportation infrastructure is ongoing and is a part of existing regular street design and construction. Components of increasing the safety and capacity for biking and walking are planned, estimated, and brought to City Council for review and approval.

#### Goals

Goals for the Community Vitality and Sustainable Living focus area:

- 1. Expand and Enhance Local Food Production and Equitable Access
- 2. Expand upon a Culture of Conservation and Sustainability
- 3. Improve Resilience and Public Health

#### Actions

Below is a sample of actions from the Community Vitality and Sustainable Living focus area. The full list of actions is included in Chapter 4.

- Educate and engage the public on growing food in yards, community gardens, and rooftop gardens; promote eating locally grown food; and continue to expand local food production sites
- Educate and engage the community on conservation and sustainability actions, including by hosting events, developing programs, and providing guides and resources
- · Work toward establishing a park or green space within a half mile of every resident
- Conduct a community resilience and preparedness assessment in order to develop actionable initiatives

#### HIGHLIGHTS OF CITY OF SIOUX FALLS ACTIONS TO DATE

#### **Public-Private Collaboration**

- Live Well Sioux Falls is a community-based initiative focused on health promotion and prevention efforts. The City collaborates with internal and external partners to assess community health and develop strategies on wide-ranging projects from promoting healthy foods and community gardens to encouraging walking and biking.
- In 2023, the City of Sioux Falls provided \$250,000 to the Sioux Falls Thrive Eat Well
  Mobile Market pilot program as part of the Eat Well Sioux Falls grant. This collaborative
  program will address food insecurity by bringing healthy foods to low access areas
  using a mobile grocery store.
- The City is increasing resilience and reducing risk of flood damage for residents.

  Through its housing buyout program, the City assists residents in moving out of the floodplain by offering fair market value for their homes, allowing them to relocate to an area safe from flooding.
- The City of Sioux Falls Parks and Recreation Department works with the Minnehaha Master Gardeners to support several community garden spaces in the community. Community gardens provide opportunities for people to grow their own food who may not otherwise have land access, such as those who live in apartments. The City's Public Works Department also supports community garden spaces in a partnership with the Minnehaha Conservation District.
- The City of Sioux Falls Environmental team regularly participates in speaking engagements, media interviews and other opportunities to connect with the community to educate people of all ages about sustainability practices and resources. For example, City staff hosted a booth at the Sioux Empire Home Show in February 2023 to provide education materials to attendees on how to incorporate sustainable practices into their homes.

#### **City Operations**

• The City continues to work toward the goal of having a park within a half mile and a bike trail within a mile of each residence in Sioux Falls.



# ENERGY AND BUILDINGS

Energy is something we use every day. We heat and cool our homes and workplaces, turn on the lights, and plug in equipment and devices. Additionally, many people spend more time indoors than outdoors, which is where much of the energy consumed in Sioux Falls occurs. Many opportunities exist to make improvements in energy generation and energy use in our buildings, and these can support healthier people, save money, and reduce pollution.

In the Energy and Buildings focus area, key realistic considerations of reliability, affordability, and conservation guided the development of the goal and actions. Additionally, consumer choice and utilizing incentives, education, and other support mechanisms were identified as the primary approaches for increasing sustainable energy and buildings.

Because sustainable energy and buildings includes a broad array of perspectives, an inclusive and collaborative approach to developing the Energy and Buildings focus area was essential. An energy, buildings, and affordable housing subcommittee was formed from the sustainability steering committee and included crucial perspectives and expertise. The group was composed of all six energy utilities that serve Sioux Falls (gas and electric), the Home Builders Association of the Sioux Empire, and representatives from affordable housing, energy codes, environmental, engineering, economic development, local industry, and the City of Sioux Falls. The subcommittee held several meetings to discuss key considerations and develop an Energy and Buildings framework that is supportable while moving the community forward on sustainable energy and buildings.

Where the community's energy comes from is an important consideration in this focus area. Electric utilities have been diversifying their energy generation portfolios for years, replacing some coal generation with cleaner sources such as natural gas and renewable wind energy. Diversifying energy sources makes good business sense, providing flexibility for energy generation while also capturing lower-carbon options. Natural gas companies are working to reduce leaks and explore renewable natural gas and other renewable fuels. These shifts have led to cleaner energy generation, and there are opportunities to continue pursuing clean energy generation based on market changes, consumer demand, and environmental considerations while also supporting reliability, affordability, and consumer choice.

Heard frequently from community members during engagement periods was concern about electric grid capacity with increasing electric technologies. Electric utilities that serve Sioux Falls

are preparing for increased electricity demand due to population increase and a rise in electric technologies such as electric vehicles and cold-climate heat pumps to maintain grid reliability.



#### Costs and Impacts

Generally, the market for energy-efficient products such as appliances and LED light bulbs has shifted to make them more cost-competitive upon initial purchase, increasing savings over time. However, costs of actions in this focus area can still vary greatly based on scale and scope. At the homeowner level, being more energy efficient in our homes can be as simple as adjusting thermostats while we're away (lower in winter, higher in summer) to purchasing new energy-efficient windows and HVAC system. With such, investments can range from a couple hundred dollars for a smart thermostat to thousands of dollars in new windows and HVAC system. New federal programs provide additional tax credits and rebates for many homeowners looking to make energy-efficient improvements. These financial programs can help offset the initial investment into energy-efficiency improvements that ultimately have a return on investment in the form of lower utility bills and increased home comfort.

Providing education on the benefits of energy-efficiency improvements and information on available programs to support this will be important tasks moving forward. Performing studies and economic analyses where feasible to understand costs, impacts, and benefits of further actions will also be important.

#### Goal

Goal for the Energy and Buildings focus area:

 Increase Sustainable Energy and Buildings While Maintaining Reliability, Affordability, and Consumer Choice

#### **Actions**

Below is a sample of actions from the Energy and Buildings focus area. The full list of actions is included in Chapter 4.

- · Evaluate ways to improve energy efficiency and increase clean energy at City facilities
- Educate and facilitate homeowners, building owners, and others to take advantage of local, state, and federal programs regarding energy efficiency and clean energy
- Explore opportunities to implement electric vehicle (EV) readiness measures guided by EV readiness study results to keep Sioux Falls competitive

#### HIGHLIGHTS OF CITY OF SIOUX FALLS ACTIONS TO DATE

#### **Public-Private Collaboration**

- The Regional Landfill collects landfill gas, which is purchased by a local industrial company to use as fuel in their operations. This brings in revenue for the Regional Landfill and allows the renewable gas to offset the use of a non-renewable fuel source for the company. In addition, this renewable resource is reused as an energy source rather than being flared off or released into the atmosphere.
- City of Sioux Falls municipal electric utility partners with Heartland Energy to provide energy-efficiency rebates for electric vehicle chargers, heat pumps, water heaters, and commercial light and refrigeration.

#### **City Operations**

- By 2023, approximately 76% of all streetlights have been replaced with LED bulbs, for a 46% reduction in energy use and savings of nearly \$200,000 in annual electricity costs. LEDs not only reduce emissions, but they reduce labor and maintenance costs as well. LED bulbs last four times as long as traditional lights, so City staff do not have to replace them as often and can spend time on other projects.
- The City's Water Reclamation Plant produces 30 to 40% of its electricity using biogas, a byproduct of plant operations. This saves taxpayer dollars and provides a beneficial reuse of the gas created during the reclamation process.



# TRANSPORTATION AND LAND USE

Urban transportation and land use are interconnected systems that play important roles in community sustainability. How we move from one place to another and how land is used affects how we live, work, and play. Sustainable transportation and land use can promote healthier residents, support economic vitality, better utilize infrastructure investments, connect people and neighborhoods, reduce air pollution, and protect natural resources.

Sioux Falls has a history of incorporating sustainability principles into transportation and land use planning and decision making. The Shape Sioux Falls 2040 plan was developed in 2010 and updated in 2016 as the community's most recent comprehensive development plan that guides land use planning strategies for the coming years. One of the three primary goals of the plan is to "improve the sustainability of the community." Sustainability is woven into many areas of the plan, including growth management, natural resource stewardship, and recommendations for sustainable development standards. Sustainable Sioux Falls builds upon this foundation and further elevates the necessity of sustainable land use that supports transportation options, economic strength, and quality of life while providing benefit to air quality, natural resources, and ecosystems.

Sustainable transportation refers to low-emission, energy-efficient, affordable modes of transport, including active transportation (bicycling and walking), biofuels, public transit, and electric vehicles (EVs). In South Dakota, light-duty EVs produce less air pollution locally and at the point of electricity generation than comparable gas-powered vehicles,<sup>5</sup> and they will become even cleaner as the electric grid becomes cleaner too. Biofuels are another option for cleaner transport that also support the state's largest industry, agriculture. Finally, active transportation is a sustainable, emissions-free mobility option that also supports individual and public health.

<sup>&</sup>lt;sup>5</sup>U.S. Department of Energy (2023). Alternative Fuels Data Center. Emissions from Electric Vehicles. https://afdc.energy.gov/vehicles/electric\_emissions.html



#### **Costs and Impacts**

The costs of actions in this focus area vary. At present, there is a higher initial investment with the goal of operational savings, in addition to the environmental benefits captured. For example, a resident who is in the market for a new vehicle may consider an electric vehicle. Over time, the sticker price of EVs has continued to drop, and recent federal financial incentives can help offset higher upfront costs, including up to a \$7,500 tax credit for a new EV that meets requirements. Furthermore, EVs can have lower fuel, maintenance, and repair costs. Residential cost can also be considered for transit and active transportation. While these mobility options may be cheaper, they pose challenges regarding access and convenience, so cost is one of multiple factors that will need to be included when evaluating effectiveness.

Finally, the key to sustainable land use and transportation is ensuring all community members can access benefits that come from cleaner transportation options and accessible green space. In addition, many sustainable transportation options such as transit, bicycling, and walking also provide benefits to people for affordable and healthy options to get around the city. This provides community-wide benefits to reduce transportation gaps for people that either cannot afford or are unable to drive a car or want to incorporate alternative transportation options into their routines.

#### Goals

Goals for the Transportation and Land Use focus area:

- Decarbonize Transportation Through Multimodal Solutions While Maintaining Consumer Choice
- 2. Increase Sustainable Land Use

#### Actions

Below is a sample of actions from the Transportation and Land Use focus area. The full list of actions is included in Chapter 4.

- Use lessons learned from the City's electric vehicle and sustainable biofuels pilot programs as considerations for planning of fleet upgrades and replacements
- Educate on and encourage sustainable transportation pathways—including active transportation, electric vehicles, biofuels, and driving less frequently—and ways to reduce transportation emissions and save money
- Commission an electric vehicle readiness study to better understand electric transportation in the community and work collaboratively to explore opportunities to keep Sioux Falls competitive and current on consumer trends
- Support efforts through the Shape Sioux Falls Comprehensive Plan to further encourage dense, low-impact, infill, and mixed-use development

#### HIGHLIGHTS OF CITY OF SIOUX FALLS ACTIONS TO DATE

#### **Public-Private Collaboration**

- The City encourages mixed-use development and higher density development in certain areas of the city to create more efficient utilization of infrastructure and services while creating a more efficient and sustainable use of land.
- Formed in 2023, the Active Transportation Board represents the values, needs, and concerns of all users of the city's roadways and transportation network including people who walk, bike, use transit, drive, and use other mobility devices. The Board consists of citizen representatives with interests in active transportation and directs the implementation of the city's Bicycle and Pedestrian Plans and all Complete Streets and Safe Route to School activities.

#### **City Operations**

- Each street construction project is reviewed with the Complete Streets Policy checklist to ensure accessibility, encourage active transportation options, and improve safety for all users.
- In 2022, the City purchased its first electric fleet vehicle to study over a one-year pilot program. The pilot period will help the City understand the costs and benefits of this transportation and determine the next steps for fleet electric vehicles.
- Adaptive Signal Control Technology (ASCT) has been implemented along several roadway corridors in Sioux Falls. ASCT adjusts the timing of red, yellow, and green lights to accommodate changing traffic patterns and ease traffic congestion. An internal audit showed this new system reduces traffic congestion and increases safety while saving around \$2,700 each day—nearly \$1 million a year—in reduced costs of crashes. Additional environmental sustainability benefits include reduced fuel consumption as traffic flow improves and less air pollution from cars delayed in traffic.
- As of 2022, City diesel vehicles are using B20, an 80/20 blend of diesel and biodiesel, in warm-weather months. City fleet vehicles used approximately 120,000 gallons of biodiesel in 2022, which meant 24,000 gallons of petroleum diesel were not used. Pollution cuts are equivalent to taking 44 gasoline-powered passenger vehicles off the road for one year or driving 508,065 fewer miles in a gas-powered car. In 2023, Sioux Area Metro will begin utilizing the B20 blend as well in its 47-vehicle fleet.
- The Sioux Falls Police Department piloted hybrid SUVs for its patrol officers. The vehicles performed well, and more hybrids will be purchased as vehicles are replaced based on availability of hybrid vehicles.

# CHAPTER 4. IMPLEMENTATION STRATEGIES



#### **IMPLEMENTATION STRATEGIES**

The tables in this chapter expand on the goals developed for each focus area and include the specific actions set forth to reach the goals. However, actions are not exhaustive and may shift as technology or community needs evolve. The actions are organized in two ways: by goal and by the entities primarily responsible for the action. For the latter, there are three categories:

City Operations	Actions that pertain to the operations of the City of Sioux Falls government and demonstrate City leadership
Public-Private Collaboration	Actions that the community and the City of Sioux Falls government work on
Community-Driven	Actions that the community leads

In each table, the Start Date indicates the proposed time frame for the *start* of the action. To provide flexibility, the time frames are provided in three-year increments (2023-2025, 2026-2028, 2029-2031). Actions marked Ongoing are already started and will continue or be built upon.

Implementing Stakeholders are the entities who play a key role in completing the action.

Each focus area includes key performance indicators (KPI) to track progress and support biennial reporting.



- Amount of total suspended solids (TSS) and E. coli in the Big Sioux River
- · Acres of buffers along the Big Sioux River
- · Implementation of green infrastructure and low-impact development (LID) projects
- · Water usage (total gallons and per capita)
- Tree species diversity and stocking percentage

		Start Date	Implementing Stakeholders				
Goal 1: Improve Wa	ter Quality and Increase Water Conservation						
	Include green infrastructure strategies and sustainable, drought tolerant landscaping on City properties where practical	Ongoing	City				
City Operations	Explore additional initiatives for water conservation	2023-2025	City				
	Continue exploring de-icing strategies that have less environmental impact	Ongoing	City				
	Continue partnering with agencies and implementing strategies that improve water quality throughout the watershed	Ongoing	City, Water agencies, Community organizations				
Public-Private Collaboration	Provide education on best practices for low-impact development and sustainable landscaping that reduces irrigation, chemical application, and stormwater runoff	2023-2025	City, Conservation organizations, Developers, Designers, Businesses				
Goal 2: Strengthen	the Urban Forest						
	Assess baseline tree stocking levels on Sioux Falls public property	2023-2025	City				
City Operations	Develop and implement an urban forestry management plan with goals and approaches to make the urban forest more diverse and sustainable	2026-2028	City				
	Replace removed ash trees with diverse species to maximize value to the community	Ongoing	City, Residents, Businesses				
Public-Private Collaboration	Provide education (e.g., residential tree lists) and develop partnerships and programs to expand the number and variety of trees planted and cared for annually	2023-2025	City, Conservation and environmental organizations, Community organizations, Local nurseries, Neighborhood Associations, Residents				
Goal 3: Protect and	Goal 3: Protect and Restore Biodiversity						
Public-Private Collaboration	Educate the community on the role of nature in urban life and how to support it, including encouraging replacing turf grass with native plants and pollinators	2023-2025	City, Conservation and environmental organizations				
	Identify possible sites for new habitat spaces that encourage wildlife, provide community benefit, and allow for educational opportunities	2026-2028	City, Businesses, Community organizations, Conservation and environmental organizations				



# Materials Management and Waste

- Amount of waste landfilled annually (total and per capita)
- Recycling rate
- Amount of food waste diverted annually (total)
- Participation in food waste composting programs
- Percent of recyclables and food waste in landfilled waste stream

		Start Date	Implementing Stakeholders
Goal: Reduce Waste	•		
	Continue efforts to support responsible disposal and recycling of hazardous waste and electronics	Ongoing	City
City Operations	Use best practices for waste reduction at City-owned facilities	Ongoing	City
	Assess possible ways to update the solid waste and recycling programs to increase waste diversion	2023-2025	City
Public-Private	Educate on, encourage, and increase reuse, recycling, sustainable consumption, zerowaste practices, and a circular economy, including reusable items, food waste composting and diversion, and recycling at public spaces and events	2023-2025	City, Conservation and environmental organizations, Residents, Businesses, Business organizations, Community organizations
Collaboration	Explore opportunities to collaborate with other jurisdictions, materials recovery facilities, haulers, and other entities to increase waste diversion, including construction and demolition recovery	2023-2025	City, Counties, Neighboring cities, Materials recovery facilities, Haulers, Businesses, Business organizations, Conservation and environmental organizations, Community organizations
Community Driven	Develop programs for hard-to-recycle materials	2029-2031	Businesses, Community organizations, Residents



## Community Vitality and Sustainable Living

- Reported number of community gardens, food forests, and neighborhood orchards
- Reported number of residents participating in sustainability activities, events, and programs
- Availability of a sustainable business program(s) and number of businesses participating

		Start Date	Implementing Stakeholders				
Goal 1: Expand and Enhance Local Food Production and Equitable Access							
Public-Private Collaboration	Educate and engage the public on growing food in yards, community gardens, and rooftop gardens; promote eating locally grown food; and continue to expand local food production sites	2023-2025	City, Local food organizations, Conservation and environmental organizations				
Community Driven	Expand local food access to residents who use nutrition assistance programs	2026-2028	Local food organizations, Community organizations, Local food producers and vendors, Other agencies				
Goal 2: Expand upo	n a Culture of Conservation and Sustainability						
City Operations	Continue exploring additional opportunities for sustainable procurement and incorporating sustainability practices into capital and budget planning	Ongoing	City				
Public-Private	Educate and engage the community on conservation and sustainability actions, including by hosting events, developing programs, and providing guides and resources	2023-2025	City, Community organizations, Conservation and environmental organizations				
Collaboration	Provide how-to resources and/or technical support for businesses and organizations that want to incorporate conservation and sustainable business practices	2023-2025	City, Community organizations, Business groups				
Goal 3: Improve Res	silience and Public Health						
	Work toward establishing a park or green space within a half mile of every resident	Ongoing	City				
City Operations	Conduct a community resilience and preparedness assessment in order to develop actionable initiatives	2026-2028	City, Local agencies, Residents, Community organizations, Conservation and environmental organizations				
Public-Private Collaboration	Educate on the intersections of health, conservation, and sustainability, including encouraging active transportation modes, such as biking and walking, and supporting the Health Department's Health in All Policies initiative	2023-2025	City, Health organizations, Conservation and environmental organizations, Community organizations, Residents				



- Percent of renewable energy in electricity generation mix Number of municipal buildings that have incorporated high-performance or energyefficiency features
- Number of engagements and resources available on sustainable energy and buildings

		Start Date	Implementing Stakeholders
Goal: Increase Susta	inable Energy and Buildings While Maintaining Re	eliability, Affor	dability, and Consumer Choice
	Explore feasibility of utilizing the energy code for new municipal construction and significant renovations	2023-2025	City
City Operations	Explore feasibility of including high- performance, low-energy best practices in municipal buildings	2023-2025	City
	Evaluate ways to improve energy efficiency and increase clean energy at City facilities	2023-2025	City
	Provide education on the progress energy utilities are making regarding sustainable energy	Ongoing	City, Utilities
	Educate and facilitate homeowners, building owners, and others to take advantage of local, state, and federal programs regarding energy efficiency and clean energy	2023-2025	City, Utilities, Community organizations, Residents, Businesses, Builders
Public-Private Collaboration	Educate residents on the value of energy efficiency options, and explore ways to better reflect the value of energy-efficient homes and buildings	2023-2025	City, Utilities, Community organizations, Housing groups
	Explore opportunities to implement electric vehicle (EV) readiness measures guided by EV readiness study results to keep Sioux Falls competitive	2023-2025	City, Builders, Residents, Businesses, Community organizations

### / Transportation and Land Use

- Community vehicle miles traveled (VMT) (total and per capita)
- · Number and percent of electric vehicles registered in Minnehaha and Lincoln Counties
- Number of publicly available charging stations
- · Percent of population riding transit

		Start Date	Implementing Stakeholders				
Goal 1: Decarbonize Transportation Through Multimodal Solutions While Maintaining Consumer Choice							
City	Use lessons learned from the City's electric vehicle and sustainable biofuels pilot programs as considerations for planning of fleet upgrades and replacements	Ongoing	City				
Operations	Increase active transportation by implementing the Sioux Falls Transit, Bicycle, and Pedestrian Plans, and reviewing complete streets procedures and policies	Ongoing	City				
	Educate on and encourage sustainable transportation pathways—including active transportation, electric vehicles, biofuels, and driving less frequently—and ways to reduce transportation emissions and save money	Ongoing	City, Residents, Community organizations, Health organizations, Automakers, Conservation and environmental organizations, Businesses				
Public-Private Collaboration	Commission an electric vehicle readiness study to better understand electric transportation in the community and work collaboratively to explore opportunities to keep Sioux Falls competitive and current on consumer trends	Ongoing	City, Residents, Utilities, Community organizations, Automakers, Conservation and environmental organizations, Businesses, Housing organizations				
Goal 2: Increase Sustainable Land Use							
Public-Private Collaboration	Support efforts through the Shape Sioux Falls Comprehensive Plan to further encourage dense, low-impact, infill, and mixed-use development	2023-2025	City, Developers, Residents				
	Work toward protecting sensitive natural areas such as wetlands and other important stormwater management sites	2023-2025	City, Developers, Design and engineering firms				

#### SUSTAINABLE SIOUX FALLS