



THE CITY OF
COLUMBUS
MICHAEL B. COLEMAN, MAYOR

2013

A YEAR IN REVIEW



A MESSAGE from our Mayor



Dear Friends:

After launching RecyColumbus, the most celebrated project in the history of the Get Green Columbus initiative, we were challenged to continue to impress the community in 2013. This challenge was met with the launch of CoGo Bike Share, car sharing services and announcement of the expansion of the residential recycling program among other successes described in detail throughout this report.

2014 is the milestone tenth year of the Get Green Columbus initiative. The most significant task we will accomplish this year is to plan for new and exciting projects that will take place over the course of the next five years. We are constantly competing with ourselves to do better and this plan will outline the steps we will take to ensure that happens. Each of you are invited to participate in this process to refresh our community vision for sustainability.

I am grateful to each and every partner who has helped advise, implement and celebrate the efforts of this important initiative over the past decade. Specifically, I'd like to thank Columbus City Council, the Solid Waste Authority of Central Ohio, the Mayor's Office of Environmental Stewardship and the members of my Green Team.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. B. Coleman". The signature is stylized and fluid.

Michael B. Coleman
Mayor

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I. Education and Engagement

- a. **GreenSpot** is the primary program used by the City of Columbus to educate and engage residents, businesses and community groups on topics of sustainability. The voluntary pledge program received renewed support with a focused staff member hired to grow the program. Membership grew from 5206 to 6915 over the course of the year. There are 775 registered businesses, 6,056 households and 84 community groups. Annually, members are invited to meet Mayor Coleman and celebrate the winners of the **GreenSpotLight Award** which included COSI, Gilbane Building Company and Organized Home Remodeling. Also acknowledged at the celebration were the inaugural class graduates of the Corporate Sustainability Initiative which provides networking and learning opportunities to businesses going through the process of becoming GreenSpot members. Participating businesses included: Anheuser Busch; Grange Insurance; Huntington Bankshares; URS Corporate; Abbott Labs; Columbus State Community College; the Ohio State University; White Caste Systems Inc; L Brands; Kroger Company and American Electric Power. Ohio Elementary School's Earth Patrol Club was presented with a **GreenSpotLight Kids Award** for the outstanding work they have done to get green at school. The club is made up of third and fourth graders who promote the GreenSpot message at school, at home and in the community.

- b. **Litter clean-ups and beautification projects** are primarily led by Keep Columbus Beautiful. The program is a division of the City of Columbus Department of Public Service offering residents resources and opportunities to improve their neighborhoods through litter clean ups and other efforts.
 - i. Mayor Coleman and Shelley Meyer (OSU Couch Urban Meyer's wife) launched the city's first litter message campaign, "Three Words about Litter.... **"PICK IT UP"**, designed to empower individuals to take action on litter and employ a socially responsible attitude.
 - ii. Keep Columbus Beautiful annually hosts the event, **Kick Butt Columbus**, targeting cigarette litter that has been discarded on area interchanges and ramps. In 2013 this effort brought together 483 volunteers, who collected 4.8 tons of trash and 1.2 tons of recyclables. The total number of cigarette butts collected hit an all-time high of 169,554.
 - iii. A total of 441 clean-up and beautification projects were conducted by 10,610 volunteers who gave 33,009 hours of their time keeping Columbus streets and neighborhoods clean and beautiful. In addition there were 12 new **Adopt-An-Area** groups bringing the total to 152 groups.
 - iv. Sixteen litter clean-ups were completed as service hours for 69 individuals assigned to fulfill community service hours, collecting over 9.4 tons of debris. Learn more about the work of the **Environmental Crimes Task Force** by visiting www.swaco.org .
 - v. The Department of Public Utilities recruited an additional 212 volunteers to collect 14 cubic yards of litter from Hoover and Griggs Reservoirs.

- c. **Mayor Coleman's Green Team** is a group of 35 residents, environmental enthusiasts and subject matter experts who donate their time to advise the Mayor and the Office of Environmental Stewardship on sustainability efforts and educate the public about Get Green Columbus. The group is further divided into working groups that focus on areas of interest including: Transportation, Education & Engagement, Energy, Growth & Development, Green Building, Green Business and Greenspace. Staff known as "Green Coordinators" representing each city department further supports the Mayor's Green Team.
- d. An **Environmental Management System (EMS)** is being established in the Division of Fleet Management to manage compliance with environmental regulations for fueling sites (52), maintenance garages and generators (67). The EMS system was modeled after the successful effort continuing to take place in the Department of Public Utilities to build staff awareness of city and department environmental policies as it relates to individual job functions. Through this training and intensive planning effort, staff is well informed about how their job may impact the environment, what actions can be done to lessen those impacts and how to respond to an environmental emergency.
- e. **Events**
 - i. **Earth Day 2013: Stand Together** once again brought together a large scale volunteer effort and a celebration of our planet at Columbus Commons park downtown. The City of Columbus was a proud sponsor of the events coordinated by the non-profit organization, [Green Columbus](#), which attracted 3,672 volunteers donating a combined 11,027 hours of time planting trees, cleaning litter, removing invasive plants and more.
 - ii. [Indian Village Outdoor Education Center](#), operated by the Recreation and Parks Department, hosted 7,690 visitors and 1,944 campers in 2013. This facility, located along the banks of the Scioto River, offers a natural environment for students to explore and learn. The campers also learn about urban gardening and local food production by tending to nine community gardens located throughout the city. In addition, Outdoor Education volunteers provided 11,825 hours of community service.
 - iii. **Grange Insurance Audubon Center**, boasts a total number of visitors to the center reached 70,000 (up from 30,000 in 2010), the conservation classrooms enrollment reached 3,500 students, the Audubon Adventure camp grew from 57 campers in 2010 to 164 in 2013, with plenty of room to grow and the group of trained and active volunteers has grown from just 30 in 2010 to over 100 in 2013.
 - iv. **Eighty-seven presentations** were given by [Keep Columbus Beautiful](#) reaching 2,867 children and adults.
 - v. The Department of Public Utilities once again partnered with local environmental professionals to bring 670 fifth graders from nine schools to the 2013 **Central Ohio Children's Water Festival**. Held during National Drinking Water Week, the festival uses fun-filled, hands on activities to educate students on the importance of conserving and protecting this vital resource.

- vi. **Neighborhood Pride** is an annual series of events. Four neighborhoods are selected each year to receive a weeklong of intensive programs and services from City of Columbus staff. Roads are swept, storm sewers are cleaned, code violations are addressed and the Mayor visits the community to answer questions and have fun with residents at a variety of events including bike rides and a Question & Answer night. In addition, residents received environmental stewardship tools to help conserve energy and water at home.
- f. **Informational materials**
 - i. **Utility Bill Inserts** were sent to over 300,000 households twice throughout the year in an effort to inform residents of important environmental topics in Columbus.

II. Energy

- a. **Energy Efficiency** is a top concern of city departments and projects to upgrade **lighting** at city facilities is ongoing. For example, in 2013, new LED lights were installed at the Cultural Arts Center, McDonald and Willis Centers to assist with energy reduction. A total savings in electricity for 2013 was \$1,045 (approx. 9,500 kWh). **HVAC systems** were replaced at Far East and Woodward Recreation Centers to assist with energy reduction and efficiency. Total savings in HVAC for 2013 was \$32,630.98 (approx. 297,000 kWh). The Department of Technology decreased usage by nearly 40,000 kWh, saving \$4,200 in utility costs by use of **virtualization technology**. Finance & Management Department completed energy efficiency retrofits in the following facilities: Franklin County Municipal Court, 77 N Front Street, Traffic Management Center, City Hall, North Market, Fire Stations (5,7,12,13,20,23,22), Police Substation Precincts (3,17,6,7,8,16,10,11,12,13,19,18), The Horse Barn, Indoor Range, Old Police Academy, Fire Training Academy, Central Safety Building and Front Street Garage. The Department of Public Service continued replacing incandescent intersection signals with more efficient **LED traffic signals**; 166 were replaced in 2013 for a total cost of \$136,000 and projected to save 174,000 kWh / year. The Department of Public Utilities installed Energy Star approved **high solar reflective roofing systems** at Hap Cremean Water Plant and Parsons Ave Water Plant buildings to extend the life of the current roof by 15 years and reduce energy usage.

In addition, through the AMP-Ohio **Efficiency \$mart program**, the city has helped municipal electric customers reach a lifetime savings of 51,786,000 kWh through this rebate program.

- b. **Renewable Energy**
 - i. **Hydroelectric power** in the amount of 9,714,101 kWh (an 87% increase over 2012) was generated at O'Shaughnessy Dam in 2013.
 - ii. **Quasar Biodigester** generated 4,179,074 kWh of electricity using biosolids, among other waste products, from the city's waste water treatment plants. A 23% increase over 2012. The City's Division of Power purchased all of this output for use by its customers.

- iii. **The largest solar** project of its kind in Ohio was installed on the roof the City's Fleet Maintenance facility. The 2,650 panels produce more than 60% of the building's electricity needs. This project was completed through a 20 year power purchase agreement with no upfront cost to the City. The panels produced 436,962 kWh in 2013, offsetting over 611,747 pounds of carbon and 32,116 tons of coal. In addition, the solar array located on the roof of Milestone 229 at Bicentennial Park generated 86,622 kWh of electricity in 2013, saving 120,000 lbs of carbon dioxide from entering the atmosphere and saving nearly \$16,000 in utility costs.

1,024 smart parking meters operated with solar power were installed by the Department of Public Service in 2013, a continuation of an ongoing initiative.

Solar powered lighting was installed at Elk Run Park.

- iv. **AEP Energy, Inc. Contract** In November 2013, Columbus City Council approved the modification of the existing contract with AEP Energy, Inc. This modification will allow the City to purchase 30% "green" power [e.g. wind-generated, solar-generated, etc.] from AEP for its Departments of Finance, Recreation & Parks, and Public Service facilities. This green power sourcing is projected to reduce the City's greenhouse gas emissions by 7%, which will help the City meet its goal of a 10% greenhouse gas reduction by 2015. This agreement also locks in a lower kWh rate for electricity costs and is projected to save the City \$1.1 million over three years.

III. Green Buildings and Neighborhoods

- a. **Green Columbus Fund** program continued to encourage sustainable development. In 2013, it awarded ten reimbursement grants to projects doing brownfield environmental site assessments and in some cases asbestos or storage tank removal. Successful applicants were Capital Core, Plaza Core Hotel, Wonderland Columbus, Preferred Real Estate Investments, 8 East Long Holdings, MRE Holdings, Community Development for All People, and Lennox Town Plaza. The grant total awarded for the ten projects was \$736,181.
- b. **Clean Ohio Brownfield Fund grant** was received by the City in partnership with the Annex at River South II for \$1,000,000 towards environmental cleanup at the Trautman and the The HUB Buildings downtown Columbus. The current development design is for an eight-story, mid-rise mixed-use structure that will cover the entire 0.538 acre site, LC River South Phase II. The project will consist of 106 top quality apartments, street level retail space, and a partially subterranean parking garage. The developer will invest approximately \$20.9 million in the project for property acquisition, site preparation and construction.
- c. Through the federal **Neighborhood Stabilization Program (NSP)**, the Columbus Housing Division funded the following number of units meeting or exceeding green home [AWARE standards](#): 36 units sold; 1 unit lease purchase; 13 rental units. Through the

HOME Program, 10 units were completed that met AWARE standards and included solar panels for electricity. Due to the AWARE standards, these homes are, on average, 1.5 times more energy efficient than a standard new home built in America.

- d. **LEED buildings** or Leadership in Energy and Environmental Design is a certification program used to limit the impact of buildings on the environment. The number of certified or registered LEED buildings in Columbus (public and private) is 358. The City of Columbus achieved LEED Silver certification for the following facilities: 77 N Front Street (the former Central Police Headquarters), Morse Road Eco Center, John R. Maloney Health and Wellness Center, Fire Station #2 and #3, bringing total count to 8 LEED certified facilities owned by the City.
- e. **ME3** or the Materials + Economy + Energy + Environment program helps manufacturing companies save money and reduce their environmental footprint through discounted technical services. Initiated in 2011 by the Mid-Ohio Regional Planning Commission (MORPC), ME3 is a comprehensive sustainability program that includes an energy assessment, a lean and green facility review, and participation in the Ohio By-Product Synergy (BPS) Network to help convert waste materials into profitable feedstocks. MORPC administers ME3 with partners including The City of Columbus, The Ohio State University, Ohio By-Product Synergy Network, the University of Dayton, AEP Ohio, Duke Energy, MAGNET and TechSolve.

Nine manufacturing facilities are participating in ME3 through the end of 2013, including four facilities located in central Ohio. Technical reports identified opportunities to cumulatively save eight companies \$6.5 million annually through activities that increase operational efficiency and reduce energy, waste and water.

The Calgon Carbon Columbus Plant has made great strides toward their sustainability goals through ME3. Within one year they have implemented projects that reduce energy, water and waste with an estimated annual savings of \$140,000 associated with their actions. Thanks to federal and local support the cost of technical services was reduced by more than 70 percent.

- f. The new **East Franklinton Zoning District** was adopted to promote an urban, mixed use district designed to support a dense, vibrant community with multiple choices for living and working within the same small concentrated area. It is hoped that this will not only spur redevelopment of the area at large, but also foster a more compact and green built environment. As many as 2,000 new lofts, live/work houses, and single-family houses will be built, along with nearly 50,000 square feet of stores, cafes and galleries. There is potential for more than 100,000 square feet of adaptive reuse of industrial buildings for artist studios and entrepreneur/small business incubator space. The new district is projected to become home for 3,600 to 4,800 new residents. Already under development are the adaptive reuse of two warehouses and one new mixed-use project.

IV. Reduce, Reuse and Recycle

- a. In 2013, the City won local, regional and national awards for its work. Using a multi-pronged outreach strategy, **RecyColumbus** combined intensive neighborhood-level grassroots activities with smart media outreach to keep the recycling issue top of mind.

Outreach efforts included:

- Recruiting and training ambassadors and volunteers to educate local neighborhoods about how and why to recycle
- Conducting 200+ presentations at community festivals and at neighborhood organizations
- Recruiting, training and scheduling recycling messengers including the Recycle Band, Recycle Segway and Recycling Sign Spinners
- Bringing the northeast neighborhoods into the recycling program in February 2013
- Partnering with the Carton Council to bring \$100,000 worth of paid TV, billboard, phone messages and direct mail advertising
- Winning a prestigious national award – Green City of the Year 2013 and local and regional communications awards (Public Relations Society of America)
- Conducting a targeted outreach campaign in seven neighborhoods where potential was greatest for more participation
- Developing a regular, monthly e-newsletter to reach our most avid participants and local leaders
- Conducting a survey to determine why people recycle and how to motivate others
- Partnering with OSU to boost participation in off-campus housing
- Publicizing the program in local media
- Planning for multi-family expansion and new collection schedules
- An improved address search feature on the 311 website was launched allowing residents to view and print personalized collection calendars. Additionally, users are now able to register to receive phone, email or Twitter reminders to set their recycling, yard waste and refuse out for collection.

2013 RecyColumbus efforts captured over 31,887 tons of material that previously would have been taken to the county landfill and more than 20,200 tons of yard waste.

Residents who were not eligible to participate in the RecyColumbus program continued recycling by depositing over 8,794 tons of material at one of 200 drop box locations. Most apartment and condominium households that were originally ineligible for the program received the good news that in spring of 2014, a program expansion, would provide these residents with RecyColumbus services.

Together, these efforts diverted an impressive total of 60,920 tons of material and equates to a **residential waste diversion rate of 25%** (20% in 2012).

- b. Additional waste was diverted through the efforts of city departments including composting, tire disposal, office recycling and more. For example, the **City Employee Office Recycling Program** collected a total of 699 tons of recyclable material, a 27% increase over 2012.

An audit of the recycling and trash at City Hall and the 77 N. Front Street administrative buildings was completed by contractor, GT Environmental. This report showed a recycling rate of 48.1% and 41.2% respectively. The plan also recommends ways to increase diversion and reduce contamination. The audit will be used as the basis to inform changes to improve internal citywide recycling programs.

Examples of recycling and conservation methods used by city staff include:

- 95.4 tons of **asphalt** was recycled from resurfacing projects to repair potholes, berms and shoulders and 477 tons of recycled asphalt was utilized within our park projects.
 - Recreation & Parks **construction projects recycled** 1.5 tons of reinforcing steel, 1 ton of aluminum siding, 4 tons of sheet metal and 2,500 tons of concrete and asphalt were removed and re-used as pavement base.
 - **Fleet Management recycled** 12,269 gallons of used oil, 330 gallons of used antifreeze, 1,423 used batteries, 146,013 pounds of scrap metal, 4,950 used tires, 8,754 pounds of used oil filters and 8,725 pounds of absorbents.
 - **Biosolids**, or the product of the waste water treatment process, produced 34,262 dry tons of material, which was able to be put to good use rather than be incinerated. Beneficial reuse methods include the city's ComTil operation which produces a rich soil amendment that is sold commercially; farmers make use of treated liquid biosolids as a fertilizer; the Quasar biodigester also uses city biosolids and other organic material to generate electricity and operate a compressed natural gas fueling station and the Deep Row Hybrid Poplar Project puts biosolids to use to improve strip mine soil.
- c. **Deconstruction** was used as an alternative to demolition. Partners including but not limited to Rain Brothers, Egner Construction and Clean Turn deconstructed 19 homes, employing 28 individuals and creating more than 1,000 conviction friendly prevailing wage hours and recycled 9,700 linear feet of wood that will be repurposed as furniture by new start-up Reckon Furniture. In addition, 80 cubic yards of foundation stone, 10 TVs, 4.75 tons of metal were recycled. The effort salvaged 33 doors, 7 windows and 4 glass window shutters, 7 mantles, 10 chimney inserts, 2 gas fireplace heaters, 1 porcelain kitchen sink, 2 claw-foot bathtubs and 2 stainless steel sinks, which would have otherwise been landfilled. Professional development sessions were also provided as well as basic deconstruction training for 36 demolition contractors. In addition to the deconstructed homes, building components and fixtures were salvaged from the city's 109 N Front Street building in preparation for its demolition.
- d. **120 public space recycling** containers were installed along High Street between Broad Street and Lane Avenue. In addition, through the support of Keep America Beautiful

and Dr. Pepper Snapple, 19 new recycling bins were installed within nine parks resulting in half ton of materials diverted from the landfill.

- e. **Restaurants and bars** along the same corridor received containers upon request in order to recycle glass free through a joint effort led by the city and supported by the Ohio EPA.
- f. **Special event recycling** equipment was ordered to test at Columbus Commons events. After analyzing their experience with this equipment, a recycling toolbox will be created, and event guidebook updated to direct festival planners on how to make recycling a standard presence at events.

V. Resource Protection and Conservation

- a. **Parkland** grew with the addition of 145 acres to the Columbus Recreation and Parks Department inventory in 2013. Of special note is the protection of the three acre parcel along the Hayden Run Stream corridor, which is home to one of Ohio's rarest plant species, the Spreading Rock Cress (*Arabis patens*), only found here within Franklin County and one other known place in Delaware County.
- b. Additionally, 5,650 square yards of hard, impervious surfaces in the parks were removed and converted to pervious land.
- c. More than 3,593 **Trees** were planted by the city's Division of Forestry. Despite the Division's focus on tree planting, the city lost 12,398 of an estimated 30,000 ash trees infected with Emerald Ash Borer.
- d. The **GreenSpot Rain Barrel program**, a service of the Department of Public Utilities administered with the help of Franklin Soil and Water Conservation District provided [low cost rain barrels](#) to GreenSpot members. The program engaged 831 households in 2013. To acquire the rain barrel participants first must learn about the impacts of stormwater and ways to prevent polluted runoff. In addition, customer service representatives in the Columbus Division of Water assist and educate customers about how to detect and fix water leaks and provide water conservation kits to residents.
- e. **Columbus Ecological Restoration Program** showed an increase in volunteer support by more than 35% in 2013. The program provides city support to volunteer groups taking on efforts to remove invasive plants. 426 volunteers donated 1655 hours to this program. These dedicated individuals cleared 14.97 acres of parkland of invasive honeysuckle.
- f. **Local Foods** remains a focus of city departments and community organizations.
 - i. **Access to healthy foods** remained important as poor nutrition is related to poor health, and some communities (often low-income) face barriers in obtaining healthy food. Knowing where these locations are can help in developing more effective, coordinated interventions by identifying where new initiatives are needed most. Maps were made available [online](#).
 - ii. **Farmers markets** are popular throughout the city, even at the city's own Health Department where over 5,889 visitors came to buy nutritious foods with WIC and ODC public assistance.

- iii. **34 Community gardens** were provided with grant funding from the City of Columbus in partnership with Franklin County, Franklin Park Conservatory and The Columbus Foundation. Grant winners collectively received \$55,000 in support as well as product donations such as soil and mulch and free educational classes of their choosing at Franklin Park Conservatory. Seven community gardens donated produce to local food pantries, providing fresh food to those who need it most.
 - iv. **Weinland Park**- Food District at Weinland Park was launched (<http://thefooddistrict.org/>)
 - v. **Rain catchment systems** were offered to all community gardens operating on city Land Bank property. Cisterns up to 500 gallons in size are installed on each site and come equipped with a drip irrigation system, solar pump and other components. Through a partnership with the [Rebuilding Together Central Ohio](#) Tool Library, equipment is weatherized and maintained each year. In order to refill the cisterns, roof structures were designed in accordance with city code. Kits to build these structures will be provided to gardens with city issued cisterns in 2014.
- g. **Blueprint Columbus** is an exciting new opportunity the city is exploring to eliminate sanitary sewer overflows while also investing in our neighborhoods and our local economy. Watch a [video](#) to learn more about the project. In addition, a Green Infrastructure Workforce Development program is being developed to prepare small businesses and individuals on technical aspects as well as operation and maintenance of green infrastructure. This effort, among others, will be led by the Department's newly created Office of Sustainability and the Division of Sewerage and Drainage.
 - h. **Green infrastructure practices** were incorporated into the following capital improvement projects: constructed a new parking lot at the Dana "Buck" Rinehart Utilities Complex utilizing pervious pavement as part of the Dublin Road Water Plant Capacity Increase project. This installation won a 2013 Project of the Year award from Ohio Concrete Association in the Central/Southeast Ohio region. The City also installed a rain garden at the Smoky Row Booster Station to solve a drainage issue. Also, the City established a partnership with Franklin Soil and Water Conservation District and researchers from US Geological Survey to instrument and measure hydrologic flow within select bioretention basins at Griggs Reservoir. The goal is to improve our knowledge of actual function versus design to determine hydrologic behavior of newly installed bioretention basins.
 - i. Columbus Public Health permitted and inspected 360 **on-site sewage** disposal systems to insure they were working correctly. Aeration sewage treatment systems are inspected annually and all household sewage treatment systems are inspected upon real estate transactions.
 - j. **Drinking water protection measures** were boosted through a partnership with Delaware Soil and Water Conservation District. The goal is to work with farmers to increase implementation of cover crops and other water quality best management practices within the Upper Big Walnut Watershed to improve raw water quality in

Hoover Reservoir, which provides drinking water to over 500,000 customers. Also at Hoover Reservoir, efforts were taken to reduce excessive populations of non-migrating Canada geese. Some of the management strategies used was creation of signs and brochures to educate visitors on the harmful effects of feeding waterfowl and landscaping and egg addling were also used to manage goose populations. In addition, watershed personnel established a healthy stand of trees and riparian shoreline habitat by planting 300 large native trees along a section of Griggs Reservoir shoreline and 97 large trees along O'Shaughnessy Reservoir. In addition, private on-site drinking wells are permitted and inspected annually by Columbus Public Health and water samples are taken upon request for evaluation of nitrates and bacteria.

- k.** The **Big Darby**, a designated state and national scenic river, continues to receive protection through the [Big Darby Accord](#). The local governments and other participants in the Big Darby Accord Watershed Master Plan of 2006 have been continuing work to carry out its provisions. This work is overseen by the Big Darby Accord Working Group (BDAWG), which represents the participating local governments. Several active bodies are broadly representative of various levels of government, citizens, environmentalists and businesses. These include the Open Space Advisory Committee (OSAC) and the Big Darby Accord Advisory Panel. An effort commenced in 2013 involved taking the next step to bring about the Big Darby Town Center. This important element of the original Big Darby Accord Plan was conceived in order to raise revenues to assist in preserving and restoring environmentally valuable land and streams, while directing low impact forms of development. A follow up planning process resulted in a more defined picture of what the Town Center should consist of. In 2013 Columbus and several local government partners procured and began working with a consulting team led by Development Concepts Inc. in order to help resolve several key implementation challenges. Its report on Town Center development is due in early 2014.
- l.** **Ecological Restoration projects** include a 7 acre installation of native prairie at the Hap Cremean Water Plant which will not only improve water infiltration and provide habitat, but is expected to save \$3,000 per year in mowing costs.

Olentangy River restoration continued in 2013 from Fifth Avenue north to Lane Avenue to improve aesthetics, recreational functionality and habitat post dam removal. This transformational project is a key component of the [One Ohio State Framework Plan](#), which envisions the River corridor as an active research and learning corridor and recreational zone which enables better Stormwater management and multi-modal transportation. It was made possible from support by the City of Columbus, Ohio EPA through the WRRSP grant and by The Ohio State University.

A second dam, the **Main Street Dam**, located on the Scioto River in the heart of downtown was removed and restoration of the River began. The Main Street Dam removal will add an additional 33 acres of green space to the downtown riverfront, creating the [Scioto Greenways](#) which will be complete in Fall 2015. The additional green space will better connect Downtown to the Scioto Audubon Park, Scioto Peninsula and East Franklinton, build upon the Scioto Mile park investments, create linkages to the

existing Scioto Greenways Trail and serve as a catalyst for further private investment in Downtown. The project is estimated to cost \$35.5 million and is being funded through private and public partners such as The City of Columbus, Mid-Ohio Regional Planning Commission, Ohio Department of Transportation, Ohio and U.S. EPA, Columbus Downtown Development Corporation, Franklin County Board of Commissioners, Metro Parks, The Columbus Foundation and Battelle.

VI. Transportation

- a. **car2go** launched as a pilot in the fall and has rapidly gained popularity. The company deployed 250 smart cars throughout the urban core of the city for pre-registered members to use on demand without the need for reservations. car2go users can legally park at city meters and residential permit areas with some exceptions. Users benefit from avoiding the hassles of car ownership including paying for insurance, gas, parking and the car itself.
- b. **Bicycling** remained a major focus of work in city departments as evidenced by a variety of exciting improvements to infrastructure and ongoing programming.
 - i. **Trails** are a favorite amenity for Columbus residents and visitors. This network spans beyond the city's borders and into neighboring communities offering over 300 miles of trails combined to enjoy connecting many destinations including the downtown riverfront, the Ohio State University, parks and more. Over 4.5 miles of trail were developed along the Scioto, Clover Groff and Big Walnut Greenways, one neighborhood connector to the Alum Creek Greenway and three bridges were constructed by the City of Columbus in 2013 adding to the regional inventory of bikeways. There are now 68 miles of trails in the Columbus greenways system. In addition, 0.6 miles of shared use path were constructed on Henderson Road.
 - ii. **On-Street bikeways** on city streets were increased by 8.2 miles in 2013, broken down as follows:
 - 335 sharrow pavement markings- 5.5 miles (1,255 installed since 2008)
 - 56 bike lane pavement markings-2.7 miles (420 installed since 2008)
 - 0 bike boulevard pavement markings (109 installed since 2008)
 - iii. **Parking Facilities** The city's Department of Public Service also installed 8 bicycle parking shelters throughout the city. These locations offer riders practical amenities including informational signage and bicycle maintenance tools allowing riders to fix a flat tire or repair a chain if they encounter a problem during their commute. The annual effort to install bike racks for businesses continued with 36 racks installed in 2013 bringing the total to 357 since 2008.
 - iv. **Pedal Instead**, initially developed by Mayor Coleman's Green Team and the Department of Recreation and Parks continues to thrive under the leadership of the **Yay Bikes!** The project provides free, secure valet style bicycle parking at public festivals and events. In 2013 the program parked 5,935 bicycles at 21 events over 30 days, saving 3,629 gallons of fuel and 78,542 pounds of related

carbon dioxide emissions. Health benefits included 3,491,365 calories burned through 6,640 hours of active transportation.

- v. [BikeShare](#), officially named CoGo Bike Share, was launched in July. The system features a network of 300 bikes at 30 downtown stations, enabling users to visit any station to borrow a bike, ride for any amount of time and return the bike at any of the stations. By the end of the year the program had amassed 744 annual members, 5,595 day pass users and 27,888 total trips and 77,377 miles traveled, equating to 3.3 million calories burned and 52,617 pounds of carbon saved.
- vi. **Organized rides** are a way of introducing bicycling to new groups of people and encouraging others to continue riding. The Columbus Public Health, Institute for Active Living hosted the Mayor's Twilight Ride; 830 riders participated, raising \$15,581 for bikes and safety equipment and training to low-income Columbus children. The city also celebrates Bike to Work Week. This year a group ride led commuters east on Broad Street from the Hilltop to City Hall to enjoy breakfast together. Other group rides the city is proud to have take place along its streets include Bike the C-Bus organized by [Yay! Bikes](#), Market to Market Ride organized by [Local Matters](#) and, of course, [Pelotonia](#) that uses an organized ride to raise funds for cancer research. Pelotonia alone reported over 6,700 participating riders who, together, raised over \$11 million.
- c. **Walking** infrastructure was increased by 3.88 miles in 2013 with new sidewalks, for a total of 20.67 miles constructed since 2008. In addition, the Healthy Places Program continued to work with the built environment to provide opportunity for increased walking and physical activity. The program does this through review of re-zoning requests and produces walking maps, which identify safe and enjoyable walking routes in selected neighborhoods. Six maps were created and 18% of re-zoning requests were submitted with Healthy Places recommendations implemented.
- d. City employees were encouraged to use **alternative forms of transportation** by offering educational opportunities on transportation options and offering the 2nd gear corporate CoGo membership program to city employees. In 2013, there were 53 city employees who took advantage of the program, buying a CoGo annual membership pass for \$30 vs the normal \$75 fee. Human Resources also offered new employees COTA 7 day passes at Buy One Get One Free discount. The City also provides bicycles for use by employees, 39 used the city bike fleet at City Hall, Columbus Public Health and the Jerry Hammond Center, which was a 69% increase from 2012.
- e. **GPS** units were installed on 85% of city fleet vehicles thus far. GPS units are proven to increase efficiency of drivers, reduce idling time and reduce miles driven. The equipment will also help automatically calculate vehicle emissions and related carbon footprint metrics.
- f. **Alternative fuel vehicles** and other strategies to reduce the impact of the city's fleet on the environment have been thoroughly outlined in the [Green Fleet Action Plan](#). In 2013, the City purchased 299 light duty vehicles, 77% of which are 'green' and 82 heavy duty vehicles were purchased, of which 82% are 'green'. Overall fuel use was flat, but petroleum fuel usage is down 8.5% (or 288,776 gallons) compared to 2012. A full report on 2013 progress for the Green Fleet Action plan is available [online](#).

- i. **Compressed natural gas (CNG)** is a cleaner burning and more cost effective fuel. The Groves Road compressed natural gas (CNG) fueling station pumped 240,918 gges in 2013, 181,185 to internal City customers and 59,733 to public customers via Visa/Mastercard. This fuel use reduces carbon dioxide emissions by 2,142 metric tons and equates to removing 446 passenger cars a year from the road. Compared to the 2013 average price of diesel fuel (\$3.44), the use of CNG saved the City \$297,143 in fueling costs for the year. Columbus is also eligible to receive a tax credit of \$.50/gge for 2013. CNG fuel savings and tax credits combined equals a total of \$417,602 for 2013. As of the end of 2013, Columbus has 55 CNG vehicles in service, with an additional 33 vehicles still on order. The second CNG fueling station on Morse Road is currently in the construction phase and is expected to be open and pumping fuel by the end of first quarter 2014. To further support CNG station development, The Department of Building and Zoning Services sponsored legislation that removed the single tank capacity limit for fueling stations.
- ii. **Electric and hybrid vehicles.** The city's two electric vehicle public charging stations were used throughout the year supplying 6,317 kWh. The Department of Building & Zoning Services issued 11 of the total 28 electrical permits for Level 2 EV chargers in 2013. The City currently owns a total of 10 hybrid light duty vehicles, 5 hybrid heavy duty vehicles and 6 on-road all-electric vehicles.
- iii. **Off road vehicles** also make up a significant portion of the city's fleet and therefore are being considered for cleaner fuel sources as well. In 2013, 14 propane powered mowers were put into service and 2 all electric off-road utility carts. The mowers consumed 7,118 gallons of propane, at an average cost of \$3.07/gallon. Compared to the 2013 average cost of diesel, the use of propane saved approximately \$2,634 for the year.
- iv. **Fire Apparatus-** 14 medics were placed in service with white tops to reflect heat and make the interior cooler, 14 more are expected in 2014.

VII. Air Quality and Climate Change

- a. **Air Quality** improved. In 2013, there were only 2 days where air quality was at unhealthy levels compared to 13 days in 2012.
- b. The Healthy Homes program improved **indoor air quality** for 52 families. The Healthy Homes Program works to reduce disease and injury by helping families to make their homes healthier and safer environments. Areas of focus include lead poisoning prevention, asthma and allergy control, and high risk indoor environmental concerns. The program provides a green cleaning kit and education to families with children that have asthma to reduce asthma symptoms and toxic chemical use in homes.
- c. **Climate Change** and its impact on the environment is an emerging public health issue. Columbus Public Health partnered with The Ohio State University to develop communication strategies meant to increase the community's understanding about the

link between this issue and public health. In 2014, a community perception survey and a number of community presentations will be given.

- d.** Reducing **Greenhouse Gas Emissions** continued to be a high priority. The City committed to reduce greenhouse gas emissions from city operations (energy use in buildings, street lights, transportation and waste) 10% (from baseline year of 2005) by the year 2015. By the end of 2013, greenhouse gas emissions have been reduced from 317,927 mteCO₂ down to 300,735 mteCO₂, which is a 5.5% reduction.



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