



**FACILITIES, GROUNDS &
CONSTRUCTION MANAGEMENT
DEPARTMENT**

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Director

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TO: Department of Natural Resources

FROM: Dean Gazza

DATE: 12/26/2012

RE: 2012 City of Appleton Annual Report, Green Tier Legacy Community

This past year was exciting to have (4) more municipalities become Green Tier Legacy Communities, thus making the total (9) communities working to achieve similar goals. The City of Appleton continues to be engaged and continues to provide leadership in sustainability.

Please find sustainability initiatives as reported by our departments for 2012. Many of the initiatives reported in 2011 continue to be ongoing efforts and were not reported below. The initiatives listed below indicate new initiatives or significant progress to those listed in 2011.

In addition, please find our updated Legacy Charter Appendix 3 which is updated to indicate our progress in various areas. We had a goal or a score of 201 as projected in 2011. We did reach our goal by reaching a score of 202. We look forward to reaching our targets as noted in 2015.

Sustainability Initiatives by Department

Community Development

- Proactive in promoting redevelopment of existing vacated properties. Crush and reuse aggregate on-site, seek EPA funding, etc.
- The Homeowner Rehabilitation Loan Program was established in 1979 and provides financial and related technical assistance for low- to moderate-income homeowners in the

City of Appleton for the rehabilitation of their owner-occupied home or duplex. Income, equity, and asset limits apply to the homeowners.

- The Rental Rehabilitation Loan Program was established in 1995 and provides financial and related technical assistance to property owners who rent the units in a property located in the City of Appleton.

Parks, Recreation and Facilities Management

- Fuel savings due to working with employees that operate vehicles to take direct routes to the work site and back to base. Mow only when grass needs it and mow only the high areas of growth in early and late season.
- Station workers and equipment closer to work sites. Reduces fuel consumption and emissions.
- Use of total vegetation killers (roundup) around fence lines, posts, etc. This reduces the need for gas operated trimmers/ mowers.
- Implemented a weed spraying program based on percentage of weed cover. Because we can cite a percentage of allowable weed cover in the parks or other city properties less pesticides are used.
- We only use fertilizers without phosphorous. Following NR151 regulations.
- If possible we no longer use any solvent based paints or cleaning agents.
- Recycle city trees into playground surfacing and planting bed mulch.
- Use leaves from fall street removal for compost additives to planting beds and landscape seeding operations.
- Usage of LED lighting fixtures where feasible in City facilities and parks.
- Replacements of standard drinking fountains with bottle fill fountains to encourage the reuse of plastic bottles.
- Utilization of recycled carpet for all replacements in 2012.
- Recycling of construction materials including donations to organizations, such as Restore, for reuse when feasible.
- Continued development and acquisition of green space for parks usage to maintain green areas within the City.
- Continued planning for additional trails including money budgeted in the 5-year Capital Plan for projects that will link and trails across the Fox River by reutilizing existing abandoned railroad trestles.

Finance

- Expanding use of procurement cards improves efficiency for small purchases, reducing paperwork and trips to the office for purchase orders.
- Continuing to move toward paperless purchasing with electronic distribution of bid requests, and facilitating electronic submittal of bids, quotes and proposals.
- Elimination of over 70% of our industrial uniform laundering service requirements, reducing natural resource consumption and associated trucking and paperwork.
- Expanded the use of Green Seal cleaning supplies to 7 additional facilities (Fire stations and Library).

- Plans made for upgrade of water metering and monitoring system Citywide, for improved leak detection and water conservation incentives.
- Expanded use of smart phones as an efficiency tool, making the office “portable” and reducing transportation and paper consumption.

Mayor

- Implemented Sustainability into the City’s Strategic Plan and continually presents a budget making sustainability a major importance for our City.
- Promotes and encourages sustainability within our organization and throughout our community.

Police Department

- Paper Reduction – Scanning and emailing rather than copying; electronic filing.
- Collect prescription drugs to keep them out of the landfills.
- Lights kept on low in hallways, minimal lighting in Operations areas.
- Lights with auto turn-off sensors.
- Thermostats that are regulated within a couple of degrees.
- Restrictors on some faucets.
- Recycling containers throughout the building – paper, plastic, aluminum, other recyclables.
- Battery recycling container .
- Bicycle rack to encourage biking to work.
- Two retention pond/storm water areas – green space.
- Procedures in place to prevent idling/squads running in parking lot.
- Pilot of hybrid Ford Fusion.
- Bikes from evidence recycled.
- Water dispensers (saved over 3,000 plastic bottles in the past six months).
- Planting new shade bearing trees in 2013.
- Recycled copy paper.
- Confidential bins shredded and then recycled.
- Carpooling for training.
- Copiers with energy saving features/sleep mode.
- Boot cleaners made from recycled materials to keep from having to re-mop floors/prevent accidents during winter.
- Dehumidifiers in locker rooms and training rooms to help regulate temperatures.
- Use of some eco-friendly cleaning supplies.
- Provide motorcycle parking.

Public Works

- Installed bike lanes on Newberry Street and Bike Routes on Packard Street and State Street. Business Unit 17022 linked to Strategic Objective #5.
- Approved design to “Road Diet” Ballard Road from 4 lanes to 3 lanes and add bike lanes when road reconstructed in 2013. Business Unit 17014 linked to Strategic Objective #5.
- Receive Tree City USA award.
- Approved purchasing 95 gallon automated recycling carts to promote recycling and divert these materials from the landfill. Business Unit 2221 linked to Strategic Objective #5.
- Reconstructed/repaired \$600,000 of sidewalk to maintain our walkable community. Business Unit 17015 linked to Strategic Objective #5.
- Purchased 10 additional GPS units to monitor vehicle idling and improve vehicle routing. Business Unit 6110 linked to Strategic Objective #5.
- Started construction of 2 new stormwater ponds. Business Unit 5230 linked to Strategic Objective #5.
- Retrofitted 50 HPS street lights to LED lights. Business Unit 17023 linked to Strategic Objective #5.

Technology Services

- Updated numerous servers and redesigned the server room with energy efficiency in mind. Several pieces of equipment were eliminated and/or replaced during this project.
- A new air conditioning system was added to the server room with various capabilities to control run-time and reduce energy usage.

Utilities

Water Plant

- The AWTF UV Project - Under the new compliance rules the Appleton Water Treatment Facility (AWTF) has begun design planning to improve water treatment processes and to create a greater removal values for microbial contaminants (i.e., Cryptosporidium and Giardia). An Ultraviolet (UV) light process is being incorporated into the plant treatment train. Other plant modifications will also occur including upgrading the existing carbon contactors. The proposed UV system is a more sustainable process when compared to the existing ultrafiltration process. Capital requirements for UV are lower in comparison because there is less manufactured equipment and parts to purchase and capitalize (e.g., comparatively \$10,000,000 less). In terms of operating expenses, the UV process does not have the electrical, chemical or waste generated demands of the existing ultra filtration process. From a preliminary report the AWTF’s chemical, electrical and waste costs will decrease \$500,000 annually. It is important to note that the treatment for the contaminants will improve with the completion of the project. This UV project represents the City’s commitment towards a more sustainable water treatment facility.

Wastewater Plant

- Biosolids Compost - Research and development project to evaluate composting as an alternative treatment of biosolids to create a high quality "Class A" material that could be used as a soil conditioner, nutrient amendment, and/or erosion control product. Has the potential to greatly expand options for beneficial reuse beyond traditional land application to farm fields or landfilling while off-setting the need to expand on-site biosolids storage (180-day DNR requirement).

Valley Transit

- Purchased two hybrid Ford Fusions to replace traditional gas-powered staff vehicles.

If you have any questions or comments concerning the 2012 Annual Report, please feel free to contact Dean Gazza, Director of Parks, Recreation and Facilities Management @ (920) 832-5572, or e-mail dean.gazza@appleton.org.



City of Appleton 2011 Baseline* City of Appleton 2012 Goal* City of Appleton 2015 Goal*

Field Value

Wisconsin Legacy Communities Strategy Options
(Last Revised 12-20-2012 by Dean Gazza)

The purpose of the strategy options matrix is to provide a broad list of best management practices that encompass several elements of sustainability including transportation, energy, land use, water, and waste. This list is not inclusive.

Prospective signatories should use the strategy options to gauge environmental performance and then use this baseline to strive for superior results.

Superior environmental performance may be achieved when municipalities use the strategy options to develop a sustainability plan that reduces their overall negative impact on the environment.

*Please note that these numbers are estimates made by Dean Gazza, Director of Parks, Recreation and Facilities Management, Paula Vandehy, Public Works Director and Karen Harkness, Community Development Director on Oct. 12, 2011 for initial comparisons against other Green Tier Legacy Communities. Please do not cite these numbers without first consulting Dean Gazza at (920) 832-5572 or dean.gazza@appleton.org

TRANSPORTATION DEMAND MANAGEMENT:

Transportation demand management strategies aim to reduce GHG emissions and VMT by influencing change in individual behavior. These strategies encourage walking, bicycling, and transit as modes of transportation within a community and seek to curb the number and length of trips by vehicle.

Field Value	Description	City of Appleton 2011 Baseline*	City of Appleton 2012 Goal*	City of Appleton 2015 Goal*
<u>Bicycle and Pedestrian Programs/Projects</u>				
2	Require bike parking for all new non-residential and multifamily uses.	0	0	2
1	Set standards for placement and number (as function of intensity of use) for bike parking spaces.	0	1	1
3	Commuter bike routes identified and cleared.	3	3	3
5 to 10	League of American Bicyclists certification. (Bronze 5, Silver 7, Platinum 10)	0	0	5
3	Funded and operating SRTS program (or functional equivalent) covering at least 10 percent of students.	0	3	3
1	Conduct annual survey of students' mode of transport to school.	0	0	1
<u>Employer-Based Programs</u>				
5	Require large employers seeking rezoning to set a price signal (cash-out or charge).	0	0	0
5	Require large employers seeking rezoning to provide subsidized transit.	0	0	0
5	Require large employers seeking rezoning to provide a TDM plan that would reduce trips by 20 percent over business as usual.	0	0	0
<u>Traffic Volume</u>				
3	Track VMT or traffic counts and report on efforts at reduction (including those on this list).	1	2	2
3	Eliminate parking minimums from non-residential districts.	0	0	0
5	Set parking maximums at X per square feet for office and retail uses.	0	0	0
5	Scheduled transit service at basic level (hour peak service within half-mile of 50 percent of addresses).	0	0	0
10	Scheduled transit service at enhanced level (half-hour peak service within 75 percent of addresses).	0	0	0

TRANSPORTATION SYSTEM MANAGEMENT

Transportation system management strategies aim to reduce GHG emissions and VMT by improving the overall performance of a transportation system. These strategies improve existing infrastructure, introduce new technology, and plan for the future of the system.

Field Value	Description	City of Appleton 2011 Baseline*	City of Appleton 2012 Goal*	City of Appleton 2015 Goal*
<u>Preservation and Improvement</u>				
3	Develop and fully fund comprehensive maintenance program for existing roads.	3	3	3
1 to 5	Charge impact fees for new roads.	0	1	2
5	Calculate lane-miles per capita for arterials and collectors, and show reductions	5	5	5
5	Prepare a plan identifying disconnections in bike and pedestrian networks, prioritizing fixes and identifying potential funding sources for the most important projects.	3	4	5
5	Any proposal to add lanes to a two-lane roadway shall be evaluated for a center turn lane, the preferred option over an expansion to four lanes.	0	5	5
3	Identify four-lane roadways with fewer than 20,000 vehicles per day (AADT) and evaluate them for "road diets" with bike lanes or on-street parking	2	3	3
<u>Electric Vehicles</u>				
1	Allow NEVs on appropriate roadways.	1	1	1
2	Provide public charging stations	0	0	1
<u>Vehicle Idling</u>				
2	Ban idling (more than 5 minutes) with local government vehicles.	2	2	2
5	Ban idling (more than 5 minutes) community-wide.	0	0	2

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ZONING AND DEVELOPMENT

Zoning and development strategies work toward improving the overall environmental, economic, and social health of a community by promoting mixed-use and infill development, walkable neighborhoods, and an overall sustainable lifestyle.

<u>Infill Development</u>				
5	Identify priority areas for infill development, including those eligible for brownfields funding.	5	5	5
1	Create land bank to acquire and assemble priority infill sites	0	0	0
1	Develop an inventory of known contaminated properties for reuse planning, with possible GIS application	1	1	1
<u>Walkscore</u>				
10	Measure Walkscore at 10 random residential addresses per Census tract, compute average, and improve upon overall score	0	2	5
<u>Zoning</u>				
5	Adopt traditional neighborhood design ordinance (if population is less than 12,500)	0	5	5
5	Zoning for office and retail districts permits floor-area ratio > 1, on average.	3	3	3
8	Zoning for office and retail districts requires floor-area ratio > 1, on average.	0	0	0
5	Zoning code includes mixed use districts	10	10	10
8	Mixed-use language from Smart Code TBA.	0	5	5

NATURAL RESOURCE MANAGEMENT

Natural resource management strategies seek to conserve, preserve, protect and promote a community's greenspace, wildlife, wetlands and waterways for this and future generations by promoting pervious surfaces and adequate setbacks.

<u>Canopy</u>				
3	Adopt tree preservation ordinance per GTLC standards.	0	1	3
4	Set a tree canopy goal and develop a management plan to achieve it	1	1	3
2	Require trees to be planted in all new developments	2	2	2
2	Certification as Tree City USA	2	2	2
<u>Mowing</u>				
2	Local government rights of way mown or cleared only for safe sightlines and/or to remove invasive species.	1	1	2
<u>Water Protection</u>				
10	Establish 75-foot natural vegetation zone by surface water.	10	10	10
5	Inventory wetlands and ensure no net annual loss.	2	3	5

COMMUNITY ENERGY USE

Community energy use strategies encourage energy efficiency and the use of renewable fuels to reduce total energy consumption throughout the community

<u>Community Energy Use Policies</u>				
6	Use PACE financing	0	0	0
1	Watt meters available to the public	1	1	1
10	Adopt Residential Energy Conservation Ordinance (time-of-sale certification and upgrades).	0	0	0
<u>Measuring Community Energy Use</u>				
4	Work with local utilities to calculate total electricity and natural gas consumption annually, beginning with the fifth year before entering the program.	4	4	4
1	State of Wisconsin Energy Independent (EI) Community designation.	0	1	1

MUNICIPAL ENERGY USE

Municipal energy use strategies encourage municipal employees to conserve energy, preserve the environment, and decrease greenhouse gas emissions from municipal facilities, services, and vehicle fleets.

<u>Government Energy Use Policies</u>				
5	Include transportation energy/emissions as criterion in RFPs for purchases of goods over \$10,000.	0	0	3
3	Develop list of lighting, HVAC and shell improvements to raise Energy Star Portfolio Manager or LEED EBO&M score	3	3	3
3	Reduce motor fuels use for non-transit activities --	1	2	3
6	Provide transit passes at 50 percent or more off the regular price and/or provide parking cash-out options for local government employees.	0	0	0
5	Streetlights operate at 75 lumens/Watt or higher	5	5	5
3	Stoplights are LED or functional equivalent	3	3	3
5	Municipal electricity purchases are at least 5 percentage points higher in renewable content than the statewide renewable portfolio standard requires. Calculation may include self-generated power and purchased offsets.	0	3	5
<u>Measuring Government Energy Use</u>				
5	Complete EPA Energy Star Portfolio Manager spreadsheet for government energy use. Or score existing buildings with LEED EBO&M.	0	3	5
2	Calculate annual government fleet use of motor fuels, in gallons of petroleum and biofuels, beginning with the fifth year before entering the program.	1	1	2
10	All new and renovated municipal buildings must meet LEED Silver or greater.	0	5	10

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		WATER USE CONSERVATION		
		Water Conservation strategy options set baselines and goals for water and energy performance in municipalities. They measure progress and promote water conservation by the government, business, and the community at-large.		
		Water Conservation		
5	Track water and sewer use annually, beginning with fifth year before entering program, and develop plan for reductions.	5	5	5
4	Develop a water loss control plan with targets below the 15% required by the state and include a system-wide water audit implementation and time table	4	4	4
2	Join EPA's WaterSense Program for water utilities or the Groundwater Guardian Green Sites program and promote them to local business.	2	2	2
6	Use block rates and flat rates to encourage water conservation among residential, commercial, and industrial users.	5	5	5
1	Financial assistance for sewer lateral replacements.	0	0	0
2 to 6	Upgrade water utility equipment (e.g., variable frequency drive motors) to achieve energy efficiency.	6	6	6
3	Infiltration and inflow reduction by 10%	3	3	3
5	Wastewater biogas captured and used in operations.	5	5	5
5	Plan for replacing all toilets using > 1.6 gpf and annual progress sufficient to reach 90 percent replacement in 10 years.	3	3	5
		Local Government Use		
2	Install waterless urinals in men's restrooms at municipal facilities (city hall, parks, etc.)	0	0	0
3	All outdoor watering by local government, excluding parks and golf courses, from rain collection.	2	3	3
4	Develop a water efficiency and conservation plan for municipal buildings	1	2	4
		STORMWATER MANAGEMENT		
		Stormwater Management strategy options encourage the use of best management practices to achieve a reduction in the amount of harmful pollutants introduced to our streams, rivers, and lakes.		
3	Develop a regular street sweeping program to reduce total suspended solids	3	3	3
3	Stormwater utility fees offer credits for best management practices such as rain barrels, rain gardens, and pervious paving	3	3	3
2	Inventory all paved surfaces (e.g., by GIS mapping), and develop a plan for reduction	2	2	2
2	Work with commercial or light industrial businesses to develop stormwater pollution plans	1	1	2
		WATER AND DEVELOPMENT		
		Water and Development strategy options link water conservation and the preservation of land, wetlands, and wildlife habitat while promoting compact development, restoration and rehabilitation efforts, and long-term planning.		
		Land Development		
5	Identify key green infrastructure areas during plan development and/or implement a plan to acquire and protect key green infrastructure areas	5	5	5
		Waters, Wetlands, and Wildlife		
1 to 6	Replace concrete channels with re-meandered and naturalized creeks, wetlands, or swales	6	6	6
3	Develop a system for identifying culverts that obstruct fish migration and install fish friendly culverts where needed	1	3	3
4	Provide incentives for protection of green infrastructure, sensitive areas, important wildlife habitat, or for the restoration or rehabilitation of wetlands or other degraded habitats such as credit towards open space or set-aside requirements	2	3	4
		WASTE MANAGEMENT AND REDUCTION		
		Waste Management and Reduction strategy options encourage municipalities and their citizens to divert organics and recyclables from landfills and properly dispose of hazardous materials in an effort to reduce waste in a community.		
3	Community waste stream monitored at least annually. Waste reduction plan prepared and updated annually	3	3	3
4	Waste and materials management plan based on "zero-waste" principles, with specific goals, prepared and updated annually	2	4	4
3	Construction/deconstruction waste recycling ordinance	2	3	3
3	Mandatory residential curbside recycling pickup that covers paper, metal cans, glass and plastic bottles	3	3	3
5	Develop a municipal collection program that encourages the diversion of food discards, yard materials, and other organics from landfills to composting or anaerobic digestion with energy recovery	2	3	5
3	Develop and promote programs that dispose of household hazardous, medical, and electronic waste	3	3	3
4	Use anaerobic digesters to process organic waste and produce energy	0	0	4
3	Implement municipal ordinances requiring manufacturer takeback for fluorescent bulbs, thermostats and other mercury-containing devices	0	0	1
2	Ordinances in place to reduce the usage of phone books as well as single-use shopping bags, styrofoam food containers and other disposable packaging	0	1	2
2	Pay-as-you-throw system implemented by municipality or required of private waste haulers	2	2	2
1	Use public education and outreach to promote recycling, backyard composting, product re-use and waste reduction	1	1	1
322		152	202	253
		47%	63%	79%