



VILLAGE OF SCHAUMBURG



# Comprehensive Green Action Plan



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## *Village of Schaumburg's Green Roots*

The Village of Schaumburg has been affectionately and officially known by many names. Although the area's first official name was Township 41, Schaumburg was originally known as Sarah's Grove in reference to 160 acres of beautiful woodland that attracted many early settlers. In 1851 prominent German landowner, Friedrich Nerge declared the official name to be Schaumburg. From its earliest days, the main occupation of Schaumburg Township residents was farming with an emphasis on dairy products. Without benefit of a river and lacking a major rail line, Schaumburg remained isolated from much of northeastern Illinois for more than 50 years. This isolation came to an end with the invention of the automobile. With the expansion of O'Hare Field in 1955 and the construction of the Northwest Tollway in 1956 the rural character of the area changed considerably.

The village was incorporated on March 7, 1956 and grew from a small farming community of 130 residents and a land area of two square miles, to a bustling suburban community with 75,936 residents occupying approximately 19 square miles. In 1961 the village's first comprehensive plan was adopted which earmarked a large portion of the community for intensive industrial, commercial, and office development. Expanses of open space along major floodways and flood plains were designated to be preserved as parks and public open spaces. Some of these areas remain as open space and offer the most widely-diversified ecosystems in the village.

Residential development began in earnest in 1959, when the village approved plans to build the first large residential subdivision in the community. Over the next 28 years, more than 5,000 single family homes were built in 22 stages as part of this development. It was during review of this large residential development that the Campanelli Brothers voluntarily donated nine acres of the original Sarah's Grove which is now part of the Oak Hollow Conservation Area. In the 1970s, several phases of the Timbercrest Subdivision were also built from which the remaining 8 ½ acres of the Oak Hollow Conservation Area were donated as open space. One of Schaumburg's finest natural areas, the site contains 100+ year old oak and hickory trees, many rare and beautiful native wildflowers, wetlands, a restored prairie, and a ½ mile trail system.

During the 1970s two additional parcels of the original Sarah's Grove would be preserved as development in Schaumburg continued. A five acre woodland parcel located in the southwest portion of Friendship Village, and an additional 4 ½ acres of woodland in the Sarah's Grove PUD located on the south side of Schaumburg Road.

Over the next five decades, residential and commercial development continued at a rapid rate.

In 1970, Ellsworth Meineke, one of the Village of Schaumburg's founding fathers, planted a seed for the preservation of the area's natural resources. He worked hard to help pass a 1973 Schaumburg Park District referendum that included funds for land acquisition in Spring Valley and helped to persuade the village to commit funding toward additional land purchases for the purpose of preservation. In 1974, the Spring Valley Nature Club, the brainchild of Ellsworth Meineke, was chartered with a mission to ensure the preservation of the native grasses, plants, trees, and wildlife that were being lost by development. Spring Valley Nature Sanctuary is now home to over 135 acres of fields, forests, marshes, and streams.



## *Village of Schaumburg's Green Roots - continued*

In 1990 the Olde Schaumburg Centre Park located at the northwest corner of Schaumburg Road and Pleasant Drive was dedicated as a wetland and wildlife preserve. The park consists of three acres of native prairie plantings that can be enjoyed by walking through the park's extensive pathway system or by sitting out on one of the observation decks built above the water. In addition to the preservation of open space, Olde Schaumburg Centre Park is an excellent example of how ecologically sound native plant restoration can be utilized as a stormwater management tool.

The village continues with Ellsworth Meineke's vision to preserve open space today as development and redevelopment of properties occurs. In 2001, the Village Board adopted the Village of Schaumburg Biodiversity Recovery Plan which provides specific guidance for maintaining, restoring, and preserving the integrity of open space in the village. The Biodiversity Recovery Plan targets specific high priority sites and makes recommendations for the preservation and restoration of these sites.

The preservation of natural resources is just one path on the road to preserving the environment. Building sustainable neighborhoods that are pedestrian friendly, reducing energy use, expanding mass transit options, updating codes and policies, and educating the community will enable the village to expand upon the preservation of natural resources to protect the environment from the effects of climate change. The village is pleased to present this Comprehensive Green Action Plan (C GAP) as further commitment to sustainability and environmental stewardship.




Over the past several years, awareness about the need for environmental change has been growing. The current rate of climate change and environmental decline places the environment at a crossing point. By signing on to the U.S. Conference of Mayors Climate Protection Agreement, the village has committed to take action to reduce the impact of climate change on a local level so future generations will benefit from the village's actions.

On February 16, 2005, the Kyoto Protocol, the international agreement to address climate change, became law for the countries in which it was ratified. The protocol calls for an emissions reduction target for the U.S. of 7% below 1990 levels by the year 2012. Although the United States did not ratify the protocol, Seattle Mayor Greg Nickels launched the U.S. Conference of Mayors Climate Protection Agreement on February 16, 2005 to advance the goals of the Kyoto Protocol in the United States. The Village of Schaumburg signed on to the U.S. Conference of Mayors Climate Protection Agreement on May 31, 2005.

The U.S. Conference of Mayors Climate Protection Agreement is a framework consisting of twelve actions that can be used to meet or exceed the Kyoto Protocol targets for reducing global warming pollution. For the purposes of the village's Comprehensive Green Action Plan, these actions have been broken down into nine categories: CO<sub>2</sub>e baseline, land use, transportation, green power, energy efficiency, green buildings, water conservation and management, recycling and waste reduction, and education and outreach. The village has taken these categories and created innovative, cost effective environmental goals that will compliment the village's existing programs. This plan is designed to define the Village of Schaumburg as a leader in the area of environmental stewardship.

The C GAP addresses the twelve actions of the U.S. Conference of Mayors Climate Protection Agreement within nine categories by highlighting current practices and addressing future goals. The plan concludes with funding and partnership opportunities to advance the implementation of the plan.



*Schaumburg has been designated as a "Cool City" by the Sierra Club. Cool Cities are Cities that have signed on to the US Conference of Mayors Climate Protection Agreement, green their city's vehicle fleets with hybrid and other cleaner cars, modernize city buildings with money-saving energy-efficiency technology, and invest in clean and safe renewable energy.*



## Plan Administration

The implementation of C GAP will be coordinated by the Community Development Department with the oversight of the Manager's Office. Progress of the departmental initiatives, programs, and goals in the plan will be presented to the Village Board on a quarterly basis. The village will publish a report on the progress of C GAP on an annual basis. This annual report will include a review of the plan and will include necessary changes for the following year. The goals of C GAP will be included in the village's annual goals.

The designated Community Development employee will manage the Green Team and will serve as a representative on the Capital Improvements Program Committee to ensure the integration of C GAP.





# CO<sub>2</sub>e Baseline



*USCM Action 1: Inventory global warming emissions in village operations and in the community, set reduction targets, and create an action plan.*




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The three most important greenhouse gases directly emitted by human actions are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). The international standard is to express these greenhouse gases in carbon dioxide (CO<sub>2</sub>) equivalents or CO<sub>2</sub>e.

In order to measure and quantify the village's success in the reduction of emissions, a baseline of CO<sub>2</sub>e emissions is helpful. The village will determine the desired reporting protocol and pursue a baseline of CO<sub>2</sub>e emissions contingent upon funding. When that information is received, the village can target areas for emissions reductions and develop specific recommendations for that portion of the plan implementation. In the absence of a CO<sub>2</sub>e baseline, the village will pursue the goals as included in the plan and will determine responsible parties, timelines, budget considerations, and financing strategies to implement the goals of the plan.

The goals set in this plan may be evaluated and prioritized after the CO<sub>2</sub>e baseline is established and specific targets are set to reduce the CO<sub>2</sub>e impact.



*Clean Air Counts is a collaborative effort between the Metropolitan Mayors Caucus, City of Chicago, US EPA – Region 5, and Illinois EPA to achieve specific and significant reductions in targeted smog-forming pollutants and major reductions in energy consumption.*







## Land Use

*USCM Action 2: Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities.*

### **USCM Action 2: Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities.**

**F**rom the adoption of the village's first General Development Plan in 1961 to the most recent edition of the Comprehensive Plan adopted in 1996, Schaumburg has benefited from the vision of its elected officials to guide the development of the community.

#### **Current Programs:**

The Village of Schaumburg updated its Comprehensive Plan in 1996 to guide the growth of the village in keeping with the village motto "Progress through Thoughtful Planning". The Comprehensive Plan addresses future land uses, sets policy guidelines, and emphasizes the importance of preserving natural areas.

In 2004, the Village Board approved an amendment to the Village of Schaumburg Comprehensive Plan to incorporate the Biodiversity Recovery Plan. Using the directives established in the Biodiversity Recovery Plan, design guidelines for properties with desirable natural amenities were adopted by the Village Board to ensure the preservation of these natural assets.

In 2008, the Village Board approved an amendment to the Village of Schaumburg Comprehensive Plan to incorporate a neighborhood Transit Oriented Design District (TOD) plan for the Suburban Transit Access Route (STAR) Line area in Schaumburg. The STAR Line is a proposed rail line that would connect nearly 100 communities in the northwest suburbs. The Northwest Corridor Segment of the 55 mile STAR line route will run from Hoffman Estates (Prairie Stone), east via Schaumburg, Rolling Meadows, Arlington Heights, Elk Grove Village, Des Plaines, and O'Hare International Airport. The TOD incorporates many of the elements detailed in USCM Action #2.

Additionally, the village's comprehensive development review process encourages new and redeveloped properties to include pedestrian amenities into their project plans. The Waterbury Place and Pleasant Square residential subdivisions are two examples of compact, walkable neighborhoods that are conveniently located to the nearby library, grocery store, and other shopping opportunities in the Olde Schaumburg Centre Historic District. The Streets of Woodfield lifestyle center and Shoppes at Prime Village retail village are examples of compact, walkable retail centers.

*The Village of Schaumburg adopted a resolution of support of the Chicago Wilderness Biodiversity Recovery Plan in 2001, and subsequently adopted the Village of Schaumburg Biodiversity Recovery Plan in 2004. The Plan provides specific guidance for maintaining, restoring, and preserving the integrity of open space in the village.*

*The Village of Schaumburg Biodiversity Recovery Plan was recognized and promoted by Lieutenant Governor Pat Quinn in a letter sent to all Mayors in the State of Illinois.*

*Chicago Wilderness also recognized the plan with their Excellence in Conservation Award in 2006.*



### **USCM Action 2: Adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities.**

#### **Goals**

- The village should continue its efforts to preserve open space and to encourage the use of native plantings in future public and private developments in order to advance the goals of the U. S. Conference of Mayors Climate Protection Agreement and to preserve valuable natural resources.
- Utilize the STAR Line TOD District Plan as a guideline to ensure the plan's concepts such as high density and walkable urban community spaces are implemented. Incorporating a mixture of residential and commercial uses in the TOD District area will ensure a vibrant daytime and evening population and is crucial to the economic vitality of the TOD District and the viability of the future STAR Line.
- Encourage walkable, transit friendly neighborhoods and retail centers in all new developments.
- Continue to review and evaluate land use regulations and policies regularly to protect open space, encourage walkable urban spaces, and limit sprawl.

## Land Use - continued

### **USCM Action 3: Maintain healthy urban forests; promote tree planting to increase shading and to absorb carbon dioxide.**

**M**aintaining a healthy urban forest is an area in which the village excels. The village actively promotes the benefits of trees and native plantings and has enacted policies and ordinances to ensure that our urban forest is preserved, maintained and enhanced.

#### **Current Programs:**

The Engineering and Public Works Department manages the urban forest which consists of over 34,000 village owned trees. Shade trees comprise the majority (89%) of the managed trees: 38% Ash, 22% Honeylocust, 22% Maple, 4% Linden, and 3% Oak with the remaining trees comprised of various shade, ornamental, and evergreen trees. The average size of a village owned tree in Schaumburg is 11 (eleven) caliper inches.

In 2003 the village inventoried all the village owned trees and placed this information in the web GIS system. This inventory allows the village to track the quantity of each tree type as well as the health, maintenance, and any insect or disease concerns for each tree.

The village installs approximately 500 trees annually on village properties and along the 253 miles of roadways in town. Additionally, there are over 25 miles of roadways with landscaped medians in the village which enhance the community while assisting in carbon dioxide absorption.

An aggressive, cost free, street tree replacement program is in place to ensure the vitality of the street tree program.

Maintenance of the village's urban forest through tree trimming and insect and disease monitoring is a priority for the Landscape Division of the Engineering and Public Works Department. The tree trimming program is tracked through the web GIS system to ensure that all trees are trimmed on a consistent basis. Insects such as Gypsy Moth and Emerald Ash Borer as well as diseases that pose a significant threat to the health and viability of the urban forest are monitored carefully in order to determine best management control practices.

The village adopted a robust Tree Preservation Ordinance that governs the preservation and removal of trees. This ordinance is reviewed annually.

The Landscape Division of the Engineering and Public Works Department partners with the local school district annually to celebrate Arbor Day by planting a tree for the school district. This outreach is important in efforts to engage and educate the school children in the benefits of trees and how they help the environment.



## ***Land Use - continued***

**USCM Action 3: Maintain healthy urban forests; promote tree planting to increase shading and to absorb carbon dioxide.**

### **Future Goals:**

- Continue the installation of street trees with new developments and fill open gaps along roadways.
- Continue to consider enhancement of public spaces with trees and landscaping wherever possible.
- Maintain the urban forest through tree trimming and monitoring insect and disease populations.
- Create an educational program to promote tree planting throughout the village to increase shade and carbon dioxide absorption.
- Continue to carefully monitor and enforce the tree preservation ordinance.





## Transportation

*USCM Action 4: Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit.*

*USCM Action 5: Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to biodiesel.*

## **USCM Action 4: Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit.**

**T**he village extensively promotes local and regional transportation options, particularly in the areas of public transit and biking. In fact, the village has a Transportation Department that is dedicated to ensuring efficient transportation which is unique for a suburban community of the village's size.

### **Current Programs**

#### Local Bikeways Program

Village of Schaumburg's nationally recognized (League of American Bicyclists "Bicycle Friendly Community") Bicycle Program consists of an 86-mile network of both on and off-street bicycle paths and an outreach program that promotes and encourages bicycling as a viable alternative form of travel. The Village of Schaumburg's program was officially incorporated into the Village's Comprehensive Plan in 1979 with a set of ordinances that address overall development of paths/lanes within the community, formation of the Bikeways Advisory Committee to specifically address bicycling issues, and bicycle parking guidelines that provide parking at most commercial, retail, industrial, and public facilities located within Schaumburg's borders. In addition to facilities, Schaumburg supports several events annually which incorporate bicycling. Most notably, the Bike to Work Week festivities in May, coinciding with the League of American Bicyclists "Bike to Work Week," a Summer Bike Patrol Program which encourages riding and educates on safe riding techniques, and the Adopt-A-Bike Path Program staffed by volunteers who keep the paths clean, attractive, and more desirable to use.

#### Regional Bikeways Programs

Schaumburg works regionally to encourage the development of bicycle facilities throughout Chicagoland by working with neighboring communities to connect path and trail facilities. Schaumburg served as a Policy Committee representative for the Northwest Municipal Conference's "Making Regional Bikeways a Reality" program and currently serves as a Municipal Representative for the Chicago Metropolitan Agency for Planning's (CMAP) Bike and Pedestrian Task Force.



## Transportation - continued

**USCM Action 4: Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit.**

### Current Programs (Continued)

#### Local Transit Programs

The village has several local mass transit programs that are implemented and funded by the village. The Dial-A-Ride Transportation (DART) program is Schaumburg's door-to-door, advance reservation, general population bus service that provides service to any destination within Schaumburg. DART provides approximately 75,000 rides per year.

The village also operates the Woodfield Trolley which provides door-to-door service between 10 Woodfield area destinations. The service operates seven days per week and is free. The trolley provides approximately 80,000 rides per year.

Schaumburg's Lunchtime Shoppers Shuttle is a convenient service designed for those working in the office complexes surrounding Woodfield and Streets of Woodfield shopping centers, and allows workers to leave their cars and take public transit during lunch. The "Shuttle" provides approximately 40,000 rides per year along two routes.

Annually, the Village of Schaumburg hosts a Septemberfest celebration which attracts over 250,000 attendees. Schaumburg provides free bus transportation service along six routes throughout the community relieving both traffic and parking congestion, and allowing residents to leave their cars at home. Approximately 45,000 rides are provided over the three day event.

When Pace proposed eliminating their Route 602 service, Schaumburg stepped in to partially fund the operating cost for this route which currently serves Schaumburg's Metra Commuter Station from the north side of Schaumburg (Golf/Salem) with two morning and two evening rush-hour shuttle runs. Route 602 provides approximately 5,000 trips annually.





## Transportation - continued

**USCM Action 4: Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit.**

### Current Programs (Continued)

#### Regional Transit Programs

The Metra Commuter Rail Station is used by 1,698 riders per weekday; the busiest of the 23 stations along the Milwaukee District West Line and Metra's 13th most productive stop throughout its entire 232 Chicagoland-station network. Annually, nearly 500,000 boardings occur at the Schaumburg station. The Metra station is served by both Schaumburg's DART bus service and Pace Route 602. Within Schaumburg's jurisdiction, there are 1,268 automobile parking spaces and 48 bicycle parking facilities (28 covered racks and 20 enclosed lockers).

Schaumburg is also home to the Pace Suburban Bus Northwest Transportation Center (NWTC), a regional bus transfer facility located near Schaumburg's Woodfield and Streets of Woodfield shopping centers, and most of Schaumburg's largest employers. In addition to Schaumburg's DART and Trolley service, more than 1.5 million bus rides are provided annually on the seven Pace Suburban bus routes and Schaumburg services stopping at this facility. The NWTC offers a free parking lot and bike lockers.

Schaumburg, Hoffman Estates, Streamwood, and Elgin partner with Pace to offer Route 554, providing morning eastbound rush-hour service from Elgin to Schaumburg and evening westbound rush-hour service from Schaumburg to Elgin. Route 554 provides approximately 32,000 trips annually. When Pace proposed to cut this service, the village stepped in to pay additional costs to fund the Route 554 Pace route to maintain the current level of service in Schaumburg.

In addition to the transit services provided, the village coordinates significant outreach and educational efforts to support the local and regional transportation systems. Since the regional transit network already provides many services, the village works with PACE and the RTA to publicize their various carpooling programs such as PACE Rideshare and Vanpool services. The village frequently includes articles in the village newsletters encouraging people to rideshare and take advantage of these services. The village also advertises for all of its local transit services in the village's newsletter, on its cable station, in the local newspapers, and on the radio.

Village staff works with the various corporate buildings in town to encourage the use of corporate center shuttle services to and from the various transportation hubs to encourage the use of public transportation. Additionally, the village partnered with the Schaumburg Business Association to produce a brochure that includes all of the public transportation options available.



## Transportation - continued

**USCM Action 4: Promote transportation options such as bicycle trails, commute trip reduction programs, incentives for carpooling and public transit.**

### Future Goals

- Continue to promote future regional transportation options by actively supporting the Suburban Transit Access Route (STAR) Line.
- Encourage state and federal governments to increase funding for mass transit and to make funding a priority.
- Continue to work on developing the Transit Oriented District (TOD) Plan by promoting multi-modal transportation access, as well as housing, commercial, retail, and entertainment uses that are accessible by many forms of public transportation.
- Continue to promote bicycling as an environmental transportation option by promoting the village's bikeways and bicycling programs.
- Evaluate the village code and village programs to identify changes that would promote public transportation, carpooling, and bicycling as transit options.
- Investigate eco-transit options to use advanced technologies to ensure efficiencies in routing.
- Encourage the use of regional ridesharing services and carpooling throughout the community.



## Transportation - continued

**USCM Action 5: Increase the average fuel efficiency of municipal fleet vehicles; reduce the number of vehicles; launch an employee education program including anti-idling messages; convert diesel vehicles to biodiesel.**

**C**arbon dioxide emissions can be reduced by increasing the fuel efficiency of municipal fleets, and decreasing the amount of time these vehicles “idle”. Robust informational campaigns are often instrumental in achieving the desired fuel efficiency.

### Current Programs:

As mandated by the State of Illinois, the village is using 2% biodiesel in the municipal fleet. Upgrading to a higher blend of biodiesel brings additional challenges with the village’s emergency response operations such as police, fire, snow and ice.

The Engineering and Public Works Department has two Standard Operating Procedures (SOP) targeting employee education and fuel efficiency. The first is an anti-idling policy which requires public works staff to turn off the municipal vehicles rather than idle for periods longer than five minutes. The second indicates that public works employees should curtail their driving habits on air pollution action days and encourages employees to complete tasks that do not require extensive driving.

Finally, the Police Department recently initiated a Fuel Conservation Committee that will look at the operations in the department to determine how they can modify their procedures to reduce the amount of fuel consumed during daily operations.

### Future Goals:

- Support changes to state and federal law that would increase fuel efficiency standards.
- Encourage mass transit agencies to increase the use of more fuel efficient fleets.
- Investigate alternate fueled vehicles in the municipal fleet to reduce greenhouse gas emissions.
- Encourage the use of fuel efficient fleets by Village of Schaumburg contractors through the village’s purchasing policy.
- Expand the village’s internal policies regarding idling and clean fuel fleets.
- Review and evaluate the village’s current transit services for improvements using efficient fleets and optimum routes to improve ridership.





## Green Power



*USCM Action 6: Increase the use of clean, alternative energy by, for example, investing in “green tags”, advocating for development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology.*

**USCM Action 6: Increase the use of clean, alternative energy by, for example, investing in “green tags”, advocating for development of renewable energy resources, recovering landfill methane for energy production, and supporting the use of waste to energy technology.**

**T**he Environmental Committee initiated a discussion on the investment in “green tags” and the village determined that pursuing a more comprehensive approach that includes a spectrum of initiatives would be preferable. The village does not operate any municipal power facilities so there is no opportunity for reduction of CO<sub>2</sub>e emissions in energy production or waste to energy technology; however, there is opportunity for growth in the use of renewable energy resources.

## Current Programs

None

## Future Goals

- Consider renewable energy options in all Village of Schaumburg CIP projects.
- Review and evaluate Village of Schaumburg policy and ordinance revisions to support and encourage the use of renewable energy technology.
- Support all appropriate changes to statewide and energy efficiency building codes that are both safe and contribute to the development of renewable energy.
- Support efforts to use more renewable energy by utility companies.





## Energy Efficiency

*USCM Action 7: Make energy efficiency a priority through building code improvements, retrofitting municipal facilities with energy efficient lighting and urging employees to conserve energy.*

*USCM Action 8: Purchase only ENERGY STAR equipment and appliances for municipal use.*

**USCM Action 7: Make energy efficiency a priority through building code improvements, retrofitting municipal facilities with energy efficient lighting and urging employees to conserve energy.**

**S**chaumburg has made great progress towards developing strategies for this initiative. The village has adopted recognized codes and standard operating procedures, while also updating municipal facilities with environmentally-friendly equipment. The village has also reached out to residents to promote community-wide energy efficiency practices.

### Current Programs

The village recently completed the replacement of all 15 village owned traffic signals using LED technology through a 50/50 grant with the Illinois Clean Energy Community Foundation. Traffic signals that fall under the jurisdiction of other agencies will be replaced with LED technology as signals are replaced and modernized.

The village is installing energy efficient lighting in village facilities. For example, the Cultural Services Department began a program in 2006 to replace non working incandescent bulbs with CFL bulbs. The village is considering the installation of energy efficient lighting, LED exit signs, and occupancy sensors at village hall.

The 2006 Energy Conservation Code establishes minimum regulations for building systems using prescriptive and performance-related provisions; thus enabling Schaumburg to create buildings standards that include energy efficiency. This was adopted by the State of Illinois and subsequently by the Village of Schaumburg.

The Engineering and Public Works Department enacted the Clean Air Initiatives Standard Operating Procedures (SOP) in 2002. One component of the Clean Air SOP encourages the purchase of energy efficient appliances and equipment as well as the installation of windows and siding that prevent heating and cooling loss.

The village partnered with School District 54 on an event for recycling, paper shredding, and the distribution of free CFL bulbs. The free CFL bulb give-away was made possible as a result of the village's support of the Greenest Region of Metropolitan Chicago. The village received 18,000 CFL bulbs to distribute to Schaumburg residents. The bulbs were made available to members of the Metropolitan Mayors Caucus through a grant from the Northern Illinois Energy Project (NIEP) and the Midwest Energy Efficiency Alliance. Staff collaborated with the Environmental Committee and School District 54 to distribute the bulbs.



## *Energy Efficiency - continued*

**USCM Action 7: Make energy efficiency a priority through building code improvements, retrofitting municipal facilities with energy efficient lighting and urging employees to conserve energy.**

### **Future Goals**

- Review and evaluate increasing the use of energy efficient lighting in municipal facilities, streetlights, and traffic signals, and encourage state and county agencies to do the same.
- Consider an energy efficiency audit of the village's facilities and operations.
- Review the village's energy efficient related codes and policies and suggest changes to encourage energy efficiency.
- Encourage the community to engage in energy efficient practices and inform the community of funding opportunities offered by outside agencies.
- Maintain an inventory of all VOS facilities in an energy portfolio tool to track energy use.
- Consider investment in energy efficient projects that have a seven year financial payback or less.





## Energy Efficiency - continued

### USCM Action 8: Purchase only ENERGY STAR equipment and appliances for municipal use.

**A**lthough the Engineering and Public Works Department has a Clean Air Standard Operating Procedure (SOP) policy; a village-wide policy regarding the exclusive purchase of ENERGY STAR equipment and appliances has not been adopted.

#### Current Programs

The Engineering and Public Works Department enacted this Clean Air SOP in 2002 which sets minimum standards for the purchase of energy efficient appliances and equipment and the Clean Fuel Fleet Program.

#### Future Goals

- Consider developing a village-wide standard policy to purchase ENERGY STAR equipment and appliances through a green procurement program.
- Create an educational program to engage the community in the use of ENERGY STAR equipment and appliances
- Encourage state and federal programs and legislation that offer incentives for the community to use ENERGY STAR equipment and appliances.





## Green Buildings

*USCM Action 9: Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system.*

## USCM Action 9: Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system.

The U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) Program is a nationally recognized rating system for the design, construction, and operation of high performance green buildings. This program recognizes performance in 5 key areas: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

Although the village adopted the 2006 Energy Conservation Code that supports energy efficiency, a specific green building standard has not been adopted. However the village has a number of programs and policies in place that promote sustainable building practices and would qualify toward achieving a LEED or similar system ranking.

### Current Programs

The village utilizes comprehensive stormwater management practices which help to offset the large role that stormwater plays in transferring pollutants to water sources. As rainfall and snowmelt moves over and through the ground, natural and human made pollutants are picked up and transported. These pollutants are then deposited in bodies of water such as lakes, rivers, wetlands, and some drinking water sources. However with the implementation of effective stormwater management practices, such as with building and infrastructure design, the negative impact of the pollutants can be minimized.

The village actively promotes and requires the use of native landscaping by code and through directives in the VOS Biodiversity Recovery Plan. Native landscaping has many attributes that include: natural adaptation, resistance to drought and freezing temperatures, erosion control, increased infiltration of stormwater runoff, lower maintenance costs, and reduction of ground water and air pollution due to lesser dependence on pesticides and gas powered maintenance equipment.

The village promotes sustainable building practices through an educational campaign in *The Cracker Barrel*. The Community Development Department and Environmental Committee regularly contribute articles on sustainable practices such as greening the home, water efficiency, reusable materials, and recycling.



## *Green Buildings - continued*

### **USCM Action 9: Practice and promote sustainable building practices using the U.S. Green Building Council's LEED program or a similar system**

#### **Goals**

- Evaluate opportunities to achieve green building recognition for village buildings.
- Investigate the development of a voluntary green building standard for the community.
- Create an educational program to engage the community in sustainable building practices.
- Publicly recognize buildings in the village that achieve a specific energy efficiency rating.
- Encourage new construction to meet the American Institute of Architect's 2030 Challenge to achieve a design standard of carbon neutral buildings by 2030. This partnership between the American Institute of Architects and the U.S. Conference of Mayors offers an exciting challenge with many opportunities for integrated, high-performance, environmentally-conscious buildings.





## Water Management and Conservation

*USCM Action 10: Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production.*

# Water Management and Conservation

## Water Management and Conservation

### **USCM Action 10: Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production.**

The United Nations predicts that water demands in 2025 will be 50% greater than the current global supply; therefore the conservation of water resources for future generations is crucial. There are opportunities within the village's systems to increase fuel pump efficiency, conserve water, and efficiently manage stormwater run off.

#### **Current Programs**

The village's drinking water system is supplied by four (4) Chicago water delivery stations which supply 100% of the water demand at system pressure. The village pumps water from the seven (7) reservoirs with pumping stations only to meet high demand and fire demand. Additionally, there are three (3) elevated tanks which float on the system pressure. The oldest pumping stations were built in the early 1970s. Pump efficiency is tracked through the water SCADA system which monitors the run time and output of each pump.

The village maintains four (4) waste water pumping stations which were rebuilt several years ago with Flygt brand high efficiency pumps. The only municipal green roof is located at reservoir and pump station #20 providing excellent insulation against heat and cold.

The village requires the use of Best Management Practices for stormwater management as outlined in the National Pollution Discharge Elimination System (NPDES) which is mandated by the U.S. Environmental Protection Agency (EPA). The Illinois EPA oversees the NPDES program in Illinois for all communities with a population of 10,000 or more. In 2004 the Village Board approved significant modifications to the Subdivision and Land Development Ordinance in support of the NPDES requirements.

In conjunction with the modifications to the Land Development Ordinance, the Landscape and Screening Ordinance was also modified in 2004 to require native landscaping around all new and modified detention basins which will reduce erosion, and absorb and filter stormwater run-off. The revisions also included a provision to allow native landscaping in the backyard of single family residential properties with a natural landscaping permit. Subsequently, another modification was approved by the Village Board in 2007 to allow rain gardens on single family residential properties. Native landscaping is substantially more tolerant of drought conditions and has a unique ability to absorb more water than a typical turf lawn. Additionally, per directives in the Village of Schaumburg's Biodiversity Recovery Plan, the village encourages the use of native landscaping wherever possible because of its excellent drought tolerance.

The village has implemented an aggressive program to replace leaking water mains when they are detected which conserves water by reducing unnecessary leaking and minimizes disruptions to residents.



## *Water Management and Conservation - continued*

**USCM Action 10: Evaluate opportunities to increase pump efficiency in water and wastewater systems; recover wastewater treatment methane for energy production.**

### **Current Programs (continued)**

In May 2008, the Environmental Committee completed the village's first rain barrel program selling 243 rain barrels of which 160 were sold to Schaumburg residents. Every time all these rain barrels completely fill with water during a rain event, up to 8,800 gallons of water will be diverted from the village's storm sewer system. The Schaumburg Park District is continuing with the rain barrel initiative at the Spring Valley Nature Sanctuary.

In 2006, all water meters in the village were replaced with electronic meters which allows for an automated meter reading. This has given the village an excellent tool for the detection of excessive water use, which could be the result from a leak that needs repairing. The village also installed on/off buttons on all public drinking fountains to conserve water as opposed to having a continuous stream of water flowing.

In 2005, the village adopted the Lawn Sprinkling Ordinance to conserve water during periods of drought. The ordinance restricts the hours when lawns can be sprinkled, preventing sprinkling during the peak hours of the day. Water evaporation occurs highest during peak sunlight hours and is decreased by limiting water use during these times.

### **Future Goals**

- Investigate the feasibility of a rain garden pilot project.
- Investigate the development of a water conservation plan for village owned buildings and property.
- Research and evaluate modifications to policies, ordinances, and codes that support water conservation.
- Investigate educational programs to encourage and promote water conservation.
- Support regional efforts and programs to conserve water.
- Create an education and outreach program that supports the use of native plantings.
- Ensure the village's drinking and wastewater systems are operating efficiently.





## Recycling and Waste Reduction

*USCM Action 11: Increase recycling rates in municipal operations and in the community.*



# Recycling and Waste Reduction

## USCM Action 11: Increase recycling rates in municipal operations and in the community.

The village has completed and implemented a number of environmental initiatives aimed at increasing recycling rates and reducing waste in municipal facilities.

### Current Programs:

The Engineering and Public Works (EPW) Department facilitates all recycling in village buildings. The Public Works Logistics Coordinator works with the janitorial contractor to ensure that recycling is available at all work stations. Additionally, EPW recycles all metals used after projects, and maintains a recycling program for mercury vapor bulbs from municipal facilities. Additionally, the village recycles toner cartridges, and purchases recycled copy paper for all departments.

The Village of Schaumburg recycling code includes provisions for residents, businesses, and other persons/groups. The recycling of appropriate materials is required by all residents and other persons disposing refuse in the village. The requirements for separating recyclables as well as collection locations are also found in the recycling code.

The village promotes recycling at village events. Patrons of programs at the Prairie Center for the Arts are encouraged to leave programs from the event in strategically placed recycling bins at the conclusion of each performance. There are also recycling bins used to collect beverage containers at special events.

The village sponsors and promotes e-waste recycling events and hazardous household waste events. The village partners with various groups to provide these opportunities to residents. The Illinois Environmental Protection Agency (IEPA) coordinates one-day household hazardous waste collections annually in spring and fall. In 2008, the IEPA cosponsored an event with the Metropolitan Water Reclamation District of Greater Chicago at their facility in Schaumburg. While the village does not host the event every year, the village actively supports this event which is open to all residents. The Environmental Committee members assist at these events.

The village also promotes recycling to the community by actively updating its website on the following topics: residential recycling; hazardous waste; computer and electronic disposal; and information concerning how to properly prepare refuse for collection. This information is also included in the Cracker Barrel.

The village has a preventative waste reduction plan in place at the airport. The Fuel Contamination Prevention Plan consists of a system of oil-water separators, dikes, and containment areas for the purpose of preventing fuel entering water or sewer systems in the event of a fuel spill.



## *Recycling and Waste Reduction - continued*

**USCM Action 11: Increase recycling rates in municipal operations and in the community.**

### **Current Programs (Continued)**

The village also considers waste reduction when maintaining the village's infrastructure. All asphalt repairs completed within the Village of Schaumburg utilize recycled asphalt. The 2008 Street Program and Wise Road Improvements will allow the village to complete 3.98 miles of pavement using recycled material. The village also recycles all woodchips collected from the village's residential brush removal program. The recycled woodchips are offered back to the residents as mulch.

### **Future Goals**

- Evaluate the current recycling rates at municipal facilities to identify opportunities for improvement.
- Investigate partnerships with outside agencies to provide residents an opportunity to recycle unconventional materials.
- Review and evaluate the village code for changes that would improve recycling rates in the community and specifically at construction sites.
- Consider including more environmentally-friendly procedures and practices during upcoming negotiations with waste management agencies.
- Continue the village's outreach program to educate and engage the community in recycling.





## Education and Outreach



*USCM Action 12: Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.*

### **USCM Action 12: Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.**

According to EPA estimates, municipal operations account for a minority of the greenhouse gas emissions in a community; therefore, outreach plays a significant role in the implementation and success of an environmental plan. The village has many valuable relationships with community organizations that can assist in communicating the importance of reducing our collective CO<sub>2</sub>e footprint.

### **Current Programs**

The village's "Green Team" is comprised of staff members from all village departments who meet on a monthly basis to consider village processes and programs, and make recommendations for environmental change. In order to ensure that environmentally responsible options are considered in capital improvement projects, a member of the Green Team will serve on the Capital Improvement Program Committee. The village has a substantial web site for the Green Team that includes information on green directories and search engines, green building and technology, energy efficient appliances, and home energy conservation. Additionally, the village regularly includes articles on energy efficiency, conservation etc. in *The Cracker Barrel* newsletter and in the village's e-newsletter.

The village's Environmental Committee is an advisory committee to the Village Board consisting of nine members from the community. The Committee is a strong outreach component for the village's green initiatives; participating most recently in the village's first rain barrel initiative. In addition, the Committee partners with the Hoffman Estates Environmental Commission annually to present an Environmental Fair which is attended by over 300 area residents. The Committee also provides significant support to local recycling events, Adopt-A-Highway, and their Annual Spring Clean Up Day. The Environmental Committee will continue in their current role of promoting environmental practices in the community, including the green action plan, and will continue to administer and assist with community-wide projects.



**USCM Action 12: Help educate the public, schools, other jurisdictions, professional associations, business and industry about reducing global warming pollution.**

### **Future Goals**

- Investigate the feasibility of creating an ad hoc committee with the Schaumburg Business Association or the Business Development Commission that brings attention to the green movement in the business community.
- Create a recognition program to support and promote the green actions taken by businesses and residents.
- Create an “Environmental Challenge” to engage the community in committing to take specific actions to improve the environment.
- Consider green programming on the Village of Schaumburg cable channel.
- Support state and federal legislative initiatives that support the goals of the Comprehensive Green Action Plan.
- Communicate the community's green practices in our economic development efforts to attract environmentally responsible businesses and development to the community.





# Funding Opportunities

## Funding Opportunities

One of the areas having the highest potential for funding is energy efficiency. The Department of Commerce and Economic Opportunity offers many grant and reimbursement programs from which staff will actively seek funding. DCEO funding programs offset the costs related to purchasing energy efficient equipment, installing energy efficient lighting, and using environmentally friendly building design. DCEO also offers funding for “custom” energy efficient projects that may not fall into one of their specific categories.

Another valuable opportunity is available through the Smart Energy Design Assistance Center (SEDAC); a partnership with the University of Illinois at Urbana-Champaign through DCEO to provide free energy audits of a facility or multiple facilities within a municipality or public school system. The program provides clients with design assistance reports that detail energy cost reduction measures that have been analyzed. These free energy audits can then be used to justify funding for projects using DCEO programs.

DCEO recently announced their “Illinois Recycling Grants Program for Traditional Recyclables” and their “Illinois Recycling Grants Program for Computers and Electronics Recycling”. The grant funds are made available from the Illinois Solid Waste Management Fund. The purpose of the program is to divert recyclable commodities from Illinois landfills by increasing the quantity of materials recycled in Illinois.

Staff will work with SEDAC and DCEO to obtain funding to reach the goals listed in the Comprehensive Green Action Plan.

Additionally, there will also be eventual opportunities for funding as a result of the federal Energy Independence and Security Act of 2007. More specifically, the Energy Efficiency and Conservation Block Grant (EECBG) Program will provide over \$2 billion in grants for local governments to further develop energy efficiency strategies to help reduce and track greenhouse gas emissions. The program has been approved however funding has not been appropriated.

### Current funding efforts

The village presently seeks funding for street and median plantings whenever possible. The village has recently submitted for funding of several streetscape enhancement projects through the Illinois Transportation Enhancement Program. Staff will continue to seek funding for these projects.

The Village of Schaumburg has been approved to receive Job Access Reverse Commute (JARC) funding to expand Pace Route 602 to serve additional trains at the Metra Station and also provide reverse commute service to the Woodfield area employment center. Anticipated ridership is 20,000 after the service expansion.

The village will actively seek partnerships with the business community to assist in hosting events such as household hazardous waste and recycling events. Additionally, several companies committed to environmental stewardship have relocated to Schaumburg; staff will work to partner with these companies to achieve the plan's goals.

Staff will investigate other opportunities as they become available. By having an action plan in place, the village will be in a better position to act quickly to utilize the funding when it is appropriated.



## Conclusion

**T**he Village of Schaumburg has a unique opportunity to make a positive environmental difference for current and future generations. The development and implementation of the Comprehensive Green Action Plan (C GAP) allows the village to review existing programs and policies, and strive to meet recommended actions established in the U.S. Conference of Mayors Climate Protection Agreement.

The Village Board will receive reports on the progress and direction of C GAP. As the environmental movement is ever-changing, provisions within C GAP allow for modifications that ensure the highest opportunity for success.

Finally, the implementation of C GAP will strive toward developing a more sustainable community and signify Schaumburg as a leader in environmental change serving as an example to other communities.





## VILLAGE OFFICIALS

Al Larson, *Village President*

### *Trustees*

Hank Curcio  
Marge Connelly  
George Dunham  
Frank Kozak  
Mark Madej  
Jack Sullivan

Marilyn Karr, *Village Clerk*

Ken Fritz, *Village Manager*



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