CITY OF MONONA
SUSTAINABILITY PLAN





MONONA
Sustainability Committee

August 3, 2015

MONONA

Dear Monona Residents,

Whenever a community works to develop a plan that is intended to meet objectives a decade from now, collaboration is paramount if the plan is to have any chance for success. This City of Monona Sustainability Plan (MSP) has been created in the truest sense of collaboration. The MSP is based upon input from residents, city committees, city staff, nonprofit organizations and businesses; bringing together all aspects of city operations affecting everyone in the community. Several opportunities for community engagement brought forth countless sustainability strategies that are incorporated in this plan.

The input from all of these community stakeholders came together in an *idea-bank of strategies* supporting Monona's overall vision of sustainability: *"…practicing sustainability means working to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors…"* Derived from the 1987 Report to the World Commission on Environmental Development, this vision is preceded in spirit centuries earlier by our original Monona residents, the peoples of the HoChunk Nation. The HoChunk concept of *Seven Generations* puts forth that actions we do today will impact our children and grandchildren tomorrow and into the future, through the seventh generation. Both of these principles are what will insure and protect our community's environmental welfare for years to come.

The MSP is the culmination of years of work and the implementation of many sustainability efforts brought forth by the city, including the formation of the Sustainability Committee; adoption of the original sustainability resolution in 2012, committing the city to reduce its energy dependence from traditional fossil fuels to renewable sources by 25% by the year 2025. The city went a long way in achieving that goal when in 2013 Monona installed the largest municipal solar array in the state of Wisconsin on the roof tops of several city buildings.

This MSP goes forward into the future with six major areas of focus. They are:

- General Sustainability
- Land Use
- Water
- Energy
- Transportation
- Solid Waste

Each focus area begins with a vision statement and a brief overview as to why this area is important. It is then followed by a list of specific measurable objectives that are divided into two groups. Municipality objectives relate primarily to the city's public lands, buildings and operations, while Community objectives more directly affect and involve private residents and businesses. Throughout you will see noticeable overlap in the city's and community's objectives.

The vision and objectives are followed by an implementation and evaluation section that covers each of the six focus areas. There, you will find projects already implemented and how they can be built upon in the future. An explanation as to how each project will be evaluated and how it helps to reach the community's 2025 goals are also provided.

Each year an annual implementation plan will be developed, detailing the actions that will be taken in the coming year. As a way to measure success, an annual progress report will also be completed at the end of each outlining where we are in the process.

Together, the principles and strategies outlined in this document will continue the values and aspirations of Monona and ensure the sustainability of our community not only in the short term but, for seven generations to come. I look forward to the challenge.

Bob Miller

Mayor

Executive Summary

The City of Monona's Sustainability Plan (MSP), was developed by the Monona Sustainability Committee in collaboration with other city committees, city employees and community residents and businesses. The MSP, adopted by the Monona City Council in July 2015, is a strategic document that establishes sustainability visions and objectives for the City of Monona. In addition, measurable targets have been set for 2025 and strategies have been proposed for meeting each objective.

Implementation
During the development of the MSP, several opportunities for community engagement were arranged. All ideas brought forward for strategies (actions) were noted and documented. This idea-bank of strategies will be continuously updated to bring in new ideas and to reflect current possibilities and challenges within the community. The final decisions regarding which strategies to implement will be considered within the city's regular decision-making processes. Each year an annual implementation plan will be developed, detailing the actions that will be taken in the coming year. To follow up on the work being done and review how the objectives are being met, an annual progress report will be presented after the completion of each year. Both formal and informal opportunities for further stakeholder input will be made available and encouraged.

Sustainability Principles and Guidelines
Monona's overall vision of sustainability is adapted from the sustainability principle identified in Brundtland's 1987 Report of the World Commission on Environmental Development. This general principle states:

"…practicing sustainability means working to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors…"

Along with this sustainability principle, the following four sustainability guidelines provide the foundation for the sustainability targets established in the MSP:

- Reduce dependence on fossil fuels and extracted underground metals and minerals.
- Reduce dependence on chemicals and other manufactured substances that can accumulate in nature.
- Reduce dependence on activities that harm life-sustaining ecosystems.
- Reduce barriers to achieving present and future human needs fairly and efficiently.

Plan Overview
The MSP covers six focus areas:

- General Sustainability
- Land Use
- Water
- Energy
- Transportation
- Solid Waste

Each of the six focus areas contains two types of sustainability objectives, municipality and community. Municipality objectives pertain primarily to the city's public lands, buildings, and operations, while community objectives more directly affect and involve private residents and businesses.

The MSP is also divided into two major sections. The first, **Vision and Objectives** briefly outlines sustainability goals for each focus area, and the second, **Implementation and Evaluation**, details how each objective will be carried out, baseline data and targets for each.

ACKNOWLEDGEMENTS

This plan was prepared by Madison Environmental Group, LLC, in conjunction with the Monona Sustainability Committee.

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Thank you to the following groups and individuals for their support:

- The resident, businesses, and community organizations of Monona that have been committed to sustainability efforts and have already begun to implement many of the strategies mentioned in this plan
- Citizens that participated in the numerous public outreach and survey efforts
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- Heather Gates and the Natural Step Monona
- Madison Gas and Electric

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City of Monona Sustainability Plan
2015

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INTRODUCTION

MONONA'S COMMITMENT TO SUSTAINABILITY

The City of Monona is committed to being a resilient and sustainable community with a quality of life and strength of economy that meet the needs of all who live, work and play within its boundaries. As part of this commitment the city has undertaken numerous sustainability initiatives, including the formation of a sustainability committee and adoption of a Monona Sustainability Resolution.

With the adoption of the Sustainability Resolution in March 2012 sustainability principles were established as the norm for city planning, policies and procedures. The Monona Sustainability Plan (MSP) has been developed based on the principles in the resolution. The MSP contains guiding visions and measurable objectives with targets set for 2025. In addition, strategies for meeting the targets of these objectives have been identified.

> "We do not inherit the earth from our ancestors; we borrow it from our children."
> -Native American Proverb

The MSP is based on input from city committees, city staff, residents, nonprofit organizations and businesses. It encompasses all aspects of city operations and will involve and affect everyone in the community. Different strategies will be the responsibility of various stakeholders, or groups of stakeholders, with progress monitored by the sustainability committee.

The city's conception of sustainability embraces the needs, concerns, and well-being of all community members, and also relies on community members to share ownership and responsibility to work towards the same goals. Sustainability goals cannot be reached by the sustainability committee alone but will be embedded in the work of all committees and departments.

HISTORY OF SUSTAINABILITY IN MONONA

Sustainability work in Monona has significantly increased since the formation of the ad hoc sustainability committee in 2007. In addition to laying a foundation for the committee's own goals, role, organizational structure and procedures, the committee reached out to both city staff and the Monona community with various educational opportunities regarding sustainability. It arranged a one-day training for several city staff in The Natural Step, an internationally regarded, scientifically based and practical framework that enables organizations of any size to apply sustainable practices as well as measure the impact of their actions. It also began a tradition of public outreach and education at Monona's annual Memorial Day parade and organized three Green Monona Tours to showcase state-of-the-art sustainable practices being used by local residents and business owners.

In 2010, the ad hoc sustainability committee became a permanent standing committee. That same year, the City of Monona pledged to become one of the State of Wisconsin's Energy Independent Communities, which required the development of a 25x25 plan. The goal of the plan was to shift 25 percent of the electricity and 25 percent of the transportation fuels used in city operations to renewable resources by 2025. Block grant funding helped the city initiate many energy-saving

improvements to its buildings. Two electric vehicle charging stations were installed and two electric vehicles were added to the city's fleet. And in 2013, the largest municipal solar array in Wisconsin was installed on the roof tops of Monona's city buildings.

Community-targeted actions of the sustainability committee have included welcoming Focus on Energy's citywide offer to provide and install free energy and water saving devices in the homes of willing residents. The committee also authorized the design of a Green Monona Map to recognize individuals and businesses that are taking initiatives to become more sustainable.

Water became a strong focus in 2012 and the committee supported various nonprofit-initiated sustainability efforts. A yearlong Monona Water Conservation Challenge was organized to encourage households to voluntarily reduce water use. A Lake Monona Water Walk helped residents honor and learn more about Monona's waterways. And a Stormwater Paddle event promoted greater appreciation, understanding, and stewardship of Monona's most valued, yet fragile, resource.

In March 2012, the city council took a further step toward integrating sustainability into future actions by adopting the Monona Sustainability Resolution (Resolution 12-03-1843, see Appendix A). The resolution quickly attracted the attention of the Wisconsin Department of Natural Resources (DNR), which invited Monona to become one of ten Green Tier Legacy Communities. The Wisconsin DNR facilitates quarterly meetings which enable participating Green Tier municipalities to support each other’s sustainability work, and it also provides access to DNR expertise and technical assistance.

Development of the Sustainability Plan - Public Process

In July 2013, the sustainability committee began work on the Monona Sustainability Plan (MSP), with the intent of both defining Monona's overall vision of sustainability, as well as outlining specific objectives and strategies to guide progress toward that vision over the next ten years. The city also hired the services of Madison Environmental Group, LLC whose consultants continue to work collaboratively with the city, community and other stakeholders to develop the MSP.

Community engagement in the creation of a sustainability plan helps make the process acceptable to all stakeholders and improves the quality of the outcome. Engagement has been encouraged in various ways. In September 2013 all representatives of city committees, boards and commissions were invited to attend a forum to discuss and prioritize the objectives and strategies set forth in the MSP. In October that same year, community members were invited to a public meeting to learn about the MSP and give their input. Community members were also invited to give their feedback to a draft of the first phase of the MSP in an online survey conducted prior to the plan's presentation to the city council. And in November 2014 a public meeting was arranged together with the City of Monona Plan Commission. At this meeting both the MSP and the City of Monona Comprehensive Plan were presented and there were opportunities for the public to speak with committee members and to give written input. As the MSP is implemented, further opportunities for stakeholder engagement are anticipated and feedback from the community will always be welcomed by the sustainability committee.

MONONA SUSTAINABILITY PLAN OVERVIEW AND FUTURE ANNUAL IMPLEMENTATION AND EVALUATION PROCESS

Plan Overview

The MSP contains six major focus areas. The first addresses general sustainability and is followed by five focus areas that correspond to those identified in the Green Tier Legacy Communities Charter. The six major focus areas are:

- **General Sustainability**
- **Land Use**
- **Water**
- **Energy**
- **Transportation**
- **Solid Waste**

In the first section, **Vision and Objectives**, each focus area is presented, beginning with a vision statement and a short rationale as to why this area is important, followed by a list of specific measurable objectives that have been divided into two groups. Municipality objectives pertain primarily to the city's public lands, buildings, and operations. Community objectives more directly affect and involve private residents and businesses. Both sets of objectives cover overlapping interests, however, and are best met through the thoughtful collaboration of all interested stakeholders.

The second section, **Implementation and Evaluation**, is divided into six sub-sections, each covering one of the six focus areas. Each sub-section begins with a list of projects that have already been implemented in Monona and upon which future work can be built. It continues to explain how each objective will be evaluated and presents baseline data for 2012 and targets to be met in 2025. For each objective a few potential strategies are given, to show examples of the types of actions that could be implemented to reach the target.

Annual Process

During the development of the MSP all ideas brought forward for strategies (actions) were noted and documented (see Appendix E). In the future, this list will be a separate document which will be continuously updated to bring in new ideas and to reflect current possibilities and challenges in the community. Each year an annual implementation plan will be developed, detailing the actions that will be taken in the coming year. (see Appendix F for an example) To follow up on the work being done and review how the objectives are being met, an annual progress report will be presented after the completion of each year. Both formal and informal opportunities for further stakeholder input will be made available and encouraged. For further details see section Implementation and Evaluation.

Example of the Annual Implementation and Evaluation Process for Year 2016

SUSTAINABILITY PRINCIPLES AND GUIDELINES

With the adoption of the Monona Sustainability Resolution (see Appendix C) by the City of Monona City Council in March 2012, the city embraced one commonly held general principle of sustainability identified in Brundtland's 1987 Report of the World Commission on Environmental Development: Our Common Future. This sustainability principle, adapted to fit Monona's municipal context, is also applicable to the MSP and states:

"…practicing sustainability means working to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors…"

The MSP recognizes that all municipal decisions are made within the context of the nesting of economic systems within social systems within the environmental system. Finding solutions that respect both current and future community members' needs and that are resilient to changing circumstances presents both challenges and opportunities. These can be best met when all systems involved are carefully considered, and when decision-making is informed, collaborative, flexible and creative.

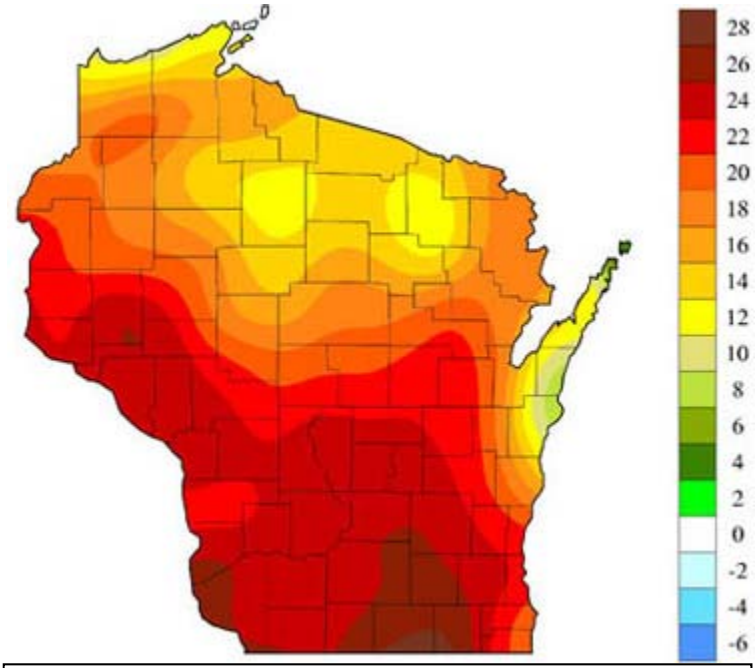
To assist decisions, the following four sustainability guidelines are also being embraced in the MSP as the basis for the development and implementation of the city's plans, policies and procedures:

- Reduce dependence on fossil fuels and extracted underground metals and minerals.
- Reduce dependence on chemicals and other manufactured substances that can accumulate in nature.
- Reduce dependence on activities that harm life-sustaining ecosystems.
- Reduce barriers to achieving present and future human needs fairly and efficiently.

Together, the above principle and guidelines express the primary values that underpin the MSP.

CLIMATE CHANGE

To ensure a resilient and livable environment for future generations, Monona is committed to adhering to the four sustainability guidelines discussed above. The City of Monona Common Council has acknowledged that the climate crisis poses a serious threat to Monona residents, both current and future, and individuals around Wisconsin and the world. Further, the city council has acknowledged that climate change is real and caused mainly by human action, primarily through the burning of fossil fuels. (See Appendix D Fossil Fuels Resolution (14-7-1978))



Wisconsin Initiative on Climate Change Impacts
Projected Change in the Frequency of 90°F Days per Year from 1980 to 2055

Reducing the dependence on fossil fuels and reducing greenhouse gas

emissions serves as a primary basis behind the creation of the Monona Sustainability Plan. Many impacts are associated with climate change, and the MSP serves as the first step in reducing Monona's contribution to a warming planet.

Climate change is harming the quality of life here in Wisconsin, primarily due to the impacts associated with more extreme weather, increased spring and fall precipitation, increased lake evaporation and higher humidity, and increases in the number of warmer days and warmer nights. The number of days and nights above 90°F has already proved to be harmful to plants and wildlife, as well as to human health, throughout the state. For instance, ticks and mosquitoes carrying diseases are on the rise, and due to warmer nights, there is less time for residents and livestock to recover from an extremely hot day.

Over 80% of Wisconsin's energy supply comes from fossil fuel sources, such as coal, and emissions from these types of fuels serve as the primary cause behind climate change. Thus, if Monona and the rest of Wisconsin are to mitigate the impacts of climate change, emissions associated with fossil fuel-driven activities need to decrease. However there are other sources of climate change besides the burning of fossil fuels and nearly all activities within the community have an effect, and consequently need to be addressed. By working towards the objectives outlined in each of the six focus areas in this MSP, businesses, institutions, and individuals will be able to collectively reduce their negative impact on climate change.

General Sustainability

By raising the sustainability awareness of Monona residents and businesses, individuals will be influenced to make more informed, conscious and strategic decisions leading to a more environmentally sustainable future. This will in turn lead to lowered negative impact on climate change in many, various ways.

Land Use

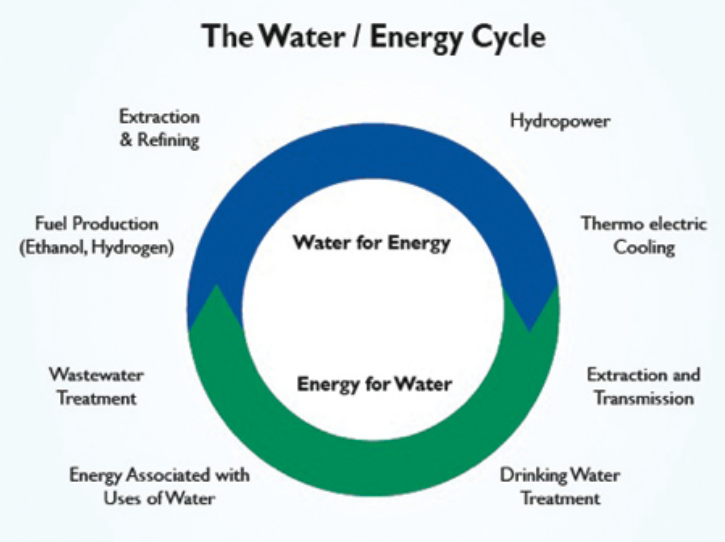
High density and mixed-use development will lead to reduced distances between housing, workplaces and retail businesses. This will offer Monona residents better opportunities for walking or biking to their desired destination, resulting in reductions in vehicular greenhouse gas emissions. Further, open green spaces have a positive impact on climate change.

Water

Climate change has drastic effects on rain and snowfall patterns. The increase in extreme rainfall events, alternating with drought, will result in catastrophic flooding followed by low water levels. It will be essential to decrease the quantity of stormwater runoff to protect our lake. Both the city and its citizens can help accomplish this by taking steps to conserve water on the land. Demand for water is expected to increase while climate change will likely decrease the supply. Therefore it will also be important to increase water efficiency and conservation by Monona residents and businesses. Finally, pumping and moving water to households and businesses consumes large amounts of energy, thus decreasing water use will also decrease our use of fossil fuels

Energy

Increasing energy efficiency and conservation by Monona residents, businesses and in the municipality's own operations will allow Monona to reduce its overall energy use and thus reduce emissions of greenhouse gases. The adoption of renewable energy sources for the city's own energy consumption will assist Monona in becoming more energy self-sufficient, reducing future demands for non-renewable, outside energy sources.



Transportation

Greenhouse gas emissions from the U.S. transportation sector make up 23% of total U.S. emissions, and thus have a large contribution to climate change. By increasing the number of Monona residents using alternative transportation, Monona will be able to reduce its overall carbon footprint and have less of an impact on the surrounding atmosphere.

Solid Waste

Energy consumption is associated with essentially all management of material resources as they flow through the economy, from the extraction or harvest of materials and food (e.g. mining, forestry, and agriculture), to the production and transport of goods, the use and reuse of materials, and their final disposal.

By reducing the amount of materials used, either by simply using less or by reusing a product instead of throwing it away, energy is saved by extracting, producing and transporting less. The same is true for recycling instead of using pristine raw materials. In addition, greenhouse gases are emitted directly from landfills as waste decomposes. By decreasing the total amount of solid waste generated and by increasing the total amount of materials being reused or recycled, Monona will reduce its emission of greenhouse gases.

VISION & OBJECTIVES

Vision
The community of Monona, including its government, residents, and businesses, strives to meet the needs of the present without compromising the resources available for future generations. Monona shares a culture that embraces, is vested in and uses best practices for sustainable living.

GENERAL SUSTAINABILITY

To support and sustain a community, the environment, society and economy must all be stable and healthy. The decisions made today in the City of Monona have far-reaching and long-lasting consequences and should be made with great consideration of their impacts on our natural systems, the economy, and the people living now and in generations to come. Adopting sustainability as a principle of decision-making for Monona will serve as both a framework for city decision-making and a model for the citizens of Monona. It will encourage a strong local economy while protecting the natural systems in which residents live, work and play. Moving toward a more sustainable future is also critical for attracting new residents and businesses.

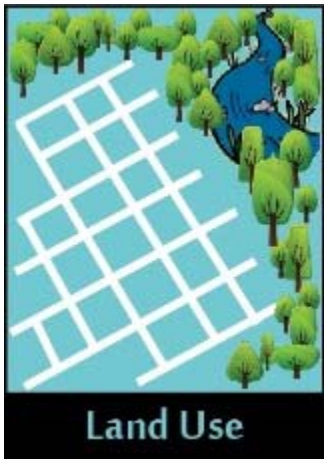
Below is a summary of the objectives pertaining to general sustainability. A more detailed description with relevant evaluation methods, targets and baselines is included in the following Implementation and Evaluation section along with examples of potential strategies to achieve each objective.

COMMUNITY OBJECTIVES

- Raise the sustainability awareness of Monona residents**.**
- Increase the percentage of residents who have implemented sustainable practices, such as those listed in other focus areas within this plan.
- Raise the sustainability awareness of Monona businesses.
- Increase the number of businesses that have implemented sustainable practices, such as those listed in other focus areas within this plan.

MUNICIPALITY OBJECTIVES

- Ensure sustainability is considered in decision-making processes, including the city budget process.
- Raise the sustainability awareness of citizen representatives to city committees.
- Raise the sustainability awareness of city employees.



Vision
The city encourages redevelopment and high-density development as a means to provide access to housing, economic development opportunities, recreation, social interaction and other basic needs while protecting the natural environment, health, safety and overall quality of life. The city is committed to keeping large areas of land open for conservation and recreational uses.

Monona is a land-locked community that has been extensively developed throughout the years, leading to a strong neighborhood fabric and few available greenfield sites. Land use in the City of Monona encompasses both developed and natural environments. How the land is used has a direct impact on residents' health, the water and other natural resources. For example, high density and mixed-use development leads to less transportation demand and thereby lowered consumption of fossil fuels and decreased air-pollution. Another example is the use of synthetic chemicals for landscaping, which has a negative impact on natural habitats, human health and the condition of our lakes.

Below is a summary of the objectives pertaining to land use. A more detailed description with relevant evaluation methods, targets and baselines is included in the following Implementation and Evaluation section, along with examples of potential strategies to achieve each objective.

COMMUNITY OBJECTIVES

- Integrate sustainability considerations in the evaluations and decisions made by the City of Monona Plan Commission.
- Integrate sustainability components in zoning code.
- Integrate sustainability components in the City of Monona Comprehensive Plan.
- Increase walkability to stores, restaurants and other amenities.
- Maintain percentage of land devoted to open space/parks/recreation.

MUNICIPALITY OBJECTIVES

- Maintain protection and restoration of natural habitats including wetlands.
- Integrate sustainability in landscape management.
- Improve stormwater reduction/management.

Vision
Monona citizens, employees and elected officials recognize that the abundant groundwater and important surface water resources of our area must be protected. Everyone in the community strives to use as little water as possible in their daily activities both indoors and out-of-doors. Clean rainwater and snowmelt is captured on the land and allowed to infiltrate. Water that does run off to storm sewers and then to the lake, or that flows directly to waterways is as clean as technology and management practices allow.

Clean water is an essential human need. Monona is fortunate to be surrounded by plentiful sources of surface water and groundwater. The state of our lakes and waterways is influenced by the runoff from our developed environment. Large quantities of chemicals are used to pre-treat the water to drinking quality. This process also consumes a high amount of energy. About 25% of the municipality's energy consumption goes to the city water utility, to bring clean water from the well to consumers.

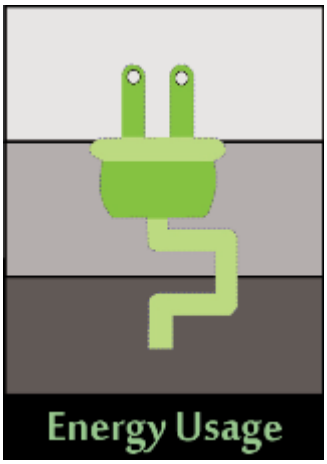
Below is a summary of objectives pertaining to water usage. A more detailed description with relevant evaluation methods, targets and baselines is included in the following Implementation and Evaluation section, along with examples of potential strategies to achieve each objective.

Community Objectives

- Increase water efficiency and conservation by residents.
- Increase water efficiency and conservation by commercial and industrial properties.
- Decrease quantity of stormwater runoff to lakes.
- Decrease pollutants and debris in stormwater runoff.

Municipality Objectives

- Decrease groundwater consumption.
- Maintain percentage of groundwater lost in distribution system.
- Decrease quantity of stormwater runoff to lakes.
- Decrease pollutants and debris in stormwater runoff.
- Continue participation in the Wisconsin Water Star Program and improve Monona's score and ranking.



Vision
The city encourages and assists public and private energy users to reduce overall energy use and bring Monona closer to producing all of its own energy. Monona is a pioneer in adopting renewable energy sources to power municipal buildings, which is meant to set an example for the community.

The impacts of our energy production and consumption have long been a major concern for environments worldwide. Unsustainable management of energy production results in climate change, air pollution and ecosystem destruction. Using less energy not only reduces the impact on the environment but also saves money.

Below is a summary of objectives pertaining to energy usage. A more detailed description with relevant evaluation methods, targets and baselines is included in the following Implementation and Evaluation section, along with examples of potential strategies to achieve each objective.

COMMUNITY OBJECTIVES

- Increase energy efficiency and conservation by residents.
  - Decrease residential electricity consumption.
  - Decrease residential natural gas consumption.

- Increase energy efficiency and conservation by commercial and industrial properties.
  - Decrease commercial electricity consumption.
  - Decrease commercial natural gas consumption.

MUNICIPALITY OBJECTIVES

- Increase energy efficiency and conservation of municipal facilities and services.
  - Decrease building electricity consumption.
  - Decrease building natural gas consumption.
  - Decrease street lighting electricity consumption.
  - Decrease water & other utility electricity consumption.
- Increase percentage of energy consumption from renewable sources.
- Decrease fuel consumption from work related (city business) transportation and motor driven equipment.

Vision
Monona provides and maintains a multi-modal transportation system for users of all ages, abilities, and income levels in addition to being connected to a regional transportation network. Community members make sustainable transportation choices to and from housing, employment, recreational, social and daily-necessity centers.

Greenhouse gas emissions from the transportation sector make up about 23% of total emissions in the United States. Choosing alternative and sustainable transportation options such as biking and taking public transportation reduces the individual carbon footprint. Moreover, a well-managed transportation system in a city can strengthen community bonds while improving air quality.

Below is a summary of objectives pertaining to transportation. A more detailed description with relevant evaluation methods, targets and baselines is included in the following Implementation and Evaluation section along with examples of potential strategies to achieve each objective.

COMMUNITY OBJECTIVES

- Increase percentage of residents using alternative transportation to destinations within Monona.
- Increase percentage of students (K-12) using alternative transportation.
- Increase percentage of residents using alternative transportation for commuting.

MUNICIPALITY OBJECTIVES

- Increase percentage of city employees using alternative transportation for commuting.
- Decrease greenhouse gas emissions from work related (city business) transportation.

Vision
Community members of Monona have access to infrastructure that allows effective and efficient reduction, reuse, composting and recycling of waste. The community is a leader in conserving resources and protecting the environment through using materials responsibly, recycling and properly managing waste.

With increasing economic development and consumption, the waste produced within cities has historically been increasing. Improper waste management can lead to the spread of diseases and other health problems from substances leaking into the environment. Unsustainable management of waste is a source of pollution in water, air and land. A local problem for Monona is that the Dane County Landfill is nearly full. Constructing an expansion to the existing landfill will be both difficult and costly.

Below is a summary of objectives pertaining to solid waste. A more detailed description with relevant evaluation methods, targets and baselines is included in the following Implementation and Evaluation section along with examples of potential strategies to achieve each objective.

Community Objectives

- Decrease total solid waste collected.
- Increase percentage of solid waste being recycled or otherwise diverted from landfills.
- Increase percentage of materials from construction and deconstruction diverted from landfills.
- Increase safe disposal of waste products not included in curb pick-up, such as medical, hazardous and electrical waste.

Municipality Objectives

- Decrease total solid waste collected.
- Increase percentage of solid waste being recycled or otherwise diverted from landfills.
- Increase percentage of materials from construction and deconstruction diverted from landfills.

IMPLEMENTATION & EVALUATION

SECTION OVERVIEW

In this section, a short introduction is given for each focus area, listing projects that have already been implemented in Monona, and upon which future work can be built. Following that, for each focus area all objectives are listed and divided into two categories, municipality and community. Municipality objectives pertain primarily to the city's public lands, buildings, and operations. Community objectives more directly affect and involve private residents and businesses. Both sets of objectives cover overlapping interests, however, and are best met through the thoughtful collaboration of all interested stakeholders.

For each objective a few potential strategies are given, to show the type of actions that could be implemented to reach the targets. (Note: strategies that will be implemented will be determined through the regular city decision process.) This is followed by a presentation of how each objective will be evaluated, as well as baseline data for 2012 and targets to be met in 2025. In cases where data for 2013 and/or 2014 was readily available, these have been included to provide further reference points. (Note, for some objectives a baseline year other than 2012 has been used due to availability of data. In those cases this has been pointed out.) For some objectives, it was not possible to establish baselines during the time that the plan was developed. Establishing these baselines and corresponding targets will be a priority during implementation of the plan.

The targets for each objective have been established based on baseline data, internal knowledge, and current research. Information has been collected from governmental entities such as the EPA and DNR, and organizations such as the U.S. Green Building Council. Other cities' sustainability plans have also been a source of information. For each objective, the Monona Sustainability Committee has discussed the evaluation method and target setting during at least two different meetings for each focus area prior to formalizing a final decision.

IMPLEMENTATION PROCESS

During the development of the MSP, all ideas that have been brought forward and strategies have been noted and categorized based on the objective they work towards (see Appendix E). Ideas for strategies come from many sources including but not limited to: residents, businesses, city employees, other cities' sustainability plans, the LEED (Leadership in Energy & Environmental Design) green building certification program, Green Tier Legacy Communities and Water Star Wisconsin. In the future, this part of the MSP will be a separate document, continuously updated to reflect new ideas, possibilities, and challenges in the community. As pointed out earlier, both formal and informal opportunities for further stakeholder input will be available and encouraged.

Each year an annual implementation plan will be developed in conjunction with the city budget process. This plan will contain the strategies suggested for implementation in the upcoming year. The sustainability committee will coordinate this work, but most of the strategies will be the responsibility of other city committees and city staff. Each year, an annual progress report will be compiled to follow up on the work done by various stakeholders. In addition, the report will present updated statuses for each objective, to track the progress made towards meeting the targets. An analysis of the progress report will be the basis for the development of the following

year’s annual implementation plan. At this stage in the annual process, a targeted effort will be made to engage the public for input.

GENERAL SUSTAINABILITY

This section introduces the evaluation indicators and metrics for each objective under the general sustainability focus area. For this focus area the objectives will mainly be evaluated indirectly through the strategies that will be initiated. Therefore, at this time no baseline or targets have been identified, but will have to be developed later in conjunction with the implementation of strategies. In addition, part of the evaluation of this focus area will be qualitative rather than quantitative using, for example, storytelling. For each objective a list of some potential strategies that can be taken to help achieve the objective are listed. The strategies that will be implemented will be determined through the regular city decision-making processes. For a collection of all strategies that have been put forward to date, see Appendix E.

Below are examples of projects pertaining to general sustainability that have already been implemented, or that are currently being implemented, to make Monona a more sustainable city. These strategies are presented as a base upon which future work can be built.

- In 2010, the City of Monona Sustainability Committee was formed.
- The committee developed the Green Monona Map, which acknowledges businesses and residents in the community who are taking initiatives to become more sustainable.

Sustainability Section at the Monona Public Library

- The Monona Public Library has a sustainability section, where community members can find information about various sustainability topics.
- The Natural Step Monona organizes Green Tuesdays and Thursdays to educate residents about sustainability.
- Many members of the city staff have gone through sustainability training.
- The Monona Sustainability Committee is given an annual budget.
- The City of Monona Green Team is maintained with a clear vision and mission.

OBJECTIVE GC1: GENERAL SUSTAINABILITY, COMMUNITY

RAISE THE SUSTAINABILITY AWARENESS OF MONONA RESIDENTS

Potential strategies to help achieve this objective:

1. Improve sustainability information on the city website – include links to organizations and other websites with information about all sustainability concepts, including water conservation and pollution, energy conservation, solid waste management, sustainable transportation efforts and sustainable land use opportunities.

2. Partner with organizations and programs that educate about and promote environmental issues and sustainability practices to raise awareness about sustainability and increase the percentage of residents that have implemented sustainable practices.
3. Make an education and marketing plan for how to spread information about general sustainability. The plan should include direction for spreading the word about all of the sustainability concepts, including water conservation and pollution, energy conservation awareness, solid waste reduction, land use impacts and sustainable transportation actions.
4. Inform the community about what the city is doing through media such as the bi-yearly newsletter, city website, signage in park shelters and articles in the local newspaper.

The evaluation of this objective will be based partly on evaluations of objectives for residents within the other five focus areas. To complement this, the outcome of each implemented strategy will be evaluated. For example, when the city's sustainability website is updated, the number of visitors will be tracked. Another evaluation example would be to follow residents' participation in sustainability programs and projects arranged by other organizations, such as Green Power Tomorrow. In addition, storytelling will be included as a qualitative evaluation in future reports.

Potential Evaluation Indicators and Metrics
1. Summary of evaluation of other objectives for residents within the other five focus areas
2. Number of visits to the city's sustainability website, Facebook, Twitter
3. Number of library check-outs from the sustainability section
4. Frequency of wattmeter checkouts from the library
5. Attendance at local sustainability workshops, seminars, etc.
6. Evaluations of other initiated strategies
7. Number of Green Power Tomorrow residential participants
8. Storytelling

Additional information and explanations:
Wattmeter: An instrument for measuring the electric supply (in watts) of any given circuit; can be used to cut energy costs and learn which electrical appliances are worth keeping plugged in.
Green Power Tomorrow: A program that allows Madison Gas and Electric customers to purchase renewable energy for their home or business.

OBJECTIVE GC2: GENERAL SUSTAINABILITY, COMMUNITY

INCREASE PERCENTAGE OF RESIDENTS WHO HAVE IMPLEMENTED SUSTAINABLE PRACTICES, SUCH AS THOSE LISTED IN OTHER FOCUS AREAS WITHIN THIS PLAN

Potential strategies to help achieve this objective:
See objective GC1 above and strategies for objectives within the other five focus areas.

This objective has a strong correlation to objective GC1 and many strategies will lead to results for both of them. Similarly to objective GC1, the evaluation of this objective will partly be based on evaluations of objectives for residents within the other five focus areas. To complement this, evaluations will be done of the outcome of implemented strategies. For example, when the city works together with other organizations to help with outreach, the number of participants will be tracked. One such collaboration, which has already been implemented but could be repeated, is

energy audits through Focus on Energy. In addition, storytelling will be included as a qualitative evaluation in future reports.

Potential Evaluation Indicators and Metrics
1. Summary of evaluation of other objectives for residents within the other five focus areas
2. Number of home energy audits through Focus on Energy or MGE
3. Annual number of Focus on Energy financial incentives awarded to Monona residents*
4. Evaluations of initiated strategies.
5. Storytelling

Additional information and explanations:
*There were 294 Focus on Energy financial incentives awarded to Monona residents in 2013.
Focus on Energy: offers energy efficiency rebates and programs to assist homeowners in reducing their energy use and costs.
Home energy audit: allows individuals to assess their home's energy use and evaluate which measures to take in order to improve efficiency.

OBJECTIVE GC3: GENERAL SUSTAINABILITY, COMMUNITY RAISE THE SUSTAINABILITY AWARENESS OF MONONA BUSINESSES

Potential strategies to help achieve this objective:

1. Partner with organizations and programs that educate about environmental issues and sustainability practices.
2. Initiate collaboration between the city and the local Chamber of Commerce on sustainability issues.

For this objective, similar to objective GC1 and GC2, the evaluation will partly be based on evaluations of objectives for businesses within the other five focus areas. Also for this objective, evaluations will be done of the outcomes of implemented strategies including collaborations with other organizations. In addition, storytelling will be included as a qualitative evaluation in future reports.

Potential Evaluation Indicators and Metrics
1. Summary of evaluation of other objectives for businesses within the other five focus areas
2. Number of Green Power Tomorrow commercial participants
3. Evaluations of initiated strategies.
4. Storytelling

Additional information and explanations:
Green Power Tomorrow: A program allowing Madison Gas and Electric customers to purchase renewable energy for their home or business.

OBJECTIVE GC4: GENERAL SUSTAINABILITY, COMMUNITY

INCREASE THE NUMBER OF BUSINESSES THAT HAVE IMPLEMENTED SUSTAINABLE PRACTICES, SUCH AS THOSE LISTED IN OTHER FOCUS AREAS IN THIS PLAN

Potential strategies to help achieve this objective:
See objective GC3 above and strategies for objectives within the other five focus areas.

This objective has a strong correlation to objective GC3 and many strategies will lead to results for both of them. Similarly to objective GC1, GC2 and GC3, the evaluation will partly be based on evaluations of objectives for businesses within the other five focus areas. Also for this objective, evaluations will be done of the outcome of implemented strategies including collaborations with other organizations. In addition, storytelling will be included as a qualitative evaluation in future reports.

Potential Evaluation Indicators and Metrics
1. Summary of evaluation of other objectives for residents within the other five focus areas
2. Number of businesses participating in Green Tier, Green Masters, MPower Champions, Travel Green Wisconsin, Main Street Green, Clean Clear Waters, Green Built Home, and other programs
3. Number of energy audits through Focus on Energy or MGE
4. Annual number of Focus on Energy financial incentives awarded to businesses (174 in 2013)
5. Evaluations of initiated strategies.
6. Story telling

Additional information and explanations:
*There were 174 Focus on Energy financial incentives awarded to Monona residents in 2013.
Green Tier: A sustainable development program developed by the Wisconsin DNR; main goal is to asses environmental impacts within businesses, communities, and individuals, and then to develop strategies to eliminate causes of negative impacts.
Green Masters: Coordinated by the Wisconsin Sustainable Business Council in conjunction with the University of Wisconsin-Madison; points-based recognition program that helps to recognize leading Wisconsin sustainable businesses and to encourage continuous improvement within these businesses.
MPower: Administered by Sustain Dane; provides participating businesses with tools to reduce their energy, transportation, waste, and water use in order to save money and become more sustainable.
Travel Green Wisconsin: Initiated by the Wisconsin Department of Tourism; certification program highlighting tourism businesses that promote environmentally friendly travel practices.
Main Street Green: Coordinated by the Wisconsin Environmental Initiative (WEI); certifies and supports local businesses implementing technologies and practices that help the surrounding community and environment.
Clean Clear Waters: Administered by the Madison Area Builders Association and the WEI; recognizes homes and businesses that have made efforts to reduce runoff and erosion around Wisconsin waterways.
Green Built Home: WEI initiative that reviews and certifies new homes that meet relevant sustainable building and energy standards.

OBJECTIVE GM1: GENERAL SUSTAINABILITY, MUNICIPALITY
ENSURE SUSTAINABILITY IS CONSIDERED IN DECISION-MAKING, INCLUDING THE CITY BUDGET PROCESS

Potential strategies to help achieve this objective:

1. Develop a process/system for how sustainability should be considered/accounted for in the decision-making processes (in committees, city council and by employees).
2. Develop a green purchasing policy.
3. Create a green cleaning policy.
4. Appoint or hire a sustainability coordinator; a part or full-time city employee to plan/manage/implement sustainability initiatives.

For this objective the evaluation will be based on evaluation of implemented strategies. The evaluation of this objective will primarily be decided upon after a process/system has been developed for how to get sustainability to be considered/accounted for in the decision-making processes of committees, city council and by employees. Some potential evaluation metrics could be the percentage of budget items for which a sustainable alternative was considered, or number of decisions in a committee in which sustainability was evaluated.

Potential Evaluation Indicators and Metrics
1. Survey responses from committee representatives
2. Evaluations of initiated strategies

OBJECTIVE GM2: GENERAL SUSTAINABILITY, MUNICIPALITY
RAISE THE SUSTAINABILITY AWARENESS OF CITIZEN REPRESENTATIVES TO CITY COMMITTEES

Potential strategies to help achieve this objective:

1. Give sustainability presentation to each city committee.
2. Regularly give sustainability presentations to new citizen representatives to city committees.
3. Offer "green education" programs to citizen representatives to city committees.

For this objective the evaluation will be based on survey responses from committee representatives. In addition evaluations of implemented strategies will be considered. Some potential evaluation metrics could be the number of participants in sustainability education programs, if such were to be developed.

Potential Evaluation Indicators and Metrics
1. Survey responses from committee representatives
2. Evaluations of initiated strategies

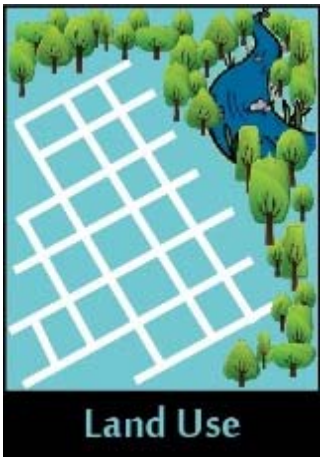
OBJECTIVE GM3: GENERAL SUSTAINABILITY, MUNICIPALITY
RAISE THE SUSTAINABILITY AWARENESS OF CITY EMPLOYEES

Potential strategies to help achieve this objective:

1. Include sustainability in job descriptions.
2. Include sustainability in employee policy/handbook.
3. Include sustainability in performance reviews of city employees (especially supervisors) to assess progress towards sustainability goals.
4. Develop and require robust sustainability training for city employees.

For this objective the evaluation will be based on survey responses from city employees and on attendance at sustainability education programs. Some employees have already gone through a short training in The Natural Step framework; others have participated in programs through Sustain Dane. In addition to these metrics, evaluations of implemented strategies will be considered.

Potential Evaluation Indicators and Metrics
1. Survey responses from city employees
2. Attendance at sustainability education programs
3. Evaluations of initiated strategies



LAND USE

This section introduces the evaluation indicators and metrics for each objective under the land use focus area. The baseline data for 2012 and targets to be met in 2025 are presented. For each objective a list of potential strategies to help achieve the objective are listed. Strategies chosen for implementation will be determined through the regular city decision process. For a collection of all strategies that have been put forward to date, see Appendix E.

Below are examples of projects pertaining to land use that have already been implemented, or that are currently being implemented, to make Monona a more sustainable city. These strategies are presented as a base upon which future work can be built.

- Monona has been certified as a Tree City USA for 23 years.
- Arbor Day tree planting events have been arranged–coordinated volunteer planting of trees in local parks.
- Organic compost is being used in the parks as fertilizer.
- Government right-of-ways are mown or cleared only for safe sightlines or to remove invasive species.

- The MSP has been adopted as part of the City of Monona's Comprehensive Plan.
- The current comprehensive plan encourages the development and redevelopment of compact, highly planned mixed-use activity centers that include shopping, employment, housing, and recreation opportunities.
- Known contaminated properties have been inventoried for reuse planning.

- As part of the landscaping standards, the zoning code includes canopy tree requirements, set as a function of the amount of parking proposed for new development.
- A land bank has been created to acquire and assemble priority infill sites.
- Priority areas have been identified for infill development, including those eligible for brownfields funding.
- Wetlands are being inventoried to ensure no net annual loss, and environmental corridors linking natural areas to facilitate wildlife movement are currently being established.
- All paved sites are being inventoried (e.g. by GIS mapping).
- The Stormwater Management Plan is updated regularly.

OBJECTIVE LC1: LAND USE, COMMUNITY

INTEGRATE SUSTAINABILITY CONSIDERATIONS IN THE EVALUATIONS AND DECISIONS MADE BY PLAN COMMISSION

Potential strategies to help achieve this objective:

1. Develop strategies for bringing sustainability into consideration.
2. Review ordinances to find those that require practices contrary to sustainability (e.g., requiring mowing) - analyze if obstacles to sustainability can be removed.
3. Decrease exterior surface parking and other impervious surfaces.

Evaluation Indicators and Metrics	Baseline	2025 Target
Number of "Sustainable Community Development Principles" which was addressed in each community development project decision	n/a	Increase

Additional information and explanations:

In the annual summary of decisions made by the City of Monona Plan Commission, an analysis will be added to evaluate each decision from a sustainability point of view. The evaluation will be based on if the following sustainability principles from the Planning Advisory Service series (PAS 567 (2012)) has been addresses or not:

1. Livable Built Environment – ensure that all elements of the built environment, including land use, transportation, housing, energy and infrastructure, work together to provide sustainable, green places for living, working and recreation, with a high quality of life.
2. Harmony with Nature – ensure that the contributions of natural resources to human well-being are explicitly recognized and valued and that maintaining their health is a primary objective.
3. Resilient Economy – ensure that the community is prepared to deal with both positive and negative changes in its economic health and to initiate sustainable urban development and redevelopment strategies that foster green business growth and build reliance on local assets.
4. Interwoven Equity – ensure fairness and equity in providing for the housing, services, health, safety, and livelihood needs of all citizens and groups.
5. Healthy Community – ensure that public health needs are recognized and addressed through provisions for healthy foods, physical activity, access to recreation, health care, environmental justice, and safe neighborhoods.
6. Responsible Regionalism – ensure that all local proposals account for, connect with and support the plans of adjacent jurisdictions and the surrounding region.

For each of these six sustainability principles several practices are given, building part of a matrix for evaluation, see www.planning.org. Some examples of practices are:

1. Multi-modal transportation choices
2. Natural habitat protection
3. Economic growth capacity
4. Range of housing types
5. Toxin exposure reduction
6. Local land use plans coordinated with regional transportation

OBJECTIVE LC2: LAND USE, COMMUNITY
INTEGRATE SUSTAINABILITY COMPONENTS IN ZONING CODE

Potential strategies to help achieve this objective:

1. Review zoning code to find those that include practices contrary to sustainability, (e.g., requiring mowing) analyze if obstacles to sustainability can be removed (e.g., zoning regulations that prohibit or limit the installation of solar panels).
2. Review zoning code to encourage sustainability practices (e.g. reduction of impermeable surfaces).

Evaluation Indicators and Metrics	Baseline	2025 Target
1) Number of zoning code *reviewed* to include sustainability aspects	0	All
2) Number of zoning code *revised* to consider sustainability aspects	0	Increase

Additional information and explanations:
Reviewing the zoning code consists of looking again into the zoning code to determine whether or not sustainability aspects need to be included. If changes do need to be made, the zoning code can be revised to make such changes.

OBJECTIVE LC3: LAND USE, COMMUNITY
INTEGRATE SUSTAINABILITY COMPONENTS IN COMPREHENSIVE PLAN

Potential strategies to help achieve this objective:

1. Analyze all City of Monona Comprehensive Plan elements based on sustainability criteria.

Evaluation Indicators and Metrics	Baseline	2025 Target
1) Analysis of the increase in sustainability components from one Comprehensive Plan to the next	Existing plan from 2004	Increase

Additional information and explanations:
The existing comprehensive plan is from 2004, with a new one currently under development. It is expected that another update of the plan will be implemented before 2025. Each consecutive

plan will be evaluated and compared to the previous to find improvements based on the scoring matrix for sustainability principles listed under LC1.

OBJECTIVE LC4: LAND USE, COMMUNITY
INCREASE WALKABILITY TO STORES, RESTAURANTS AND OTHER AMENITIES

Potential strategies to help achieve this objective:

1. Track and improve Walk Score.
2. Encourage mixed-use buildings/development along business corridors.
3. Allow light commercialization in the area of community center/library/Winnequah Park.

Walkability is a concept that determines the extent to which a built environment is friendly to walking. Walkability is commonly defined by factors such as:

- Proximity: the distance to stores, restaurants, mass transit access points, parks and other community amenities.
- Connectivity: how efficient street and walk path patterns are for walking; distance between intersections and if walking routes are direct or cumbersome (e.g. large sub-divisions with cul-de-sacs).
- Safety: room to walk, trip hazards, safe crossing of streets, behavior of motorists, well/dimly lit walk paths, occurrence of crime.
- Convenience and Pleasantness: quality of walk paths, waiting time to cross streets, obstructions, type of environment (e.g. by an interstate or a small local street, by a warehouse or a park), cleanliness, beauty of surroundings.

This objective will be evaluated through a combination of metrics for proximity and other aspects of walkability as listed above. Before deciding on the details of the measurements, different existing tools will be tested and evaluated for suitability for the City of Monona. One potential metric is Walk Score, a rating based on households' proximity to stores, restaurants, parks, schools and other amenities. Higher values indicate more walkable areas, whereas lower values indicate more car dependent areas. See walkscore.com. A walk audit is a tool for evaluating walkability aspects other than proximity. To perform a walk audit, first, several walks are done, preferable by two or more people, originating from households at a variety of points in the community and ending at community amenities. The walks are then evaluated using an index of walkability based on factors such as those listed above. See http://www2.epa.gov/smart-growth/walkability-checklist.

Potential Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) Walk Score rating for a number of households distributed over a grid of Monona	n/a	Increase
2) Percentage of households within 0.25mi and 0.5mi of mass transit access point, stores, restaurants, library, park and other community amenities	n/a	Increase
3) Walk audits for a number of households distributed over a grid of Monona	n/a	Improve

Additional information and explanations:
Walkability is partly covered by other objectives in the MSP both under the land use and transportation focus areas. However, walkability has been included in the MSP as a separate

objective due to its multi-faceted impact on the community. Listed below are some areas where positive impacts have been identified by research:

- Environment: Walking as an alternative to motorized transportation lowers the negative environmental impact both on a global scale (e.g. less greenhouse gas emissions) but also on a local scale with less air pollution.
- Health: walking, like other forms of physical activity, results in significant health benefits. It has been found that residents living in walkable neighborhoods are at less risk of being obese or overweight, and there are higher levels of physical activity in children. Is has also been shown that walking contributes to a reduction of cancer.
- Community engagement: neighborhood walkability leads to enhanced levels of social and community engagement. People that live in walkable neighborhoods are more likely to know their neighbors, participate politically, trust others, have an increased sense of pride, show increased volunteerism and be socially engaged.
- Social justice: A highly walkable community ensures that people who cannot drive are not restricted and it makes it possible to avoid the expensive costs of private transportation.
- Safety: walkable neighborhoods have been linked with decreased crime rates.
- Economics: the presence of sidewalks and other walking facilities is shown to increase property value and promote tourism. A highly walkable community will also increase economic activity due to the higher probability of residents using local businesses.

OBJECTIVE LM1: LAND USE, MUNICIPALITY

MAINTAIN PROTECTION AND RESTORATION OF NATURAL HABITATS INCLUDING WETLANDS

Potential strategies to help achieve this objective:

1. Update the City of Monona Wetland Management Plan.
2. Inventory natural habitats.
3. Implement an invasive species management plan for public lands that includes controlling aquatic invasive species.

Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) Square miles of land reserved for natural habitat	260*	Increase by 8%
2) Square miles of land restored to natural habitat	0	20

* Aldo Leopold Nature Center (40 acres) and the Wetland Conservancy (220 acres)

Additional information and explanations:

Land reserved for natural habitat consists of space that is protected from development projects, human influence, etc. Land restored to natural habitat consists of space that has been reconstructed from a previous condition to support natural life. In addition to large parcels of land set aside, this could include having areas with natural/indigenous plants and trees in existing parks and open spaces in support of wildlife. Probable areas for this would be; Winnequah Park shoreline restoration, wetland restoration in Three Meadows Park and pockets in other parks switched to no-mow, native plantings.

OBJECTIVE LM2: LAND USE, MUNICIPALITY
INTEGRATE SUSTAINABILITY IN LANDSCAPE MANAGEMENT

Potential strategies to help achieve this objective:

1. Set a tree canopy goal and develop a management plan to achieve it.
2. Assess current landscape management practices.
3. Develop a sustainable landscape management plan.
4. Develop a pest management plan that limits the use of insecticides, fungicides, and rodenticides to applications needed to avoid significant ecological or public health damage and that prohibits use of pesticides for aesthetic purposes.

This objective would be evaluated by a combination of metrics, all of which need to be assessed before a target can be set.

Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) Acres of city land planted with native plant species	n/a	n/a
2) Pounds per year used on city land: • synthetic fertilizer, • pesticides • herbicides used on city land	n/a	n/a
3) Number of trees planted per year (new plantings and replacements) • in parks and open spaces • in terraces (right of way)	15 new and replacement	n/a
4) Irrigation with potable water (not including rainwater or lake water)	n/a	n/a
5) Fuel use (or emissions) by powered equipment	n/a	n/a

OBJECTIVE LM3: LAND USE, MUNICIPALITY
MAINTAIN PERCENTAGE OF LAND DEVOTED TO OPEN SPACE/PARKS/RECREATION

Potential strategies to help achieve this objective:

1. Inventory present land devoted to open space/parks/recreation.
2. Identify key green infrastructure areas during plan development and/or implement a plan to acquire and protect key green infrastructure areas.

Evaluation Indicators and Metrics	2010 Baseline*	2025 Target
1) Outdoor recreation area, developed (acres)	427.5	Keep at same or above
2) Woodlands (acres)	16.0**	Keep at same or above
3) Wetland (acres)	27.6***	Keep at same or above
4) Open space/park/recreation land per resident	0.07	Keep at same

(acres/resident)		or above
5) Open space/park/recreation land as percentage of total Monona land area	23%	Keep at or above 23%

Additional information and explanations:
*Evaluation of land use data for Monona was done in 2010 and therefore this year is used instead of 2012 as baseline for this Objective. The numbers in the table comes from Capital Area Regional Planning Commission (CARPC) **Aldo Leopold Nature Center (40 acres) is not included in this number. *** The Wetland Conservancy (220 acres) is not included in this number, but is included in the "Outdoor recreation area, developed (acres)" inventory.

The City is hoping to undertake a comprehensive inventory of the street trees and trees in its parks in an effort to verify the baseline of the tree canopy. Moving forward, this updated inventory will allow us to manage data about the tree canopy using the City's online GIS program.

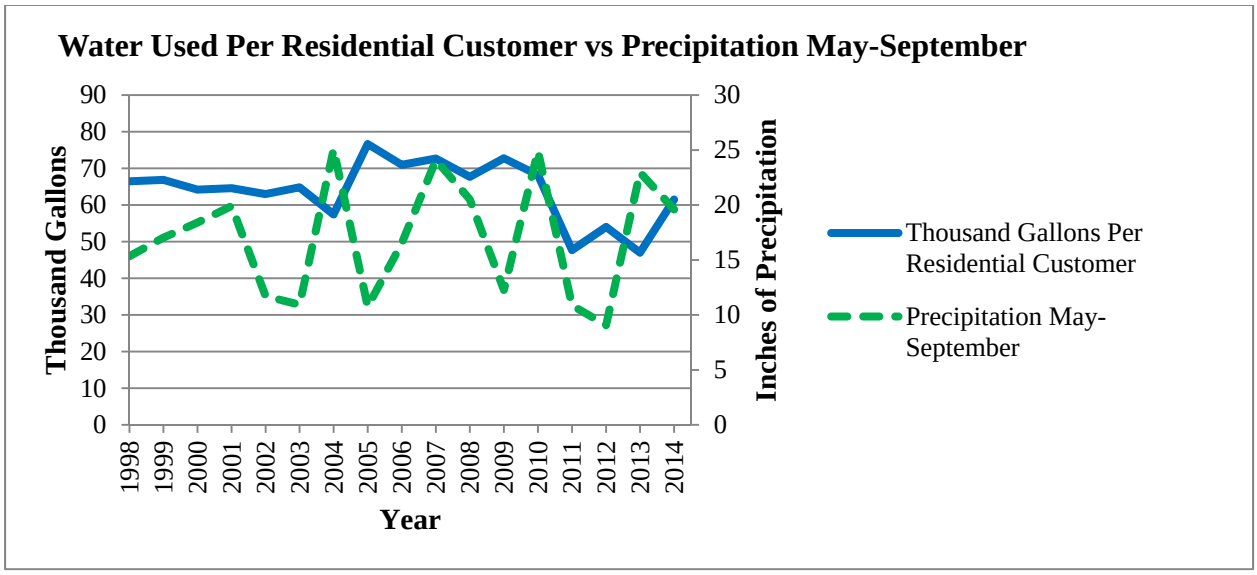
WATER

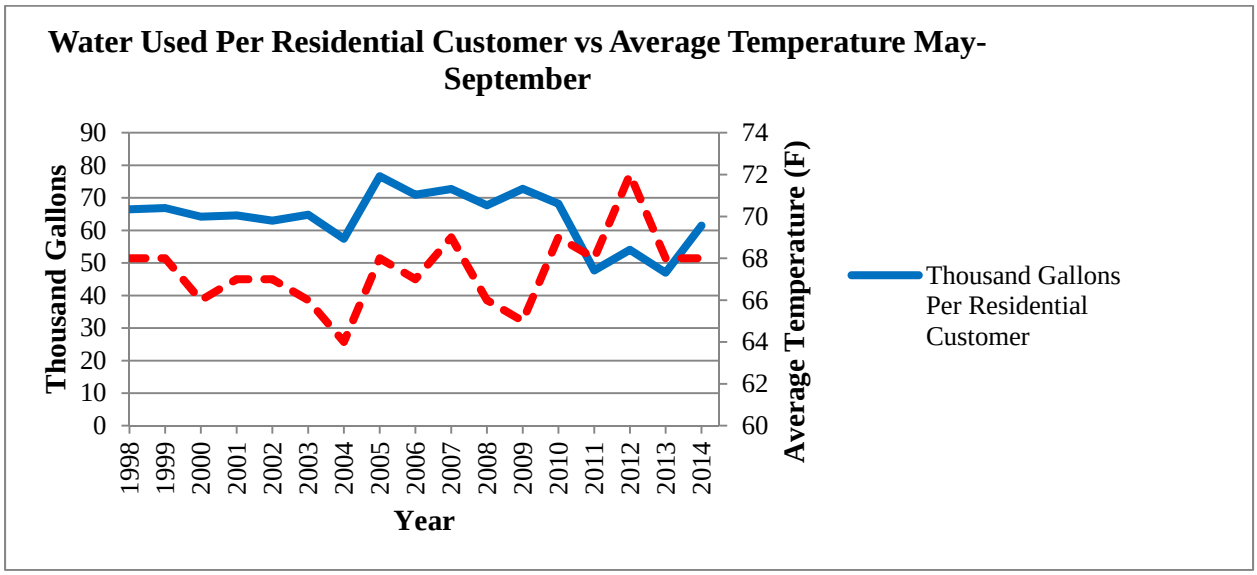
This section introduces the evaluation indicators and metrics for each objective under the water focus area. The baseline data for 2012 and targets to be met in 2025 are presented. For each objective, examples of some potential strategies to help achieve the objective are listed. Strategies chosen for implementation will be determined through the regular city decision-making processes. For a collection of all strategies that have been put forward to date, see Appendix E.

Below are examples of projects pertaining to water that have already been implemented, or that are currently being implemented, to make Monona a more sustainable city. These strategies are presented as a base upon which future work can be built.

- 2012 was proclaimed the Year of Water with several activities during the year including the Monona Water Walk.
- A water conservation challenge for residents was carried out during 2012, a collaboration between the non-profit organization The Natural Step Monona and the City of Monona.
- A stormwater study project has been launched, surveying existing stormwater outfalls and prioritizing a repair/replacement schedule.
- Monona has become a bronze level Wisconsin Water Star program participant.
- Monona has a Water Sense Partnership with the EPA.
- Monona is a member of the Groundwater Guardian Green Sites program.
- Rain barrels have been placed at the library and the community center.
- Businesses or industries are provided with incentives for implementing best management practices that exceed regulations in reducing impervious surfaces and increasing infiltration.
- Credits are offered for residents for best management practices such as rain barrels, rain gardens, and pervious paving through stormwater utility fees.
- A regular street sweeping program is in place to reduce total suspended solids.
- A leak detection program has been developed for local municipal businesses.

The consumption of water is somewhat correlated to outdoor temperature and precipitation, which should be taken into consideration when water use efficiency and conservation objectives are evaluated. It is important to understand trends in water consumption, taking into account extreme years occurring with unusually hot and dry, or wet and cold, summers. One way to understand the impacts of extreme weather is to look at both actual yearly values as well as averages over two or more years and to compare these with corresponding average temperature and precipitation values. Below are graphs showing residential water consumption as an example. (note, the graphs show only residential Monona Water Utility Customers) Two trends can be seen in the graphs with actual yearly values. The first trend is that historically the water consumption goes up if there is a combination of both a hot and a dry summer. The second trend is that with the water rate change in 2011 the consumption went down, even when the summer was hot and dry. A third trend can vaguely be seen in the graphs showing rolling 5-year averages, this trend corresponds to other data for Wisconsin. It appears that water consumption is going down.





OBJECTIVE WC1: WATER, COMMUNITY

INCREASE WATER EFFICIENCY AND CONSERVATION BY RESIDENTS

Potential strategies to help achieve this objective:

1. Arrange educational events.
2. Develop an incentive program for citizens to encourage conservation. E.g. incentives for low flow toilets, faucets, showerheads, and water softeners.
3. Develop a smart water metering system for assessment and consumer feedback.

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1) Absolute household residential water use (thousand gallons/year)	146,164	126,625	167,004	*
1a) Water use intensity (thousand gal/resident/year)	19	17	22	Reduce by 20%
1b) Water use intensity (thousand gal/household /year)	54	47	61.5	*

Data from the Public Service Commission of Wisconsin, WEGS Annual Report.
*This metric has been included for background information, not for the purpose of target setting.

Additional information and explanations:
A portion of Monona residents are served by the Madison Water Utility. The water usage by these households has been estimated based on the water usage of those served by the Monona Water Utility.

Base year for target setting: Because water usage fluctuates with the average temperature and precipitation it is difficult to accurately choose a base year, compare water usage over several years and set a target for reduction. Using the actual data for the baseline and target years could produce skewered results if those years happen to be extreme weather years. Using five-year averages would make it difficult to see any results from implemented strategies to lower water consumption. A two-year average might be the best option, however we suggest making the decision on an annual basis about which years, or averages, to compare with which and to track actual yearly water usage for the duration of the MSP so that patterns and irregularities can be recognized.

OBJECTIVE WC2: WATER, COMMUNITY

INCREASE WATER EFFICIENCY AND CONSERVATION BY COMMERCIAL AND INDUSTRIAL PROPERTIES

Potential strategies to help achieve this objective:

1. Promote EPA's WaterSense Program for water utilities or the Groundwater Guardian Green Sites program to local business.
2. Educate hotels and other high-volume users.

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1) Absolute commercial/industrial water use (thousand gallons/year)*	122,512	124,551	153,799	***
2) Water use intensity (thousand gallons/customer)	378	383	479	Decrease by10%
3) Water use intensity (thousand gallons/sq ft commercial building area)**	10.92	10.74	8.7	***

* Data from the Public Service Commission of Wisconsin, WEGS Annual Report. **This number has not been estimated for 2012 and 2013. *** This metric has been included for background information, not for the purpose of target setting.

Additional information and explanations:
For a discussion about how to choose base year and absolute or average values, see Objective WC1. Similar to residential customers there are some commercial customers in Monona served by Madison Water Utility, however they represent a negligible percentage of commercial water use.

OBJECTIVE WC3: WATER, COMMUNITY
DECREASE QUANTITY OF STORMWATER RUNOFF TO LAKES

Potential strategies to help achieve this objective:

1. Create private-public partnerships for stormwater reduction initiatives.
2. Provide incentives to businesses and industries for implementing best management practices that exceed regulations in reducing impervious surfaces and increasing infiltration.
3. Offer stormwater utility fee credits to residents for best management practices such as rain barrels, rain gardens and pervious paving.

This objective will be evaluated in the same way, and has the same baseline and target as objective WM3: Decrease quantity of stormwater runoff to lakes, see below.

OBJECTIVE WC4: WATER, COMMUNITY
DECREASE POLLUTANTS AND DEBRIS IN STORMWATER RUNOFF

Potential strategies to help achieve this objective:

1. Improve leaf containment and collection processes to reduce the amount of leaves entering lakes and streams.
2. Work with commercial or light industrial businesses to develop stormwater pollution plans.

This objective will be evaluated in the same way, and have the same baseline and target, as objective WM4: decrease pollutants and debris in stormwater runoff, see below.

OBJECTIVE WM1: WATER, MUNICIPALITY
INCREASE WATER EFFICIENCY, CONSERVATION BY MUNICIPALITY

Potential strategies to help achieve this objective:

1. Develop a water efficiency and conservation plan for municipal buildings.
2. Encourage the installation of low-flow faucets, urinals, sink aerators, and toilets in all public facilities.
3. Encourage outdoor watering by local government using rainwater.

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1. Absolute water use for municipality (thousand gallons/year)	3,454	3,034	4,601	20%

Data from the Public Service Commission of Wisconsin, WEGS Annual Report.

Additional information and explanations:
Similar to energy use, it will be important to track water use per facility to see the impact of implemented strategies.

OBJECTIVE WM2: WATER, MUNICIPALITY
MAINTAIN PERCENTAGE OF WATER LOST IN DISTRIBUTION SYSTEM

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1. Percentage of water (drinking water) lost in distribution system	5%	5%	4%	Keep under 5%

Data from the Public Service Commission of Wisconsin, WEGS Annual Report.

OBJECTIVE WM3: WATER, MUNICIPALITY
DECREASE QUANTITY OF STORMWATER RUNOFF TO LAKES

Potential strategies to help achieve this objective:

1. Increase landscaping on municipal land that uses plants which minimize need for irrigation (Xeriscaping).
2. Decrease impermeable surfaces, increase permeable. (E.g. decrease exterior surface parking, increase parking structure density).

Evaluation Indicators and Metrics	2013 Baseline	2025 Target
1. Volume (gal/year) of stormwater reductions	1,489,993,889	10% reduction

*Stormwater modeling was not done for 2012; 2013 is therefore used as the baseline year for this Objective. Data from the Public Service Commission of Wisconsin, WEGS Annual Report.

OBJECTIVE WM4: WATER, MUNICIPALITY
DECREASE POLLUTANTS AND DEBRIS IN STORMWATER RUNOFF

Potential strategies to help achieve this objective:

1. Improve leaf containment and collection processes to reduce the amount of leaves entering lakes and streams.
2. Improve regular street sweeping programs to reduce total suspended solids.
3. Develop a plan for handling hazardous material on municipal properties including a map of hazmat storage and handling facilities and inspections for safety. Provide municipal staff, including office staff, with contact lists for emergency water contamination issues.

Evaluation Indicators and Metrics	2012 Baseline	2013	2025 Target
1) Pounds per year of phosphorus in effluent at stormwater outfalls	NA	479	Reduce by 40%
2)-Pounds of total suspended solids in effluent at stormwater outfalls	NA	114,746	Reduce by 50%

Data from the Public Service Commission of Wisconsin, WEGS Annual Report.

Additional information and explanations:

Effluent is liquid waste that is discharged into a waterway, and depending on the source can be treated or untreated. High phosphorus levels in waterways contribute to high algal growth and thus to lower water quality. Suspended solids are small particles that remain suspended in stormwater. Pollutants are often carried on the surface of these particles, and thus levels of suspended solids can also serve as an indicator of water quality.

OBJECTIVE WM5: WATER, MUNICIPALITY
CONTINUE PARTICIPATION IN THE WISCONSIN WATER STAR PROGRAM AND IMPROVE MONONA'S SCORE AND RANKING

Potential strategies to help achieve this objective:

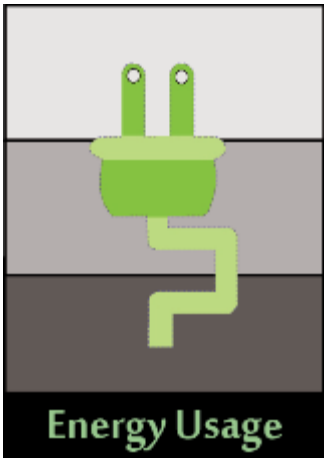
1. Analyze the current status of WI Water Star application annually, and plan for improvements.

Evaluation Indicators and Metrics	2012 Baseline	2013	2025 Target
1. City of Monona Water Star score and ranking	"Bronze" ranking	"Bronze" ranking	"Silver" ranking

Data from Water Star Wisconsin.

Additional information and explanations:

The Wisconsin Water Star Program guides, inspires, and recognizes communities taking exemplary actions to improve their local water supply. Depending on the actions taken, communities can be designated Bronze, Silver, or Gold Water Star Communities.



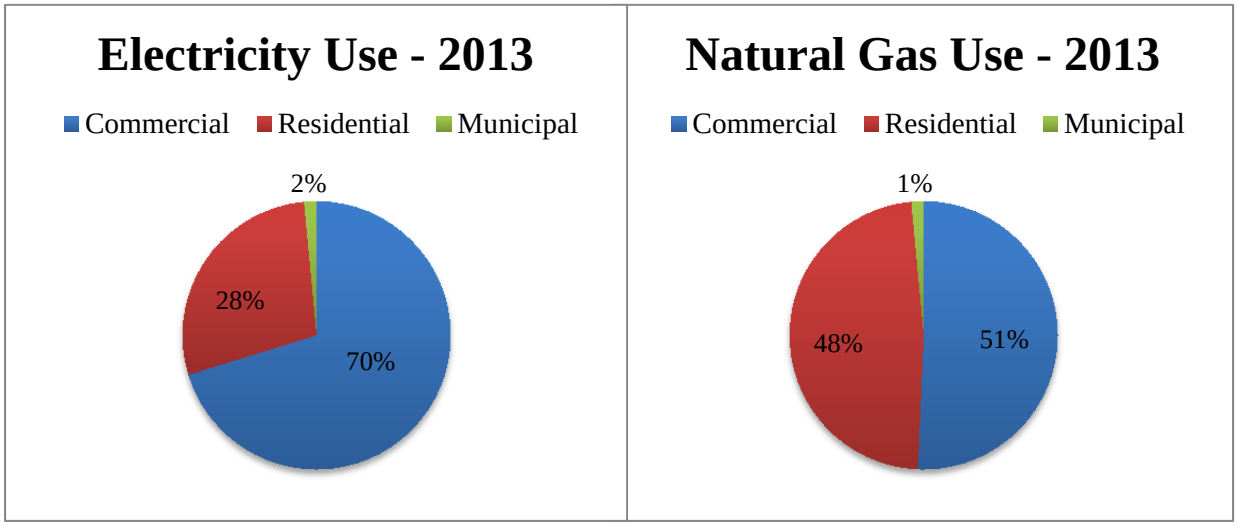
ENERGY

This section introduces the evaluation indicators and metrics for each objective under the energy focus area. The baseline data for 2012 and targets to be met in 2025 are presented. For each objective a list of some potential strategies to help achieve the objective are listed. Strategies chosen for implementation will be determined through the regular city decision process. For a collection of all strategies that have been put forward to date, see Appendix E.

Below are examples of projects pertaining to energy usage that have already been implemented, or that are currently being implemented, to make Monona a more sustainable city. These strategies are presented as a base upon which future work can be built.

- The city collaborated with Focus on Energy to offer the Express Energy Efficiency Program to residents.
- An LED exterior lighting retrofit project has been implemented, e.g. at Ahuska park parking lot, the skate board park and at the lagoon. Also for dusk/dawn lights at the pool and outside the community center.
- HVAC systems upgrades have been installed in city buildings.
- At the pool an efficient, variable frequency pump was installed.
- A 157 kW solar project involving the installation of solar arrays on four facility buildings has been completed. The solar arrays produce more than 210,000 kilowatt-hours of clean energy per year, equating to 30% of the buildings' combined electricity usage.
- Wattmeters are available to the general public through the public library.
- Monona is designated as a State of Wisconsin Energy Independent (EI) Community.

The two graphs below show a comparison of energy consumption for the residential, commercial and municipal sectors in Monona.



A large portion of the energy used for residential, commercial and municipal buildings goes to heating and cooling. As the energy usage of a heating or cooling system varies with the weather, it is important to take this into account when evaluating energy efficiency and conservation objectives. One common way to understand energy use data is to take into account heating and cooling degree days. Heating degree days are a measure of how much (in degrees), and for how long (in days), the outside air temperature was below a certain level, at which it is assumed that a building needs to be heated. Relating the natural gas consumption to the heating degree days of a month or a year will make it possible to see trends in energy efficiency irrelevant of the heating need. Cooling degree days works in a corresponding way for cooling needs and electricity consumption. Heating degree days and cooling degree days will be taken into consideration when this objective is evaluated.

OBJECTIVE EC1: ENERGY, COMMUNITY

INCREASE ENERGY EFFICIENCY AND CONSERVATION BY RESIDENTS

Potential strategies to help achieve this objective:

1. Encourage new homes to meet ENERGY STAR home standards.
2. Work with MG&E to develop smart electricity and gas metering for assessment and consumer feedback.
3. Continue collaborating with Focus on Energy to offer energy efficiency programs.
4. Utilize Property Assessed Clean Energy (PACE) financing.

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1) Total annual residential electricity use (kWh/year)*	27,565,470	26,782,039	26,378,171	**
1a) Electricity use intensity (kWh/resident/year)	3,660	3,560	3,502	**
1b) Electricity use intensity (kWh/household/year)	7,127	6,869	6,613	10% decrease
3) Total annual residential natural	1,782,869	2,337,857	2,550,697	**

gas use (therm/year)*				
3a) Nat. gas use intensity (therm/resident/year)	237	311	339	**
3b) Nat. gas use intensity (therm/household/year)	461	600	654	10% decrease

*Data from Madison Gas and Electric.
** This metric has been included for background information, not for the purpose of target setting.

OBJECTIVE EC2: ENERGY, COMMUNITY

INCREASE ENERGY EFFICIENCY AND CONSERVATION BY COMMERCIAL AND INDUSTRIAL PROPERTIES

Potential strategies to help achieve this objective:

1. Collaborate with the local Chamber of Commerce to increase energy efficiency and conservation, and encourage renewable energy.
2. Work with MG&E to develop smart electricity and/or gas metering.

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1) Total commercial electricity consumption (kWh/year)*	66,619,143	66,586,465	64,264,343	**
1a) Electricity use intensity (kWh/sq ft*year)	3.78	3.78	3.65	10% decrease
2) Total commercial natural gas consumption (therm/year)*	2,002,676	2,476,697	2,677,251	**
2a) Nat. gas use intensity (therm/sq ft*year)	1.49	1.85	1.99	10% decrease

*Data from Madison Gas and Electric.
** This metric has been included for background information, not for the purpose of target setting.

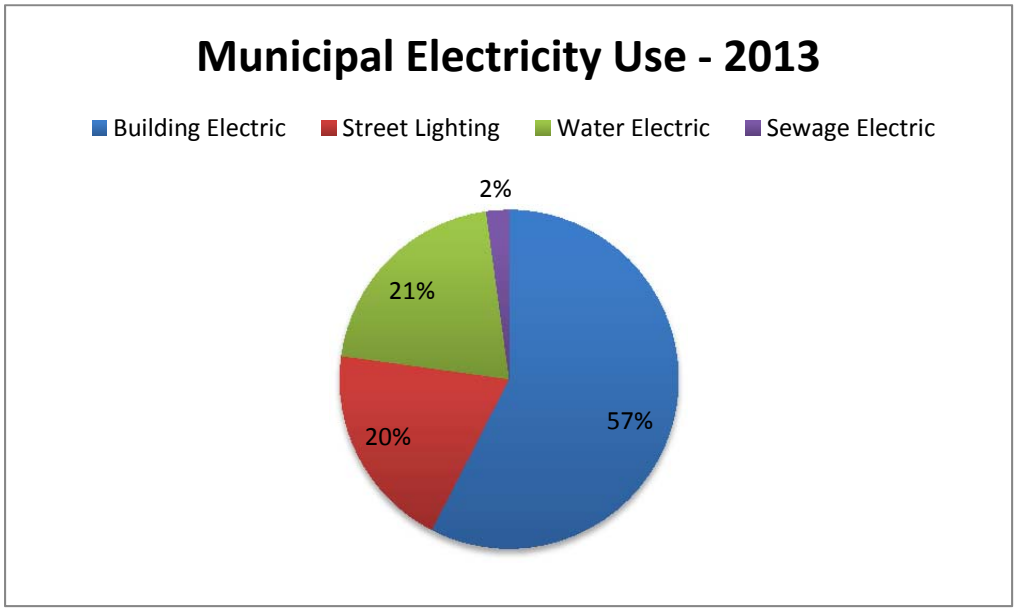
OBJECTIVE EM1: ENERGY, MUNICIPALITY

INCREASE ENERGY EFFICIENCY AND CONSERVATION OF MUNICIPAL FACILITIES AND SERVICES

Potential strategies to help achieve this objective:

1. Complete energy audits of all city facilities.
2. Complete EPA Energy Star Portfolio Manager spreadsheet for government energy use or score existing buildings with LEED green building certification.
3. Develop list of lighting, HVAC and shell improvements to increase Energy Star Portfolio Manager score or LEED green building certification credits.
4. Ensure streetlights are directed where light is needed, are full cut-off, operate at 75 lumens/Watt or higher and are LED or the functional equivalent.
5. Upgrade water utility equipment (e.g., variable frequency drive motors) to achieve energy efficiency.

The graph below shows energy consumption for different parts of the municipality.



Electricity

Evaluation Indicators and Metrics	2012 Baseline	2013	2025 Target
1) Grand total annual municipal electricity use (kWh/year)*	2,000,827	1,971,946	n/a
1a) Total annual city building electricity use (kWh/year)	1,455,232	1,436,234	20% decrease
1b) Annual street lighting electricity use (kWh/year)	545,595	535,712	50% decrease
1c) Annual utility electricity use (kWh/year)	Data missing	Data missing	?
2) Intensity of city building electricity use (kWh/sq ft*year)	14.6	14.4	20% decrease

Natural Gas

Evaluation Indicators and Metrics	2012 Baselines	2013	2025 Target
3) Total annual municipal nat. gas use (therm/year)*	57,802	72,847	20% decrease
4) Intensity of city building natural gas use (therm/sq ft*year)	0.6	0.7	20% decrease

*Data retrieved from Madison Gas and Electric.

OBJECTIVE EM2: ENERGY, MUNICIPALITY

INCREASE PERCENTAGE OF ENERGY CONSUMPTION FROM RENEWABLE SOURCES

Potential strategies to help achieve this objective:

1. Install more solar cells.

2. Install solar water heaters.
3. Consume less energy.

Evaluation Indicators and Metrics	2012 Baseline	2014	2025 Target
1) Energy generated from renewables (kWh/year)	0	163,030	*
1a) Renewable energy as percentage of total municipal electricity use (kWh from RE/total municipal kWh per year)	0 %	8 %	25 %
2) Installed renewable energy capacity (kW)	0	157	*

Data from the City of Monona's own renewable energy tracking system.
* This metric has been included for background information, not for the purpose of target setting.

OBJECTIVE EM3: ENERGY, MUNICIPALITY
DECREASE FUEL CONSUMPTION FROM WORK RELATED (CITY BUSINESS) TRANSPORTATION AND MOTOR DRIVEN EQUIPMENT

Potential strategies to help achieve this objective:

1. Retrofit city fleet vehicles for CNG (compressed natural gas).
2. Train employees in eco-friendly driving techniques that conserve fuels, release fewer emissions, and prolong vehicle life.
3. Upgrade to more efficient motor driven equipment.

Evaluation Indicators and Metrics	2014 Baseline	2025 Target
1) Total fuel consumed per department (gal/year)	See table below	Decrease

2014 Fuel Consumption Divided by Department and Fuel Type:

Department	Number of Vehicles /Equipment	Number of Gasoline Vehicles/ Equipment	Gallons Gasoline	Diesel Vehicles/ Equipment	Gallons Diesel
Police	11	11	6,807	0	0
Fire	8	2	1,506	6	720
Public Works	29	17	8,687	12	6,020
Total	**48**	**30**	**17,000**	**18**	**6,740**

Additional information and explanations:
Targets will have to be set after further analysis.

TRANSPORTATION

This section introduces the evaluation indicators and metrics for each objective under the transportation focus area.

The baseline data for 2012 and targets to be met in 2025 are presented. For each objective a list of some potential strategies to help achieve the objective are listed. Strategies chosen for implementation will be determined through the regular city decision-making processes. For a collection of all strategies that have been put forward to date, see Appendix E.

Below are examples of projects pertaining to transportation that have already been implemented, or that are currently being implemented, to make Monona a more sustainable city. These strategies are presented as a base upon which future work can be built.

- The reconstruction of Monona Drive added bike lanes.
- Commuter bike routes have been identified and properly cleared.
- Standards for placement and number (as function of intensity of use) of bike parking spaces are set.
- The city has hosted a children's Bike Safety Day for several years.
- The Monona PTO, Winnequah School and the City of Monona each year arrange a Walk/Bike to School Day.
- Two electric vehicle charging stations are installed near the community center in collaboration with MG&E.
- The Monona Transit bus route has been extended.

- Monona transit service is scheduled at the basic level (hour peak service within half-mile of 50 percent of addresses).
- Neighborhood electric vehicles (NEVs) are allowed on appropriate roadways.
- City vehicles are kept well maintained to ensure efficient performance (tire pressure, regular tuning, etc.).
- A new mower bought for the city in 2015 is low-emission, Tier IV compliant.
- City vehicles have been retrofitted for compressed natural gas (CNG).

OBJECTIVE TC1: TRANSPORTATION, COMMUNITY

INCREASE PERCENTAGE OF RESIDENTS USING ALTERNATIVE TRANSPORTATION TO DESTINATIONS WITHIN MONONA (E.G. LIBRARY, POOL, CITY HALL, COMMUNITY CENTER, STORES, RESTAURANTS)

Potential strategies to help achieve this objective:

1. Prepare a plan that identifies disconnections in bike and pedestrian networks, prioritizes fixes, and identifies potential funding sources for the most important projects.
2. Provide bike racks at municipal buildings and other city operated destinations, e.g. parks.

Potential Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) On-site survey of visitors to community destinations (i.e. library area, stores)	n/a	n/a
2) Ratio of bikes to cars at community destinations-observation study (i.e. library area, stores)	n/a	n/a
3) Bus ridership (number rides/year) (Monona Lift)	6972	?
3. Measures of potential:		
4) Bike Score		

Additional information and explanations:

Monona Lift is a handicapped-accessible bus service that meets the needs of the elderly and disabled, as well as the general public. The bus has six scheduled daily loops: four through Monona and downtown Madison, and two within Monona. Bike Score is similar to the Walk Score in that it measures how feasible a given location is for biking. The score is based on a scale of 0-100, and is based on the presence of four components: bike lanes, hills, destinations and road connectivity, and bike commuting road share.

OBJECTIVE TC2: TRANSPORTATION, COMMUNITY

INCREASE PERCENTAGE OF STUDENTS (K-12) USING ALTERNATIVE TRANSPORTATION

Potential strategies to help achieve this objective:

1. Arrange biking education for children and parents.
2. Fund and operate a Safe-Routes-to-School (SRTS) program (or functional equivalent) covering at least 10 percent of students.
3. Initiate carpool programs at Monona schools.

For this objective, baselines and potential targets would have to be evaluated before strategies are implemented.

Potential Evaluation Indicators and Metrics
1. Survey of students reporting mode of transportation (walk/bike/bus/car)

Alternative – Observation Study

1a. School bus ridership/year
1b. Number of bicycles parked at schools (observation)
1c. Number of autos dropping off/picking up at schools (observation)
1d. Number of students walking (observation)

OBJECTIVE TC3: TRANSPORTATION, COMMUNITY

INCREASE PERCENTAGE OF RESIDENTS USING ALTERNATIVE TRANSPORTATION FOR COMMUNITY

Potential strategies to help achieve this objective:

1. Track bus stops/routes/times that are most crowded and increase trips or range to meet/grow demand.
2. Reroute some of the bus lines to make more parts of the city and surrounding areas more accessible via bus.
3. Establish additional stop locations to make more parts of the city and surrounding areas more accessible via bus.
4. Work with neighboring local governments to coordinate regional public transit opportunities including mass transit, shuttle buses, carpooling and vanpooling, bicycle and pedestrian infrastructure.

Evaluation Indicators and Metrics	2012 Baseline	2013	2025 Target
1) Percentage commuting by car, truck or van -- **drove alone**	85.0%	82.0%	75.0%
2) Percentage commuting by car, truck or van -- **carpooled**	5.4%	6.9%	*
3) Percentage commuting by **public transportation** (excluding taxicab)	3.8%	3.8%	*
4) Percentage commuting by **walking**	0.9%	1.8%	*
5) Percentage commuting by **other means** (assumed to mainly be bicycles, but this also includes motorcycles, taxi etc.)	2.4%	3.1%	*
6) Percentage who **worked at home**	2.6%	2.4%	*

Data is for workers over age 16, taken from the American Community Survey, executed by the same entity as the US Census.

* This metric has been included for background information, not for the purpose of target setting.

OBJECTIVE TM1: TRANSPORTATION, MUNICIPALITY

INCREASE PERCENTAGE OF CITY EMPLOYEES USING ALTERNATIVE TRANSPORTATION FOR COMMUTING

Potential strategies to help achieve this objective:

1. Encourage participation in regional transit.
2. Encourage walking and biking for those living near place of employment.
3. Provide transit passes at 50 percent or more off the regular price.

Evaluation Indicators and Metrics
1) Vehicle miles traveled (VMT/per city employee*year) - intensity.
2) Percentage of city employees reporting alternative transport (bike, walk, carpool, bus)

OBJECTIVE TM2: TRANSPORTATION, MUNICIPALITY

DECREASE GREENHOUSE GAS EMISSIONS FROM WORK RELATED (CITY BUSINESS) TRANSPORTATION

Potential strategies to help achieve this objective:

1. Ban idling (more than five minutes) with local government vehicles/city vehicles.
2. Make electric cars available to city employees for work transportation.
3. Create a bicycle fleet for employees to use for local work-related trips, improving employee health and air quality, and reducing fleet vehicle costs.

Evaluation Indicators and Metrics	2014 Baseline	2025 Target
1) Total GHG emissions for city fleet (CO_2e/year)	n/a	Decrease
1a) Total miles driven city fleet & per department (miles/year)	n/a	Decrease

Additional information and explanations:
Targets will have to be set when baseline data have been established (miles driven have not previously been tracked). Greenhouse gas emissions will be calculated based on miles driven for each separate vehicle.

SOLID WASTE

This section introduces the evaluation indicators and metrics for each objective under the solid waste focus area. The baseline data for 2012 and targets to be met in 2025 are presented. For each objective a list of some potential strategies to help achieve the objective are listed. Strategies chosen for implementation will be determined through the regular city decision-making processes. For a collection of all strategies that have to date been put forward, see Appendix E.

Below are examples of projects pertaining to solid waste that have already been implemented or that are currently being implemented to make Monona a more sustainable city. These strategies are presented as a base upon which future work can be built.

- There is mandatory residential curbside recycling pickup that covers paper, metal cans, glass and plastic bottles.
- A med-drop collection was arranged and the city helped promote a medication drop-off day at a local pharmacy.
- The city provided an eCycle event, an electronic waste drop-off day, in collaboration with Monona Grove High School.
- The Monona PTO has extended their collection of special items for recycling through TerraCycle, www.terracycle.com to the general public. Winnequah school families can continue to drop items at Winnequah School and a community drop-off site has been established at the Monona Public Library.
- Styrofoam is collected at the library for recycling at a local company that transforms the product into picture frames.
- Paper towels have been eliminated in the restrooms at the pool, and replaced with air-dryers.
- The Park and Recreation Department e-mail receipts for financial transactions.
- The city offers more public recycling receptacles in public places (i.e. parks, community center, and libraries) and at events.

OBJECTIVE SC1: SOLID WASTE, COMMUNITY
DECREASE TOTAL SOLID WASTE COLLECTED

Potential strategies to help achieve this objective:
1. Use public education and outreach to promote product re-use and waste reduction.
2. Introduce pay-as-you-throw system.

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1) Absolute residential waste (pounds/year)	4,870,580	5,250,600	5,372,400	*
2a) Intensity (pounds of waste/household*year)	1260	1347	1378	*
2b) Intensity (pounds of waste/resident*year)*	647	698	713	Decrease by 10%

Data from the City of Monona, in conjunction with Advanced Disposal.
* This metric has been included for background information, not for the purpose of target setting.

OBJECTIVE SC2: SOLID WASTE, COMMUNITY
INCREASE PERCENTAGE OF SOLID WASTE BEING RECYCLED (OR OTHERWISE DIVERTED)

Potential strategies to help achieve this objective:
1. Offer more public recycling receptacles in public places and at events (i.e. parks, community center, and libraries).
2. Increase the types of materials that can be recycled.
3. Develop a city-wide collection program that encourages the diversion of food scraps, yard materials and other organics from landfills to composting or anaerobic digestion.
4. Use public education and outreach to promote recycling and backyard composting.

Evaluation Indicators and Metrics	2012 Baseline	2013	2014	2025 Target
1) Annual residential recycling rate (percent)	32%	32%	32%	45%
Eventual addition when infrastructure exists:				
2) Annual compost/digester rate (percent)				

Additional information and explanations:
Annual residential recycling rate per year currently calculated by pounds of residential recycling material at processing plant/pounds of residential waste
Annual compost/digester rate per year calculated by pounds/year of compost received at designated facilities / pounds residential waste

OBJECTIVE SC3: SOLID WASTE, COMMUNITY

INCREASE PERCENTAGE OF MATERIALS FROM CONSTRUCTION AND DECONSTRUCTION DIVERTED FROM LANDFILL

Potential strategies to help achieve this objective:

1. Create construction/deconstruction waste recycling outreach program.
2. Require construction/deconstruction waste management plans and calculate reuse and recycling.
3. Require construction/deconstruction reuse and recycling.

Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) Residential deconstruction/construction waste reuse and/or recycle rate (percent of pounds diverted/pounds total waste*year)	n/a	70%
2) Commercial deconstruction/construction waste reuse and/or recycle rate (percent of pounds diverted/pounds total waste*year)	n/a	75%

*Data is still being assessed.

Additional information and explanations:

While reuse involves any activity that extends the life of an item and recycling includes reprocessing of an item into a new raw material, these indicators and metrics combine reuse and recycle into one rate.

Information about current rates for deconstruction/construction reuse and recycling does not exist for Monona. As a first step working towards this objective, an ordinance could be implemented requiring reuse and recycling plans and reports from deconstruction/construction, without a required rate.

OBJECTIVE SC4: SOLID WASTE, COMMUNITY

INCREASE SAFE DISPOSAL OF WASTE PRODUCTS NOT INCLUDED IN CURB PICK-UP, SUCH AS MEDICAL, HAZARDOUS AND ELECTRICAL WASTE

Potential strategies to help achieve this objective:

1. Develop programs that dispose of household hazardous, medical, and electronic waste.
2. Promote existing programs that dispose of household hazardous, medical, and electronic waste.

Evaluation Indicators and Metrics
1) Number of material types collected
2) Number of drop-off events & drop-off sites per year (available days/year)
3) Mass (pounds/year) of material brought to designated pick up locations

OBJECTIVE SM1: SOLID WASTE, MUNICIPALITY
DECREASE TOTAL SOLID WASTE COLLECTED

Potential strategies to help achieve this objective:

1. Develop a waste and materials management plan based on zero-waste principles, with specific goals, prepared and updated annually.
2. Develop a green purchasing policy.
3. Develop a green printing policy.

Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) Total waste for all municipal buildings and & department (pounds/year)	n/a	Decrease by 15%

*Waste data for Monona currently combines residential and municipal waste. Future plans exist for implementing a Waste Management System, allowing Monona to conduct waste audits. Waste audits will assist Monona in separating the amount of waste collected by residential homes and municipal buildings and departments.

OBJECTIVE SM2: SOLID WASTE, MUNICIPALITY
INCREASE PERCENTAGE OF SOLID WASTE BEING RECYCLED OR OTHERWISE DIVERTED FROM LANDFILLS

Potential strategies to help achieve this objective:

1. Develop a waste management plan for city facilities.
2. Conduct a waste audit at city facilities.

Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) Annual recycling rate (percentage) for municipal facilities	n/a	60%
Eventual addition when infrastructure exists:		
2) Annual compost/digester rate (percentage)		

* See SM1 for explanation about lack of municipal waste data.

OBJECTIVE SM3: SOLID WASTE, MUNICIPALITY
INCREASE PERCENTAGE OF CONSTRUCTION AND DECONSTRUCTION MATERIALS DIVERTED FROM LANDFILLS

Potential strategies to help achieve this objective:

1. Make a construction/deconstruction waste management plans and calculate reuse and recycling.

Evaluation Indicators and Metrics	2012 Baseline	2025 Target
1) Municipal construction waste reuse and/or recycle rate (percentage, pounds diverted/pounds total waste*year)	n/a	80

APPENDICES

APPENDIX A: GLOSSARY AND DEFINITIONS

Focus Area:

A major element (category) of the Monona Sustainability Plan. There are six total focus areas, taken together they are meant to encompass the many characteristics of a sustainable community. Each focus area includes a specific vision and a list of objectives and strategies.

Example: land use, energy, solid waste, etc.

Indicator*:*

A proxy measurement or assessment that indicates progress toward a given objective. One or more indicators are used if a direct quantifiable measurement (metric) cannot be easily/practically established for the objective.

Example: Number of green education sessions hosted, and number of visits to sustainability website, as indicators for raised sustainability awareness.

Metric:

A quantifiable measurement that can be used to assess a baseline value related to an objective, and then to evaluate progress toward meeting relevant targets.

Example: kWh electricity used/household/year.

Objective:

Each focus area includes a list of community objectives and municipal objectives. Objectives define gaps between a current practice and a sustainable practice and indicate a direction in which the practice should change.

Example: Decrease total electrical consumption (kWh).

Municipality objectives pertain to the city's public lands, buildings, and operations. Community objectives more directly affect and involve private residents and businesses.

Strategies:

Each objective includes a list of strategies. Strategies are ideas, methods and actions that, when implemented, will move the community in the direction specified by the given objective.

Example: Encourage new homes to meet ENERGY STAR home standards.

Targets:

Quantitative or qualitative measurements that are set for each objective based on relevant baseline data.

Example: Achieve a 20% reduction in total annual municipal electricity use (kWh/year).

Vision:

Each focus area has a vision, and each vision consists of an aspirational description of what the community intends to accomplish in the long-term future. A vision is intended to serve as a clear guide for choosing current and future courses of action.

APPENDIX B: REFERENCE METRICS

The tables below contain reference metrics used for the calculation of certain baselines and targets included in the MSP.

Reference metrics which will need to be updated each year:

Reference Indicator and Metrics	2011	2012	2013	2014
Number of residents*	7,533	7,523	7,532	7,532
Number of households**	3,868	3,899	3,898	n/a
Number of residential water customers***	n/a	2,460	2,450	2,417
Number of commercial water customers***	n/a	317	318	320
Commercial Building Area (sq ft)****				17,605,242

*Wisconsin Department of Administration **American Fact Finder, an entity governed by the US Census ***Public Service Commission of Wisconsin ****City of Monona

Reference metrics that generally remain constant:

Reference Indicator and Metrics	Value
Total Land area, City of Monona (acres)*	2,100
Municipality Building Area (sq ft)**	
City Hall/Fire Dept/Police	29,450
Community Center	12,000
Library	26,882
Public Works Garage	28,468
Pool	3,000
Park Shelters	1,825

*Capital Area Regional Planning Commission **City of Monona's *25 x 25 Plan for Energy Independence*

APPENDIX C: MONONA SUSTAINABILITY RESOLUTION (12-03-1843)

Resolution No. 12-03-1843
Monona Common Council

A COMMITMENT TO SUSTAINABILITY IN THE CITY OF MONONA

WHEREAS, the environment, society, and economy must all be stable and healthy to support and sustain a community; and,

WHEREAS, a commitment to local and regional cooperation is essential for stewardship of the natural systems that sustain us; and,

WHEREAS, the decisions made today in the City of Monona have far-reaching and long-lasting consequences and should be made with great consideration of their impacts on our natural systems, the economy, and people living now and in the generations to come; and,

WHEREAS, practicing sustainability means working to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors; and,

WHEREAS, adopting principles of sustainability as a principle of decision-making will serve as both a framework for city decision-making and a model for our citizens, encouraging a strong local economy while protecting the natural systems in which residents live, work, and play; and,

WHEREAS, moving toward a more sustainable future is critical for attracting new residents and businesses; and,

WHEREAS, the City of Monona adopts endorses the following four Sustainability Guidelines as a basis for the development and implementation of the city's plans, policies and procedures.

1. Reduce dependence on fossil fuels and extracted underground metals and minerals;

2. Reduce dependence on chemicals and other manufactured substances that can accumulate in Nature;

3. Reduce dependence on activities that harm life sustaining ecosystems; and

4. Reduce barriers to achieving present and future human needs fairly and efficiently.

WHEREAS, these guidelines have been has proven to be effective by the experience of many cities in Wisconsin and in the United States and over 75 cities worldwide; and

WHEREAS, it has been demonstrated that the application of these principles can reduce expenses and save taxpayer dollars; and,

WHEREAS, the City of Monona Sustainability Committee has recommended that these principles be adopted by the City of Monona as its guiding sustainability framework.

NOW, THEREFORE, BE IT RESOLVED that the City of Monona Common Council accepts the recommendation of the Sustainability Committee to adopt the Sustainability Guidelines described herein, and agrees to apply these principles in its planning, policy-making and procedures.

Adopted this 19th day of March, 2012.

BY ORDER OF THE CITY COUNCIL
CITY OF MONONA, WISCONSIN

Robert E. Miller
Mayor

ATTEST:

Joan Andrusz
City Clerk

Approval Recommend By: Sustainability Committee, 2/16/12

Council Action:
Date Introduced: 3-5-12
Date Approve: 3-19-12

APPENDIX D: FOSSIL FUELS RESOLUTION (14-7-1978)

Resolution No. 14-07-1978
Monona Common Council

A RESOLUTION SUPPORTING PRACTICES THAT REDUCE MONONA'S DEPENDENCE ON FOSSIL FUELS

WHEREAS, the Common Council acknowledges that the climate crisis is a serious threat to current and future generations here in Monona, Wisconsin and around the world; and,

WHEREAS, the Common Council acknowledges that climate change is real, primarily caused by the burning of fossil fuels, poses significant risks of disruption of human and natural systems throughout the world including the melting of Arctic ice, sea level rise, increase in the ocean's acidity, flooding, and drought; and,

WHEREAS, the Common Council acknowledges that in 2009, 167 countries endorsed the non-binding Copenhagen Accord which, as drafted by the United States, China, India and Brazil, states that any warming above a 2°C (3.6°F) rise would be unsafe, and if all the known reserves of coal, oil, and gas were burned, they would emit roughly five times (2860GtCO2) the amount we can safely release to maintain a 2°C limit of planetary warming; and,

WHEREAS, the City of Monona in 2010 pledged to become an Energy Independent Community (EIC) and released its '25 x 25 Plan' in which the City of Monona pledged to generate 25 percent of its energy from renewable resources by 2025, and,

WHEREAS, the City of Monona adopted a Sustainability Resolution (12-03-1843) in March 2012 committing the City of Monona to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors; and,

WHEREAS, the City of Monona became part of the Green Tier Legacy Communities Charter (Sustainability Component) in July 2012, under which the city agreed to carry out sustainability initiatives in five categories, Land Use, Water, Energy, Transportation, and Waste; and,

WHEREAS, the City of Monona has invested in an innovative and precedent-setting solar energy project; and,

WHEREAS, the City of Monona has a responsibility to protect the health, safety, and welfare of its residents from the threats and consequences of climate change and is committed to ensuring a resilient and vibrant community for the future.

NOW, THEREFORE, BE IT RESOLVED, by the Common Council of the City of Monona, Dane County, Wisconsin, that the City will take the following steps to further that commitment:

1. That the Sustainability Committee focus on recommending additional methods that city government can implement to reduce the City of Monona's dependence on fossil fuels.

2. That the Sustainability Committee make it a priority to educate the residents and business owners of Monona about the importance of reducing carbon emissions from fossil fuels and suggest a variety of ways they can work towards that goal including; divestment and re-investment, and shareholder advocacy strategies.

3. That all departments of the City of Monona prioritize reducing their greenhouse gas emissions and the use of fossil fuels in their daily operations.

4. That where practicable the City of Monona contract with vendors who provide products and services in a way that would reduce the overall greenhouse gas emissions of the City.

5. That the City of Monona urges individuals, businesses, institutions, and other communities to reconsider their investments in practices and equipment that are dependent on the use of fossil fuels and to invest in, explore and adopt alternative energy sources.

Adopted this 4th day of August, 2014.

BY ORDER OF THE CITY COUNCIL
CITY OF MONONA, WISCONSIN

Robert E. Miller
Mayor

ATTEST:

Joan Andrusz
City Clerk

Approval Recommended by: Sustainability Committee – 6/19/14

Council Action:
Date Introduced: 7-7-14
Date Approved: 8-4-14

APPENDIX E: COLLECTION OF STRATEGIES PROPOSED BY MONONA RESIDENTS

See separate PDF, will be included in plan going to city council.

APPENDIX F: EXAMPLE: ANNUAL IMPLEMENTATION PLAN 2015

Sustainability Plan

Annual Implementation Plan

2015

MONONA
Sustainability Committee

SUSTAINABILITY PLAN OVERVIEW

The City of Monona's Sustainability Plan, (MSP) was developed by the Monona Sustainability Committee in collaboration with other city committees, city employees, community residents and businesses. The plan, adopted by the Monona City Council in July 2015, is a strategic document that establishes sustainability visions and objectives. In addition, measurable targets have been set for 2025 and strategies have been proposed for meeting each. The full plan can be found at www.mymonona.com/sustainability.

The strategies proposed in the MSP will be continuously updated to reflect current possibilities and challenges in the community. Each year an annual progress report will be presented and an annual implementation plan will be developed. This document presents the strategies (actions) which are proposed for implementation in 2015. Strategies chosen for implementation each year will be determined through the city's regular decision-making processes.

Monona's overall vision of sustainability is adapted from the sustainability principle identified in Brundtland's 1987 Report of the World Commission on Environmental Development. This general principle, states:

"…practicing sustainability means working to meet the needs of today's residents and visitors without compromising the needs of future residents and visitors…"

Along with this sustainability principle, the following four sustainability guidelines provide the foundation for the sustainability targets established in the MSP:

- Reduce dependence on fossil fuels and extracted underground metals and minerals.
- Reduce dependence on chemicals and other manufactured substances that can accumulate in nature.
- Reduce dependence on activities that harm life-sustaining ecosystems.
- Reduce barriers to achieving present and future human needs fairly and efficiently.

The plan addresses matters of sustainability in these six focus areas:

- **General Sustainability**
- **Land Use**
- **Water**
- **Energy**
- **Transportation**
- **Solid Waste**

Within each focus area, two groups of objectives are outlined, municipality and community. Municipality objectives pertain primarily to the city's public lands, buildings and operations, while community objectives more directly affect and involve private residents and businesses.

GENERAL SUSTAINABILITY

Following are the objectives or goals within the general sustainability focus area, along with a list of strategies for 2015 pertaining to each. Please note that for some objectives there are no strategies to be implemented in 2015. However, strategies for these objectives will be developed in future years.

COMMUNITY OBJECTIVES

Objective GC1: Raise the sustainability awareness of Monona residents.

- Improve sustainability information on the city website. Include links to organizations and other websites with information about sustainability concepts, including water conservation and pollution, energy conservation, solid waste management, sustainable transportation efforts and sustainable land use opportunities (*sustainability committee*).
- Partner with organizations and programs that offer education about environmental issues and sustainability practices, to raise citizen awareness about sustainability and increase the percentage of residents who have implemented sustainability practices (*sustainability committee*).
- Create an esthetically pleasing sustainability plan for outreach (*sustainability committee*).
- Inform the community about on-going sustainability work the city is doing (through the biannual newsletter, city website, signage in park shelters, articles in THI, etc.) (*City Administrator – Patrick Marsh*).
- Support the Green Tuesdays Film and Lecture Series (*Library – Sally Buffat*).
- Expand the sustainability section at the Library (*Library – Sally Buffat*).
- Increase the number events at the library with a sustainability theme (*Library – Sally Buffat*).
- Improve sustainability information on city website. Include links to organizations and other websites with information about sustainability concepts, including water conservation and pollution, energy conservation, solid waste management, sustainable transportation efforts and sustainable land use opportunities (*Director of Administrative Services – Leah Kimmel*).

Objective GC2: Increase the percentage of residents who have implemented sustainable practices, such as those listed in other sections of this plan.

- Improve sustainability information on the city website. Include links to organizations and other websites with information about sustainability concepts, including water conservation and pollution, energy conservation, solid waste management, sustainable transportation efforts and sustainable land use opportunities (*sustainability committee*).
- Partner with organizations and programs that educate about environmental issues and sustainability practices to raise citizen awareness about sustainability and increase the percentage of residents who have implemented sustainability practices (*sustainability committee*).

 **Objective GC3: Raise the sustainability awareness of Monona businesses.**

- Initiate collaboration between the city and the Chamber of Commerce on sustainability issues (*City Administrator – Patrick Marsh*).

 **Objective GC4: Increase the number of businesses that have implemented sustainable practices, such as those listed in other sections in this plan.**

- Review ordinances that require practices contrary to sustainability (e.g. minimum parking requirements) and evaluate possibilities for changes (*City Planner – Sonja Reichertz*).

MUNICIPALITY OBJECTIVES

 **Objective GM1: Ensure sustainability is considered in the decision making process, including the city budget process.**

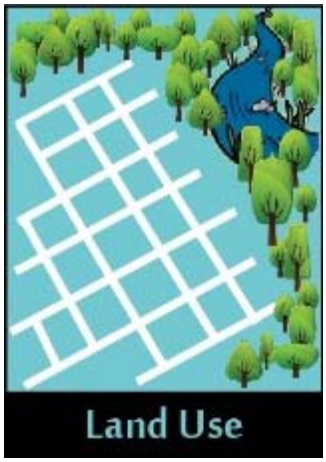
- Develop a process/system for how sustainability is to be considered/accounted for in the decision making process (in committees, city council and by employees) (*sustainability committee*).
- Develop a green purchasing policy (*sustainability committee*).
- Develop a green purchasing policy (*City Administrator – Patrick Marsh*).

 **Objective GM2: Raise the sustainability awareness of citizen representatives to city committees.**

- Require that some portion of the city savings from sustainability efforts is recycled back into more sustainability efforts (*City Administrator – Patrick Marsh*).
- Give a sustainability presentation to each city committee (*City Administrator – Patrick Marsh*).
- Develop sustainability checklists – one page – formatted to the needs of each specific committee and handed out for consideration in decisions (*City Administrator – Patrick Marsh*).

Objective GM3: Raise the sustainability awareness of city employees.

- Include sustainability in job descriptions (*City Administrator – Patrick Marsh*).
- Include sustainability in performance reviews of city employees, especially supervisors, to assess progress towards sustainability goals (*City Administrator – Patrick Marsh*).
- Maintain the city's Green Team with a clear vision and mission *(City Planner – Sonja Reichertz*).
- Include sustainability in job descriptions (*Director of Administrative Services – Leah Kimmel*).
- Include sustainability in performance reviews of city employees (especially supervisors) to assess progress towards sustainability goals (*Director of Administrative Services – Leah Kimmel*).
- Develop and require robust sustainability training for city employees (*Director of Administrative Services – Leah Kimmel*).



Land Use

Following are objectives related to land use, with a list of strategies for 2015 pertaining to each. Please note that for some objectives there are no strategies to be implemented in 2015. However, strategies for these objectives will be developed for future years.

COMMUNITY OBJECTIVES

Objective LC1: Integrate sustainability considerations into the evaluations and decisions made by the Plan Commission (e.g. landscaping, building performance).

- Develop strategies for how to bring sustainability into consideration (*City Planner – Sonja Reichertz*).
- Review ordinances to find those that require practices contrary to sustainability (e.g. required mowing). Analyze if obstacles to sustainability can be removed (*City Planner – Sonja Reichertz*).

Objective LC2: Integrate sustainability components in zoning code (e.g. reduction of impermeable surfaces)

- Review zoning code to find those that require practices contrary to sustainability (e.g. required mowing). Analyze if obstacles to sustainability can be removed (e.g. zoning regulations that prohibit/limit installation of solar panels) (*City Planner – Sonja Reichertz*).
- Zoning for office and retail districts permits floor area ration >1, on average (*City Planner – Sonja Reichertz*).

Objective LC3: Integrate sustainability components in comprehensive plan (e.g. efficient use of resources, mixed-use centers, high density/compact/transit oriented development, walkability)

For this objective, there are no strategies planned for 2015.

Objective LC4: Increase walkability to stores, restaurants and other amenities

For this objective, there are no strategies planned for 2015.

Objective LC5: Maintain percentage of land devoted to open space/parks/recreation

For this objective, there are no strategies planned for 2015.

MUNICIPALITY OBJECTIVES

Objective LM1: Maintain protection and restoration of natural habitats including wetlands

- Identify culverts that obstruct fish migration and install fish-friendly culverts where needed (*Public Works Director – Dan Stephany*).

Objective LM2: Integrate sustainability in landscape management

For this objective, there are no strategies planned for 2015.

Objective LM3: Land Use, Municipality Maintain percentage of land devoted to open space/parks/recreation

For this objective, there are no strategies planned for 2015.

Water

Following are objectives for the water focus area, along with a list of strategies for 2015 pertaining to each. Please note that for some objectives there are no strategies to be implemented in 2015. However, strategies for these objectives will be developed for future years.

COMMUNITY OBJECTIVES

Objective WC1: Increase water efficiency and conservation by residents.

- Develop an incentive program to encourage water conservation among citizens, e.g. incentives for low flow toilets, faucets and showerheads and water softeners (*Finance Director – Marc Houtakker*).

Objective WC2: Increase water efficiency and conservation by commercial and industrial properties.

- Develop an incentive program to encourage water conservation among citizens, e.g. incentives for low flow toilets, faucets and showerheads and water softeners (*Finance Director – Marc Houtakker*).

Objective WC3: Decrease quantity of stormwater runoff to lakes

- Create private-public partnerships for stormwater reduction initiatives (sustainability committee).

Objective WC4: Decrease pollutants and debris in stormwater runoff.

- Develop a website or other media to publicize methods by which the public can report spills, leaks, discharges, or other contamination events (*Public Works Director – Dan Stephany*).

MUNICIPALITY OBJECTIVES

Objective WM1: Increase water efficiency and conservation by municipality.
For this objective, there are no strategies planned for 2015.

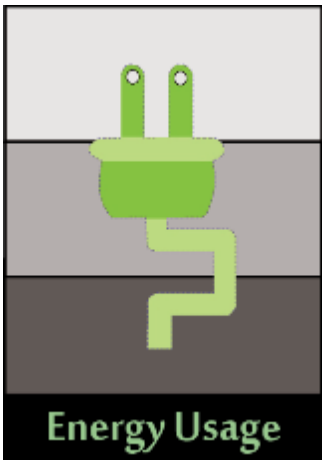
Objective WM2: Maintain percentage of groundwater lost in distribution system.
For this objective, there are no strategies planned for 2015.

Objective WM3: Decrease quantity of stormwater runoff to lakes.

- Create landscaping on municipal land using plants that minimize the need for irrigation (xeriscaping) (*Public Works Director – Dan Stephany*).

Objective WM4: Decrease pollutants and debris in stormwater runoff.
For this objective, there are no strategies planned for 2015.

Objective WM5: Continue participation in the Wisconsin Water Star Program and improve Monona's score and ranking.
For this objective, there are no strategies planned for 2015.



Energy

Following are the objectives for the energy focus area, along with a list of strategies for 2015 pertaining to each. Please note that for some objectives there are no strategies to be implemented in 2015. However, strategies for these objectives will be developed for future years.

COMMUNITY OBJECTIVES

Objective EC1: Increase energy efficiency and conservation by residents.

For this objective, there are no strategies planned for 2015.

Objective EC2: Increase energy efficiency and conservation by commercial and industrial properties.

For this objective, there are no strategies planned for 2015.

MUNICIPALITY OBJECTIVES

Objective EM1: Increase energy efficiency and conservation of municipal facilities and services.

- Upgrade water utility equipment (e.g. variable frequency drive motors) to achieve energy efficiency (*Public Works Director – Dan Stephany*).
- Upgrade stoplights to LED or functional equivalent (*Public Works Director – Dan Stephany*).

Objective EM2: Increase percentage of energy consumption from renewable sources

For this objective, there are no strategies planned for 2015.

Transportation

Following are the objectives for the transportation focus area, along with a list of strategies for 2015 pertaining to each. Please note that for some objectives there are no strategies to be implemented in 2015. However, strategies for these objectives will be developed for future years.

COMMUNITY OBJECTIVES

Objective TC1: Increase percentage of residents using alternative transportation to destinations within Monona (e.g. library, pool, city hall, community center, stores, and restaurants).

- Provide bike racks at municipal buildings and other city operated destinations, e.g. parks (*City Administrator – Patrick Marsh*).
- Evaluate which transportation options are currently subsidized by the community and whether those subsidies promote sustainable transportation choices (*Finance Director – Marc Houtakker*).
- Require bike parking spaces for all new non-residential and multi-family land uses. Set standards for placement and quantity, as a function of intensity of use. (Ordinance for bike parking at businesses?) (*City Planner – Sonja Reichertz*).

Objective TC2: Increase percentage of students (K-12) using alternative transportation.

For this objective, there are no strategies planned for 2015.

Objective TC3: Increase percentage of residents using alternative transportation for commuting.

- Promote available transit services (*Finance Director – Marc Houtakker*).

- Collect more comprehensive data on what residents want in mass transit (*Finance Director – Marc Houtakker*).

MUNICIPALITY OBJECTIVES

Objective TM1: Increase percentage of city employees using alternative transportation for commuting.

- Keep city vehicles well maintained to ensure efficient performance (tire pressure, regular tuning, etc.) (*City Administrator – Patrick Marsh*).
- Provide transit passes at 50% or more off the regular price and/or provide parking cash-out options for local government employees (*Finance Director – Marc Houtakker*).

Objective TM2: Decrease greenhouse gas emissions from work related (city business) transportation.

For this objective, there are no strategies planned for 2015.

Solid Waste

Following are the objectives for the solid waste focus area, along with a list of strategies for 2015 pertaining to each. Please note that for some objectives there are no strategies to be implemented in 2015. However, strategies for these objectives will be developed for future years.

COMMUNITY OBJECTIVES

Objective SC1: Decrease total solid waste collected.

For this objective, there are no strategies planned for 2015.

Objective SC2: Increase the percentage of solid waste being recycled (or otherwise diverted).

- Create more recycling opportunities within the city by offering more recycling receptacles in public places and at events (e.g. parks, community center, and libraries) (*City Administrator – Patrick Marsh*).

Objective SC3: Increase the percentage of materials from construction and deconstruction diverted from landfills.

- Adopt a construction/deconstruction waste recycling ordinance (*sustainability committee*).
- Implement a construction/deconstruction waste recycling program (*City Administrator – Patrick Marsh*).

Objective SC4: Increase safe disposal of waste products not included in curb pick-up, such as medical, hazardous and electrical waste.

For this objective, there are no strategies planned for 2015.

MUNICIPALITY OBJECTIVES

Objective SM1: Decrease total solid waste collected.

For this objective, there are no strategies planned for 2015.

Objective SM2: Increase the percentage of solid waste being recycled (or otherwise diverted).

- Develop a waste management plan for city facilities (*sustainability committee*).

Objective SM3: Increase the percentage of materials from construction and deconstruction diverted from landfills.

- Develop a construction/deconstruction waste management plan and calculate reuse and recycling (*City Administrator – Patrick Marsh*).

Backside Top

This will feature a certain topic (or focus area), and will be different each year.

E.g. Year of water, Year of Biking, Energy, Waste.

Backside Bottom

This could give information about how to get engaged in the implementation of the sustainability plan and could also give tips on how to become more sustainable.