

Clayton Serves As A Model For Environmental Conservation

. . . and continues to reduce its carbon footprint

By members of the **PlanIt! Green Team**

Clayton's impressive history as a leader in the environmental movement started with its residential recycling program approximately 15 years ago. A citizen advisory group, the Ecology and Environmental Awareness Committee, was established in 1997 to provide recommendations about support and development of ecologically sound programs and practices within Clayton's municipal government and the Clayton community. The City was one of the first St. Louis County municipalities to implement single-stream recycling and now sets a standard by recycling 30% of its total refuse collection compared to an average of 14% for cities nationwide.

SMOKE FREE

In July, Clayton became only the second of St. Louis County's 91 municipalities to adopt a citywide ban on smoking in public places. The City hoped that by adopting the ordinance, other municipalities, the County and the State would be encouraged to address this critical public health issue. The new ordinance will take effect July 1, 2010. Ballwin also bans smoking in public places.

From smoke free to online and paperless, Clayton implements a versatile approach to its environmental efforts.

GREEN ARCHITECTURE

As a leader in sustainable building practices, Clayton was the first of two Missouri cities to implement the LEED (Leadership in Energy and Environmental Design) certification program that was created by the U.S. Green Building Council (USGBC). Clayton and Kansas City were the first municipalities in the State to adopt an ordinance calling for LEED certification. The ordinance requires all new construction and major renovation projects owned, occupied or funded by the City of Clayton that are 5,000 square feet of floor area or greater be certified to the U.S. Green Building Council's LEED Silver level. LEED certification, which requires commercial buildings to have environmentally friendly features, is now part of the public benefits criteria section in the City's Planned Unit Development (PUD) Projects guidelines. A PUD is a distinct zoning classification established to provide flexibility for unified developments by waiving certain zoning requirements in exchange for public benefit. PUD guidelines reward developers for environmentally responsible developments.

One of the few development projects underway anywhere is Centene Plaza. The developers continue to move forward with the expansion of Centene Corporation's headquarter in downtown Clayton and pledge to build the project according to LEED standards.



The City also encourages Green building practices in residential construction. Plans for new single-family homes introduce Green features such as solar roof systems, energy efficient heating and cooling systems, increased Green space, enhanced tree protection and replacement requirements and permeable pavers that allow water to filter through the material, a process that reduces storm water runoff.

Clayton's leadership in the advancement of sustainability and Green building practices was recently recognized by the St. Louis Chapter of the USGBC. The City received the St. Louis Growing Green Award in the Government

category. The Growing Green Award program celebrates the people, organizations and companies that are transforming the St. Louis region's "built" environment into a more environmentally responsible, profitable and healthy place to live, work and play. The City has adopted local ordinances and incentives to encourage change; encourages state and federal renewable energy and energy efficient legislation; and provides public relations support for Green activities occurring in the municipality.

INTERNAL SUSTAINABILITY

In addition to encouraging Green practices in Clayton's private sector, City staff makes environmental matters integral to daily operations in all City-run facilities.



Decisions regarding sustainability play a major role in the City's daily internal business operations. This year a committee, the PlanIt! Green Team comprised of personnel from each City department, was formed to address various aspects of environmental responsibility, including the City's internal procedures. The PlanIt! Green Team works with City departments to maintain a sensitivity to environmental issues as it executes its Green procurement program; increases the use of Green products; implements, among others, its facilities-wide recycling program; and expands the City hybrid vehicle fleet.

Green Procurement

The City's Green Procurement Program requires staff to compare products and services that reduce the environmental impact to non-environmental products and services. In the past, purchasing was based on both price and quality of service. The new policy includes Green criteria to determine the best value overall for both the City of Clayton and the environment.

The availability of ecologically safe products continues to grow. Recently, the City's Building Supervisor conducted a study of the benefits of Green building maintenance products. As a result of his research, 100% of the cleaning solutions and lavatory paper products used in City-run facilities are Green products. These products have many environmental benefits. The elemental chlorine-free paper products meet or exceed Environmental Protection Agency (EPA) standards. The Green cleaning solutions are biodegradable and do not contain phosphates. The coreless paper products are made with recycled fiber content, require less landfill capacity and conserve natural resources. Packaging waste is reduced by 45 to 55%; post-consumer waste is reduced by 40 to 62%.



In addition to Green cleaning solutions and paper products, the Parks and Recreation Department uses organic pesticides and fertilizers to maintain turf and landscaping in City parks. Furnishings made of high-density polyethylene material, a 90% recycled product made of post-consumer bottle waste, replace existing park benches, tables and trash cans.

The IT Department maintains the same responsible attitude toward the purchase of electronic equipment. When a real need for new hardware is determined, the City strives to purchase Energy Star equipment when it is available.

A special effort by seven St. Louis County municipalities was not only to help preserve the environment, but also to capitalize on economies of scale. The group issued an invitation for bids to jointly purchase recycled, multi-purpose paper. Participating with Clayton in the cooperative purchase are Creve Coeur, Ferguson, Maryland Heights, Olivette, Richmond Heights and University City.

Reduce, Reuse, Recycle

Conservation is the principle that guides City staff during its day-to-day operations.

To conserve energy, the IT Department makes energy-saving features such as hibernation and sleep settings available on all PCs Citywide. The department instructs employees to turn off computers at the end of each day. It encourages network printing, which reduces the resources used by printers, and promotes participation in a toner cartridge recycling program.

In addition, the City uses virtualization technology to reduce the physical number of servers in the data center. Virtualization replaces physical servers with virtual machines, thereby reducing the required resources (space, power, cooling) and limiting the amount of hardware eventually sent to the landfill. Plans are underway to develop a new high-efficiency data center and expand the server virtualization process to desktops. This will extend the life of desktop hardware. Eventually, however, desktop hardware will be replaced with low energy consumption thin client computers instead of full desktop computers. Thin clients depend primarily on a central server. All processing activities are sent to and occur on the server, which eliminates the energy necessary to run multiple PCs.

When computer equipment becomes obsolete, the hardware is donated to a non-profit agency that reuses it, which provides technology to low-income and underserved populations. To further reduce hardware items sent to landfills, each year the City partners with Web Innovations & Technology Services (WITS) to hold the annual electronic recycling event at a site in Shaw Park. The event provides the opportunity of residents and businesses to properly dispose of their used electronic equipment.

All City departments work to reduce paper usage and increase efficiency. Applicants for programs and activities provided by the Parks and Recreation Department can register on-line and receive payment receipts via email. City officials use a web-based portal that houses key documents, such as meeting agendas, minutes and ordinances. And, the City Hall Council Chambers is wired with internet access, so Board members can view all necessary documents online during Board meetings, thus eliminating the need to print and copy documents.

ALTERNATIVE MODES OF TRAVEL

The City also concentrates on travel as a means for environmental change.

Clayton prides itself on being part of the Bike St. Louis system, which includes multiple “Share the Road” trails and dedicated bike lanes recently installed on Wydown Boulevard. These trails interconnect Shaw Park, the Central Business District, Metrolink and the City of St. Louis. Clayton’s commitment to developing a joint bicycle and pedestrian master plan with adjacent communities is an acknowledgement of the many benefits of a more bicycle and pedestrian friendly environment for residents, workers and visitors. Providing a safe, interconnected network of bicycle and pedestrian infrastructure can improve community health, reduce harmful auto emissions, increase transportation choices while reducing automobile traffic congestion, generating economic benefits for residents and businesses, fostering a greater sense of community and improving quality of life.



The City encourages employees to use the light rail system, which runs through downtown Clayton. It participates in the Partial Expense Reduction for Commuters (PERC) program by subsidizing the purchase of MetroLink passes, which reduces employees’ out-of-pocket cost for transit. It also decreases employers’ costs for employee parking and cuts down on absenteeism and tardiness. Everyone benefits by improving air quality and conserving energy.

In an effort to further reduce its carbon footprint, the City will increase its hybrid fleet in 2010 from six to eight vehicles; and increase the number of fleet vehicles adapted to use alternative fuels from 83 to 101. According to the Center for Performance Measure (CPM), a program that tracks the performance of 250 professionally managed cities from across the country, 40.7% of City of Clayton vehicles use alternative fuels versus 7.3% by other cities participating in the CPM program. Additionally, all products, from oil to tires, used to run City vehicles are recycled.

The City is committed to making the streets safe and beautiful. To encourage pedestrian travel, enhancements such as curb ramps with truncated domes, textured crosswalks, and crossing signals with countdown timers and audible tones were installed as part of the Pedestrian Safety Improvement Project.

LOOKING TO THE FUTURE

Clayton focuses on enhancing its impressive achievements with research into additional ecological initiatives.

To set benchmarks for future improvements, the City recently joined ICLEI—Local Governments for Sustainability, an international association of over 1,090 local and regional governments committed to sustainable development. As an ICLEI member, the City must develop a Greenhouse Gas Inventory of its operations and the City as a whole. In addition to the Greenhouse Gas Inventory, an energy audit of City facilities is being explored. An energy audit identifies measures that will make City facilities more energy efficient.



Rain gardens have a profound affect on the impact urbanization has had on the environment. They allow rainwater runoff from impervious urban areas such as roofs, driveways, walkways, and compacted lawn areas. The rainwater is then absorbed into the ground rather than flowing into storm drains and surface waters which causes erosion, water pollution, flooding and diminished groundwater. The City plans to establish rain gardens along Meramec and Bonhomme Avenues as part of the Pedestrian Enhancement Project.

Rain gardens will also be installed in City parks, where efforts continue to eliminate invasive plants such as honeysuckle and ground cover euonymus. They are being replaced with native plants and bushes that

require less maintenance of habitat quality; are more consistent pollen and nectar sources for native pollinators; lead to higher diversities of native insects, birds, and wildlife; and increase resistance to invasive weeds.



Knowing how important ecological conservation is to the Clayton community, efforts to encourage preservation of the environment continue. “While maintaining an impressive workload and providing Clayton’s renowned quality of life, City staff makes protecting the environment an integral part of daily operations,” said Mayor Linda Goldstein. “We are all proud of these achievements in preserving the environment that are enriched by the support of the Board of Aldermen, our citizen advisory committees, the PlanIt! Green Team and our dedicated City staff.”

To help educate others about the benefits of Green practices, the City maintains a comprehensive Green section on its website www.ci.clayton.mo.us. The City of Clayton encourages everyone to participate in the preservation of the environment . . . **REDUCE, REUSE, RECYCLE.**