

# VILLAGE OF LA GRANGE

## “GREEN INITIATIVES” (11/2019)

The Village of La Grange has a commitment to enhancing energy efficiency and environmental awareness through its various purchases, projects, policies and programs.

Some recent and notable initiatives are provided below:

### Vehicles

The Village seeks out and considers low emission vehicles and equipment whenever possible when making purchasing decisions as provided by the budget. Some examples of vehicles recently purchased by the Village that produce lower emissions are:

1. Front end loader, tractor and backhoe tractor with new Tier 3 engines (reduced emissions).
2. Ambulance which uses ultra low sulfur diesel fuel (all DPW and Fire equipment uses ultra low sulfur diesel).
3. Police Squad Cars which use ethanol “flex” fuel.
4. Two Segways (personal transporters using electrical power) for the Police Department (reduces the need for patrol vehicles in the downtown and adjacent areas).
5. One “Smart” car used as a parking enforcement vehicle – 33 mpg city.
6. One Toyota Prius c One used as a parking enforcement vehicle – 48 mpg city. This vehicle is extremely efficient during “stop and go” traffic, and recharges the batteries through the application of the braking system. This type of driving is consistent with Parking Enforcement Officers, and results in greater fuel cost savings and lower emissions due to operation while under battery power.
7. Dump truck and brush loader truck engine with particulate matter filters.
8. Fire engine that meets or exceeds new federal reduced emissions guidelines.
9. All new trucks will have urea and particulate matter filters per EPA standards.
10. The Public Works Department implemented an anti-idling policy that is supported by a vehicle monitoring system.
11. The Public Works Department has implemented computerized controls for salt and de-icing chemicals in new vehicles for use during winter weather storms. The systems are designed to more effectively distribute salt and de-icing chemicals which results in using less material.

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### Building / Infrastructure

There are several initiatives related to Village infrastructure and buildings that have been implemented or planned through the budgeting process with a goal to increase energy efficiency / reduce environmental footprint.

1. LED signal upgrades in 2009– All traffic signals within the Village have been upgraded from incandescent bulbs to LED, including new pedestrian countdown signals (this project was significantly funded by grants).
2. In conjunction with the remodeling of the Community Development Department in 2010, 20 existing “T-12 recessed fluorescent light fixtures were replaced with 20 T-8 recessed fluorescent light fixtures that are expected to improve energy efficiency by 30%. The reason for the improved energy efficiency is that the T-8 tubes are narrower than T-12’s although there is comparable glowing surface and output with lower input watts. Also the ballasts are electronic rather than electromagnetic which is more efficient. Similar fixture changes were performed in the Police and Fire Departments using grant funds.
3. HVAC, mechanical and lighting upgrades that provide environmental benefits and less reliance on energy were completed in several municipal buildings (Village Hall, Public Works and Police / Fire facilities). The Village received several grants through the ARRA Energy Efficiency and Conservation Block Grant Program – EECBG for the majority of the work. Recessed fluorescent light fixtures were replaced with energy efficient fixtures. Estimated energy savings from the installation of the new boiler is expected to increase efficiency from 80% to 96%. Additional energy efficiency gains from 1) conversion to heat pump system and 2) automatic lighting sensors.
4. The Village built a new water pumping station which incorporates more energy efficient technology. The new station features variable frequency drive systems which regulate the amount of electricity being delivered to the water pumps in a more efficient manner.
5. In 2010, the 20 + year old emergency generator that serves the Police and Fire facilities was replaced with a new fuel efficient model meeting EPA emission reducing Tier 3 requirements.
6. The Village participated in the US EPA Energy Star Benchmarking Assistance Program. The program provides tools for the Village to use to evaluate and compare energy usage in municipal buildings from year to year.
7. Construction of Maple Avenue Relief Sewer (MARS) – when fully implemented will provide flood protection benefits as well as reduce the potential for combined sewer overflow (CSO) to Salt Creek – preserving its biological significance.
8. The Village has designed a new storm sewer along 50<sup>th</sup> Street to divert stormwater out of the combined sewer system which increases capacity in the combined sewer system.
9. A new “green” commuter parking lot was installed in 2013 at the corner of Brainard Avenue and Burlington Avenue. The design includes a pervious paver system that allows water to drain more efficiently. New LED light fixtures were also installed. Two additional lots are being replaced in 2019 using the same design. All three projects are funded by a grant through the Metropolitan Water Reclamation District of Greater Chicago.
10. New LED light fixtures were installed in the parking lots at the corner of Sixth and Harris Avenues and Bluff and Burlington Avenues which gained environmental efficiencies.
11. La Grange has been designated as a Tree City USA for over 30 years, retaining an annual planting program and maintaining thousands of trees that are a part of our urban forest.

12. Stone Avenue Train Station Renovation Project features a 100% recycled polymeric roofing material. Historical elements were also retained and renovated whenever feasible, as opposed to replacement.
  13. All Village overhead street lights have been replaced with energy efficient LED fixtures through a grant at no cost to the Village. These new LED fixtures use 100 watts of energy, compared to previous usage of 400 watts.
  14. The Village is in the process of replacing residential street lights with LED technology. This results in a decrease of watt usage from 125 to 25 watts. To date, the Village has replaced 504 residential street lights out of approximately 1,800 lights.
  15. The Village recycled 1,352 pounds of holiday lights during the holiday light recycling program.
  16. The Public Works Department implemented a policy of recycling cardboard boxes.
  17. In 2019, the Village received an award for sustainable landscaping from the Metropolitan Water Reclamation District for landscaping related to the construction of two permeable parking lots.
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### **Village Services / Operations**

The Village routinely evaluates its operations in conjunction with our budget parameters in order to determine ways to improve energy efficiency and consider environmental factors. Some examples include:

1. In 2010, Village added two recycling receptacles in the downtown – one at the La Grange Road Train Station and the other at the southwest corner of La Grange Road and Harris Avenue (in front of Starbucks).
2. In 2009, the Department of Public Works switched to using natural fertilizer in public areas to reduce the impact of chemicals on the environment.
3. Also in 2009, the Village purchased its own diesel (ultra low sulfur fuel) and in 2010 an unleaded fuel tank – both located at Public Works. Having fuel available “on-site” as opposed to having to travel to adjacent communities or gas stations improves energy efficiency by minimizing travel to and from other facilities.
4. Annual brush chipping program encourages residents to place branches at the curb to be chipped for reuse as mulch which is made available for resident use.
5. Annual “Spring Clean Up” program provided through the Village’s refuse disposal contract encourages reuse and repurposing of items, instead of landfilling.
6. Provide dedicated parking for moped type vehicles at train stations to encourage alternative vehicle use.
7. Developed a new “Bike to Metra” brochure which encourages residents to consider biking to the train stations.

8. Participation in a regional bicycle planning initiative to connect key facilities and existing bike trails to increase bicycle usage.
  9. Purchased a new office copier with energy saver features and scanner function to reduce paper copies and improve the ability to post information on the Village's website.
  10. Purchase of new Mobile Data Terminals (funded through a grant) installed in fire emergency vehicles which provides building plans and other safety related information electronically to responding personnel.
  11. Received a grant through the Keep West Cook Beautiful program to purchase 130 - 18 gallon recycling bins with lids as a part of a recycling enhancement pilot program.
  12. In 2013, the Village approved an Electric Aggregation program which featured electricity supply savings for residents. Through the program, residents receive 18% Renewable "Green" Energy through the base program (which is higher than what is required by the State's Renewable Portfolio Standard) and residents had the option to select a 100% Renewable Energy Option. Residents have since been returned to Com Ed as pricing stabilized.
  13. In 2018, the Police Department purchased four solar powered electronic speed display signs through a grant. These signs are used in the same manner as the older battery powered display signs, however can be deployed for longer time periods without having to recharge or charge the batteries.
  14. Permanent solar powered speed radar signs were installed at the Lyons Township High School South Campus.
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### **Community Development / Building and Zoning**

The Community Development Department has considered various amendments to the Zoning Code and building policies / site development standards to encourage the use of environmental materials and methods including:

1. Facilitate LEED (Leadership in Energy and Environmental Design) "green" building construction methods and components resulting in the building of several "green" LEED certified homes throughout the Village, one of which was featured in the "Chicagoland Green Built House Tour". Several additional homes are currently in the process of being built to LEED certification status. The Village collaborates with homeowners in order to accommodate re-use of materials / achieve LEED standards.
2. Provide for the utilization of roof mounted solar panels where they were previously disallowed in residential zoning districts.
3. Allow for alternative heating and cooling options such as geothermal heat pumps. Several homes in La Grange have installed geothermal heating systems in recent years.
4. Adjusted the maximum lot coverage requirement to retain 55% permeable surface on a zoning lot and to incent permeable materials over non-permeable materials.

5. Encourage stormwater management initiatives that focus on “green” options such as rain gardens, underground dissipation / storage systems with options for water harvesting, etc.
  6. Developed new site development standards to incorporate some of the region’s strictest stormwater management and dissipation / storage practices (i.e. retention practices) within a zoned lot.
  7. Developed calculations for basement depth ratios to decrease the impact of new basement construction on the existing water table, potentially resulting in the need for greater or lesser water storage systems on the site.
  8. Worked with landscape architects to develop a list of preferred tree and plant species to promote absorption in the landscaping and resistance to saturation.
  9. Participated in and achieved recognition under the SolSmart program which removes barriers in order to enhance the use of solar energy. The Village will continue its efforts to achieve a higher SolSmart designation. Reduced fees for building permits related to solar projects.
  10. The Village has processed nine new solar panel permits over the course of six years.
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### **Event Promotion and Education**

The Village partners with the La Grange Business Association, West Suburban Chamber of Commerce, West Cook County Solid Waste Agency and other entities to encourage and promote recycling events and options; educational programs and resources; and utility energy conservation programs. Some of these initiatives include:

1. Promotion of “Cool Cities” events.
2. Promotion of numerous local and regional Household Hazardous Waste and Electronics Recycling events.
3. Development of a “Disposal Alternative Options” information sheet.
4. Advertised alternatives to disposing of leaves.
5. Hosted an Expired Medication Drop-Off Event and advertised regional events – Beginning in 2013, the Police Department hosts a permanent collection box for resident convenience.
6. Advertised Nicor and Com Ed Energy Efficiency Program opportunities.
7. Promotion of the 2010 Summer Arts Program – “Rainbarrels” and similar projects.
8. Member of the WCCSWA Regional Disposal Project.
9. Host and help promote weekly seasonal Farmer’s Market featuring an assortment of fresh fruits and vegetables as well as other goods.
10. Informational section on the Village’s website regarding recycling options and links to West Cook County Solid Waste Agency Recycling Guide.

11. Promotion of Energy Impact Illinois program as well as other energy assistance programs.
12. Promotion of annual “Earth Hour” programs that promote energy conservation – partner with the La Grange Business Association to advertise restaurant “candlelight” dinners, etc.
13. Promotion of “Eco Friendly” businesses – particularly those certified as a “green business in Illinois” by the Illinois Green Business Association (IGBA).
14. Promotion of used cooking oil recycling events.
15. Worked with the La Grange Business Association to identify recycling programs for businesses such as for cardboard and reclamation of used food oils.
16. Coordinate paper shredding / recycling events along with Habitat for Humanity Restore and SCARCE in conjunction with Representative Zalewski and the Park District of La Grange.
17. Advertised a Metropolitan Water Reclamation District of Greater Chicago initiative that offers compost for no charge to residents.
18. Promoted a Native Bicycle Tour in conjunction with the La Grange Park Sustainability Commission.
19. Promoted pumpkin composting and holiday light recycling events.