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THE CITY OF  
**COLUMBUS**  
MICHAEL B. COLEMAN, MAYOR

THE  
COLUMBUS  
GREEN  
COMMUNITY  
PLAN  
Green Memo III



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THE CITY OF  
**COLUMBUS**  
MICHAEL B. COLEMAN, MAYOR

Dear Friends:

It was 2005 when I first launched the Get Green Columbus initiative to ensure our city's active contribution to the resolution of global environmental issues. At the time, "Get Green Columbus" was an appropriate name for the initiative as we were at the beginning stages of our work. After 10 years of constant, dedicated effort, Get Green Columbus no longer appropriately characterizes where we stand today.

We have gotten green.

We removed low head dams, thus restoring our rivers, including the Olentangy River winding through the OSU campus. We added greenspace downtown, making the improved greenway a primary attraction. We launched the city's first comprehensive recycling program, which has been widely embraced by our residents. We launched a bikeshare program, CoGo, and the CBUS is circulating throughout downtown. We are piloting Blueprint Columbus, a new approach to eliminating sewer overflows while creating local jobs and strengthening our neighborhoods. This is just a small sample of our successes to date.

Sustainability can be visualized along an unending spectrum. Although we have "gotten green," there will always be more work to do, and I pledge my ongoing commitment to this endeavor. In the following pages you will see the projects, policy changes, and partnerships that make up the next five-year plan for sustainability in Columbus.

The problems facing us are severe, and our work to mitigate the effects of climate change must remain an urgent priority. The City of Columbus cannot do this work alone; it will take the entire community. This is why we engaged the community in the creation of this plan.

Thank you to my Green Team for providing many hours of work preparing this plan. I'd also like to thank Columbus City Council, the Solid Waste Authority of Central Ohio, the Mayor's Office of Environmental Stewardship, and countless people in our community who have made sustainability part of their way of life. Lastly, I offer special thanks to more than 1,000 residents who took the time to share their ideas and provide comments during the creation of this plan.

Thank you,

  
Michael B. Coleman, Mayor



2020  
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**2015**

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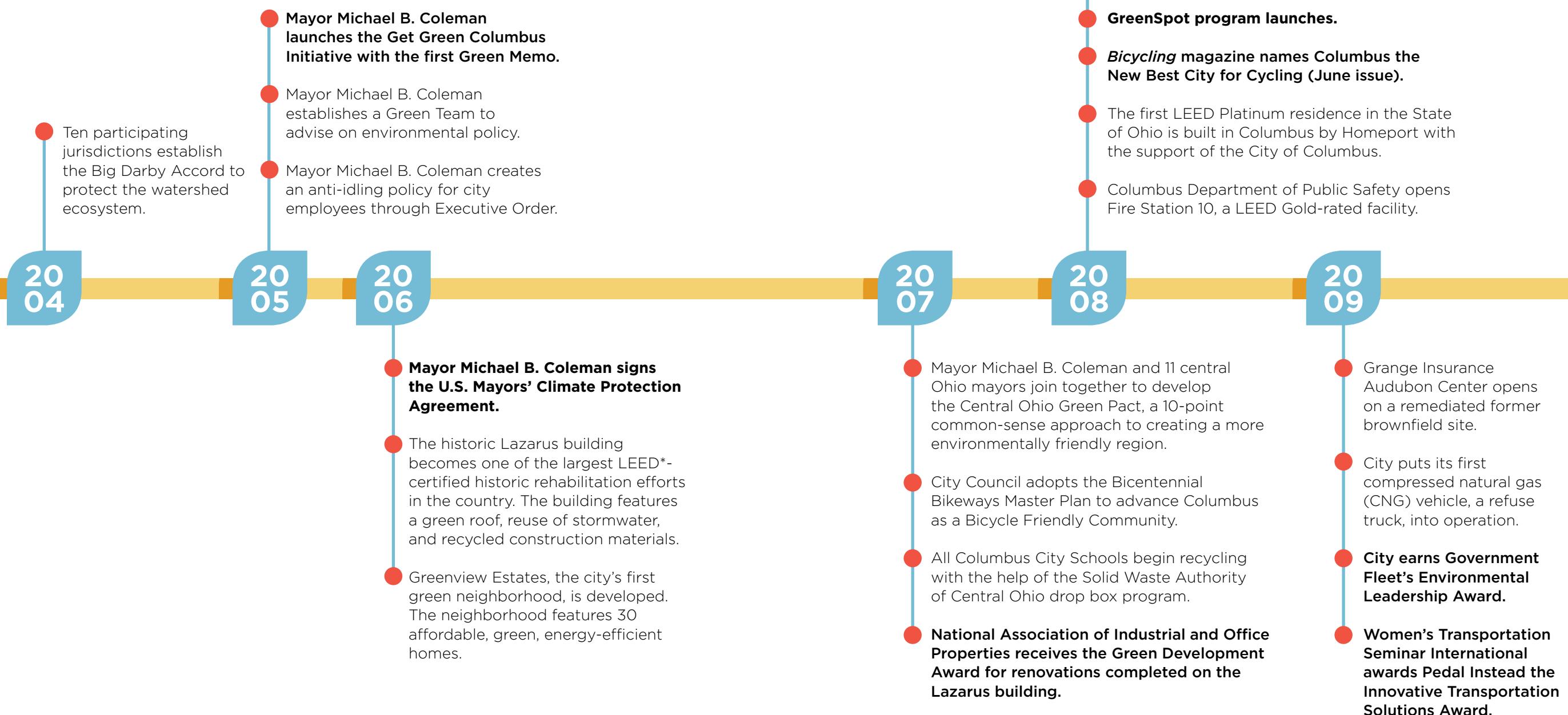
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# Timeline

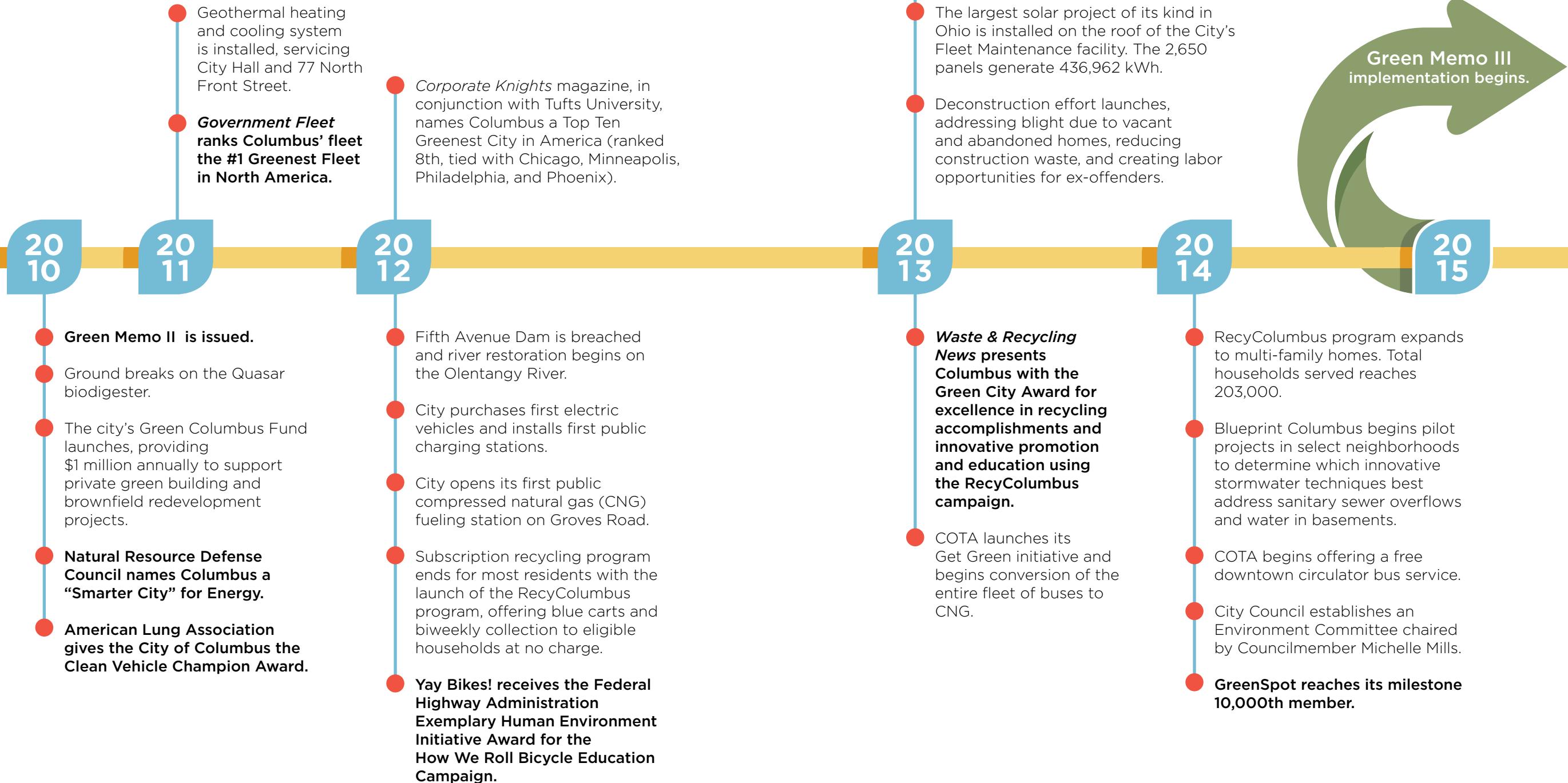
## Recent Green Successes



\*Leadership in Energy and Environmental Design (LEED) is a set of rating systems for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods.

# Timeline

## Recent Green Successes



## Our Purpose

# To Advance Sustainability

As a core value, the Columbus community believes in being responsible stewards of the environment. The united vision for the future of our city is to be a green community—a community that is

**beautiful**  
in its landscape, with  
**healthy**  
people breathing clean air,  
drinking and enjoying clean  
water, and living in  
**prosperity,**

ultimately demonstrating that economic vitality and environmental protections are mutually dependent. In the past, this core value has been approached by many entities independently as well as among small alliances. The progress that has been made to date is remarkable.

## The Columbus Green Community Plan

acknowledges the need for additional work. It serves as a platform to unite a broad range of diverse stakeholders, including government entities, nonprofit organizations, educational institutions, private businesses, and residents, to lead our community in becoming increasingly environmentally sustainable.

While maintaining existing programs that make progress toward advancing sustainability, The Columbus Green Community Plan spells out additional ventures to pursue within

**the next five years.**

**Internally** for city staff, the plan acts as a Mayoral directive, calling for active engagement in these community initiatives and providing a method of tracking and reporting progress toward clearly defined objectives.

**Externally**, it serves as an open invitation to join the city in working toward realizing the outlined priorities.

## Our Vision

The Columbus Green Community Plan is for “all of us”—residents, businesses, educational institutions, nonprofits, foundations, and city government. We are working together to achieve the following vision and goals for our community by 2020.

**COLUMBUS—  
A green community:  
BEAUTIFUL. ❤️  
HEALTHY. ❤️  
PROSPEROUS. 💰**

## Our Goals

### CLIMATE CHANGE

To mitigate and adapt to a changing climate.

### ENERGY

To responsibly use energy through conservation, efficiency, and renewables.

### TRANSPORTATION

To support efficient movement of people and goods.

### WASTE REDUCTION

To reduce waste going to landfills and littering our neighborhoods.

### ECOLOGICAL SYSTEMS

To preserve and restore natural ecological systems.

### WATER

To reduce the use of water and prevent pollution.

### LOCAL FOOD

To improve food security and equitable access to local, healthy food.

### BUILT ENVIRONMENT

To responsibly design high-performing neighborhood streetscapes, buildings, and transportation corridors.

### COMMUNITY ENGAGEMENT

To have a fully engaged community where sustainability is part of the culture.

## Our Values

Integrated into all of our goals, we value:

Fostering healthy, safe, and vibrant living.

Ensuring equity, inclusion, and access to community resources for all residents.

Increasing employment opportunities that generate earnings sufficient for living.

**SUPPORTING DOCUMENTS**

Sustainability involves many entities. As such, the text of this document references a number of existing or pending plans with overlapping missions. These plans support the vision for a green community: Beautiful. Healthy. Prosperous.

**The following plans have either been completed or are in process.****Each one will help in achieving our goals:**

**Green Memo**, issued by Mayor Michael B. Coleman in 2005.

**Green Memo II**, issued by Mayor Michael B. Coleman in 2010

**Citywide Environmental Policy**, issued by Mayor Michael B. Coleman in 2014. (see opposite page)

**Environmental Management System for City of Columbus Operations**

- **Department of Public Utilities**, began in 2006 and achieved ISO 14001 Certification in 2014
- **Division of Finance and Management**, began in 2014
- **Department of Public Service**, expected to begin in 2016
- **Recreation and Parks Department**, expected to begin in 2016

**Air Quality Alert Action Plan**, issued by Columbus Public Health in 2008

**Bikeways Master Plan Update**, expected completion by Department of Public Service in 2015

**Columbus Area Plans**, issued by Department of Development

**Columbus-Franklin County Food Action Plan**, expected completion summer 2016

**Columbus Recreation and Parks Department Comprehensive Master Plan**, issued in 2014

**Columbus Region Comprehensive Economic Development Strategy**, completed in September 2014 by Columbus 2020.

**COTA Long Range Transit Plan**, issued in 2012

**Executive Orders**

- **Anti-idling**, 2005
- **Paper Usage**, 2007
- **Fleet Management**, 2007

**Franklin County Emergency Management Homeland Security 2013 Risk Assessment**, issued in 2013

**Franklin County Greenways Plan**, issued by the Mid-Ohio Regional Planning Commission in 1996

**Franklin County Local Food Council audit** in 2012

**Green Fleet Action Plans**, issued by Department of Finance and Management in 2011

**Local Food Assessment and Plan**, issued by Mid-Ohio Regional Planning Commission in 2010

**Local Watershed Action Plans**, endorsed by OhioEPA in various years

**Multi-Modal Thoroughfare Plan**, expected completion in 2015 by the Department of Public Service.

**National Climate Assessment Midwest Report**, issued by US Global Change Research Program in 2014

**Regional Energy Action Plan and insight2050**, by the Mid-Ohio Regional Planning Commission in 2014.

**Safe Routes to School, Health Impact Assessment**, issued by Columbus Public Health in 2014

**Stormwater Management and Wet Weather Management Plans Update** issued by Department of Public Utilities in 2010

**Urban Tree Canopy Assessment**, expected completion by the Columbus Recreation and Parks Department in spring 2015.

**Water Conservation Plan**, issued by Department of Public Utilities in 2014

**ENVIRONMENTAL POLICY**

The City of Columbus' mission is to provide leadership that will inspire: high standards of excellence in the delivery of city services; a spirit of cooperation, pride and responsibility to achieve strong, safe and healthy neighborhoods; and a shared economic prosperity and enhanced quality of life. We undertake this mission believing and knowing that we can make a difference for future generations. As part of its mission, the City sets forth this environmental policy which forms the foundation of its environmental stewardship commitment.

**THE CITY OF COLUMBUS SHALL:**

- Comply with applicable laws, regulations, and other requirements (by way of example- Green Memo, Executive Orders and City Code);
- Prevent pollution at its source through the identification and implementation of best management practices;
- Continually work to conserve resources through waste prevention, reduction, reuse, recycling and reclamation;
- Provide employees with tools, resources and information required to practice environmental stewardship in their daily roles and heightening their awareness of environmental issues through the communication of this policy, written guidance, training, and management and work practices;
- Continually improve environmental performance through proactive environmental management and routine assessment of our performance;
- Encourage efforts by other governments, businesses, and the general public to adopt environmental stewardship and sustainable development practices; and,
- Utilize an environmental management system for operations, as appropriate, to provide a framework for facilitating the preceding actions.

**PARTNERS**

The Columbus Green Community Plan serves as an open invitation for nonprofit organizations, businesses, residents, foundations, educational institutions, and government entities to become engaged in the advancement of sustainability efforts in Columbus. Advancing Columbus as a sustainable city is a shared responsibility in which the city will participate, but cannot achieve or finance on its own. Each action item will be carried out by appropriate entities whose leadership and collaboration is essential to its success. All proposed actions by the City of Columbus must be evaluated as part of the budgeting process.

# Climate Change



## BEAUTIFUL

Over the past 50 years, global warming has primarily been caused by human activities, predominantly the burning of fossil fuels. Rising levels of greenhouse gas emissions threaten the quality of life of residents in Columbus and throughout the world. Climate change could have a detrimental effect on biodiversity and ecological systems. According to the 2014 National Climate Assessment Report for the Midwest region, the composition of the region's forests is expected to change as rising temperatures drive habitats for many tree species northward. Forests, coastal areas, and glaciers are just a few examples of beautiful landscapes threatened by climate change.



## HEALTHY

The burning of fossil fuels negatively affects health conditions such as asthma and heart disease. The current levels of greenhouse gases cause increased risk of death and injury from violent storms. In addition, climate change increases heat waves, humidity, degraded air quality, and water- and vector-borne disease, as well as reduces water quality, which each pose a public health risk.



## PROSPEROUS

The economic impact of intense storms is clear. An intense derecho hit Ohio in 2012, killing five people and causing more than \$433 million in damages. According to the National Climatic Data Center, the U.S. sustained 12 weather-related disasters in 2011 alone—the most for any year on record, with total costs approximating \$52 billion. In 2013, seven disasters resulted in overall damages exceeding \$1 billion. The agricultural industry is particularly vulnerable to storms, flooding, heat, and droughts. By preventing climate change, these costs can be avoided in the future.

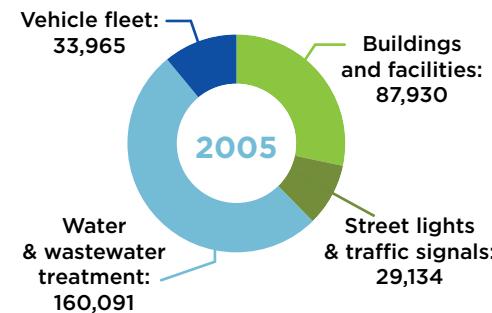
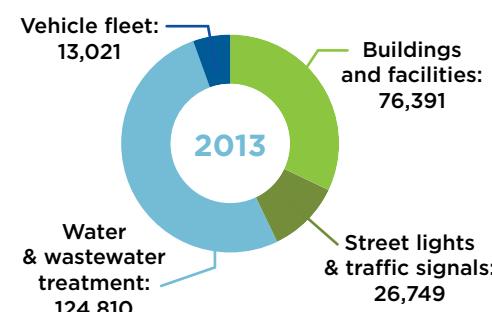
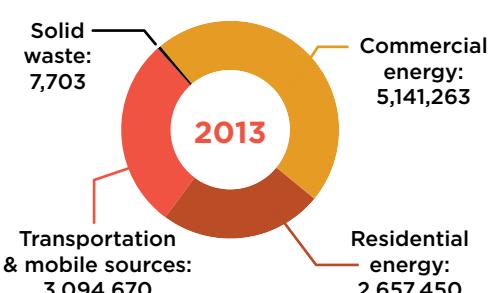
**To mitigate and adapt to a changing climate, we will take the following actions in the next five years:**

## OBJECTIVE

**1**

Reduce greenhouse gas emissions by 30% from city operations and by 20% from the community over the next five years.

## BASELINE

CITY OPERATIONS TOTAL  
GHG IN 2005: 311,120 mtCO<sub>2</sub>eCITY OPERATIONS TOTAL  
GHG IN 2013: 240,971 mtCO<sub>2</sub>eCOMMUNITY WIDE TOTAL  
GHG IN 2013: 10,901,086 mtCO<sub>2</sub>e

## ACTIONS

- 1** Implement the Columbus Green Community Plan Green Memo III, as many of the actions called for in this plan will reduce greenhouse gas emissions.
- 2** Communicate climate change impacts and mitigative measures to the public.
- 3** Calculate mtCO<sub>2</sub>e emissions saved as a result of GreenSpot commitments by providing access to locally specific data online and reporting cumulative totals.
- 4** Update greenhouse gas emissions inventory based on national best management practices and emission factors.
- 5** Support regulations and best practices backed by scientific study, that will lower carbon and other greenhouse gas emissions.

mtCO<sub>2</sub>e  
metric ton carbon dioxide equivalent

mtCO<sub>2</sub>e stands for metric ton carbon dioxide equivalent and was developed as a consistent and internationally comparable measure for greenhouse gas emissions. To convert emissions of a gas into CO<sub>2</sub> equivalent, its emissions are multiplied by the gas's Global Warming Potential (GWP). The GWP takes into account the fact that many gases are more effective at warming Earth than CO<sub>2</sub>, per unit mass.

total GHG  
total greenhouse gas

The total greenhouse gas (GHG) estimates are based on the summation of the most recent available data for each individual source.

# 12,000

INDIVIDUALS IMPACTED

through outreach programs including facility tours, school visits, public lectures, and film screenings (2013)

Climate Explorations education programs will bring engaging science investigations to students and current climate research to people of all ages (2014 and 2015)

"We hope to create a Climate Collaborative that will allow many of the environmental and educational groups in Central Ohio to share information about climate change related initiatives."

Jason Cervenec  
Education & Outreach Director, Byrd Polar Research Center

## BYRD POLAR RESEARCH CENTER

## Leading the way in climate research

The Byrd Polar Research Center at The Ohio State University is recognized internationally as a leader in polar and alpine research. The Center, named in honor of Admiral Richard E. Byrd, America's most famous polar explorer, conducts research programs throughout the world. The Center is home to 10 research groups, along with a library, archival program, the U.S. Polar Rock Repository, and a team of support staff.

Research at the Center focuses on the role of cold regions in the Earth's overall climate system. Scientists are reconstructing past climate by studying chemical records preserved in ice cores collected from glaciers in Greenland, Asia, North and South America, and Antarctica. In addition, the Center maintains the Byrd Postdoctoral Fellowship Program, provides research opportunities and support for a number of graduate and undergraduate students, offers seminars and lectures on a frequent basis, and maintains a public Education Outreach program to provide research to schools in the local area and throughout the world.

"The Byrd Polar Research Center will officially become the Byrd Polar and Climate Research Center in January 2015 to recognize the large and growing body of climate research undertaken by the Center," says Jason Cervenec, Education and Outreach Director. "While we will continue our work in the Polar Regions, expect to see more knowledge contributed by our Center's teams to climate research around the globe."

To learn more about the Center and support its activities, visit [bpvc.osu.edu](http://bpvc.osu.edu).

## OBJECTIVE

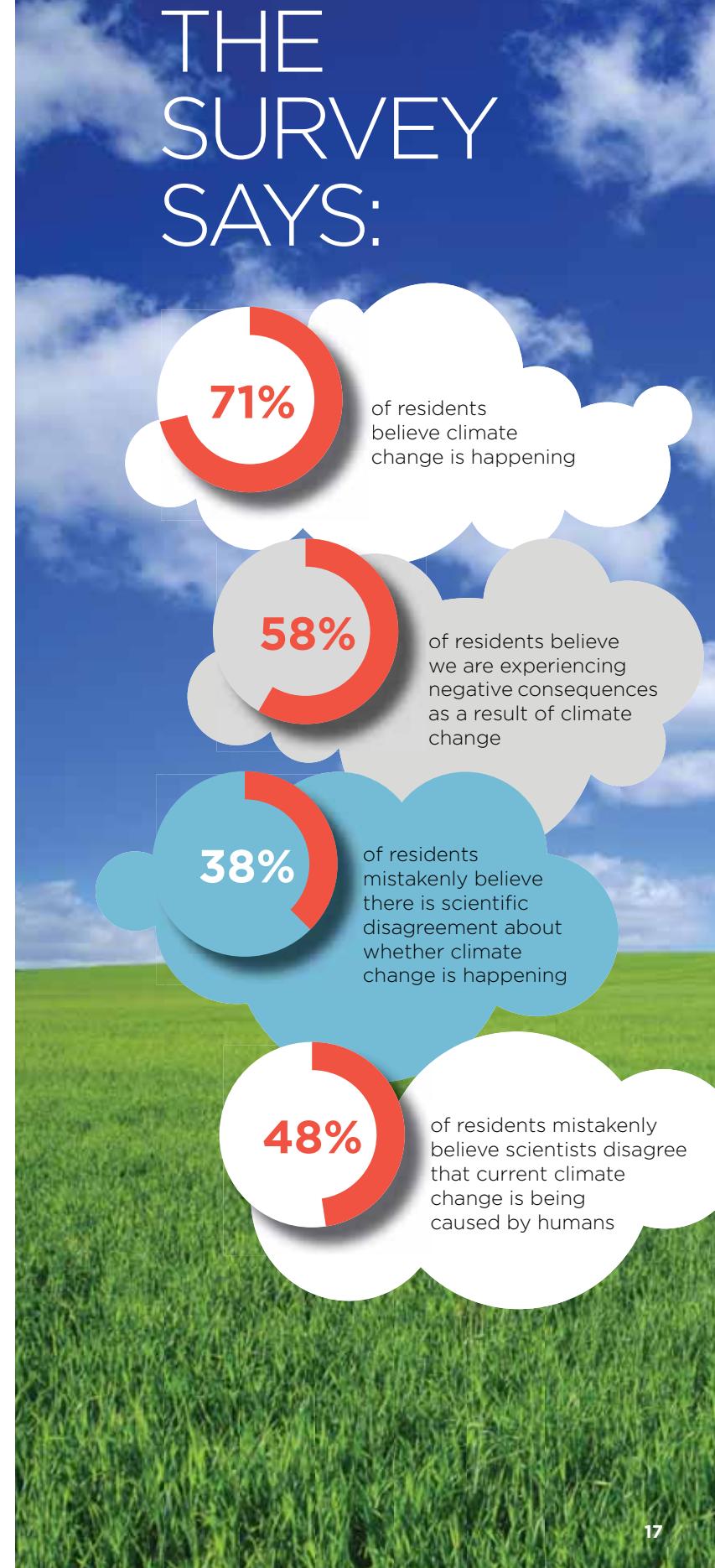
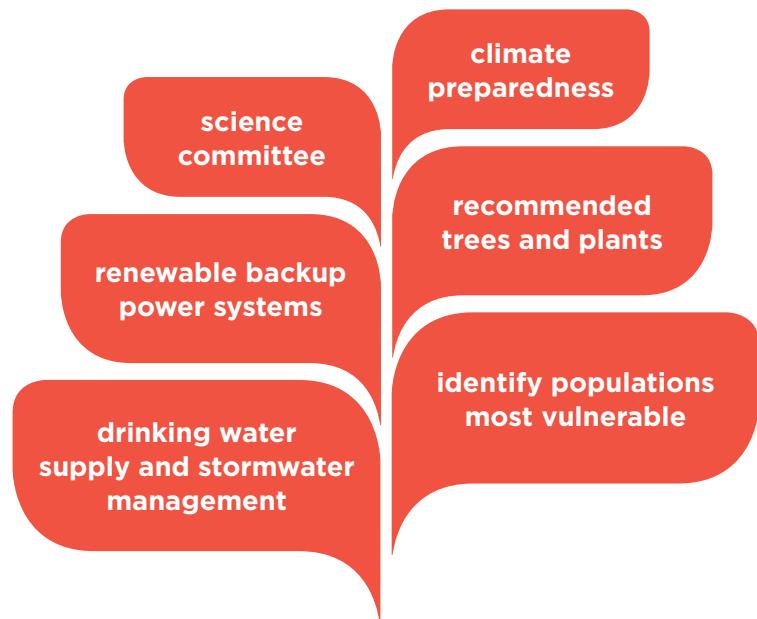
**2**

Adapt to consequences of climate change through planning and preparation over the next five years.

**Baseline:** No baseline established.

**ACTIONS**

- 1** Form a Climate Change Science Committee to identify vulnerabilities from events such as increased tornadoes, flooding, power outages, extreme temperatures, and more, including related costs.
- 2** Create a Climate Preparedness Plan by 2017 based on internationally recognized science, public outreach, and benchmarking.
- 3** Adjust recommended tree and plant lists to reflect change of climate.
- 4** Study impact of climate change on drinking water supply, public health, and stormwater management.
- 5** Identify opportunities to create renewable backup power systems for areas of refuge and emergency facilities (911 center, recreation centers, hospitals) during prolonged power outage situations.
- 6** Identify populations most vulnerable to climate change and integrate into climate preparedness plans.

**CLIMATE CHANGE SURVEY**

**Determining residents' knowledge about climate change—and their willingness to take action**

In late 2013, Columbus Public Health, in partnership with The Ohio State University, launched a project to determine what residents know and believe about climate change—and what actions they are willing to take to address it. The project involved surveying 420 Columbus residents about climate change, as well as conducting community presentations throughout the city to address the four critical beliefs underlying support for climate action:

- 1. That climate change is real**
- 2. That climate change is caused by people**
- 3. That it's bad for people**
- 4. That people can do something about it**

The goal of the project was to learn what types of policy change residents might support in order to develop an effective climate adaptation and mitigation plan for the city.

Project data is currently being analyzed by OSU researchers. But initial indications show that people believe taking action to reduce climate change is necessary, and that they'd support a range of actions to conserve energy, reduce greenhouse gas emissions, and adapt to climate change impacts.

"What we've learned will be extremely valuable in helping our city move forward with environmental efforts that can be supported by the community, and therefore more likely to succeed," says Teresa C. Long, MD, MPH, Health Commissioner, Columbus Public Health. "It's our hope that this project will help people to understand that climate change is happening, it's caused by people, and it's having—and will have—serious consequences for Columbus if we don't act now."

# Energy



## BEAUTIFUL

Mining for coal, oil, and natural gas is inherently destructive to the environment and can cause the landscape to be irreversibly changed.



## HEALTHY

Increasing the percentage of renewables in Ohio's energy portfolio will improve air quality by reducing the burning of fossil fuels for energy generation. Clean air will reduce the occurrence of illnesses that are linked to poor air quality, such as chronic obstructive pulmonary disease, asthma, and some types of cancer.



## PROSPEROUS

According to the Mid-Ohio Regional Planning Commission, as of 2010, there were 25,410 jobs in the energy industry in Ohio. By investing in energy efficiency and locally generated renewable energy, the Columbus region will grow the local industry and advance the region's reputation as a hub for growth and innovation. According to the 2014 National Climate Assessment Report, the Midwest region has a highly energy-intensive economy with per capita emissions of greenhouse gases more than 20% higher than the national average. Specifically, the Columbus region has a high per capita energy use, using 3% more energy than the average Ohioan and 8% more energy than the average American. The inefficient use of energy costs the regional economy \$1-2 billion annually. Efficiency measures can reduce this energy demand and redirect funding from energy to address other important needs.

**To responsibly use energy through conservation, efficiency, and renewables, we will take the following actions in the next five years:**

## OBJECTIVE

**1**

Reduce energy consumption community-wide by 20% (as measured on a per capita basis) over the next five years.

	2012		2013	
	RESIDENTIAL	COMMERCIAL & INDUSTRIAL	RESIDENTIAL	COMMERCIAL & INDUSTRIAL
AEP Ohio	2919.93 GWh	5487.88 GWh	2310.32 GWh	5209.15 GWh
Columbia Gas	15,737,175 MCF	18,721,786 MCF	18,575,972 MCF	20,278,090 MCF
Columbus Municipal Power	66.12 GWh	726.32 GWh	62.65 GWh	717.75 GWh
	ANNUAL PER CAPITA		ANNUAL PER CAPITA	
Total GWh	9,200.25	11.36	8,299.87	10.09
Total MCF	34,458,961	42.53	38,854,062	47.23
Total Population	810,103		822,553	

**MCF**

one thousand cubic feet of natural gas

A single Mcf is equal to approximately 1,000,000 Btu (British thermal units) of energy.

**GWh**  
gigawatt hour

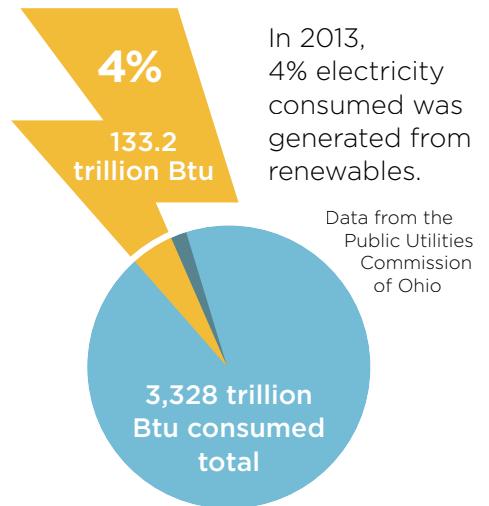
It is a unit of electrical energy equivalent to 3.41 billion British thermal units (Btu) or 3.6 terajoules, or one thousand megawatt hours, or one billion ( $10^9$ ) watt hours.

## ACTIONS

- 1 Expand adoption of the Lights Out program, encouraging businesses and individuals to turn lights off at night. Keep neighborhood park lighting to a minimum to reduce light pollution (unless recommended for safety).
- 2 Begin conversion of “cobra head” streetlights to down-facing, energy-efficient LED.
- 3 Pilot a Smart Roofs program offering structural assessments to determine if roofs can be retrofitted with water collection systems, vegetation, or solar photovoltaic panels.
- 4 Conduct energy audits and weatherization showcase events as part of the Columbus Neighborhood Pride program.
- 5 Provide job training in a field of work that includes energy efficiency retrofits, audits, and renewable energy installations. Leverage the market’s existing programs.
- 6 Evaluate the feasibility of requiring energy performance ratings and/or disclosing energy usage for homes for sale or rent so that prospective owners and tenants have information to aid in purchasing decisions.
- 7 Market and leverage utility incentives such as rebates for energy efficiency measures.
- 8 Increase voluntary participation in the Columbus Energy Challenge, striving for enrollment of 70% (or 690) large buildings (more than 50,000 square feet) by December 2015 and improve access to energy management training and to utility bill data for challenge participants. If enrollment goals are not met, make the program mandatory starting in 2016.
- 9 Provide energy utilization information to Columbus Municipal Power customers, specifically with energy benchmark reports, and an online tool to measure energy performance.
- 10 Evaluate the feasibility and impact of adopting a citywide building code that would require new construction to exceed the requirements of the current statewide building energy code.
- 11 Reduce energy use in city facilities through prioritized implementation of energy efficiency measures, such as procurement of ENERGY STAR® appliances, replacing inefficient lighting and HVAC equipment, and updating or upgrading to direct digital controls when practical.
- 12 Tie green requirements to existing incentive options such as tax abatements. For example, incentivize energy efficiency as part of a building renovation or incentivize a reduction in energy consumption to be a recipient of tax/loan funds from the city.
- 13 Build a new building and retrofit an existing city facility to demonstrate Net Zero Energy standards. Once complete, call upon the Columbus design and construction community to build or renovate at least 10 Net Zero Energy facilities.
- 14 Support Property Assessed Clean Energy (PACE) and other innovative tools to finance commercial energy improvements.

**OBJECTIVE 2**

Increase mix of energy consumed from renewable sources to 10% over the next five years.

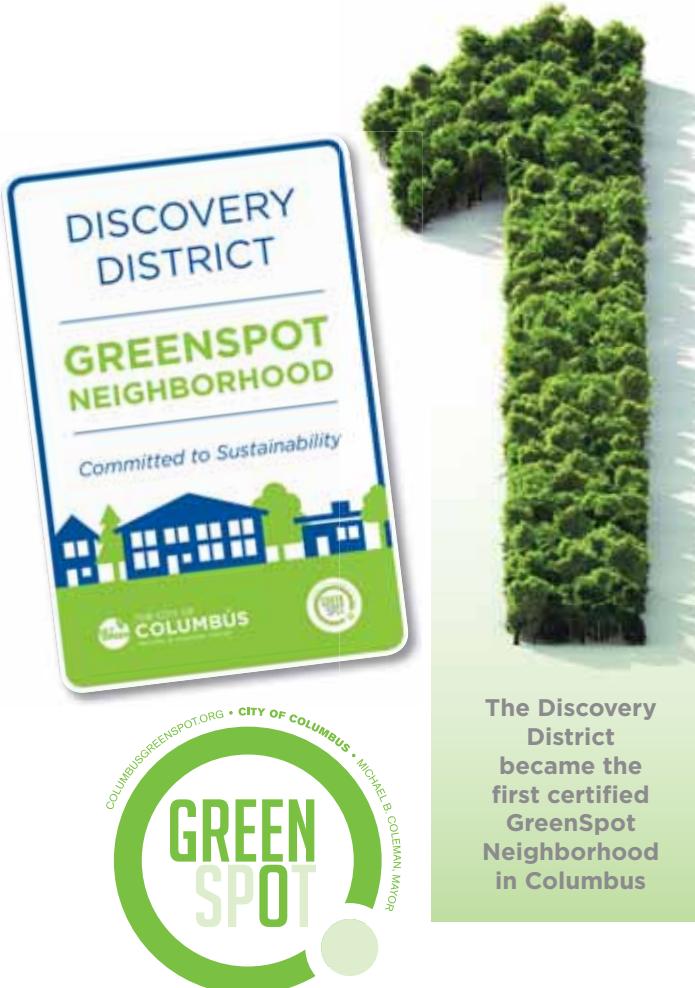
**BASELINE****Community Choice**

**Aggregation:** In Ohio, local communities are allowed, by law, to join their citizens together to buy natural gas and/or electricity as a group and thereby gain “buying power” to solicit the lowest price for the group’s natural gas and/or electricity needs.

**EcoSmart:** In January 2009, American Municipal Power, Inc. (AMP) began offering its EcoSmart Choice® green-pricing program, which provides the benefits of renewable generation directly to member communities and their customers. EcoSmart Choice® allows participating municipal electric system customers the option of offsetting up to 100% of their electric usage with renewable resources.

**ACTIONS**

- 1 Strive to help customers offset 100% of their electricity usage through renewable energy credits available for residential and small business customers as part of programs such as Community Choice Aggregation and Columbus’ EcoSmart program.
- 2 Purchase renewable energy credits for city operations (20% by 2015, strive toward 100% by 2020) and explore purchasing renewable natural gas from sources such as landfills and waste water treatment plants.
- 3 Create an incentive program for onsite renewable energy systems on residential and/or commercial buildings.
- 4 Install at least three renewable energy systems on city facilities.
- 5 Eliminate the use of incinerators at Southerly Wastewater Treatment Plant and beneficially reuse methane gas.
- 6 Research combined heat and power and waste heat recovery opportunities.
- 7 Increase awareness among financial institutions about the benefits and low-risk nature of financing energy efficiency projects.
- 8 Add reporting requirement to electric permits in order to track installations of renewable energy projects.
- 9 Support existing state funding programs, such as the Water Environment Research Foundation program, to include carbon-reducing strategies, including renewable energy and energy efficiency lending or credit enhancement.



“Efficient use of resources is fundamental to successful sustainability practices. The Discovery District Community Energy Savers pilot had outstanding results by bringing residents and businesses the benefits from AEP Ohio energy efficiency programs, which save communities money and reduce carbon dioxide and other emissions.”

Pablo Vegas  
President and Chief Operating Officer, AEP Ohio

**DISCOVERY DISTRICT COMMUNITY ENERGY SAVERS PILOT PROGRAM****Reducing energy waste throughout the downtown district**

Community Energy Savers is a pilot program launched by AEP Ohio in 2014 to encourage residents and businesses to participate in AEP’s energy efficiency programs. The Discovery District Civic Association partnered with AEP to kick off the program. During the first six months of 2014, the Discovery District engaged 170 participants, achieving 180% of its participation goals and earning a \$10,000 award from AEP. The funds will be used for sustainability programs in the community, including money-saving improvements for the historic Kelton House and Thurber Center, as well as a five-month sustainability educational program to benefit the youth of central Ohio. In addition, AEP will fund a three-year Energy Road Map for the district.

The District, working with the city, brought neighbors together to develop a three-year sustainability plan that highlights conserving energy, conserving and protecting water, greener transportation, reducing waste, and informing and engaging the public. The city designated the Discovery District as the first GreenSpot Neighborhood and installed four signs to promote the designation.

“We have enabled almost 200 households in the Discovery District to improve their own energy savings, creating greater awareness about sustainability, and, in the process, helped two historic organizations in the district make energy saving infrastructure improvements that will save them substantial operating funds into the future,” says Harlan Schottenstein, President of the Discovery District Civic Association.

To learn more about the Discovery District, visit [discoverydistrict.com](http://discoverydistrict.com).

**OBJECTIVE****3**

Manage and reduce energy costs over the next five years.

**Baseline:** No baseline established.

**ACTIONS**

- 1** Encourage shifting industrial energy usage to off-peak times, if possible.
- 2** Support creation and expansion of smart meter programs.

*A smart meter is a digital electric meter equipped with two-way communications technology that provides near real-time readings while giving customers greater control to help save money and energy.*

- 3** Encourage large commercial accounts to participate in the PJM Volunteer Demand Response Program.

*Demand Response is a consumer's ability to reduce electricity consumption at their location when wholesale prices are high or the reliability of the electric grid is threatened.*

- 4** Seek energy savings through a community choice aggregation program for residential and small business customers.

**IN ADDITION TO SOLAR PROJECTS,  
THE COMMUNITY GENERATES**



**9,714,101 kWh**

of hydroelectric power on the O'Shaughnessy Dam.  
(2013)



The city's anaerobic digester project generates

**4,179,074 kWh**

using biosolids from the city's wastewater treatment plants.  
(2013)



The commercial-scale wind turbine at Byers Mazda on Billingsley Road annually produces approximately

**150,000 kWh**



**2,650  
rooftop  
solar panels  
installed**

**436,962 kWh  
of energy  
produced  
(2013)**



**Generates  
40% of power  
consumed  
at the  
city's Fleet  
Management  
facility**

**GROVES ROAD SOLAR ARRAY****Generating power to fuel our city**

Whenever the sun is shining, the rooftop at the City of Columbus Fleet Management facility is working hard to generate power. With 2,650 solar panels, it was the largest rooftop array of its kind in Ohio at the time of installation, as well as the first large-scale solar project installed on a municipal building for the City of Columbus. The solar PV system generates 40% of the power consumed at the Fleet Maintenance facility. It was constructed and is maintained by Settle Muter Electric, a Columbus-based company, and it represents true collaboration between project owner General Energy Solutions (GES), original developer Tipping Point Energy, and the City of Columbus.

"This project will serve as a model for future development throughout the city," says Jack Chen, Managing Director, GES USA. "We remain honored to have constructed our first U.S.-based project for the City of Columbus. We greatly appreciate the assistance of the Mayor's Office of Environmental Stewardship and the numerous other divisions of the City of Columbus that made this project possible, not in the least, the Fleet Management Division, which patiently provided unprecedented assistance and access during construction and remains a welcoming host to those wishing to tour the facility."

In addition to solar projects, the city generates 9,714,101 kWh (2013) of hydroelectric power on the O'Shaughnessy Dam. The city's anaerobic digester project generates 4,179,074 kWh (2013) using biosolids from the city's wastewater treatment plants. And the commercial-scale wind turbine at Byers Mazda on Billingsley Road produces approximately 150,000 kWh annually. The city also purchases additional green energy to help power city facilities.

To learn more about the city's renewable energy projects, visit [columbus.gov](http://columbus.gov).

## MORPC WEATHERIZATION PROGRAMS

### Reducing energy usage in low-income homes

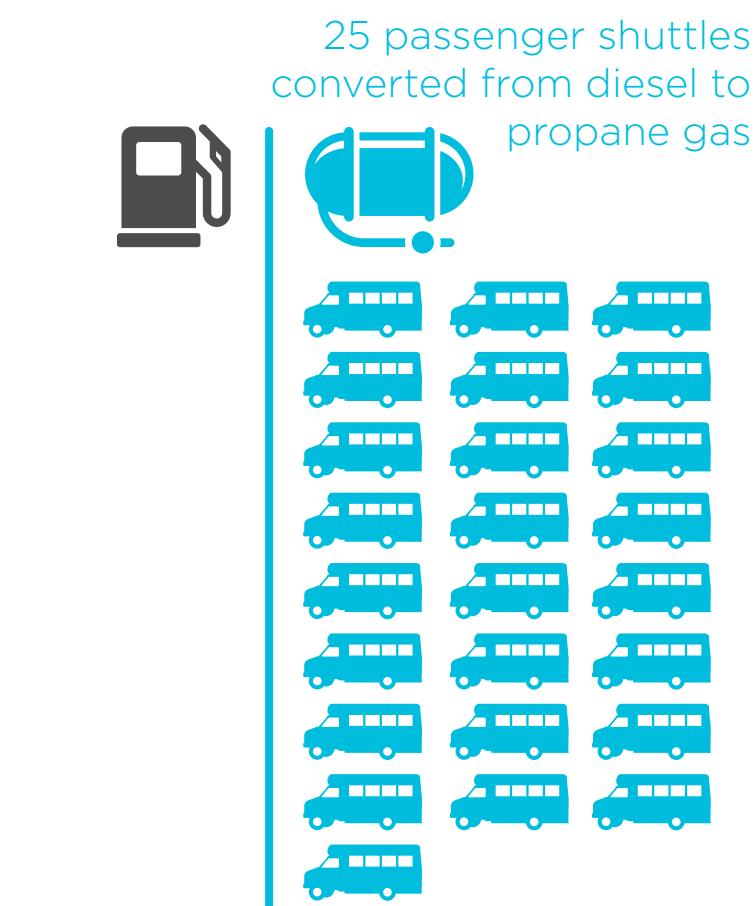
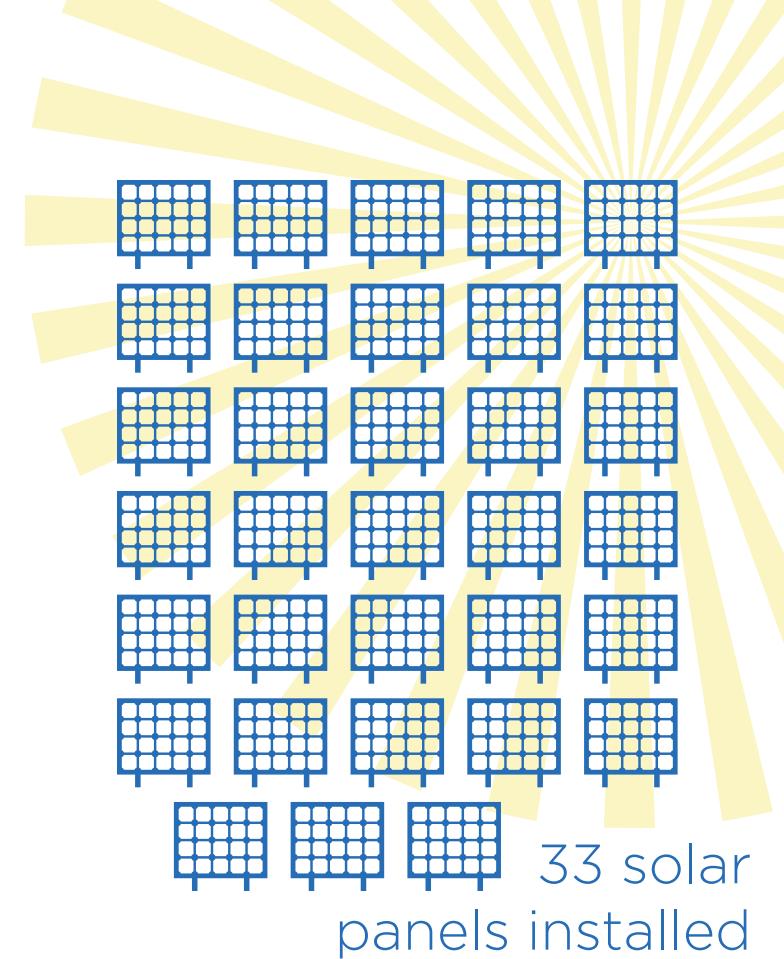
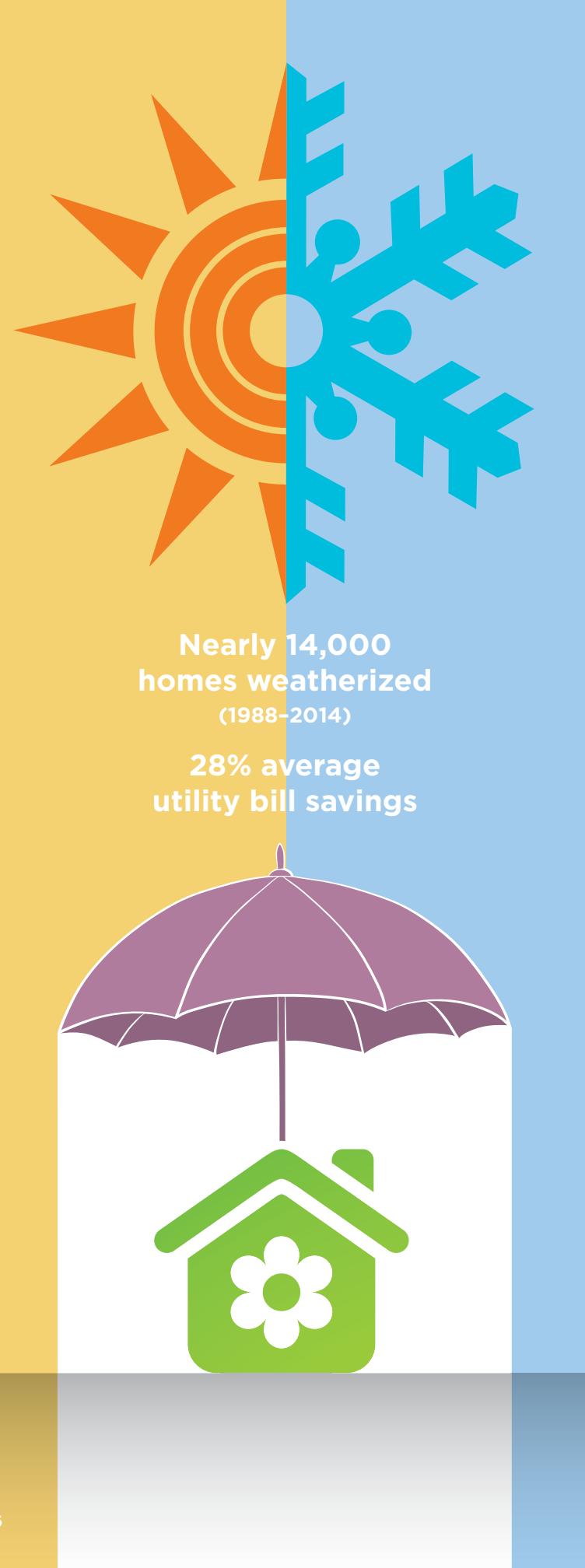
Studies show that the Columbus region has a higher energy use per capita than the average Ohioan or American. To help curb energy use, the Mid-Ohio Regional Planning Commission (MORPC) offers free weatherization programs and energy services to customers who meet income eligibility guidelines. Available services include safety inspections, installation or repair of heating units, insulation of walls and heating ducts, and the reduction of air leakage throughout the homes. Residents also receive personalized energy education and strategies to help facilitate continued energy efficiency. These weatherization and heating improvements have been implemented in thousands of homes throughout the City of Columbus, dramatically increasing energy efficiency, reducing air pollution, and decreasing Columbus' carbon footprint, all while lowering residents' utility bills.

"These programs have touched so many families to protect their health, safety, and comfort, along with saving residents an average of 28% on their utility bills, which helps to lift them up toward economic prosperity," says Christina O'Keeffe, MORPC Director of Energy and Air Quality.

The residential energy programs delivered by MORPC are a great example of public-private partnerships. These programs receive financial support from federal and state funds along with electric and gas utilities serving the Columbus region, including Columbia Gas of Ohio's WarmChoice® program, AEP Ohio's Community Assistance Program, and Home Weatherization Assistance Program administered by the Ohio Development Services Agency.

"Residential energy programs make an important contribution to the economic competitiveness of Columbus by supporting the businesses involved along with improving the financial conditions for the eligible families," says O'Keeffe.

**To learn more about weatherization services, visit [morpco.org](http://morpco.org).**



## COLUMBUS REGIONAL AIRPORT AUTHORITY ENERGY MANAGEMENT PLAN

### Creating energy efficiencies at the airport

The Columbus Regional Airport Authority (CRAA) launched an energy management plan in 2010, kicking off an organization-wide effort to implement efficiency, conservation, and innovation. Energy management efforts have involved every level of the organization from accounting to maintenance, operations, and more.

As part of its environmental stewardship efforts, CRAA installed 33 solar panels on the Concourse A roof in 2014, completely offsetting the energy consumed by passengers connecting to the airport's more than 2,000 power outlets. An online tool allows browsers to view real-time data on the energy generated by the panels.

In addition, CRAA converted its fleet of about 25 passenger transport shuttles from diesel to propane, a cleaner burning fuel, in 2014, greatly reducing greenhouse gas emissions as well as fuel and maintenance costs. CRAA's shuttle fleet logs about 1.2 million miles a year, a distance roughly equivalent to 48 trips around the Earth, making the magnitude of these reduced emissions extremely significant.

"These environmental stewardship efforts align with CRAA's strategic priority to champion social responsibility," says Paul D. Kennedy, AAE, CRAA Manager of Energy and Environment. "By being thoughtful about today's business and development practices, we can preserve the environment for future generations. In 2015 and beyond, we will be applying a continuous improvement approach—using the environmental management system principles—to ensure that our operations minimize environmental impact and provide value to our customers and the community."

# Transportation



## BEAUTIFUL

Motor vehicles contribute significantly to poor air quality and smog, which detract from the natural beauty of our city. By providing mass transportation, alternative fuels, and biking and walking infrastructure, the impacts of transportation on the environment can be minimized, thus preserving the beauty of the Columbus skyline.



## HEALTHY

For people with asthma or heart disease, poor air quality can result in a trip to the emergency room. Decreasing transportation-related emissions will improve the health of Columbus residents, and sensitive populations will be able to live more comfortably as they enjoy outdoor activities. Additionally, prioritizing development of infrastructure that supports active transportation will mobilize our community members and help reduce obesity rates.



## PROSPEROUS

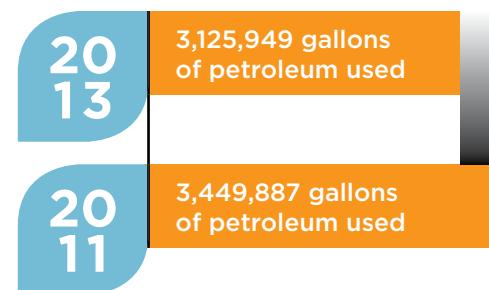
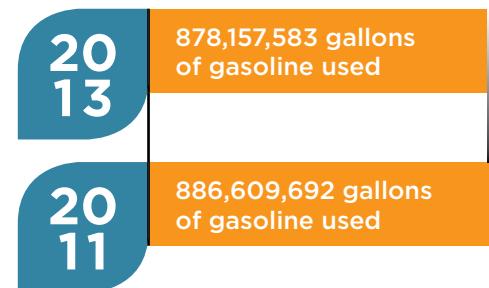
Providing alternative transportation options puts disposable income back into the pockets of residents by reducing the need for families to spend precious income on car payments, gasoline, and insurance. Lack of transportation is also the largest obstacle to obtaining and retaining employment.



**To support efficient movement of people and goods, we will take the following actions in the next five years:**

**OBJECTIVE 1**

Reduce consumption of petroleum-based fuels from city operations by 33% and from the community by 5% over the next five years.

**BASELINE****CITY OPERATIONS****COMMUNITY**

**Note:** While gallons of petroleum consumed is not available specific to the Columbus community, it is available statewide. Per capita estimates of usage were used.

The two charts above are not drawn to equal scale.

**ACTIONS**

- 1 Reduce vehicle idling through encouragement and awareness campaigns to the general public and fleet operators.
- 2 Raise community support for the proposed passenger rail system that would connect Columbus to Fort Wayne, Indiana, and Chicago, Illinois.
- 3 Utilize automatic vehicle location system data to increase efficiency of city employee driving habits through route planning, training, and incentives.
- 4 Install anti-idling technology on new police cruisers and explore use for other types of vehicles within the city that require idling to power auxiliary equipment such as computers and lights.
- 5 Pilot use of bicycles and cargo bicycles for duties traditionally assigned to car or off-road vehicles within the city fleet.
- 6 Promote use of electronic solutions and remote training programs to avoid unnecessary driving.
- 7 Increase use of alternative fuel lawn maintenance equipment. Evaluate the creation of a lawn-mower exchange program.



# 1.2 million gallons of petroleum fuels DISPLACED BY 2020



# \$2 million per year in taxpayer SAVINGS BY 2020

## CITY OF COLUMBUS FLEET MANAGEMENT DIVISION GREEN FLEET

**Columbus' award-winning green fleet is among the most recognized in the nation**

Named the #1 Fleet Operation in North America in 2014 and the #1 Government Green Fleet in 2011, the City of Columbus Fleet Management Division is at the head of its class when it comes to green transportation. The Division is responsible for the acquisition, disposition of all vehicles/equipment, green technologies, fueling infrastructure for both petroleum and gaseous fuels, and the maintenance of all vehicles used by city staff within all departments for both on-road and off-road units. In past years, the Fleet Division has worked to reduce overall fuel usage by eliminating under-utilized vehicles, right-sizing vehicles to the assigned job duty, and transitioning to Compressed Natural Gas (CNG), a clean-burning, domestically available, low-cost alternative fuel.

To support this transition, Columbus is home to two large "fast-fill" CNG stations that serve city vehicles, the general public, and Fortune 500 companies in the area. One of the stations is the largest "fast-fill" public access CNG station in the Midwest.

Through the use of CNG and other green transportation efforts, by 2020, the city will have displaced more than 1.2 million gallons of petroleum fuels, saving the taxpayers of Columbus over \$2 million per year. "This is like taking more than 3,000 cars off the road every year," says Kelly W. Reagan, Fleet Administrator for the City of Columbus. "By reducing petroleum consumption, we are reducing our dependency on foreign-produced oil and providing a much cleaner environment for our children and their children."

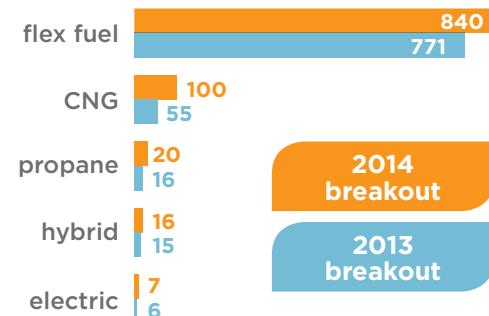
For more information, visit the Division of Fleet Management at [columbus.gov](http://columbus.gov).

**OBJECTIVE****2**

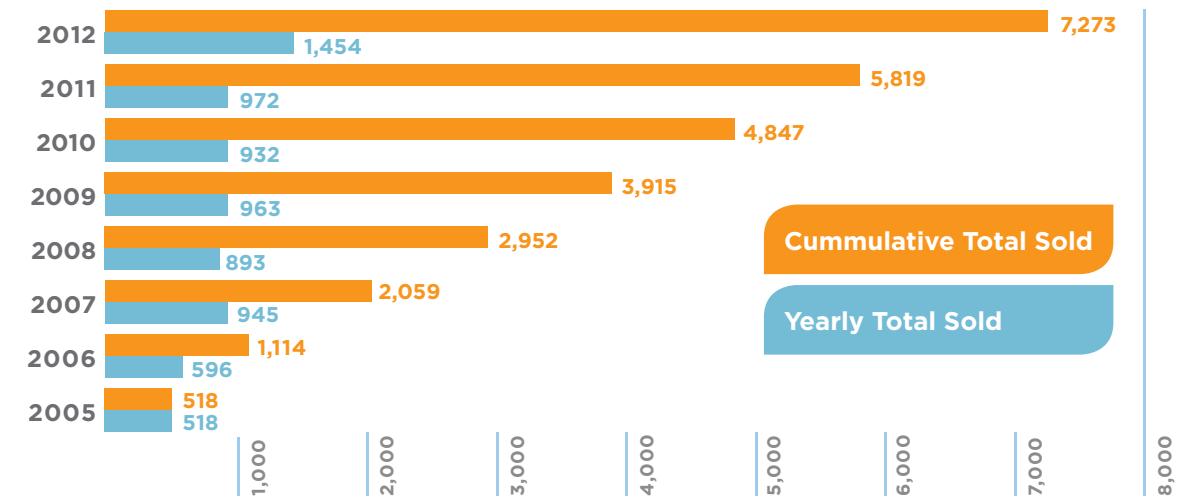
Triple the amount of alternative fuel vehicles sold in Columbus to 22,000 over the next five years.

**BASELINE****CITY OPERATIONS**

As of December 2013, there were 863 alternative fuel vehicles in the city's fleet. As of 2014, there were 983.

**COMMUNITY**

1,454 alternative vehicles were sold in Columbus in 2012 for a total of 7,273 since 2005.



**Note:** This data is only inclusive of hybrid electric and plug-in electric vehicles; additional vehicle types, such as CNG and E85, will be reported in the future.



**50,000+  
bikes parked**

**500000**

Nearly 500,000  
automobile miles saved

**PEDAL INSTEAD**

**Free, secure bicycle parking at festivals and other events gives residents the choice to pedal instead**

An innovative program offered by Yay Bikes!, Pedal Instead has provided free, secure valet-style bicycle parking at public festivals and events since 2007. Like a coat check for bikes, the program's bike corrals help reduce event congestion and give residents a healthy transportation alternative that's good for them—and our environment.

In 2014 (with two events left to go), the program parked 7,434 bicycles at 17 events over 20 days, saving 4,431 gallons of fuel and 90,412 pounds of related carbon dioxide emissions. What's more, cyclists burned 4,223,673 calories through 7,764 hours of active transportation.

"We want Pedal Instead to be at every possible special event to serve cyclists with consistency and educate people about bicycle transportation," says Catherine Girves, Executive Director of Yay Bikes! "We plan to more intentionally outreach through our bike corrals to "bike curious" members of the general public so that we can help them effect a mode shift in their everyday lives."

To find out where you can "Pedal Instead," visit [yaybikes.org](http://yaybikes.org)

**OBJECTIVE****3**

Achieve Silver Level Bicycle Friendly Community designation or higher from the League of American Bicyclists over the next five years.

**BASELINE****ACTIONS**

Bronze Level



- 1** Explore the creation of a bike hub(s) with commuter facilities, such as showers, lockers, indoor parking, maintenance, security, and office space for transit organizations.
- 2** Add a minimum of 10 miles of multi-purpose trails.
- 3** Double the size of the CoGo Bike Share System.
- 4** Increase bike and pedestrian count programs and analyze data to understand transportation trends and prioritize areas for new infrastructure.
- 5** Install thoughtfully designed, destination-oriented bike infrastructure connecting CoGo stations, east-west corridors, and within one mile of elementary schools.
- 6** When building bike lanes, allow space for a striped buffer for future installation of protective devices, such as bollards, once a maintenance plan and equipment for such areas have been resolved.
- 7** Create, implement, and promote a maintenance plan for bikeways including regular and emergency street sweeping, vegetation management, pothole repair, and snow removal.
- 8** Create a volunteer Bike Ambassador program to ensure bikeway maintenance needs are identified quickly and to help users navigate the system.
- 9** Require secure, supervised bike parking be provided at applicable major events taking place on city property or that have received city funding.
- 10** Encourage all schools to have bike parking.
- 11** Offer a League of American Bicyclists certified instructor training annually.
- 12** Create "Park and Pedal" lots much like COTA Park and Ride facilities to make combined car/bicycle commutes more feasible into downtown.
- 13** Create a program targeting low-income residents that would encourage use of bikes for transportation, offset the costs for CoGo bikeshare use, and/or provide bikes, helmets, and safety training.

"COG has become a catalyst for our region to integrate trails, environmental awareness, active lifestyles, and green transportation into the daily fabric of our citizens."

**Alan D. McKnight***Director of Columbus Recreation and Parks Department***100-mile trail network**

Part of more than 300 miles of bikeways in Columbus and surrounding communities



For a trail map, go to [columbusrecparks.com](http://columbusrecparks.com).

**CENTRAL OHIO GREENWAYS**

If you're going—go green by taking trails that lead to daily destinations all across the city

More than 300 miles of bike paths wind their way through Columbus and our surrounding communities, including the Central Ohio Greenways (COG), a network of 100 miles of paths located along our river corridors.

The COG trails connect many destinations, including the downtown riverfront, the Ohio State University, picnic areas, boating and fishing facilities, family-friendly parks, and shopping and recreation centers. They create a unique experience by joining the natural wonders of scenic rivers with diverse neighborhoods and city attractions. Beyond providing recreational opportunities for residents of all ages, the trails also offer a convenient mode of alternative transportation to cyclists and pedestrians.

"COG has become a catalyst for our region to integrate trails, environmental awareness, active lifestyles, and green transportation into the daily fabric of our citizens," says Director Alan D. McKnight. In fact, COG and Columbus Recreation and Park Department's nationally recognized trail wayfinding system have been studied and adopted by several other cities. Looking forward, COG is striving to expand access to one of the Midwest's most robust trail networks in order to offer more miles, more routes, and more connections.

**OBJECTIVE 4**

Reduce vehicle-pedestrian crashes by 25% over the next five years.

**BASELINE**

Pedestrians hit by motor vehicles in central Ohio from 2007 to 2011: **2,157**

Pedestrians killed by motor vehicles in central Ohio from 2007 to 2011: **98**

**ACTIONS**

- 1** Add LED countdowns to all signalized intersections and evaluate the use of additional 'no turn on red' signage.
- 2** Evaluate feasibility for the use of unique traffic calming features such as artful and/or lit crosswalks.
- 3** Increase the rate of sidewalk installations.
- 4** Permanently designate a street to solely allow for nonmotorized transportation.
- 5** Create a ticket diversion program to dismiss bike-related minor traffic citations. For example, instead of paying a fine, the driver or cyclist would attend a course on how bikes and cars can safely share the road.
- 6** Aggressively enforce pedestrian rights-of-way at all crosswalks.



**As of October 2014:**

**300** **bikes in service**  
**1,289** **annual subscriptions**  
**68,217** **trips logged**  
**184,890** **miles traveled**  
**7,946,436** **calories burned**  
**125,665** **pounds of carbon offset**

**COGO BIKE SHARE****The greenest way to get around downtown**

Launched in July 2013 as a project of the City of Columbus, CoGo Bike Share makes it easier—and greener—than ever to get around downtown Columbus. The bike share boasts 300 specially designed, heavy-duty bicycles and 30 secure bicycle docking stations located around the city. Members of the bike share can simply check out a bike at any automated station, ride to their destination, and then dock the bike at any nearby station. Bikes and stations are available 24/7/365, providing an affordable, healthy transportation option for accessing all of the city's best destinations.

"We are proud of the unwavering support from the local residents and business communities," says Heather Bowden, CoGo Bike Share General Manager. "We will continue to expand our system so that more residents and visitors can understand and take advantage of the benefits afforded to them through bike share—the only transportation type that improves the health of the customer and the health of the community."

**Day passes and annual memberships are available. For pricing or to become a member, visit [cogobikeshare.com](http://cogobikeshare.com).**

OBJECTIVE **5**

Reduce the amount of people driving alone to work to 70% over the next five years.

**BASELINE**

2013 – 79% of Columbus residents drive a single-occupancy vehicle to work.

**ACTIONS**

- 1** Collaborate to highlight CoGo Bike Share, bus routes, bikeways, car sharing and other transit options on a unified map, mobile app, and membership/pass program.
- 2** Launch a Smart Trips program, offering intensive education and encouragement to residents who express an interest in alternative transportation.
- 3** Challenge employers to offer their employees incentives for use of alternative transportation.
- 4** Strategically plan for a comprehensive, future-oriented system of public transportation that fully integrates appropriate rail transit, bus rapid transit, and enhanced overall bus service.
- 5** Improve the COTA customer experience, per the results of the COTA study, by increasing efficiency and appeal through the strategic placement of stops and shelters and by providing free wifi.
- 6** Expand car sharing to additional areas in and around Columbus.
- 7** Host an annual Open Streets event.
- 8** Ensure that COTA bus routes are equitably distributed throughout downtown, allowing for greater community access to transit.



# Waste Reduction



## BEAUTIFUL

Each year, volunteers come together to clean up the litter that has carelessly been deposited along our roadsides, park trails, and stream corridors. Litter detracts from the beauty of neighborhoods and presents a negative impression of the community.



## HEALTHY

Illegal dumping can cause serious threats to public health, and littering causes a similar threat to wildlife. For example, tires dumped on an abandoned property provide a breeding ground for disease-carrying mosquitoes. Plastic bags can entangle wildlife. People and wildlife benefit when waste is managed properly.



## PROSPEROUS

Everyday, recyclable materials that have inherent value are thrown away. Worse yet, the community pays to have these valuable materials buried in a landfill. The entire community stands to benefit when such materials are recycled into new, salable products instead of being misplaced in the landfill.



**To reduce waste going to landfills and littering our neighborhoods, we will take the following actions in the next five years:**

**OBJECTIVE**

**1**

Reduce food waste and yard waste sent to the landfill by diverting an additional 10% of each material (equal to 5,893 tons of food waste and 143,003 tons of yard waste) over the next five years.

**BASELINE**

According to the 2013 Solid Waste Authority of Central Ohio annual district report, 5,358 tons of food waste and 130,003 tons of yard waste were diverted from the landfill. Total tonnage of all waste sent to the landfill was 1,020,127. Also in 2013, a Waste Characterization study shows that 12.8% of what is sent to the landfill is food waste and 5.9% is yard and pet waste.

**ACTIONS**

- 1** Establish a composting facility proximal to Columbus that is permitted to accept food scraps.
- 2** Offer composting and food diversion programs targeting the largest producers such as event centers and schools. Incorporate training to avoid contamination of compostable materials.
- 3** Assist in the development of an additional anaerobic digester facility to convert organic waste to CNG or to generate electricity.
- 4** Expand GreenSpot Backyard Conservation Program to include rain garden assistance, composting workshops, irrigation system upgrades, and free or discounted materials and equipment.
- 5** Create a yard waste management educational campaign for residents.
- 6** Utilize community gardens as neighborhood area composting sites.
- 7** Support and promote efforts to recover unwanted food from restaurants to feed those in need.

**5,358 tons  
of food waste  
and  
130,003  
tons of yard  
waste were  
diverted from  
the landfill**





## THE OHIO STATE UNIVERSITY ZERO WASTE STADIUM

### Eliminating waste at Ohio Stadium and throughout the campus

"The Ohio State University strives to be a leader in global sustainability by demonstrating the integration of sustainable practice and programming across all university functions. Waste reduction is at the core of these efforts, and the university has set a goal to become a zero waste campus by 2030."

**Aparna Dial**

*University Energy and Sustainability Engineer  
Director of Energy Services and Sustainability  
The Ohio State University*

More than 100,000 people celebrate on and around campus during Buckeye football games, generating a large amount of waste. Yet, you won't find a trash can at the Ohio Stadium. In 2011, Ohio State launched a zero waste stadium initiative as a demonstration of the university's leadership in sustainability and to help educate the broader community on sustainability issues.

By diverting 90% or more of the waste stream, Ohio Stadium has become the largest stadium in the country to achieve zero waste.

Waste is minimized at its source by choosing only food and vendor products that are compostable or recyclable, thus eliminating the need for trash cans. Ohio Stadium provides recycling and composting bins for Buckeye fans to dispose of their waste, and volunteers are positioned nearby to help guests determine the appropriate container. The compostable and recyclable products are delivered to the university's zero waste partners, Price Farms Organics and the Southeastern Correctional Complex, where the materials are composted and recycling is managed. This partnership provides opportunities for inmates to develop job skills that could be useful upon re-entry into society. Additionally, leftovers are donated to the Mid-Ohio Foodbank.

In addition to volunteers, the program employs local high school students to serve as zero waste ambassadors in the stadium, teaching fans about sustainability. This collaboration gives the high school students exposure to higher education, sustainability, and the work environment.

"Two years in a row (2012 and 2013 seasons), The Ohio State University was named the Diversion Rate Champion of the Game Day Recycling Challenge. A total of 88 schools participated in the national campaign, resulting in 1.46 million pounds of waste from football games diverted from landfills. Ohio State fans diverted 90.5% of waste from Ohio Stadium during the 2013 season with a game-high total of 98.5% percent from the Wisconsin game – the highest landfill diversion of any participating school," says Aparna Dial, University Energy and Sustainability Engineer and Director of Energy Services and Sustainability.

To learn more about the project, visit [footprint.osu.edu/zero-waste](http://footprint.osu.edu/zero-waste).

**OBJECTIVE****2**

Divert an additional 10% (equal to 54,515 tons) of recyclable and reusable materials from the landfill over the next five years.

**BASELINE**

According to the 2013 Solid Waste Authority of Central Ohio annual district report, there were 545,147 tons of recyclables diverted from the Franklin County Landfill in 2013.

**ACTIONS**

- 1** Improve upon the success of the "RecyColumbus" residential recycling program with the following changes in order to reach a diversion rate of 35%:
  - Target education to neighborhoods where there is highest potential for improving recycling rates.
  - Reduce residential trash can size from 96 to 64 gallons as old containers are replaced.
  - Explore increasing recycling collection frequency from every other week to weekly or offering a free or low-cost program to help families acquire a second recycling container.
- 2** Create a recycling program for high-density apartments that are unable to participate in RecyColumbus.
- 3** Require new multiple dwelling unit developments to provide recycling service.
- 4** Attract credible brokers and manufacturers that purchase recycled materials in order to increase the range of materials that can be accepted at the recycling plant long term.
- 5** Develop a community-wide standardized recycling and trash container labeling system and guide recommending best practices.
- 6** Reduce Styrofoam use in restaurants, schools, and food trucks. Assist in finding affordable alternatives.



- 7** Create online document management system for city plan submission and review.
- 8** Install energy efficient dishwashers and purchase dishware to reduce use of disposable products in city facilities.
- 9** Install a recycling bin next to each existing trash bin along public streets and in city parks.
- 10** Expand the bar and restaurant recycling program on High Street to other commercial corridors and provide waste audits to participants.
- 11** Compile a clearinghouse of outlets for recycling and reuse of items that are not accepted in traditional recycling programs (e-waste, textiles, furniture, etc.) and broadly market these options to the public.
- 12** Re-establish the Waste Not Center, a reuse center for artists and teachers.
- 13** Increase city procurement of recycled content goods through actions such as strengthening the environmental preference in city code and/or increasing awareness of environmentally preferable options available to employees.
- 14** Evaluate and optimize refuse collection routes.
- 15** Add recycling containers and collection service in all remaining city facilities.



**DECONSTRUCTION INITIATIVE****Reducing waste while creating jobs**

"We support furthering the sustainability of our city, and our support reflects our belief that PNC will only be as strong as the communities where we conduct business. We continue to make investments and grow in Columbus and central Ohio."

**Michael Gonsiorowski**  
PNC President for Columbus

When homes are demolished, the construction materials are typically sent to landfills where they take up a good deal of precious space. Concerned with this problem, the city joined forces with area businesses and nonprofit organizations to create a better solution. And in 2013, the Deconstruction Initiative was born.

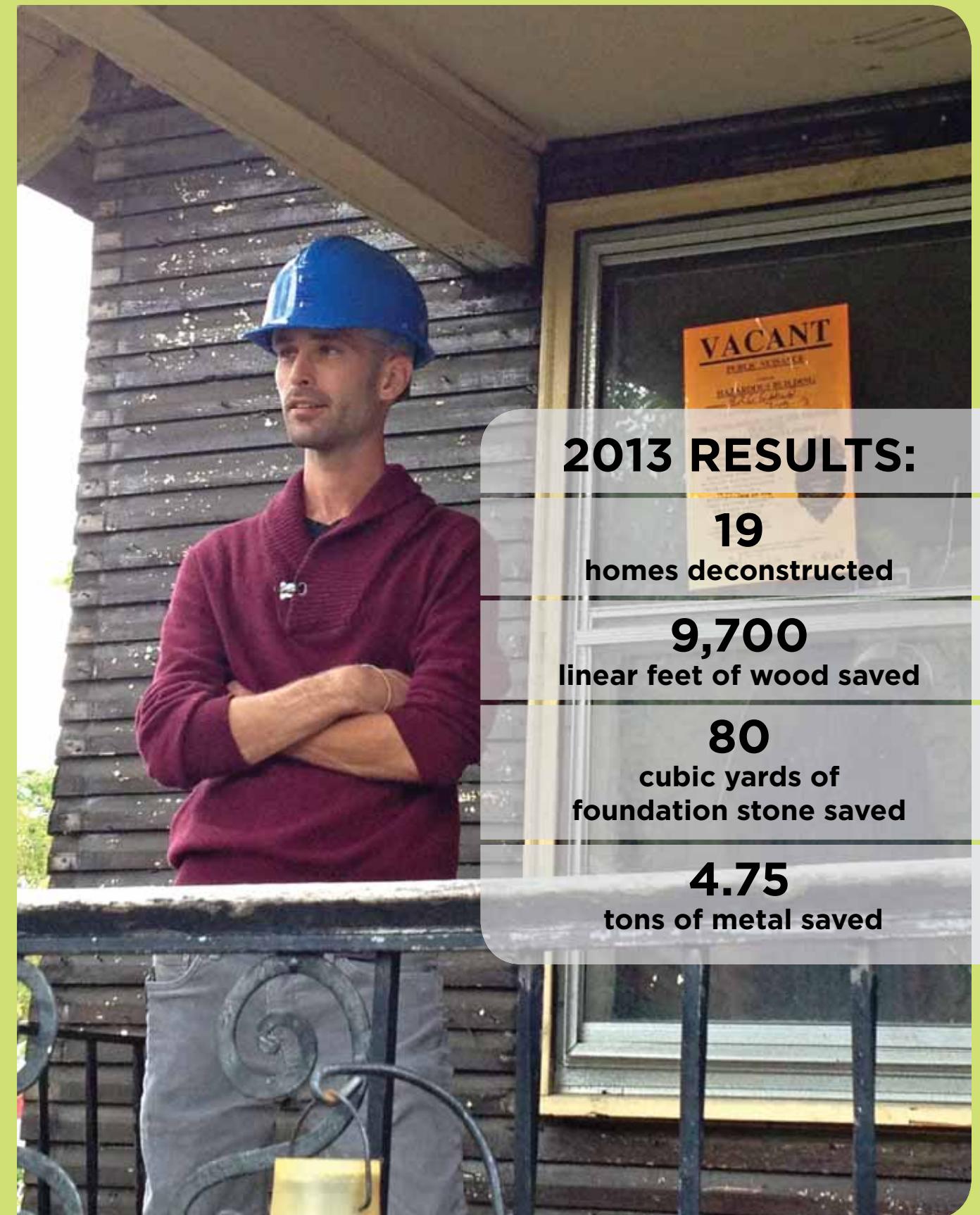
The initiative works to remove blighted houses from neighborhoods while decreasing the amount of construction debris going to landfills and creating training and employment opportunities for individuals in Columbus with challenging backgrounds. Key project partners include Eigner Construction; Rain Brothers, a deconstruction contractor; and CleanTurn, a social enterprise that helps people with employment obstacles work toward self-sufficiency. The project's major financial supporters include the City of Columbus, PNC Foundation, The Columbus Foundation, Ohio Capital Corporation for Housing, United Way of Central Ohio, and Ohio EPA. The Greater Columbus Community Development Collaborative acted as a fiscal agent for grant funds dedicated to the initiative.

"The collective efforts of the city, nonprofit, and private organizations led to a dramatic decrease in the amount of construction debris in local landfills. We were able to take material from vacant and deteriorated houses and use that material for creative and innovative end uses. In the process, we were able to create more than 40 employment opportunities for men and women with significant challenges to employment, including prior incarceration," says John Rush, CleanTurn CEO and President.

The initiative implemented innovative deconstruction tactics, including developing a method to safely and efficiently reclaim an average of 700 to 1,000 board feet of structural lumber per house prior to demolition, ultimately keeping tons of building materials from entering the waste stream. What's more, Rain Brothers has created a new venture, Reckon Reclaimed, which reclaims the lumber and materials from the initiative's deconstructed homes and puts them to use in commercial and residential furniture projects.

"By finding outlets for reclaimed lumber and continuing to develop end market uses for the lumber, we can make deconstruction a financially advantageous method of demolition," says Rain Brothers Partner Gordy Smith.

To learn more or purchase furniture created from Columbus-area deconstructed homes, visit Reckon Reclaimed at [reckonreclaimed.com](http://reckonreclaimed.com).



**OBJECTIVE****3**

Reduce litter rates to 50% below state average or less than 238 pounds per road mile over the next five years.

**BASELINE**

According to the 2004 Ohio Department of Natural Resources Statewide Litter Study, approximately 475 pounds of litter were deposited per mile along all roads annually.

**ACTIONS**

- 1** Launch a campaign to target cigarette litter, simultaneously promoting the availability of the illegal dumping hotline, [itsacrime.org](http://itsacrime.org).
- 2** Research feasibility of a cigarette tax to finance litter prevention programs and clean-ups.
- 3** Aggressively enforce litter laws.
- 4** Conduct a litter survey to establish a local baseline, inform solutions, and track progress.
- 5** Incentivize use of reusable bags and consider a surcharge or ban on single-use bags.

**OBJECTIVE****4**

Reduce construction and demolition waste by 20% over the next five years.

**BASELINE**

In 2013, 478,765.11 tons of waste were landfilled in Franklin County area construction and demolition landfills.

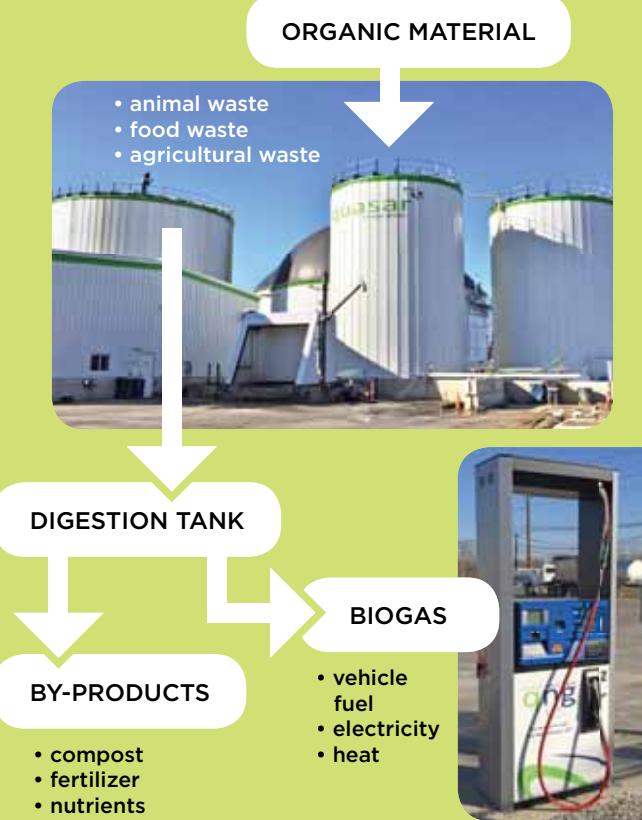
**ACTIONS**

- 1** Deconstruct vacant and abandoned houses and commercial buildings as an alternative to traditional demolition.
- 2** Establish a new facility or online exchange to sell materials salvaged from deconstructed homes, and develop markets to sell these materials.
- 3** Update city code to increase the required percentage of construction and demolition debris recycled from 25% to 35% and establish audit methodology.
- 4** Conduct a pilot project to evaluate long-term feasibility of utilizing recycled asphalt shingles in city road and trail projects.
- 5** Evaluate the feasibility of requiring salvage/deconstruction plans as a condition of any demolition permit.



**“What was once considered waste is now considered a valuable resource.”**

**Mel Kurtz**  
President  
*quasar energy group*

**ANAEROBIC DIGESTER PROJECT****Converting waste into energy**

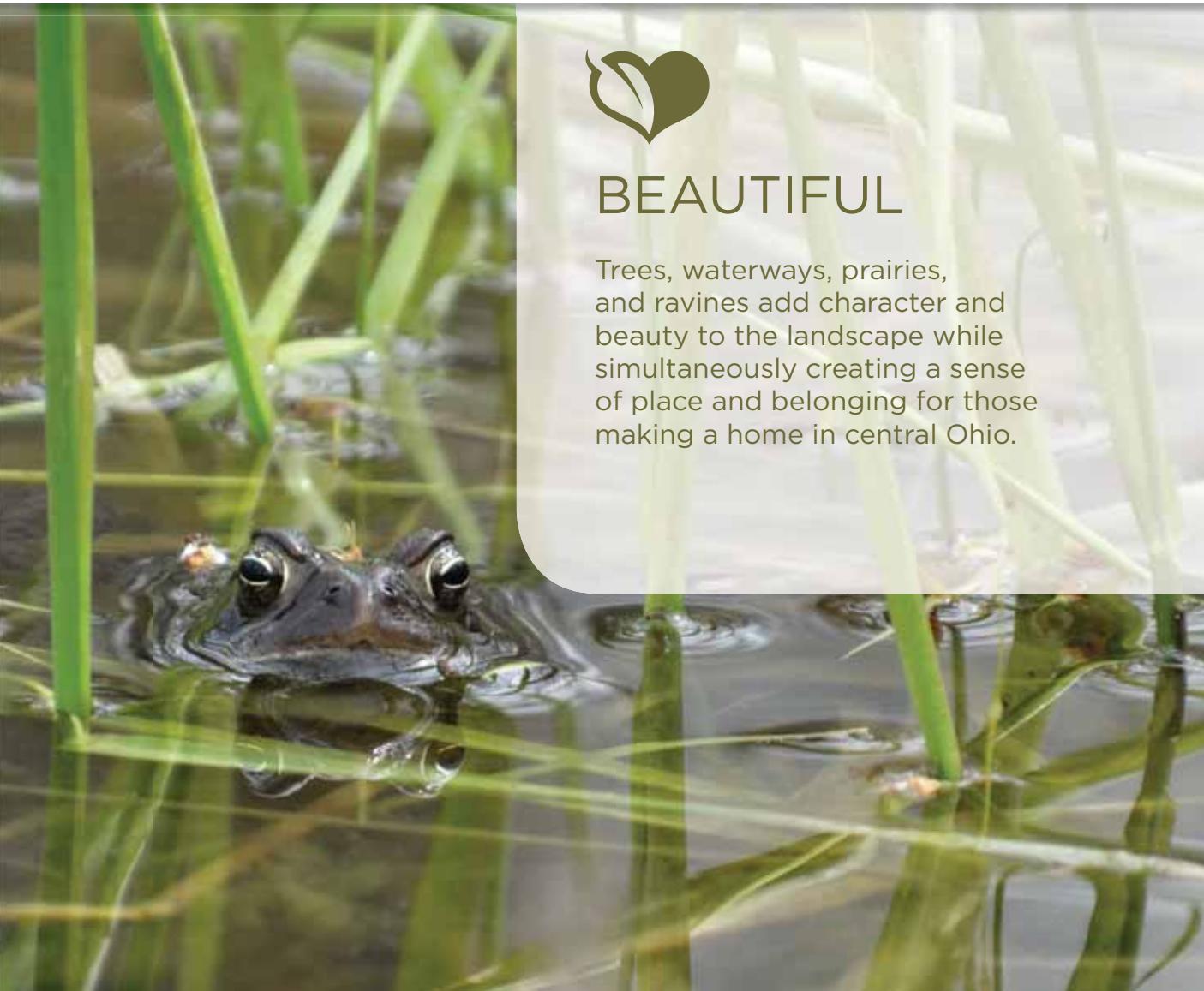
In 2010, quasar energy group, Kurtz Bros., Inc., the City of Columbus, and the Solid Waste Authority of Central Ohio (SWACO) celebrated the ground breaking of an anaerobic digester project on Jackson Pike designed to process regional waste and transform it into renewable energy. Since then, the facility has been expanded, more than doubling in size. In addition, a gas upgrade system has been installed to convert excess biogas to alternate motor vehicle fuel, or CNG. The CNG is sold at a public fueling station located at the digester, bringing clean, renewable, and less expensive fuel to the residents of Columbus.

“Anaerobic digestion is a sustainable option for area businesses that want to manage their organic waste in a manner that benefits the community and the environment,” says Tom Kurtz, President, Kurtz Bros. Central Ohio.

Anaerobic digestion is quickly becoming a preferred solution for managing organic waste streams at large stadiums and cafeterias across Ohio. The Ohio State University’s Jerome Schottenstein Center, the largest arena in the Big Ten Conference, has recently joined the ranks of Ohio’s stadiums converting food waste to energy by utilizing an InSinkErator Grind2Energy grinder to process food scraps into a slurry. The slurry is held in an onsite storage tank and monitored remotely. “The slurry is then taken to the Columbus anaerobic digester, where the gases emitted from the slurry are captured and converted into electricity, heat, or compressed natural gas for use as vehicle fuel,” comments quasar President Mel Kurtz.

For more information on anaerobic digestion, visit [quasareg.com](http://quasareg.com).

# Ecological Systems



## BEAUTIFUL

Trees, waterways, prairies, and ravines add character and beauty to the landscape while simultaneously creating a sense of place and belonging for those making a home in central Ohio.



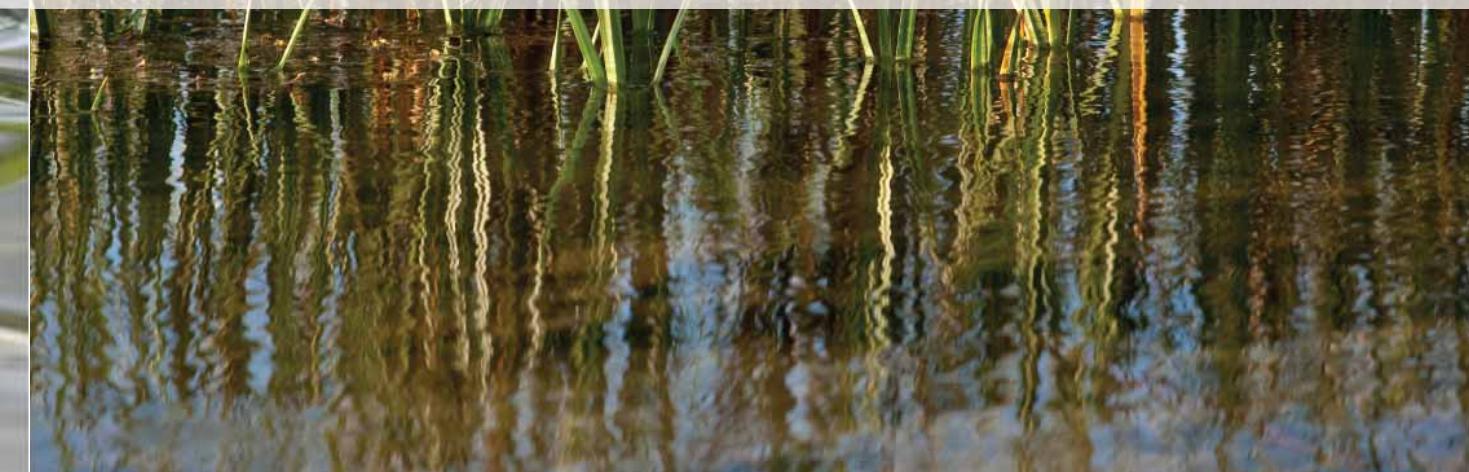
## HEALTHY

Like a “canary in a coal mine,” wildlife struggling to survive serves as an indicator that a problem exists and that humans are also likely in danger of adverse effects related to the state of the surrounding environment.



## PROSPEROUS

Natural resources provide the raw materials for products that consumers enjoy and that support the economy. If those resources are not harvested sustainably, the ecosystem will suffer, and eventually will no longer be able to support the needs of the population.



**To preserve and restore natural ecological systems, we will take the following actions in the next five years:**

**OBJECTIVE****1**

Increase tree canopy a minimum of 1% annually over the next five years.

**BASELINE**

Estimated tree assessment showed 22% to 24% canopy in 2013.

**ACTIONS**

- 1** Create a campaign to communicate the benefits of a healthy tree canopy.
- 2** Develop tree protection standards, including a requirement for planting trees in new housing and neighborhood developments. Provide planting standards to ensure tree growth to maturity.
- 3** Start an "Adopt a Tree" program to fund tree plantings.
- 4** Initiate incentives for tree preservation and plantings on private property and include basic tree maintenance training.
- 5** Target tree plantings in areas identified by the Urban Tree Canopy Assessment.
- 6** Implement the Mayor's Street Tree Initiative to plant more than 1,000 trees per year in the public right of way and educate residents on how to request them. Require a mix of street-tree species to avoid vulnerable monocultures.

**OLENTANGY RIVER RESTORATION AND FIFTH AVENUE DAM REMOVAL****Restoring an ecosystem and improving a community**

In August 2012, the City of Columbus began the removal of the Fifth Avenue Dam in the Olentangy River, launching a transformation project designed to return the river to a natural flow and improve the river's habitat and ecosystems. Active construction was completed in the early part of 2014.

The numerous environmental benefits of the project include the addition of wetland areas along both sides of the Olentangy. Planted with native grasses, shrubs, and trees, these areas will help capture stormwater runoff from busy nearby traffic areas, simultaneously reducing erosion and providing an element of natural stormwater filtration, thus improving overall water quality for Columbus residents. The project also improved safety for boaters using the city-designated Olentangy River Water Trail. Additional benefits include removal of invasive plant species, removal of trash and debris from the river and both banks, and the addition of a series of riffles and pools along the project length to create habitats favorable to a variety of plants and animals. In the future, some of the restored riverbank areas will serve as outdoor laboratories for The Ohio State University.

"The river now flows unimpeded past the site of the former dam," says Greg Davies, Columbus Director of Public Utilities. "Aside from the many ecological benefits of the project, it has also created an overall visually aesthetic improvement to the area, much of which runs alongside the heavily used Olentangy Greenway Trail. The appearance of this project will continue to evolve over the next several years through the maturation of native species along the new riverbanks."

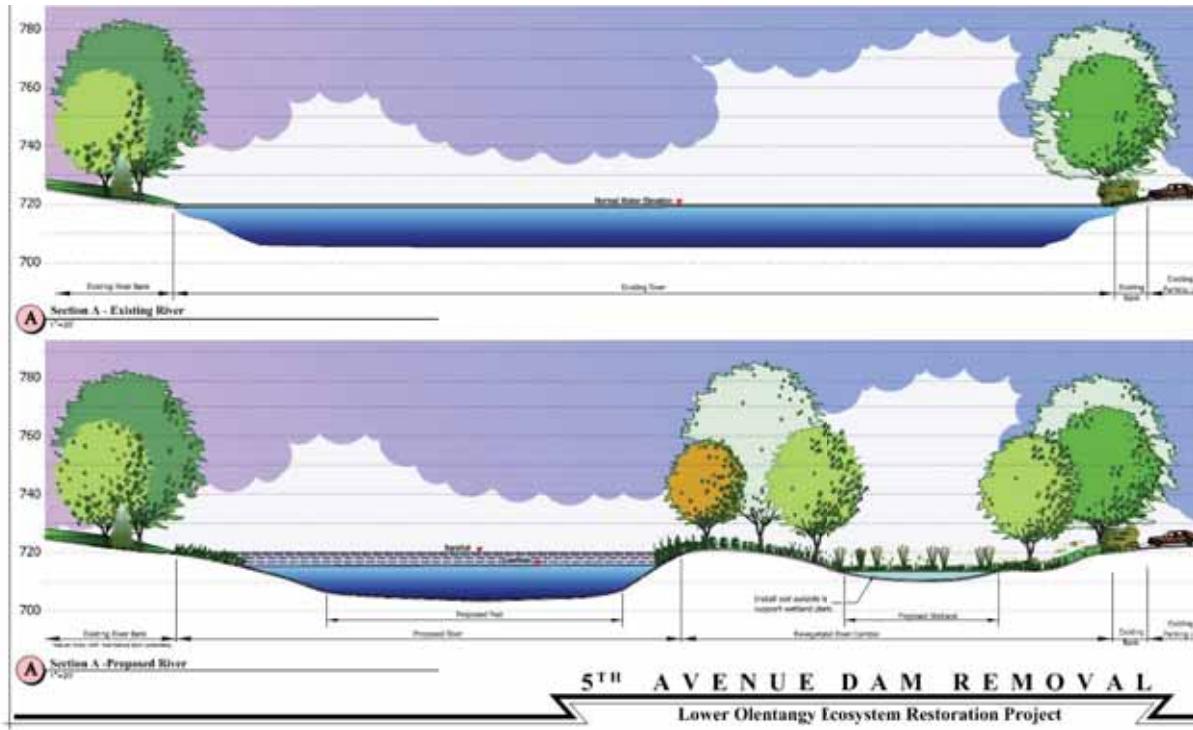
Carried by the momentum of the Fifth Avenue project, in late 2013 the city embarked on a similar project to remove the Main Street Dam from the Scioto River. This project will transform the Scioto riverfront downtown and add 33 acres of green space.

To see the results of the Olentangy River restoration project, the public can access the area from the Olentangy Trail, just north of Fifth Avenue, near Battelle on the east side of the river. Main Street dam construction can be seen along the Scioto Mile near Bicentennial Park or at Genoa Park near COSI.

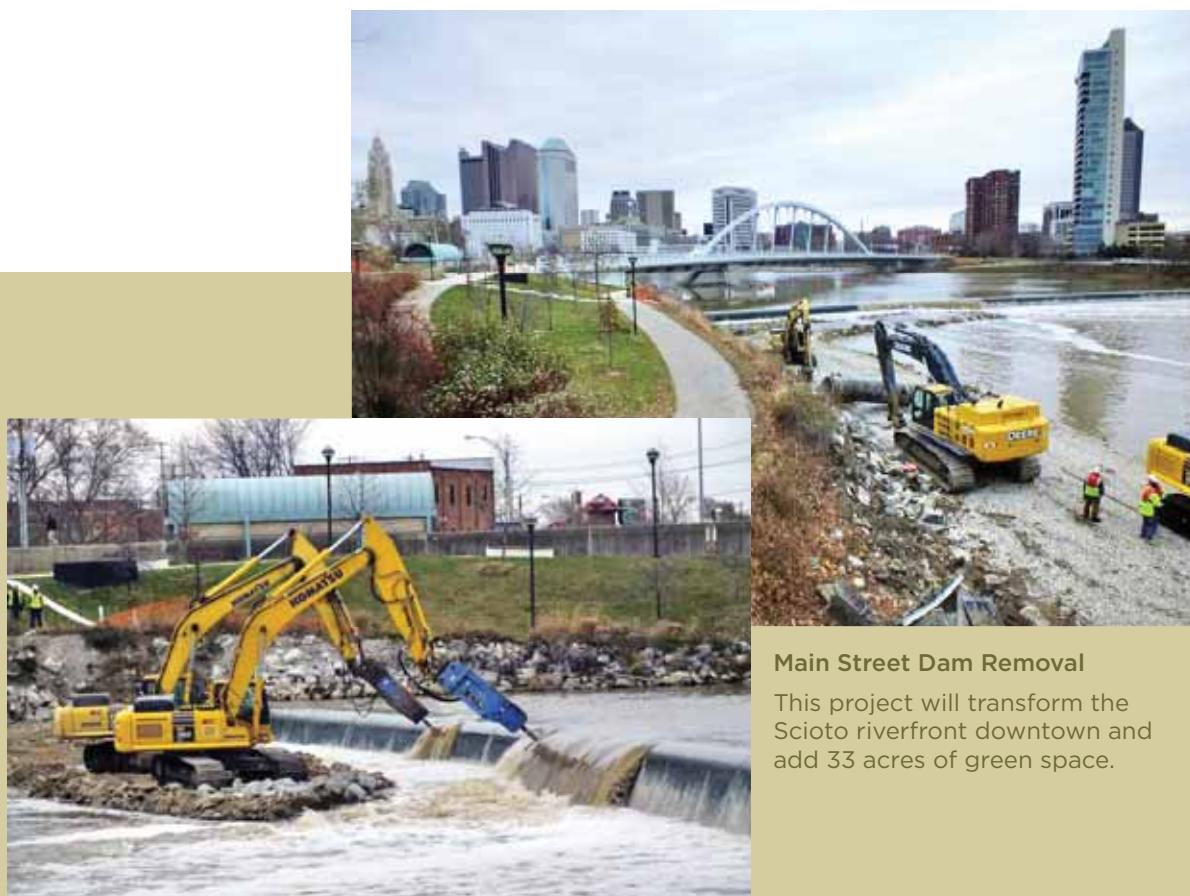


**"Public response was overwhelmingly positive and supportive of the work that went into restoring this section of the Olentangy River, and it has served as a continual reminder of the crucial role clean water plays in our community."**

*Greg Davies  
Director  
Columbus Department of Public Utilities*



Scioto River before Main Street dam removal projects.



Rendering of completed Main Street dam removal projects. Expected completion Fall 2015.

**OBJECTIVE****2**

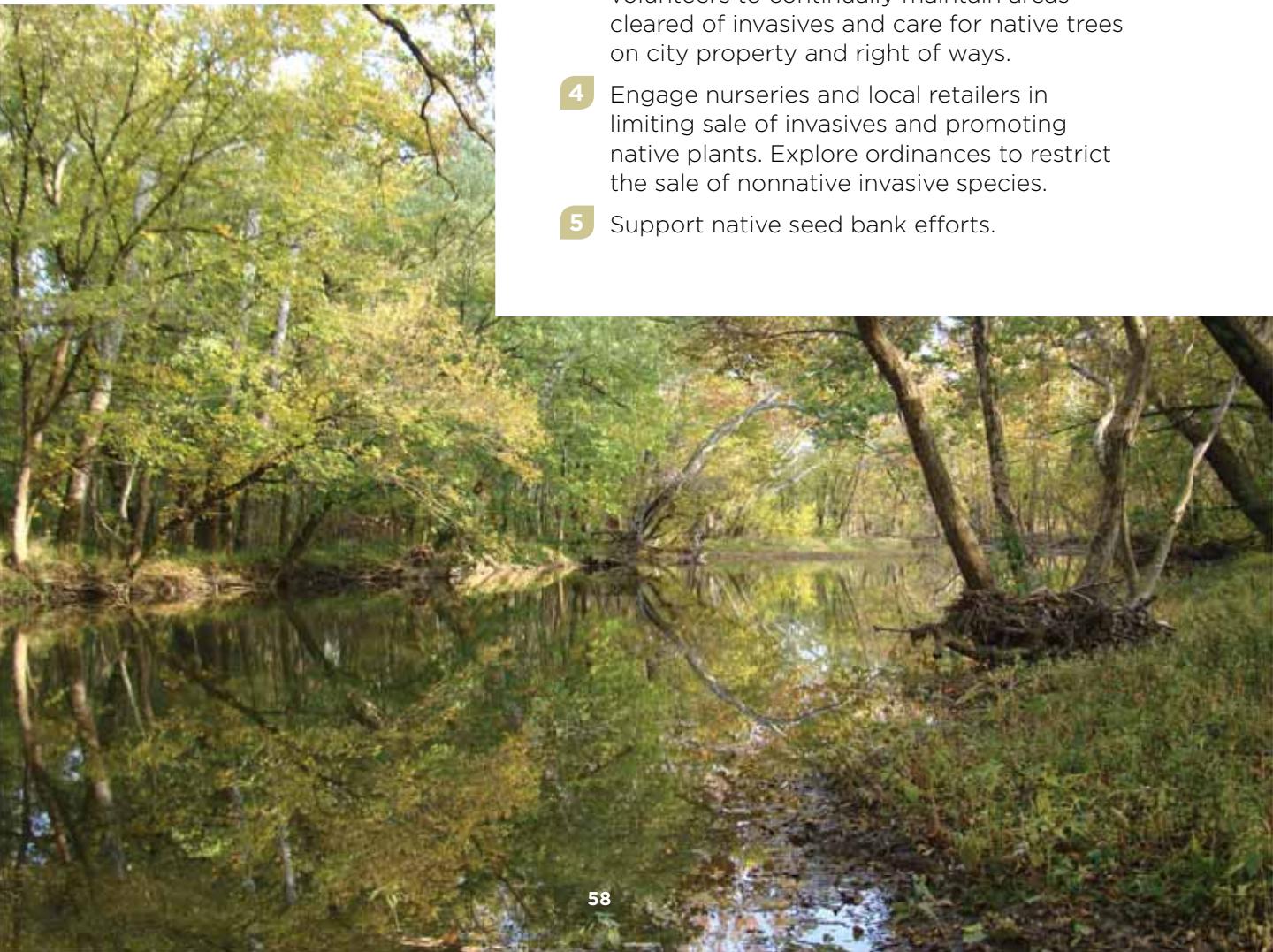
Eliminate invasive plants covering 20 acres of land each year over the next five years.

**BASELINE**

Through the Columbus Ecological Restoration Program and local watershed groups, invasives have been cleared from 15 acres of land annually.

**ACTIONS**

- 1** Develop a citywide comprehensive plan for the management of invasive species, including strategies for growing the Columbus Ecological Restoration Program volunteer base.
- 2** Plant native, pollinator-supporting species in areas that have been cleared of invasives.
- 3** Create a program that uses trained volunteers to continually maintain areas cleared of invasives and care for native trees on city property and right of ways.
- 4** Engage nurseries and local retailers in limiting sale of invasives and promoting native plants. Explore ordinances to restrict the sale of nonnative invasive species.
- 5** Support native seed bank efforts.

**COLUMBUS ECOLOGICAL RESTORATION PROGRAM (CERP)****Restoring ecosystems and managing invasive plants**

**“The program has touched many people in different ways. I have seen people on our multiuse trails stop to enjoy the scenic rivers that were hidden by overgrown invasive plants. I have seen families be able to enjoy streams that where impossible dues to stands of invasive plants. I have seen the blooms of native plants that have returned to the once mono-cultured areas.”**

Karl Hoessle

*Ecological Restoration Programmer*

The Columbus Recreation and Parks Department developed the Columbus Ecological Restoration Program (CERP) in 2011. As part of the department's Forestry Section, CERP's mission is to restore native ecosystems on public land by combating invasive plant species taking root along greenway trails, in parks, and in other open spaces.

Invasive species are nonnative to the ecosystem and are likely to have negative economic, environmental, and/or human health impacts. Nonnative honeysuckle is one of the biggest concerns in our area, as these bushes prevent sunlight from reaching plants attempting to grow underneath them.

Each year, CERP volunteers donate hours of assistance to remove plants and haul them to the chipper pile where staff chip them. Staff members then follow up to spray stumps to prevent these damaging species from growing back.

To further its mission, the Forestry Section has invested in Light Detection and Ranging (LiDAR)-based analysis and will use this to identify areas of canopy loss and map honeysuckle infestations throughout the county, which will help CERP pinpoint the honeysuckle battlefields. The CERP program also works to raise awareness about the issue of invasive plants. In 2014, the program added a planting component, enabling volunteers to plant native seed in previously cleared areas. This planting component is expected to increase over time.

**To learn more or find out how you can volunteer, visit CERP at columbus.gov.**

**40+ acres of land  
cleared of invasive plants  
2011-2014**

**OBJECTIVE****3**

Preserve an additional 1,374 acres of greenspace, for a total of 30,000 acres, over the next five years.

**BASELINE**

28,626 acres protected as parkland, undevelopable, or held as a conservation easement in 2013, which equates to 19.6% of the total land coverage in Columbus.

# 28,626 ACRES PROTECTED



## 19.6% of the total land coverage in Columbus

**ACTIONS**

- 1** Building off the Balanced Growth Plans, develop a citywide comprehensive plan for the protection and restoration of natural habitats, identifying high-risk ecosystem services.
- 2** Complete the Scioto Greenways Project and initiate further stream and wetland restorations focusing on impaired waterways.
- 3** Create green corridors connecting parks and trails into the neighborhoods (using street trees, green infrastructure, natural landscaping, ravine protections, etc).
- 4** Continue to acquire parkland, especially in neighborhoods lacking infrastructure, to support active living.
- 5** Evaluate ways to make greenspace (including but not limited to sensitive areas such as ravines and wetlands) a priority in zoning and development practices and proposals, including updating the parkland dedication ordinance to include urban neighborhoods.
- 6** Actively engage with partner jurisdictions to advance protections of the Darby Watershed in accordance with the Big Darby Accord.
- 7** Leverage funding through partnerships with private land trusts and other agencies to protect greenspace.



"I read the great article in the *Frankly Speaking* newsletter about the Hamilton-161 category 3 wetlands, containing disappearing spring peepers, dragonflies, and salamanders. You don't see the red-headed woodpeckers often anymore, but the neighbors site them regularly. It is a great habitat for bats, too. Congratulations to Columbus Recreation & Parks on being appointed the official steward for this fragile, important habitat!"

Toni Stahl  
*Habitat Ambassador*  
*National Wildlife Federation*



### THE HAMILTON ROAD WETLAND NATURE PRESERVE AND HERON ROOKERY

**Preserving, conserving, and researching a significant natural resource**

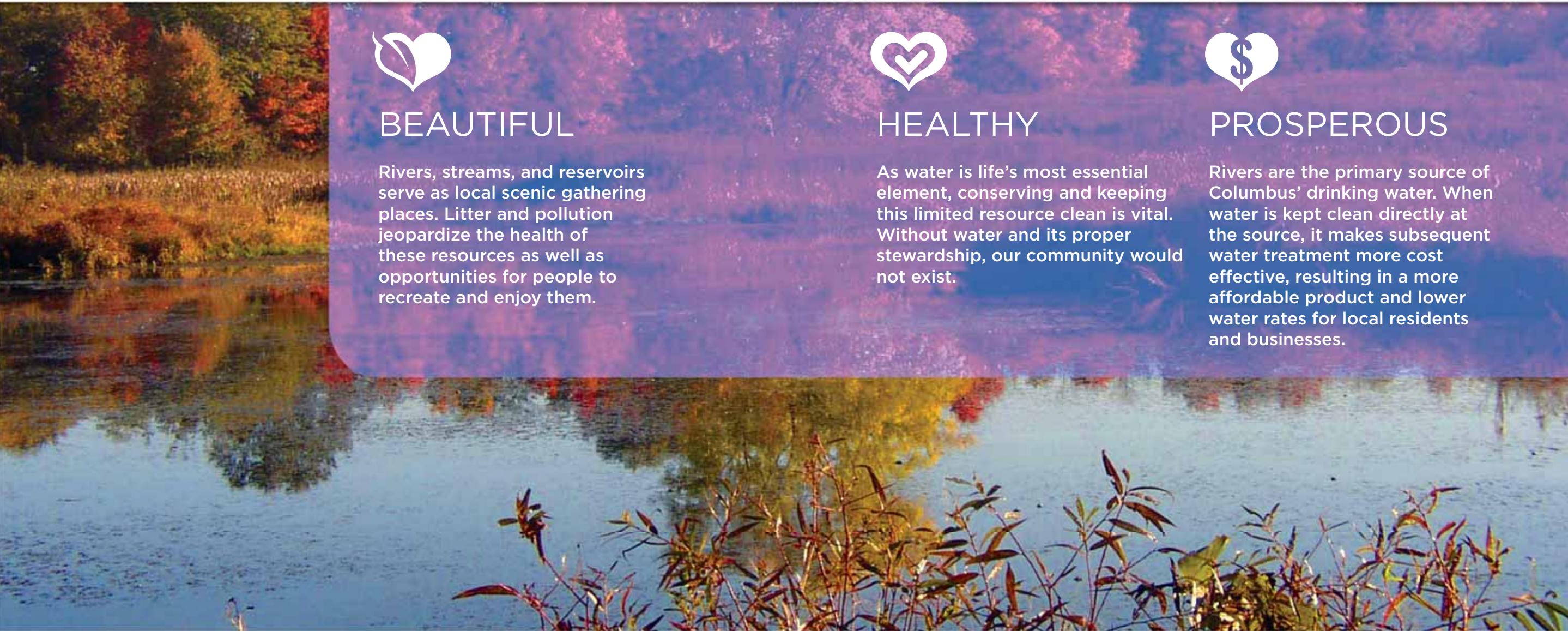
In December 2008, the New Albany Company donated the Hamilton Road Wetland, located in the northwest corner of SR 161 and Hamilton Road, to the City of Columbus in order to preserve the high-quality wooded wetland and the blue heron rookery on the site. The 71-acre parcel of land was officially designated a nature preserve in 2010 under the City's Nature Preserve Advisory Council (NPAC).

Home to approximately 50 nests of blue heron, the location is one of the largest heron rookeries in central Ohio. It includes a category 3 wetland, several vernal pools, and several salamander and frog species. In addition, the wetlands perform a vital stormwater function within the watershed of Rocky Fork Creek, a sub-watershed of Big Walnut Creek.

"This 70 acres is only one of a few areas within central Ohio, and Ohio in general, with such a diverse ecosystem assemblage," says Tina Mohn, Natural Resource and Property Manager. "To the community, it is a space that provides education, extensive wildlife, and a diversity of plant life to be observed. Here, with the ongoing research, we are able to help the adjacent ecological communities and water quality as well."

Due to the sensitivity of the location, the site is protected from typical use and accessible by permit only. However, the city has plans to provide educational tours on the site in the future.

# Water



## BEAUTIFUL

Rivers, streams, and reservoirs serve as local scenic gathering places. Litter and pollution jeopardize the health of these resources as well as opportunities for people to recreate and enjoy them.



## HEALTHY

As water is life's most essential element, conserving and keeping this limited resource clean is vital. Without water and its proper stewardship, our community would not exist.



## PROSPEROUS

Rivers are the primary source of Columbus' drinking water. When water is kept clean directly at the source, it makes subsequent water treatment more cost effective, resulting in a more affordable product and lower water rates for local residents and businesses.

**To reduce the use of water and prevent pollution, we will take the following actions in the next five years:**

## OBJECTIVE

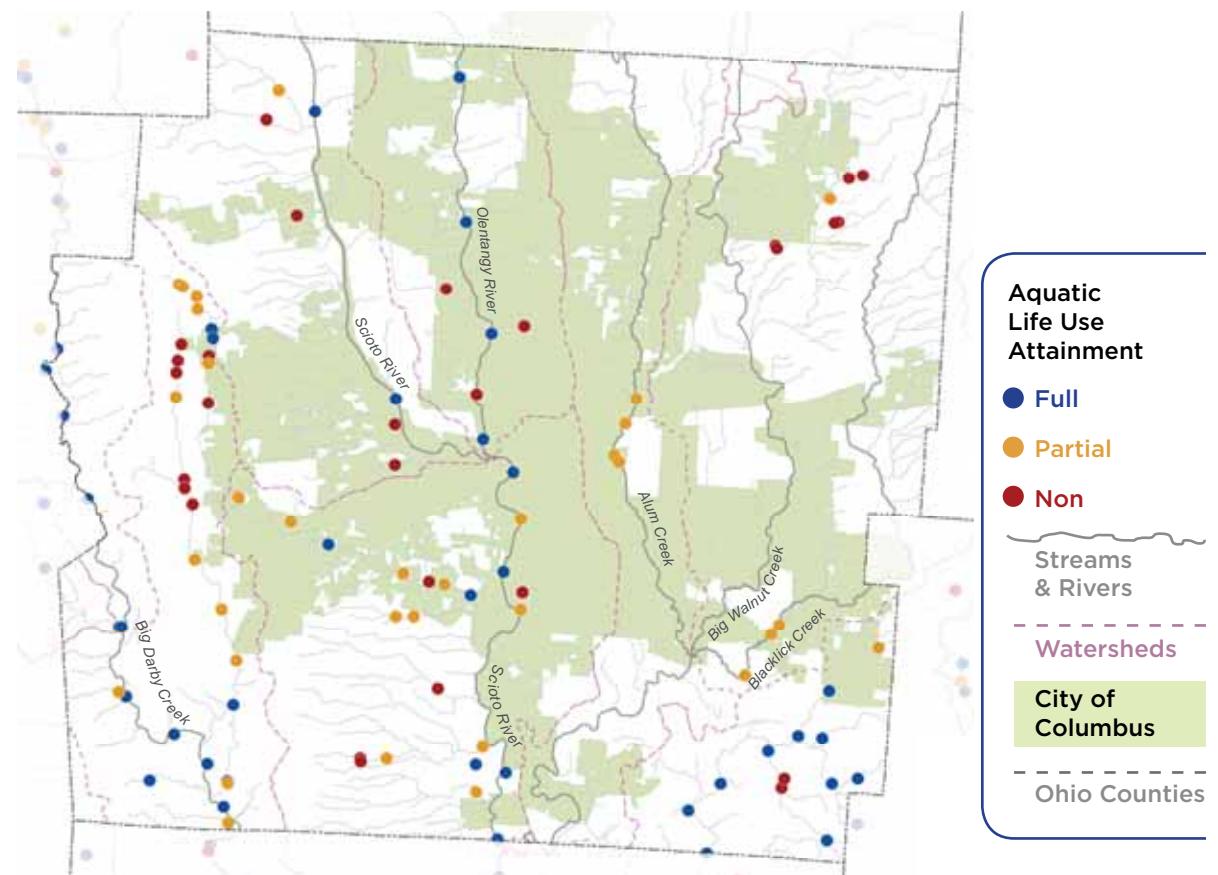
**1**

Meet or exceed Ohio EPA's goal to have 80% of all streams in full or partial attainment of aquatic life use standards over the next five years.

## BASELINE

Attainment status for each watershed (37 sampling locations) show full attainment (38%), 32 show partial attainment (33%), and 28 are in nonattainment (29%); see map below).

## AQUATIC LIFE USE ATTAINMENT AT MONITORED SITES



Assessment results shown on this map are from the 2014 Integrated Water Quality Monitoring and Assessment Report for Ohio. <http://epa.ohio.gov/dsw/tmdl/OhiointegratedReport.aspx>

A detailed description of Ohio EPA's biological assessment and biocriteria program including specifics on each index and how each was derived is available (see Biological Criteria for the Protection of Aquatic Life, <http://www.epa.ohio.gov/dsw/bioassess/BioCriteriaProtAqLife.aspx>).

10/20/2014



## BLUEPRINT COLUMBUS

An innovative plan to create cleaner streams—and stronger neighborhoods

Cities across the country struggle with sewer overflows into area waterways. The problem is caused by aging infrastructure that is unable to channel the volume of stormwater and sewage to a water treatment facility. As a national leader in addressing this problem, Columbus Department of Public Utilities worked with Ohio EPA to establish Blueprint Columbus, an outgrowth of the city's 2005 Wet Weather Management Plan.

While the Wet Weather Management Plan successfully helped reduce sewer overflows by expanding treatment plants, Blueprint Columbus is an exciting new opportunity that offers an innovative approach to treating stormwater above ground, rather than in sewer tunnels below. The project proposes creating and training a new local workforce to install rain gardens along neighborhood streetscapes and gathering places to capture rainwater and allow it to infiltrate the ground, rather than rush into the sewer system.

"Blueprint Columbus will be a much better investment for the city. We will still eliminate sewer overflows, but we will also be investing in our neighborhoods by adding green infrastructure and other amenities. We will also invest in our local workforce," says Greg Davies, Director, Columbus Department of Public Utilities.

The Blueprint Columbus proposal was developed in 2012 and the first pilots began in 2013. If approved by the EPA, the project will initially focus on targeted areas, such as the Hilltop, Linden, and parts of Clintonville, and will be expanded to other parts of the city.

To learn more, visit [columbus.gov/blueprint](http://columbus.gov/blueprint).

## ACTIONS

- 1 Reduce combined sewer overflows and sanitary sewer overflows.
- 2 Review, update (if necessary), and implement Watershed Action Plans and Balanced Growth Plans to mitigate stormwater impacts and to protect and restore streams and maintain wetland and stream buffers.
- 3 Reduce improper disposal of pharmaceuticals through hosting additional pharmaceutical collection events, establishing permanent collection locations, and educating physicians, pharmacists, and the general public about proper disposal methods.
- 4 Complete and implement the 2015 Watershed Master Plan which will be focused on protecting Columbus' drinking water from upstream pollution.

"Tunnels are out-of-sight, out-of-mind, and do nothing for our neighborhoods. With Blueprint Columbus, we can install rain gardens, porous concrete sidewalks, and trees in right-of-ways, improving home values. We can take down vacant houses and replace them with amenities such as porous pavement basketball courts."

**Greg Davies**  
Director, Columbus Department of Public Utilities

## OBJECTIVE

**2**

Reduce gallons of treated water produced to 42,484 gallons per capita, a 3% reduction, over the next five years.

## BASELINE

50,200,000,000 gallons of water were treated and distributed to 1,146,169 customers (43,798 gal/person) in 2013.



## ACTIONS

- 1** Implement the Columbus Water Efficiency Plan, which includes strategies targeting the top 100 water users as well as commercial and residential customers. Provide irrigation system rain sensors, efficient spray nozzles for commercial kitchens, and high-efficiency showerheads.
- 2** Use WaterWise products in city operations when feasible.
- 3** Use native plants that have low water needs in landscaping whenever feasible.

**PUP****"Doo"ing the right thing to maintain clean water**

A new city initiative in 2014, PUP stands for "Pick Up Poop." The goal of the program is to increase awareness among pet owners of the importance of picking up dog waste, which can become a source of pollution and bacteria that washes into storm drains and area waterways if not cleaned up properly. The city supports this program from the top down, and, in fact, Mayor Coleman's very own pup, Mr. Milo Tibbs, is the official program ambassador.

To bring its message to residents, PUP campaign team members traveled to dog parks and special events to ask people to sign a PUP pledge to "doo" the right thing. In return, participants were offered bandanas or biodegradable dog waste bags for their pups. Later, participants proudly shared images of their pups wearing their new bandanas on the program's Facebook page.

"The message was clear: clean water is the goal and each one of us can help protect the quality of our water through everyday activities like picking up after our dogs," says Greg Davies, Director, Columbus Department of Public Utilities.

During the course of one season, more than 2,000 residents learned the importance of PUPing and took the pledge to pick up poop in their own yard and while walking their pooches. PUP pledgers were also inspired to take the next step and become GreenSpot members by committing to take actions to reduce, reuse, and recycle. The PUP campaign hopes to reach more residents in coming years and will be used as a template for meeting future stormwater education goals.

**2,000+**  
**PUP pledges**  
**signed in 2014**

To learn more, visit  
[www.columbus.gov/pup](http://www.columbus.gov/pup).

## OBJECTIVE

**3**

Install a minimum of 50 acres of green infrastructure to mitigate stormwater runoff and increase infiltration.

**Baseline:** No baseline established.

**ACTIONS**

- 1** Track and quantify the location, area, and/or the volume of water being treated by green infrastructure.
- 2** Incentivize innovative best management practices for managing stormwater such as installing permeable parking lots, green roofs, and vacant land stormwater detention.
- 3** Incorporate stormwater best management practices into public streetscapes.
- 4** Design and build an interactive Stormwater Demonstration Park at the Grange Insurance Audubon Center.

**SUSTAINING SCIOTO****Central Ohio's plan to prepare for the impact of climate change on our water supply**

“With projections of longer droughts, more intense rainfall storms, and slightly greater annual rainfall, an adaptive management strategy is to pump more water into the upground reservoir during rainfall periods and release more water from the upground reservoir during droughts. Another adaptive management strategy is to implement water conservation.”

**Richard Westerfield**  
*Administrator, Division of Water  
Columbus Department of Public Utilities*

Central Ohio has been fortunate through geography and natural history with abundant water resources. Careful planning based on the historical record has resulted in robust individual networks of water systems that currently provide clean, secure water to two million people in the region. However, climate change and future growth will impact those systems, and the past record can no longer be relied on to guide the development of new water networks.

The Sustaining Scioto project is a planning study begun in the spring of 2011 that brings together multiple and diverse stakeholders—including the Mid-Ohio Regional Planning Commission (MORPC), the U.S. Geological Survey (USGS), the City of Columbus, Del-Co Water Company, Inc., Brown and Caldwell, and the Ohio Water Development Authority—to discuss and model the potential impacts of climate change on the region’s water resources and to develop an adaptive management plan to respond to those risks. The goal is to ensure central Ohio has clean and secure water resources for current residents and businesses as well as to support future growth.

“Model results indicate warming temperatures, more extreme wet periods, and more extreme dry periods,” says Kerstin Carr, MORPC Director of Planning and Environment. “In order to prepare our communities, the Sustaining Scioto project suggests adaptive management strategies that can be implemented on the local level. We will continue to bring people together to implement recommendations while reassessing current conditions and future threats.”

To learn more, visit [morpco.org/sustainingscioto](http://morpco.org/sustainingscioto).

# Local Food



## BEAUTIFUL

The agricultural landscape of Ohio provides a scenic backdrop to roadways crisscrossing the state. Families flock to nearby farms and community gardens each fall to enjoy the simple beauty of apple orchards and pumpkin patches.



## HEALTHY

A healthy diet includes vegetables and fruits. When grown locally, these foods do not need to travel as far to reach the dinner plate, reducing transportation-related emissions that are harmful to health. Additionally, when local food is also organically grown, it can reduce chemical exposure.



## PROSPEROUS

Agriculture is Ohio's number one industry, contributing more than \$107 billion to the state's economy and creating jobs and providing livelihoods for thousands of Ohioans. On a smaller scale, events such as farmers' markets provide income for local agriculturalists and opportunities for neighbors to support their community.

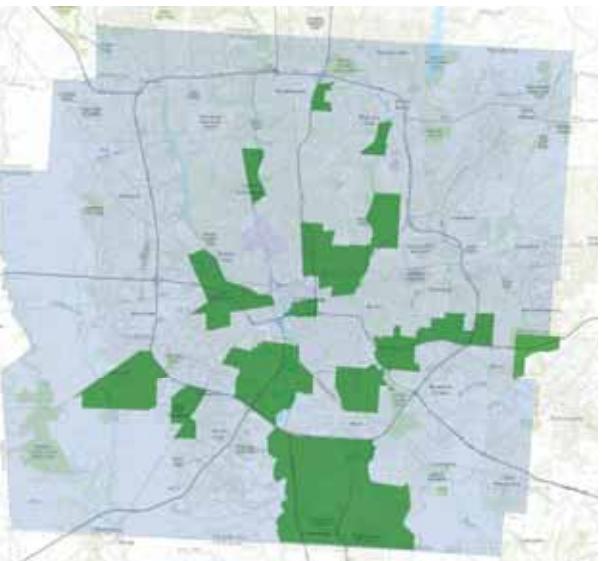
**To improve food security and equitable access to local, healthy food, we will take the following actions in the next five years:**

**OBJECTIVE****1**

Reduce the amount of census tracts considered food deserts by the U.S. Department of Agriculture by 10%.

**BASELINE**

39 census tracts are located 1-10 miles from a food source

**ACTIONS**

- 1** Promote fresh, local food in food desert areas through neighborhood retail strategies, such as Fresh Foods Here healthy corner store initiative, and strategically placed mobile vending (near bus stops, for example).
- 2** Expand and improve provider/consumer networks through faith community for community-supported agriculture (CSA) and other distribution efforts.
- 3** Develop a clearinghouse and map of local food markets, community gardens, CSAs, and restaurants that source local foods, food processors, food distributors, and farms.
- 4** Measure demand for healthy foods to better understand willingness and ability to buy it.
- 5** Explore how to work with local food hubs for better and safer distribution of food.
- 6** Plant an urban orchard with fruit and nut trees and berry bushes. Plan for storing and harvesting the produce.
- 7** Increase local foods in city operated meal programs and encourage purchase of local food by institutions in Columbus – such as colleges, universities, schools, hospitals, and large employers.
- 8** Pilot providing translation services at select farmers' markets.
- 9** Ensure access to farmers' markets is easy and possible with USDA's Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Study creating a program that would simplify financial transactions at farmers' markets.

**SCOTTS MIRACLE-GRO COMMUNITY GARDEN CAMPUS AT FRANKLIN PARK CONSERVATORY AND BOTANICAL GARDENS**

**A living classroom for gardening and food education**

**The largest public edible garden in North America established on city property**

**40** active community garden plots  
**2 TONS** of produce donated to food banks annually



Designed as a national model for community gardening development, education, and outreach, the Scotts Miracle-Gro Community Garden Campus at Franklin Park Conservatory and Botanical Gardens is a four-acre living classroom. Completed in 2009, the campus features demonstration gardens, edible gardens, an education pavilion with a demonstration kitchen, a live-fire cooking theater, an apiary, and a pollinators' garden—all designed to illustrate best gardening practices that can be translated into successful community gardens and neighborhood beautification projects throughout the metropolitan area. The campus is the epicenter for community gardens across Columbus as well as the hub for the growing number of food education and gardening classes offered by the Conservatory. The Conservatory's Women's Board supports the campus' initiatives and members also volunteer in community gardens throughout the city.

"One of the campus' greatest benefits is its ability to support access to local, fresh, healthy food. Two tons of produce are donated annually to food banks. The Conservatory's Healthy Harvest program, which serves low-income families, also receives produce from the gardens. Additionally, 40 community garden plots are planted, maintained, and harvested by individuals, families, and organizations," says Bruce A. Harkey, Franklin Park Conservatory Executive Director.

A community outreach and education center is under construction on the campus and will be completed by late 2015 to augment existing programming and fully activate the mission of the campus.

To learn more about the Scotts Miracle-Gro Community Garden Campus, visit [fpconservatory.org](http://fpconservatory.org).

## OBJECTIVE

**2**

Add 10 acres of land for food production over the next five years.

## BASELINE

There were 367 acres of urban food gardens and agricultural lands in Columbus in 2013.



## ACTIONS

- 1** Stimulate small businesses and local food production through the promotion of alternative forms of agriculture, including organics, aquaponics, and hydroponics.
- 2** Encourage redevelopment of existing buildings and infrastructure to support indoor farming.
- 3** Advance the creation of a food hub(s).
- 4** Support start-up farmers with education and access to financial resources.
- 5** Review policies that affect urban agricultural ventures and revise as needed.



*"This furthers our personal goals of making communities aware of sustaining themselves by planting their own crops for their families in their homes, backyards, and patios to enjoy."*

**Hon. Michelle M. Mills**  
President and CEO  
*St. Stephen's Community House*

**ST. STEPHEN'S COMMUNITY HOUSE PROJECT AQUASTAR****Addressing food insecurity in the Linden area**

Project AquaStar originated as St. Stephen's Community House's promise to address the food insecurity epidemic prevailing in the Linden community. The program has two goals: education and establishing food security. And it accomplishes them through one strategy: Aquaponics, which is a sustainable method for producing herbs, fruits, and vegetables in synergistic elements that use 70% to 90% less energy than traditional farming practices. The method allows for farming tilapia and vegetables together by pumping nutrient-rich water from fish tanks to vegetable plants growing above. In return, the plants filter the water, and clean water is returned back to the thriving fish.

"Project AquaStar aims to increase the amount of healthy food available to residents and allow families to grow their own sustainable food source," said St. Stephen's Community House President and CEO, Hon. Michelle M. Mills. "The program also reduces the community's footprint to the landfill and teaches families the importance of energy conservation."

Project AquaStar officially opened on June 12, 2014. In addition to providing crops for the community, the project helps educate youth on Science, Technology, Engineering and Mathematics (STEM) principles through aquaponics and urban farming.

"Through engaging our youth and families in our green initiatives, we have seen leadership rise up within our participants," says Mills. "The youth took leadership roles in planting, in teaching younger participants and their families on the benefits of urban farming, and in stimulating their career interests in potential STEM careers. This will foster our efforts to develop globally competent contributory citizens in Linden."

To learn more, visit [saintstephensch.org](http://saintstephensch.org).

# Built Environment



## BEAUTIFUL

Buildings and streetscapes contribute to the aesthetics of a community. The ever-increasing portfolio of LEED buildings in Columbus marries form and function: beautiful architecture with high-performance building systems. Curbside trees and rain gardens add a splash of color to the urban environment while simultaneously filtering stormwater and creating a sense of place.

## HEALTHY

So much of our lives are spent indoors, which makes buildings a contributor to overall health and wellness. Building materials off-gas, heating and cooling systems circulate air, and window systems allow natural light to filter inside. As such, architects and engineers can have a lasting impact on the health of building occupants by carefully and conscientiously selecting materials and equipment. Additionally, our design and development community has the ability to influence how people travel throughout our city. Favoring placemaking, open space, and pedestrian and bike friendly design elements can improve the health of residents by creating accessible destinations.

## PROSPEROUS

Through thoughtful and efficient design, organizations, and the community as a whole, stand to save on energy and water costs over the life cycle of a building.

**To responsibly design high-performing neighborhood streetscapes, buildings, and transportation corridors, we will take the following actions in the next five years:**

76

77

**OBJECTIVE****1**

**Double the amount of LEED buildings within Columbus for a total of 550 over the next five years.**

**BASELINE**

As of June 11, 2014, there are 275 LEED certified buildings in Columbus.

# 275 CERTIFIED LEED BUILDINGS IN COLUMBUS

**ACTIONS**

- 1 Give bonus job performance tax incentive if business is building or renovating to LEED v4.
- 2 Advocate for state building code changes that favor LEED requirements.
- 3 Build and renovate city buildings to a minimum of LEED certified, and operate in accordance with LEED principles.
- 4 Explore the creation of a 2030 District. 2030 Districts are designated urban areas committed to meeting the energy, water, and transportation emissions reduction targets of the 2030 Challenge for Planning. Led by the private sector, 2030 Districts represent more than 100 million square feet of commercial buildings in downtown business districts working to reduce greenhouse gas emissions at a district scale, realizing the benefits of multiple building owners, operators, and occupants working together to share resources, leverage financing, and implement collective strategies.

**GREEN COLUMBUS FUND****Incentivizing sustainable development and redevelopment**

Green Columbus Fund is a grant program that encourages the assessment and redevelopment of brownfield sites, or former industrial or commercial sites that may be affected by environmental contamination. The fund also supports the development of LEED-certified green buildings. Between 2011 and 2014, the program awarded 48 grants totaling more than \$3 million to private businesses and nonprofit organizations. "Green Columbus Fund allows us to work with the private sector to accomplish smart development," says Steve Schoeny, Director, Columbus Department of Development.

For example, through a \$200,000 Green Columbus Fund reimbursement grant, Wagenbrenner Development financed a thorough environmental assessment of the former Timken steel plant. The 35-acre vacant brownfield site, located on the southwest corner of Cleveland Avenue and Fifth Avenue, was creating blight in the Milo Grogan neighborhood. The findings of the assessment led directly to obtaining a \$3 million Clean Ohio Revitalization Fund (CORF) grant from the State of Ohio. "The environmental remediation is nearly complete, and we hope to turn this site to a productive use to become an asset versus a detriment to the neighborhood," says Eric Wagenbrenner, Vice President of Development, Wagenbrenner Development. "Without the city grant, we would not have been able to receive the Clean Ohio grant, and this property would still be a vacant brownfield site."

The LEED component of the program reimburses the review fee charged by the Green Building Certification Institute for buildings that achieve at least the basic certification level. Additional performance based incentives may increase the amount of the grant award. "City staff, along with the Green Building Working Group of the Mayor's Green Team, spent several years searching for ways the City of Columbus could encourage owners to build sustainable buildings, and ultimately developed the LEED portion of the Green Columbus Fund program. The program builds on the comprehensive and tested programs of the U.S. Green Building Council, doesn't require expansion of city bureaucracy, and supports economic and environmental goals," says Daniel W. Jones, Turner Construction Company, Chair of the Green Building Working Group, Mayor's Green Team.



**To learn more about the Green Columbus Fund, please call the Department of Development at 645-7795.**

**2011-2014 48 grants awarded  
\$3,000,000+ in funding for Columbus' green projects**

**OBJECTIVE****2**

Reduce brownfields by 17% or 30 acres over the next five years. Focus on the areas near the Parsons Avenue Corridor, Downtown, Arena West, and Franklinton.

**BASELINE**

175.04 acres of brownfields existed in Columbus in 2013.

**ACTIONS**

- 1** Facilitate use of the Clean Ohio Fund and Green Columbus Fund and advocate for continued funding from the State of Ohio.
- 2** Reclaim polluted brownfield sites as well as vacant and abandoned lots.



“Encouraging reinvestment in an urban neighborhood, recycling existing buildings, and constructing new infill—instead of further suburban expansion in greenfields—is a more productive use of resources.”

Vince Papsidero, FAICP  
Deputy Director  
Columbus Development Department

**FRANKLINTON REVITALIZATION****Reinvesting in existing neighborhoods**

Spearheaded by Mayor Coleman as a way to attract the creative class to East Franklinton—Columbus' very first neighborhood—the East Franklinton Creative Community District Plan was adopted in November 2012. The plan forecasts that more than 4,000 new residences and over 500,000 square feet of arts, retail, incubator, and office space will be created over the next 20 years—and change is already taking place. ArtPlace America awarded a \$350,000 grant to the Franklinton Development Association and Columbus Idea Foundry to rehabilitate a warehouse space in the neighborhood. In addition, in 2014 the Columbus Development Department undertook a plan to update West Franklinton, which will extend private investment further west into the core of the neighborhood.

“Encouraging reinvestment in an urban neighborhood, recycling existing buildings, and constructing new infill—instead of further suburban expansion in greenfields—is a more productive use of resources,” says Vince Papsidero, FAICP, Deputy Director, Columbus Development Department. “The Mayor’s Franklinton initiatives will further attract a future workforce that seeks an urban, walkable place to live and work. These new residents will support all of the city’s initiatives that seek to grow the core of Columbus.”

To learn more, visit [www.facebook.com/EastFranklintonCCDPlan](http://www.facebook.com/EastFranklintonCCDPlan).



OBJECTIVE

3

Increase urban core density and allure, striving to increase the population living in the downtown core to 10,000 over the next five years.

BASELINE

Residents living downtown approximately 6,300 in 2013.

ACTIONS

- 1 Implement Housing Works, which is an effort to create access to workforce housing in and around job centers, including downtown.
- 2 Enhance open space amenities.
- 3 Implement neighborhood revitalization initiatives in areas such as Franklinton, Hilltop, Milo Grogan, Southside, and Near East.



**OBJECTIVE****4**

Encourage integrated placemaking and sustainable design principles over the next five years.

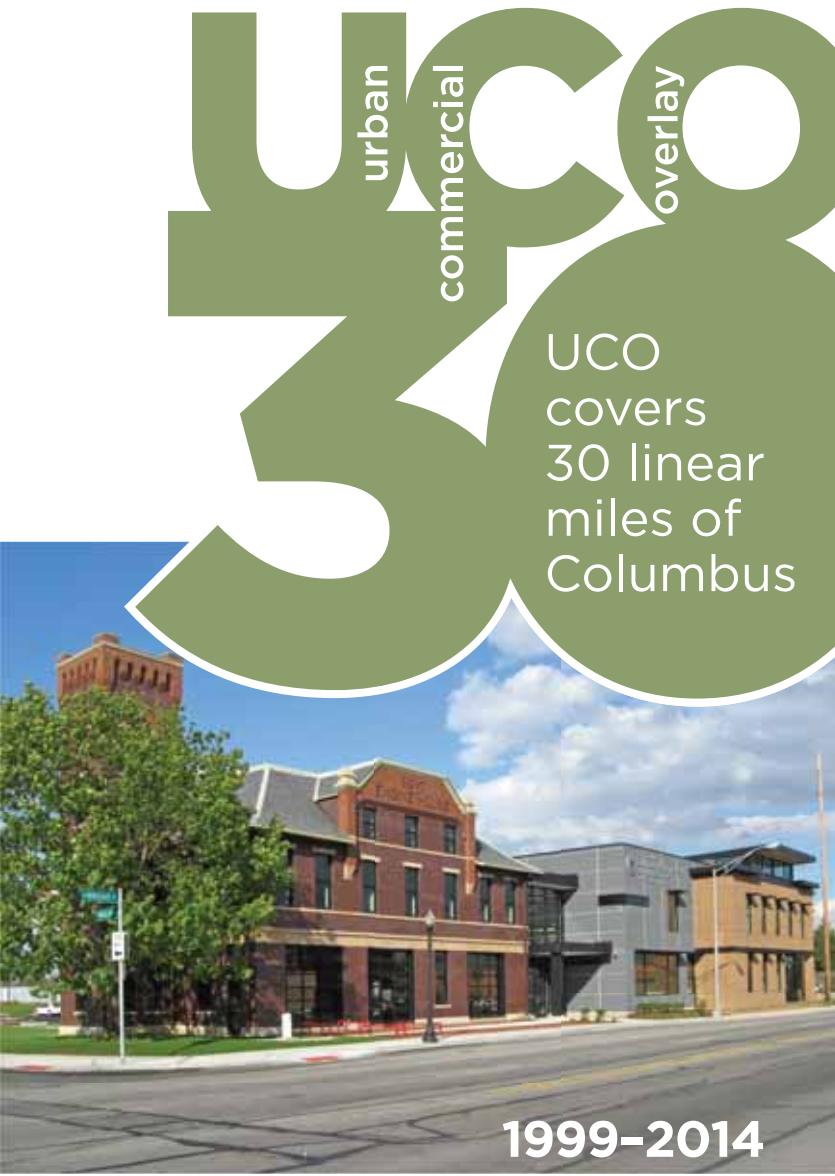
**BASELINE**

In 2013, 478,765.11 tons of waste were landfilled in Franklin County area construction and demolition landfills.

**ACTIONS**

- 1** Create a local design award program recognizing integrated beauty and sustainability principles.
- 2** Work with the Milo Grogan neighborhood to become a model of environmentally friendly and innovative green infrastructure strategies.
- 3** Review existing green housing design manual standards ("AWARE") and strengthen, as needed.

Green infrastructure uses natural hydrologic features to manage water and provide environmental and community benefits. For more information, visit [www.water.epa.gov](http://www.water.epa.gov).



1999–2014

**1,400,000+**

square feet of  
commercial and  
mixed-used  
development  
constructed

**URBAN COMMERCIAL OVERLAY****Rebuilding the urban fabric of our neighborhoods**

The Urban Commercial Overlay (UCO) is the oldest of Columbus' three commercial zoning overlay tools. Established in 1999, this important zoning tool reinforces the pedestrian-oriented development pattern common in the city's older commercial corridors. It prioritizes pedestrians over vehicles by addressing building and parking placement, as well as other components of commercial site development.

"The UCO rebuilds the urban fabric of the city's neighborhood business districts and encourages walking and biking by placing parking behind buildings and placing buildings near the sidewalk," explains Vince Papsidero, FAICP, Deputy Director, Columbus Development Department. "Healthy and vibrant business districts serve as the 'front door' to the adjacent residential neighborhoods, thereby retaining existing residents and attracting new residents."

Since the first UCO was adopted in 1999, about 1.4 million square feet of walkable, bikeable commercial and mixed-use development has been constructed in Columbus' various UCO districts. Often a key component of neighborhood plan updates, the UCO zoning tool was nominated for a National Award for Smart Growth Achievement under the USEPA's Office of Sustainable Communities in 2014.

To learn more, visit [columbus.gov/planning/commercialoverlays](http://columbus.gov/planning/commercialoverlays).

# Community Engagement



## BEAUTIFUL

It is common to think that the actions of just one person have little impact on the environment. However, when multiplied by the overall population of our city, these impacts are significant. Take, for example, littering. The city quickly loses its appeal when riddled with trash and litter with no one willing to clean up the mess. For this reason, engaging the community in the vision of a more sustainable city is vital.



## HEALTHY

Air quality, water quality, and more are impacted by human behavior and, in turn, impact human health. Engaging people in these topics can help to inspire widespread behavior change capable of improving environmental health and, therefore, public health.



## PROSPEROUS

The best sustainability projects combine environmental and social responsibility with economic prosperity. By engaging the community in building a local economy that is based upon sustainability principles, we can create a more resilient, economically prosperous city.



**To have a fully engaged community, where sustainability is part of the culture, we will take the following actions in the next five years:**

## OBJECTIVE

**1**

Reduce environmental impacts of daily life by motivating behavior change through GreenSpot, increasing membership to 20,000 over the next five years.

## BASELINE

As of October 2014, there are 10,469 registered Green Spots.



## ACTIONS

- 1** Register large event venues and neighborhoods as GreenSpots.
- 2** By 2018, require all city-managed, funded, and permitted festivals and large events to operate in accordance with the city's Green Event Guidebook.
- 3** Market GreenSpot program to diverse audiences with translated materials (Spanish, Somali).
- 4** Increase value for GreenSpot business members through marketing member testimonials, case studies, aggregated savings, and performance data.
- 5** Offer GreenSpot members discounts for green products and programs.
- 6** Encourage businesses and nonprofit organizations registered as city vendors or receiving city incentives to register as GreenSpot members.

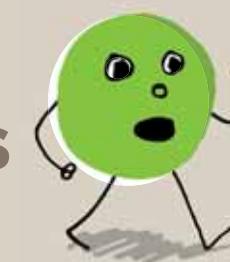
**10,600+**  
GreenSpot  
members and  
growing daily



**140+**  
GreenSpot Kids  
classes  
representing  
**4,000**  
students



**25 large**  
businesses  
graduated  
or enrolled in  
Corporate  
Sustainability  
Initiative classes



**2,500+**  
rain barrels  
distributed



## GREENSPOT

**The spot to go to learn about living and working greener—and commit to doing it**

The community asked how they could make Columbus more sustainable. And in 2008, Mayor Coleman answered by launching GreenSpot. The outreach program provides a place for community members to make pledges to conserve energy, conserve and protect water, and reduce waste. Households, businesses, and community groups can get involved by registering online, and participants receive educational information as well as incentives, such as low-cost rain barrels.

The program also includes GreenSpot for Kids, which helps first-grade teachers incorporate sustainability themes in the classroom and will soon be expanded to include green-themed summer camp experiences.

GreenSpot also offers Corporate Sustainability Initiatives classes for businesses. As of November 2014, 25 large entities representing thousands of employees have completed or are enrolled in the classes.

"Residents, community groups, and businesses can join GreenSpot and be part of something bigger than themselves," says David R. Celebrazione, GreenSpot Coordinator. "The commitments GreenSpot members make are real and significant, and together we are conserving water and energy, reducing waste, informing and engaging, and greening transportation."

For example, more than 5,600 members have committed to using reusable shopping bags. Assuming each member uses two bags per week, together they will have avoided the waste of 1,164,800 plastic bags in just one year.

To learn more, make your pledge, or become a GreenSpot member, visit [ColumbusGreenSpot.org](http://ColumbusGreenSpot.org).

## OBJECTIVE

**2**

Foster an appreciation for nature through experiential educational opportunities by offering at least 5 million participant experiences, or 1 million per year, over the next five years.

## BASELINE

In 2013, Columbus area organizations provided environmental educational programming to more than 1.2 million people. This figure comprises the participation numbers for various park events, summer camps, volunteer opportunities, presentations, school programs, and other experiential learning opportunities.

**Organizations provided environmental education to more than 1.2 MILLION PEOPLE**

## ACTIONS

- 1 Create a sustainability themed summer camp program to expand the GreenSpot Kids program.
- 2 Increase river recreational opportunities and expand water trails. Evaluate the feasibility of modifying low head dams with features that will improve habitat for aquatic life and safety conditions for paddlers.
- 3 Increase internship, scholarship, and community service opportunities in order to develop the next generation of sustainability professionals. Coordinate and market by creating a clearinghouse of opportunities, including a speakers' bureau, capstone classes, and re-establish the Green Business Case Competition.
- 4 Expand outdoor education to adults by increasing access to and awareness of natural spaces.
- 5 Expand Columbus Green Walks program beyond the pilot at Whetstone Park and organize guided walks to highlight green features.
- 6 Create a series of art installations that use recycled materials or incorporate renewable energy technologies and install related interpretive signage.



## EARTH DAY

**Green Columbus hosts the largest Earth Day event anywhere on Earth**

Earth Day Network confirms it: Columbus' annual party for the planet is the biggest around. Columbus Earth Day was the first event of its type to combine a citywide celebration with a large-scale volunteer effort. Since the party started in 2007, Green Columbus, in partnership with its dedicated sponsors, has worked to bring together communities, organizations, businesses, and individuals to raise environmental awareness while actively improving the planet.

Earth Day now includes a full week of service opportunities followed by an all-out bash at Columbus Commons. During the week, participants of all ages can volunteer for projects at hundreds of sites across the region, including planting trees, maintaining seasonal community gardens, cleaning up litter, and more. When the week's work is done, volunteers and community members celebrate with an all-day party featuring local bands, food trucks, kids' activities, and opportunities to connect with local green businesses and environmental efforts.

"Columbus and the rest of central Ohio continue to embrace volunteerism around environmental issues. There is a lot of community pride in and around Columbus, and citizens are eager to put in the effort needed to improve their neighborhoods, parks, and natural areas," says Tad Dritz, Founder of Green Columbus.

Looking forward, Green Columbus has plans to grow its event even bigger. The organization hopes to engage as many as 10,000 volunteers by 2020.

**To learn more or get involved in Earth Day activities and celebrations, visit [greenbus.org](http://greenbus.org).**

## OBJECTIVE

**3**

Build community pride by telling the green story of ColumbUS over the next five years. Achieve name recognition as measured by the number of mentions in local and national publications and other media outlets.

**Baseline:** No baseline established.

**ACTIONS**

- 1** Raise awareness of Columbus sustainability initiatives through signage, hosting, exhibiting, and speaking at conferences and utilizing national publications and media outlets.
- 2** Increase social media presence using dynamic, strategic messaging.
- 3** Create a user-friendly web portal for information on community-wide environmental efforts.

## Community Engagement IN ACTION

**COLUMBUS RECREATION AND PARKS DEPARTMENT OUTDOOR EDUCATION PROGRAM****On average, outdoor education helps create 26 new stewards of the environment every single day**

Between 2010 and 2014, the Columbus Recreation and Parks Department Outdoor Education program reached 45,593 participants via its summer camps, after-school enrichment classes, free and low-cost evening and weekend programs, private programs, and school field trips. Each participant enjoyed a unique opportunity to experience nature in a positive manner. And each left the program with greater respect and appreciation for the environment, thus

creating, on average, more than two dozen new environmental stewards on a daily basis.

In addition to the program's Indian Village Outdoor Education Center—which features a trail system, caves, creeks, the Ottawa Education Lodge, and access to the Scioto River—Outdoor Education added a traveling program, the Traveling Naturalist, in 2013. The award-winning Traveling Naturalist program visits every Columbus Community Recreation Center at least once during the summer camp season to give more children throughout our communities the opportunity to explore nature and the outdoors.

In the words of one satisfied camper's parent, "Indian Village was an absolutely FANTASTIC experience for my son. I am both grateful and proud that Columbus has such a fine program."

**To learn more or register for activities, visit the Indian Village Outdoor Education Center at columbus.gov.**

## Community Engagement IN ACTION

**GRANGE INSURANCE AUDUBON CENTER AND THE SCIOTO AUDUBON PARK**

**A downtown oasis for nature enthusiasts demonstrates and promotes key conservation principles**

As one of only a handful of Audubon Nature Centers located in a downtown urban environment, Grange Insurance Audubon Center provides a downtown oasis for nature enthusiasts, budding naturalists, and birdwatchers. After seven years of development, the center opened in August 2009 on a formerly polluted brownfield site within what is now the Scioto Audubon Metro Park on the Scioto River. The center offers a variety of activities and programs for adults and children, including bird hikes, the Conservation Classroom Program, and projects that allow community members to get involved in collecting data for ongoing scientific studies.

The center itself is sustainable and was awarded LEED certification at the Gold level. The facility and grounds demonstrate green design, including energy efficiencies and stormwater management best practices, and the center is currently working with Columbus and the Department of Public Utilities to create interactive exhibits and signage to help communicate the importance of stormwater management.

The center also has plans to launch an Audubon at Home initiative to enlist property owners to increase bird-friendly habitats. In addition, the center is working to spread the word about a recent study on the impact of climate change on birds. "More than half of North American bird species are climate sensitive and will be endangered or threatened by 2080," says Audubon Center Director Christie Vargo. "As the voice of birds, we will use this information to help tell the story of climate change and the ways in which people can make a difference through both adaptation and mitigation."

**To learn more about Grange Insurance Audubon Center and opportunities to get involved, visit [grange.audubon.org](http://grange.audubon.org).**



Grange Insurance Audubon Center's mission is to awaken and connect participants to the beauty of the natural world in the heart of Columbus and inspire environmental stewardship in their daily lives.



# Governance of the Plan's Implementation

## REPORTING COMMITMENT

The Columbus Green Community Plan is a five-year document. Each year, a progress report will be issued online in conjunction with the Mayor's State of the City Address.

## MAYOR

Mayor Michael B. Coleman first formalized the city's commitment to sustainability in 2005 with the launch of the Get Green Columbus initiative and creation of the Mayor's Office of Environmental Stewardship and the Mayor's Green Team.

## MAYOR'S OFFICE OF ENVIRONMENTAL STEWARDSHIP

The Mayor's Office of Environmental Stewardship is made up of dedicated full-time staff responsible for the day-to-day work of overseeing the implementation of the Columbus Green Community Plan. The plan provides a pathway to a more sustainable Columbus both through reducing the impact of city operations and assisting the greater community in reducing their cumulative impact on the environment. The office also serves as a liaison to residents and organizations on city-related environmental affairs. Often, the office must serve as a bridge between ideas and their practical implementation. The Mayor's Office of Environmental Stewardship reports to the Mayor and is housed within the Mayor's Office.



## GREEN TEAM AND WORKING GROUPS

The Mayor's Green Team serves in an advisory role to the Mayor and his Office of Environmental Stewardship. The Green Team meets bi-monthly and is made up of subject matter experts, community leaders, and business leaders appointed by the Mayor. A representative from each of the city's departments is assigned to attend Green Team meetings. The Green Team is further made up of working groups to invest additional focus on a variety of projects and policy. Attendance at working group meetings spans beyond the membership list of the Green Team to include additional interested parties. Working group topics are aligned with the nine goal areas of this plan.

## MEETING FACILITATOR

To keep implementation of *The Columbus Green Community Plan: Green Memo III* on track, a professional staff meeting facilitator will assist in guiding the Mayor's Green Team to conduct the most productive meetings possible.

## GREEN COORDINATORS

One or more staff members in each city department are tasked with serving in the role of liaison to the Mayor's Office of Environmental Stewardship. These representatives meet bi-monthly to ensure internal initiatives described in the Green Community Plan are being carried out.

## ASSISTANT DIRECTORS OF SUSTAINABILITY

Select departments with key roles in carrying out sustainability projects have hired a staff person within the Director's Office to oversee sustainability-related issues within the department. The Columbus Green Community Plan further recommends that any remaining departments with significant roles in sustainability do the same (i.e., Recreation and Parks Department, Public Health, and Finance and Management).

## CITY COUNCIL ENVIRONMENT COMMITTEE

Columbus City Council established the Environment Committee beginning in 2014. All relevant legislation is funneled through this committee for consideration.

# Planning Process

Planning for the city's third sustainability plan began a year prior to its release date. The Mayor's Office of Environmental Stewardship led the process with the assistance of a professional facilitator. The first visioning exercise was conducted with the city's administration leadership including the Mayor, Mayor's Office staff, department directors, deputy, and assistant directors. This group brainstormed ideas for improving sustainability within their departments and helping the community as a whole. These ideas were transcribed and passed on to additional stakeholder groups for input.

The Mayor's Green Team was the next stakeholder group to build upon the work of the city's leadership. This group of community leaders, subject matter experts, and city staff (including City Council representation) acted as the primary group advising the direction of the plan throughout the year-long planning process. The group also advises the city's regular sustainability efforts on an ongoing basis. The Green Team met monthly for the first half of 2014 with supplemental ad hoc group meetings in between. These groups wrote the plan's vision statement, created objective areas, and fine-tuned action items.

Throughout the year, the Mayor's Office of Environmental Stewardship staff and interns synthesized input collected from the community, benchmarked against other cities, collected baseline data to inform the objectives, drafted plan content, and developed work plans.

The community contributed input via "Speak Up" comment boxes, which were made available at a variety of community events, such as the Earth Day Festival and the Long Street Cultural Wall event. Event goers were asked to write down their ideas for how they would like to see Columbus become more sustainable. A similarly branded website was made available for comment remotely and promoted to the public.

Other related outreach efforts took place simultaneously and were also considered in the crafting of this plan. Most of the ideas submitted by the general public, such as increased recycling, more bicycle facilities, litter prevention, and tree planting programs, were already included in early drafts of the plan. However, this input was beneficial to show which projects had the most public support. These ideas were weighted more heavily when considering which ideas to include in the final document. The Green Team used a criticality matrix (shown on page 99) to evaluate and weigh each item, and public support was one of a variety of factors considered in this evaluation. While the Green Team would ideally like to carry out each and every idea suggested during the outreach process, the criticality matrix helped to prioritize ideas, given the realistic limits of what can be accomplished within the five-year timeframe of this plan.



## CRITICALITY FACTORS

(EVALUATED FOR EACH OBJECTIVE)

### OBJECTIVE

Cost

ROI Case

Effort

Impact toward Vision

Public Interest/  
Demand

Visibility



### PLANNING PROCESS (CONTINUED)

In July, the city developed an online survey in collaboration with The Ohio State University for the purpose of collecting the public reaction to ideas compiled to date for consideration in the plan, as well as to solicit additional ideas. More than 650 people responded to the survey.

Throughout this entire process, the Mayor received regular briefings and his feedback was sought during weekly staff meetings. Two drafts of the plan were created before the final document was presented to the Mayor for his ultimate approval. The Mayor's Green Team approved each draft before it was circulated to the Mayor, Cabinet Directors, and City Council for editing and ultimately posted online for the public to review.

The city hired the Kirwan Institute at The Ohio State University to compile survey results and coordinate focus groups, interviews, and presentations, ensuring that interested stakeholders and traditionally harder to reach audiences were involved in the planning process in an attempt to represent the city's diverse population.

### COMPLEMENTARY SIMULTANEOUS OUTREACH EFFORTS CONSIDERED:

- FORGE Ahead
- Good Ideas (Transit Columbus)
- Bikeways Master Plan update
- Columbus Recreation and Parks Department Comprehensive Master Plan
- The Ohio State University and Columbus Public Health Climate Change Survey

# Acknowledgements

## PRIMARY CONTRIBUTORS

The following contributors provided significant effort to the planning process and writing of this document:

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**Napoleon Bell** | Columbus Community Relations Commission  
**Melinda Carter** | Equal Business Opportunity Commission  
**Gary Cavin** | Department of Technology  
**Nichole Brandon** | Department of Human Resources  
**Greg Davies** | Department of Public Utilities  
**Tracie Davies** | Department of Public Service  
**Amy DeLong** | Civil Service Commission  
**Dr. Teresa Long** | Columbus Public Health  
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**Scott Messer** | Department of Building and Zoning Services  
**Paul Rakosky** | Department of Finance and Management  
**George Speaks** | Department of Public Safety  
**Steve Schoeny** | Department of Development

## COLUMBUS CITY COUNCIL:

**Andrew Ginther**, President  
**Michelle Mills**, Environment Committee Chair  
**Hearcel Craig**  
**Shannon Hardin**  
**Zachary Klein**  
**Eileen Paley**  
**Priscilla Tyson**

## DEPARTMENTAL APPOINTED GREEN COORDINATORS:

City staff appointed by their Department Director to serve as a liaison to the Mayor's Office of Environmental Stewardship and actively participate on the Mayor's Green Team.

**Karine Aswad** | Department of Finance and Management  
**Randy Bowman** | Department of Public Service  
**Dave Bush** | Department of Finance and Management  
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**Anita Musser** | Columbus Department of Public Utilities  
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**Devyn Paros** | City Council  
**Brenda Sobieck** | Civil Service Commission  
**Jo Anne St. Clair** | Department of Development

## PROFESSIONAL FACILITATOR:

**Kim Stands**

## MAYOR'S GREEN TEAM

Community representatives who have been appointed by the Mayor to serve in an advisory capacity to the city on issues relating to environmental sustainability.

**Aparna Dial** | The Ohio State University | Green Team Chair  
**Angel Arroyo-Rodriguez** | Ohio EPA  
**Bryson Cole** | Anheuser Busch Brewing Company  
**Eric Davies** | Transformative Consulting  
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**Kristen Easterday** | Columbus Chamber  
**Blair Everett** | Gresham Smith and Partners  
**Laura Fay** | Friends of the Lower Olentangy Watershed  
**Steve Giles** | Hull and Associates  
**Catherine Girves** | Yay Bikes!  
**Kristi Higginbotham** | Solid Waste Authority of Central Ohio  
**Sherry Hubbard** | American Electric Power Ohio  
**Dan Jones** | Turner Construction  
**Paul Kennedy** | Columbus Regional Airport Authority  
**Kai Landis** | Green Roots LLC  
**Ashley Lester** | Columbus Downtown Development Corporation  
**Maureen Lorenz** | Friends of the Ravines  
**Danielle Maignan** | Dr. Pepper Snapple Group  
**Elizabeth Mallett** | Chemical Abstracts  
**Wallace McLean** | North Central Area Commission  
**Jonathan Meier** | Rain Brothers  
**Megan Melby** | Columbia Gas of Ohio  
**Susan Moran** | L Brands  
**Erin Neeb** | The Dawes Arboretum  
**Sheryl Owens** | Columbus Metropolitan Library  
**Ryan Pilewski** | Franklin Soil and Water Conservation District  
**JM Rayburn** | Columbus Housing Partnership  
**Tyler Steele** | Hines  
**Belinda Taylor** | Central Ohio Transit Authority  
**Shannon Tolliver** | White Castle System Inc  
**Christie Vargo** | Grange Insurance Audubon Center  
**Nate Vogt** | Mid-Ohio Regional Planning Commission  
**Jason Woehrle** | Gilbane  
**Gloria Zebbs Anderson** | Argyle Park Civic Association

## COLUMBUS AREA ENVIRONMENTAL ORGANIZATIONS

Get Green Columbus is proud to partner with the following organizations that make significant contributions to furthering the sustainability of our city.

Central Ohio Rain Garden Initiative  
Central Ohio Sierra Club  
Central Ohio US Green Building Council  
Clean Fuels Ohio  
COTA  
Columbus and Franklin County Metro Parks  
Columbus Audubon  
Columbus Green Building Forum  
Columbus Outdoor Pursuits  
Columbus Zoo & Aquarium  
Consider Biking  
COSI  
Experience Columbus  
Franklin County Local Food Council  
Franklin Park Conservatory and Botanical Gardens  
Franklin Soil and Water Conservation District  
Friends of Alum Creek & Tributaries (FACT)  
Friends of the Lower Olentangy Watershed (FLOW)  
Friends of the Ravines  
Friends of the Scioto River  
Greater Columbus Growing Coalition  
Green Energy Ohio  
HERO USA  
Land Trust Alliance  
League of Conservation Voters  
Local Matters  
Lower Olentangy Urban Arboretum  
Mid-Ohio Regional Planning Commission  
No Child Left Inside Central Ohio Collaborative  
Grange Insurance Audubon Center  
Ohio Department of Natural Resources  
Ohio Environmental Council  
Ohio Environmental Education Fund  
Ohio Ecological Food & Farm Association  
Ohio EPA  
Ohio to Erie Trail  
Pedal Instead  
Rails to Trails Conservancy  
Simply Living  
Solid Waste Authority of Central Ohio  
The Nature Conservancy  
Transit Columbus  
Urban Land Institute  
Yay Bikes!

Omissions will be corrected during an annual reporting and update of the document. Please notify the Mayor's Office of Environmental Stewardship if you feel your organization should be listed as a stakeholder or if you would like to become involved in any of the actions described throughout the plan by calling 614-645-7671.

A GREEN VISION



REALIZED



AND EVOLVING



COLUMBUS-  
A green community:

BEAUTIFUL.



HEALTHY.



PROSPEROUS.





THE CITY OF  
**COLUMBUS**  
MICHAEL B. COLEMAN, MAYOR

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ENVIRONMENTAL  
STEWARDSHIP

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