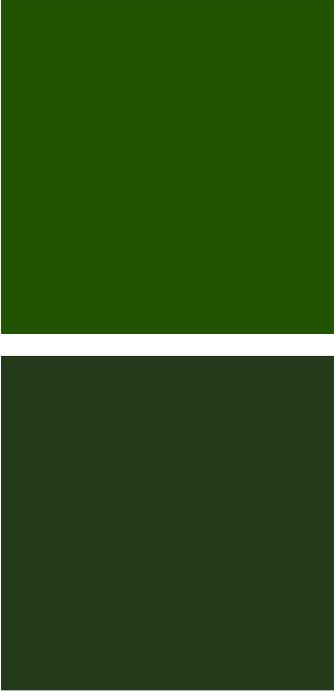


# 2009

A Year in Review  
City of Columbus, Ohio



Mayor Michael B. Coleman finished 2009 with the conclusion of the first five year phase of his Get Green Columbus initiative. Accomplishments made throughout the year have been recorded in this document and compiled following the framework set forth by the Green Memo, the initiative's guiding document.

# Table of Contents

**2** A message from our Mayor

**3** Collaborating with City agencies  
& community leaders

**4** Improving recycling efforts

**5** Improving outdoor and indoor air quality

**7** Improving water quality

**9** Promoting green business development

**11** Fostering the “greening” of Columbus

Dear Friends:

2009 marks the conclusion of a significant chapter in the history of our city, the end of the first ever Green Memo which launched a five year plan to improve environmental sustainability. The directives set forth in this plan led to significant outcomes benefiting the health of our residents, our planet and our economy.

The following pages of this document are filled with accomplishments made in the past year. After reviewing these achievements, it is my hope that you will feel as proud of the City of Columbus as I do.

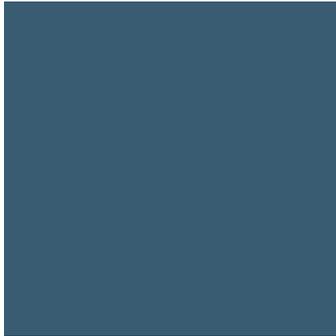
Thank you to each of you who contributed to this success. As you know, the City alone cannot rid our air and water of harmful contaminants, we can only aid in this community wide effort. Making progress towards these types of complex issues requires individuals making daily choices to act responsibly as stewards of the environment to properly dispose of waste, carpool to work, and buy locally, for example. Specifically, I would like to take this opportunity to thank City employees, community volunteers, GreenSpot locations and members of my Green Team for their dedication to this urgent cause. Added thanks is owed to the Solid Waste Authority of Central Ohio, who's support makes the Environmental Steward's Office possible.

Sincerely,



Michael B. Coleman  
Mayor

# A MESSAGE from our Mayor



**2009**  
GET GREEN  
Columbus  
A Year in Review

## Collaborating with City agencies & community leaders



The City depends on strong partnerships to achieve its goals. The foundation of this network is the Mayor's Green Team which is made up of approximately 35 members representing universities, private businesses, neighborhood groups and non-profit organizations. Green Coordinators are also assigned representing each department or division within the City. In addition to every-other month meetings, the Green Team is divided into subcommittees which meet on a frequent basis. These subcommittees specialize in six different areas including: Transportation; Education and Engagement; Green Business; Green Building; Growth and Development and new in 2009, Energy.

The dedication of partner organizations and the Green Team coupled with the day-to-day efforts of the City's dedicated Environmental Steward's Office staff has resulted in the following accomplishments along with many of the projects listed throughout the 2009 Year in Review:

**AWARE Green/Universal Design Manual:** Adopted as the new performance standard for federally funded housing projects in order to provide healthier, more accessible, and environmentally friendly housing. This manual was created in partnership with Franklin County and Enterprise Communities.

**Central Ohio Green Pact:** A formal agreement made by central Ohio Mayors, City Managers and other community leadership to continually improve sustainability through a ten point commitment. The original membership of 12 has more than doubled to 27, signing on five new members in 2009. The Mid-Ohio Regional Planning Commission (MORPC) continues to provide guidance and educational opportunities to Pact members throughout the year including bi-monthly Education Forums, the Summit on Sustainability & the Environment and online resources.

**E3 Program:** Representing the words Energy, Economy and Environment, this initiative was designed in 2009 to provide lean, environmental, carbon footprint and energy assessments to six local manufacturers identifying 5.3 million dollars of potential savings, 19,000 tones of CO2 emissions avoided, 257,000 pounds of water pollution avoided, 215 tons of Sox reduced and 24,000 pounds of solid waste reduced annually. To date, the manufacturers have spent \$551,000 implementing program recommendations and realized a \$50,000 increase in sales and retained 5 jobs as a result of the E3 program. The City joined five federal agencies, SWACO, AEP, TechSolve and the following manufacturers to make this program a reality: C.O.W. Industries, Inc, Hirschvogel Incorporated, Crane Plastics, ArcelorMittal, TimberTech and G&J Pepsi Co.



## Improving recycling efforts

The City of Columbus is the 16<sup>th</sup> largest city in the United States employing over 8,000 individuals and home to over 700,000 residents. A tremendous amount of resources are required to keep a city of this size functioning and therefore, the City and its residents generate a significant amount of waste. The City is committed to reducing the amount of material sent to the landfill. The following work was completed in 2009 in pursuit of this goal:



### City operations:

- The Department of Public Service used 341 tons of recycled asphalt from street-resurfacing projects to repair berms and shoulders, an acceptable practice according to City engineering standards.
- The Division of Mobility Options piloted a new initiative to remove trashcans from individual workspaces to encourage recycling. Recycling bins remain at each desk; however, trashcans are located in common areas for a group of employees to share. There was positive feedback and results showed an increase of recycling by 10-15%, the City will look to expand this program to more city facilities in 2010.
- Human Resources, among other departments have started to introduce and plan for paperless systems for training, payroll, increased use of intranet etc.
- Citywide over 53,381 tons of waste have been diverted from the landfill in 2009 through proper disposal of yard waste, recyclable materials, appliances, tires and hazardous waste.

**Education:** Keep Columbus Beautiful partnered with COSI, the Columbus Metropolitan Library and Columbus Public Schools to engage families in implementing good environmental behaviors. Presentations and activities including a *Make Your Own Birdfeeder* program demonstrated how new life can be given to items often times perceived as waste.

**Volunteerism:** The City offers opportunities for the public to get hands-on improving the Columbus landscape with the Kick Butt Columbus and Earth Day clean ups as well as use of free equipment for clean-ups year-round. Keep Columbus Beautiful facilitated opportunities for over 11,000 volunteers to participate in 2009 collecting a total of 198.7 tons of litter. Additionally, the Department of Public Utilities facilitated 6 river clean-ups during Central Ohio River Pride month in May.

**Media:** Keep Columbus Beautiful maintains a monthly column in the Suburban News Paper. Keep Columbus Beautiful received national recognition from Keep America Beautiful for a YouTube.com educational video.

**Residents:** 11,613 households subscribed to curbside recycling and 10,814 subscribed to the yard waste pick up program in 2009. Their combined efforts kept 16,216 tons of waste from the landfill. An additional 15,127 tons of recyclables were deposited at drop-box recycling bins distributed across the City bringing the total waste diverted from the landfill by residents to 31,343 tons.





## Improving outdoor and indoor air quality

The Environmental Protection Agency has designated Central Ohio as not meeting ozone and particle pollution limits. In 2009, MORPC issued nine air quality alert days for the region. The City continually works to see that these alert days are prevented through the following actions:

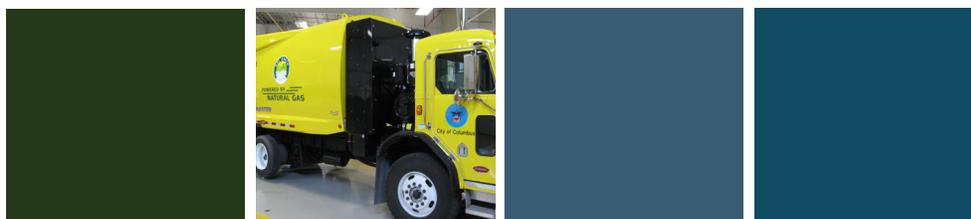
### Promoting alternative forms of transportation:

- **Biking:** Over 80 bike racks were installed citywide and an additional 100 racks were purchased for installation at a later date. The City partnered with MORPC and Consider Biking to produce an award winning Bike Users Map identifying the safest transportation routes via bike in order to promote travel by bicycle as an option beyond recreation. These efforts were recognized in 2009 when the City was designated a Bronze Level Bicycle-Friendly City by the League of American Bicyclists and also received an Award of Excellence from the American Council of Engineering Companies of Ohio.
- **Walking:** Through COTA, the City was awarded over \$300,000 from the Federal Transit Administration to build sidewalks on South High Street and Obetz Road to provide better access to transit.
- **Two-wheeled vehicles:** Four new parking areas for scooters were added in 2009 bringing the total capacity for these vehicles to over 300 spots.

### City operations:

- **Parking meters:** The Department of Public Service conducted a pilot study on Gay Street between Pearl and Third Streets using 35 solar-powered, parking-meter mechanisms. The meters performed well in winter and summer conditions, and users embraced the payment choices of credit cards, debit cards or coins. The meters can be monitored remotely saving emissions from staff who work to maintain these devices. Additionally, up to three times fewer batteries are required to operate these new meters.
- **Electronic training:** In order to reduce miles traveled to City training facilities, Human Resources purchased software to enable distance learning.

- Fleet Management:** The City's, *Government Fleet's* 2009 Environmental Stewardship Award winning, Fleet Management division continued to be progressive in reducing emissions. Total fuel use and related emissions were reduced by 4.5% in 2009 over 2008 amounts as a result of a variety of initiatives including: Use of 250 flex fuel vehicles and purchase of "green" (hybrid and CNG) vehicles (51 on-road vehicle purchases and 40 off-road in 2009), purchase of biodiesel (a total of 62% of all diesel purchases), employee green driving training, use of federal Congestion Mitigation and Air Quality grants to retrofit 112 vehicles with Diesel Oxidation Catalysts and Diesel Particulate Filters on all diesel on-road vehicles, use of compressed natural gas (CNG), right-sizing of vehicles, reducing the size of the vehicle pool, use of anti-idling technologies. Also, the City is planning the construction of a CNG fueling station on Groves Road as a result of a Department of Energy grant with help from Clean Fuels Ohio.
- Energy efficiency:** The City has studied its baseline use of energy and works each year to take actions to reduce its usage and therefore its greenhouse gas emissions. Simple solutions such as eliminating use of unnecessary lighting, adjusted temperatures, replacing inefficient lighting fixtures (513 intersections, 188 pedestrian crossing signals and pilot testing of LED street light technology), improved HVAC systems and replacement of doors and windows have been implemented citywide. More advanced strategies for energy conservation are also in use at the Jackson Pike Wastewater Treatment Facility. Treating wastewater so that it is safe to be released back into our waterways is an energy intensive process. The plant operated with only one furnace at any given time, using its own biogas to operate at reduced temperatures. Additionally the plant used biosolids resourcefully for land application purposes rather than the common alternative of incineration.
- Alternative energy:** The City both generates and purchases green power contributing to a cleaner power system. The O'Shaughnessy Dam generated 2,286 megawatt hours of electricity which was then sold to American Electric Power. Similarly, the City buys green power produced at the former landfill beneath The Phoenix Golf Links golf course. Methane gas, produced by the decomposition of trash beneath the golf course, is used to fuel two internal combustion engine generator units. In 2009, the facility generated 9,666 megawatt hours of electricity for the City, enough to meet the average electrical needs of nearly 870 homes.
- Air Quality Alert Days:** All staff are notified of Air Quality Alert Days via the City intranet and email systems. To assist in reducing the severity of pollution levels on alert days, the City encourages staff to engage in behaviors that will help to ease the problem. For example, signs have been posted at City fueling stations advising users to avoid refueling during air quality alert days, which can help decrease the formation of ozone pollution. Additionally, the Department of Public Utilities uses best management practices to avoid exasperating pollution problems on alert days by curtailing incineration operations.
- Indoor Air Quality:** The continued operation of the Healthy Homes program worked with 100 households during the year to reduce or eliminate health and safety hazards in the home, including substituting hazardous cleaning chemicals and pesticides with green cleaning produces and less toxic pest control. The program also provided 280 home assessments for asthma and other indoor environmental health risks.





## Improving water quality

Many cities throughout the United States and the world struggle to provide an adequate supply of fresh water to residents, businesses and farming operations. Here in Central Ohio, we are fortunate to have an abundance of water, but the City of Columbus does not take this fact for granted. The City maintains the role of steward to our waterways as a high priority, improving water quality for ourselves and for the many people who live downstream.

**Septic Systems:** Columbus Public Health inspected 300 septic systems for potential leaks into surface and ground water. Failing systems are a common problem, discharging untreated wastewater into the environment with the potential to make recreational use of waterways unhealthy, as well as harming native fish and plant populations.

**Rain Gardens:** Led by Franklin Soil and Water Conservation District, the City has partnered with the Central Ohio Rain Garden Initiative made up of a large group of community organizations, including the Department of Public Utilities, to promote the use of rain gardens. One of these gardens was installed at COSI along with related interpretive signage to teach the concept to museum visitors (*pictured above*). Two other gardens at Casto and Westgate parks were also designed and installed in 2009.

**Rain barrel pilot:** The Department of Public Utilities has been cutting the costs for rain barrels to Columbus residents for years, but new in 2009, the City worked with EarthMinded, a subsidiary of Greif, and the Friends of the Lower Olentangy Watershed (FLOW) on a pilot to design a new rain barrel which will be offered free to residents in a specific Clintonville neighborhood in spring of 2010 to measure the impact of these devices on the sewer system during rain events.

**Green Roof:** Located at the Whetstone Park of Roses, a new recreation center boasts 5000 square feet of vegetated roofing which absorbs stormwater and insulates the building from extreme temperatures reducing energy demands on the building.

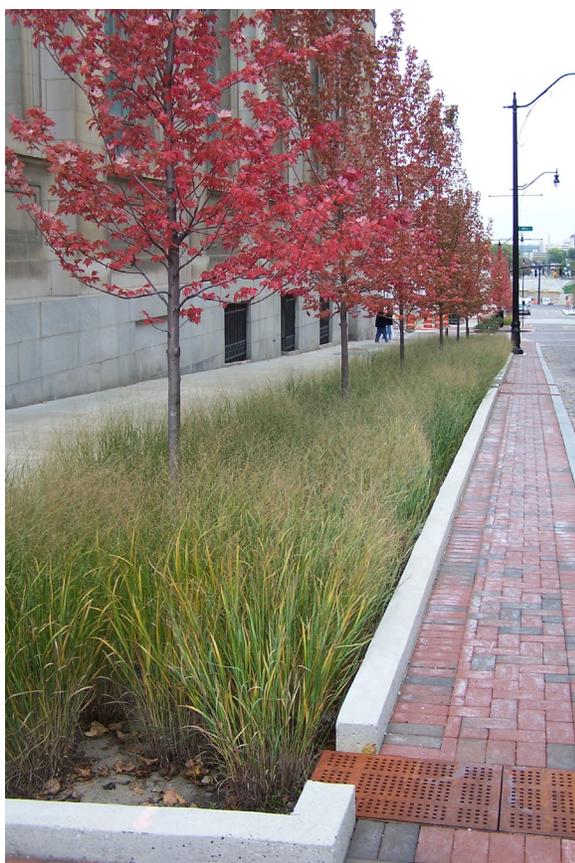
**Stream restoration:** The Recreation and Parks Department restored two streams (Glen Echo and Clover Groff) to a more natural state, resulting in improved water quality.

**Big Darby Accord:** Work continued to protect central Ohio's only National Scenic River in partnership with seven other jurisdictions whose water flows across the watershed and into the Big Darby.

**Storm Drain Markers:** Nearly 600 new labels were posted on City storm drains serving an important purpose informing residents that each of these drains lead directly to a waterway and only rain should ever be allowed to enter the system.

#### Festivals:

- **Riverfest on Tour!** Partnering with MORPC, the City participated in Riverfest which aims to bring people to the banks of our rivers to experience and build appreciation for the environment. The month long event began with WaterFire on the Scioto paired with Family Friday Night at COSI featuring special water themed booth activities and a showing of *Grand Canyon Adventure: Rivers at Risk*. Throughout the month of June the City partnered with MORPC to offer free activities to the public including canoe and kayaking on the Hoover Reservoir and a tour of the Southerland Wastewater Treatment Facility.
- **Central Ohio Children's Water Festival:** The Department of Public Utilities coordinated with OhioEPA and other central Ohio organizations to teach 200 4<sup>th</sup> and 5<sup>th</sup> grade students about our water resources at a half-day field trip to the Franklin County Fairgrounds. Each student participated in a series of educational activities hosted by each participating organization.





## Promoting green business development

One of the fastest growing sectors of our economy is green businesses. With many institutions of higher learning in central Ohio developing curriculum for students interested in this field, our region has a foundation for success in this new market. The City of Columbus has worked throughout 2009 to bolster the success of our green business community in the following ways:

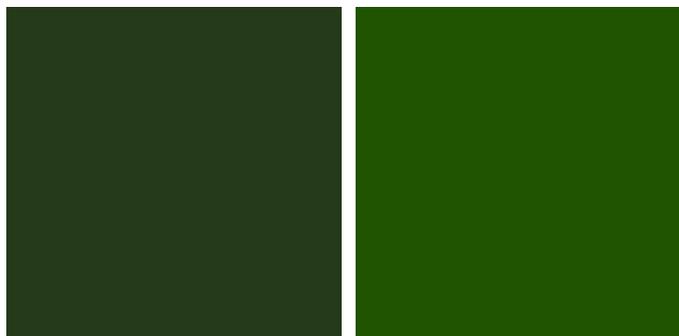
**Purchasing:** Leveraging the purchasing power of the City of Columbus, green products have been incorporated into purchasing contracts including janitorial supplies, office supplies, furniture, vehicles, and fuels.

### Education:

- The Mayor's Green Team partnered with the Columbus Green Building Forum to combine the **Get Green Business Conference** with the Green Building Expo in April. The professional event offered educational sessions, an exhibit hall and presented the GreenSpotLight Awards to Battelle Memorial Institute, Whole Foods- Dublin and Homeport for being the most accomplished GreenSpot business locations of the year.
- **Workshops:** The Department of Development offered three free, green workshops targeted towards contractors, builders and nonprofit developers in partnership with Enterprise Green Communities. Over 100 participants representing 40 companies completed the training in 2009.



**GreenSpot:** In 2009 over 600 businesses, residents and community groups went online to [www.columbusgreenspot.org](http://www.columbusgreenspot.org) to identify themselves as an environmentally friendly location, bringing the total GreenSpot count to 1580. Nationwide joined in 2009 and is now the program's largest member with two buildings and over 7,600 employees. Business First promotes the program when space allows. GreenSpot's strong brand and appeal has attracted interest in the program from outside of central Ohio, specifically, Summit County. As a result, the City has agreed to share the files with other areas interested in adopting the program free of charge.

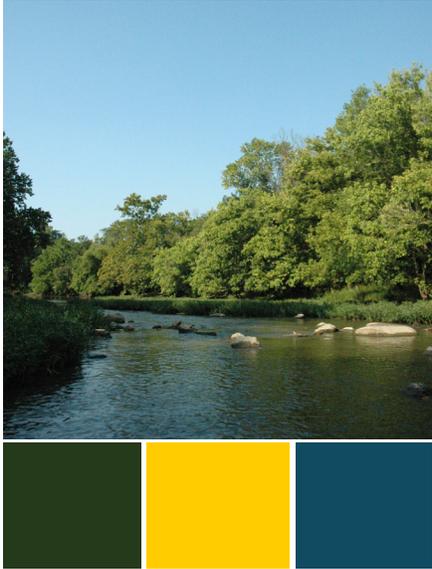
**Incentives:**

The City of Columbus uses financial incentives to encourage the retention and creation of new jobs and investment. A fundamental focus of our program is the continued redevelopment of our downtown and core neighborhoods. We place special emphasis on projects considering these areas and offer higher incentives accordingly. In addition, companies receiving incentives must demonstrate the green components of their project. In 2009 the Economic Development Division leveraged City resources to secure 16 new projects. Over the next 5-10 years, these projects will create 4,127 new jobs, retain 17,062 and generate \$5.9 million of new income tax and \$1 billion of new private investment. Green components from these 16 new projects include enhanced recycling programs, brownfield remediation and use of energy efficient building materials.

**Brownfields:**

The Economic Development Division oversees the administration and coordination of the City's Brownfield Redevelopment program. Payments of over \$20 million in grant funds were made in 2009. Projects included TechSouth, Jaeger Manufacturing, B&T Metals, 3M, Wheatland, Columbus Coated Fabrics, Kimball-Midwest and the former Schottenstein site.





## Fostering the "greening" of Columbus

A visually green city has a multitude of benefits, the obvious being environmental, but a city with a multitude of trees, markets, gardens, and environmentally friendly planning can promote health and economic development. Similarly, a community made up of informed, green-minded individuals will lead to the practice of more sustainable behaviors on a scale that can have a positive impact on our air, and water quality.

**Native vegetation:** The City makes an effort to remove non-native plants that can strain native species and quickly dominate the landscape while simultaneously reintroducing native species on City property. 3.5 acres of honeysuckle were removed throughout the year and over 5550 trees and 1000 seedlings were planted in 2009 with the help of dedicated community groups and volunteers.

**Open Space:** The Recreation and Parks Department acquired over 26 acres of park land in 2009.

**Scioto Audubon Metro Park:** Opened in August, Mayor Michael B. Coleman, in partnership with Metro Parks and Audubon Ohio restored 160 acres on the Whittier Peninsula downtown and opened the space as a Metro Park. Residents and visitors can now visit this urban jewel to bird, fish, boat, bike and rockclimb.

**Markets:** Columbus Public Health has worked to improve access to fresh, nutritious foods for low-income families. The annual Columbus Public Health market served over 9,500 customers and distributed 4,500 free produce vouchers. Additionally, the Department created and produced a map to identify locations where access to healthy, nutritious foods is lacking, established three new community farmers markets, assisted in establishing a community garden in the Linden area and increased the number of community gardens that directly provide fresh, local produce to neighborhood food pantries.

### Education and Engagement:

- The Environmental Steward Office gave **presentations** on Mayor Coleman's Get Green Columbus initiative to 12 community organizations in 2009.
- **Lunch & Learn:** SWACO, MORPC, Columbia Gas of Ohio, American Electric Power of Ohio and the City have partnered to create an hour long lunch presentation to discuss recycling, efficiency, and other conservation methods. The presentation is marketed to central Ohio's largest employers in order to reach as many people as possible. Columbia Gas of Ohio hosted the first of this new series.
- **Neighborhood Pride:** Energy saving tips as well as water saving give-away items were provided to residents in the following neighborhoods: Tussing, Arlington Park, Deschler Park and Clinton Estates.
- **Internal communications:** City employees are introduced to the City's green culture through a series of presentations provided during their five day new hire orientation. Employees learn about Get Green Columbus, GreenSpot, stormwater and pollution control, recycling, air quality, anti-idling policies, and more. These messages are reiterated through the Human Resources Connections newsletter.

- **Websites:** City websites including [getgreencolumbus.org](http://getgreencolumbus.org) and [columbusgreenspot.org](http://columbusgreenspot.org) continue to be updated and provide tips and resources to the community. The Get Green Columbus website attracts an average of approximately 16,000 visitors a year.
- **Calendar:** Opportunities for involvement in green events are posted online to the Get Green Columbus “Green Community Calendar” at [morpc.org](http://morpc.org). New in 2009, the website code was made available to all organizations who would like to partner to display this calendar on their own website.
- **Utility bill insert:** The Department of Public Utilities provides tips and information within the 314,000 utility bills sent out quarterly encouraging and educating on topics including water and energy conservation.



**Green Buildings:** According to the United States Green Building Council (USGBC), buildings in our country are responsible for 39% of CO2 emissions, 40% of energy consumption and 13% water consumption. The City of Columbus understands the significant impact buildings have on the environment, and has taken the following actions to limit its demand on our natural resources:

- **LEED Buildings:** LEED or Leadership in Energy and Environmental Design of buildings is a certification program of the USGBC. Five buildings either completed or currently under construction have been built to meet LEED standards including: Fire Station 10 located on West Broad Street (certified Gold in April 2009), The Ohio State University Policing Center Substation 4 (projected to achieve Gold certification) and the Parking Violations and Police Impound building set to open in 2011 (built to LEED Silver standards), Columbus Westside Family Health and Wellness Center (built to LEED Silver standards), and the Police Heliport (built to LEED Certified standards). Additionally, a home located in the King Lincoln District owned by the Columbus Housing Partnership was awarded LEED Platinum status. This home is the first Platinum-certified residential dwelling in the State of Ohio. The home was built by a collaboration consisting of non-profits, government, corporate and educational entities and was completed with City of Columbus financing assistance.
- **AWARE Green/Universal Design Manual:** Based on the Enterprise Green Communities criteria, the City of Columbus partnered with Enterprise and Franklin County to publish the first edition of a manual adopted to set a performance standard for the construction and renovation of federally-funded residential projects. AWARE stands for Accessible, Water Conservation, Air Quality, Resource Conscious and Energy Efficient. The manual will provide residents in central Ohio with housing that is healthier, more accessible, resource conscious and environmentally friendly.



City of Columbus  
Michael B. Coleman, Mayor

Supported by



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