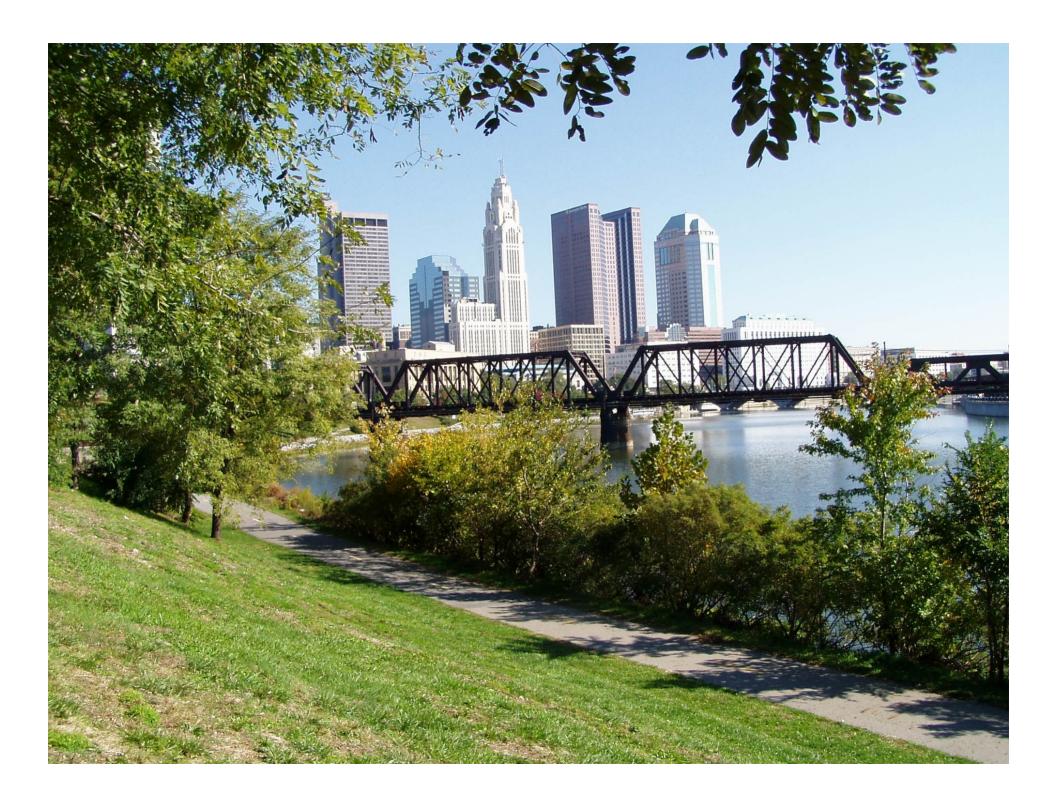


### Get Green Columbus

A summary of progress: 2005-2009

City of Columbus Michael B. Coleman, Mayor







ayor Michael B. Coleman launched the "Get Green Columbus" initiative January 28, 2005. A "Green Memo" was issued outlining a series of strategies to both meet economic development goals and ensure a healthier environment. The document provides a policy framework for the community as we come together to address these goals. It outlines changes in City operations to improve efficiency and environmental sensitivity. It also directs city agencies to use the City's purchasing power and investment incentives to encourage job creation. The "Green Memo" was broken into six broad categories:

- I. Collaborating with City Agencies & Community Leaders
- II. Improving Recycling Efforts & Reducing Solid Waste
- III. Addressing Outdoor & Indoor Air Quality
- IV. Protecting Our Water
- V. Promoting Green Businesses
- VI. Fostering the Greening of Columbus

The following is a summarized accomplishment report for the Get Green Columbus initiative from January 2005- December 2009, specifically addressing the implementation status of Green Memo objectives. More detailed annual progress reports can be found online at www.getgreencolumbus.org.

Overall, the City of Columbus has made great strides in creating a sustainable, green City and is beginning to achieve state and national recognition for its efforts. In 2009, the Ohio Environmental Council recognized the City with the Environmental Public Servant award. The third party national benchmarking program, SustainLane, recognized the City's achievements and, in 2008, listed Columbus as the most improved city, stating "Columbus is a veritable Phoenix rising from ashes as the city shoots up a full 20 spots from its rank as dead last in 2006. Cities looking for sustainable inspiration need look no further than the Buckeye state." In 2009, Smarter Cities, a project of the Natural Resources Defense Council, ranked Columbus 15<sup>th</sup> among the 67 large cities evaluated. Bicycling Magazine has named Columbus one of five cities to watch in the future. Columbus has been repeatedly recognized for the Fleet Management Division, which was just named one of the greenest fleets in the nation at the Green Fleet Conference 2009 Environmental Leadership Awards. It has also been recognized multiple times by 100 Best Fleets, most recently placing in the top 20.

### Collaborating with City Agencies & Community Leaders

The single largest success in this category was the creation of Mayor Coleman's Green Team. The purpose of the Green Team is to advise the administration on environmental policy, identify resources to carry out the Get Green Columbus initiatives and educate the community.

This thirty-five member team is led by David Brehm and is made up of environmental, community and business leaders. They meet bi-monthly and on the off- months six committees meet which are focused on Green Transportation, Green Business, Growth & Development, Green Buildings, Education & Engagement and Green Energy.

In addition, the Environmental Steward Office (ESO) was created in partnership with the Solid Waste Authority of Central Ohio (SWACO). This office coordinates the Get Green Columbus initiatives within the City as well as with the community. The ESO works closely with the Green Team as well as an internal team made up of Green Coordinators representing each Department and Division within the City.

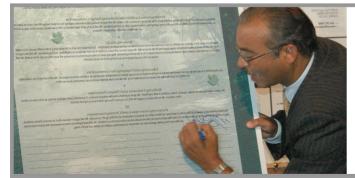
The Get Green Columbus website (www.getgreencolumbus.org) continues to attract visitors interested in learning about Columbus' efforts to get green. The site averages 555 visitors per day. Annual progress reports are posted as well as links to Get Green programs and

a regional green community calendar hosted by the Mid Ohio Regional Planning Commission (MORPC).

In addition, on October 4, 2007, Mayor Michael B. Coleman joined with elected officials from twelve other local jurisdictions in signing the Central Ohio Green Pact. The Pact commits the City to lead by example. The goals of the Pact are to:

- Green Public Fleets
- 2. Grow a Strong Green Economy
- 3. Collaborate to Purchase Green Products
- 4. Adopt Sustainable Land Use Policies
- 5. Build Green Facilities and Reduce Energy Consumption
- **6.** Reduce Waste
- 7. Educate and Engage Our Communities
- 8. Reduce Emissions and Climate Protection
- 9. Preserve Green Space and Create Greenways
- **10.** Improve and Promote Mass Transportation.

To date, twenty seven jurisdictions in central Ohio have signed the Pact and are actively working on implementation collaboratively through the Center for Energy & Environment at MORPC.









### Improving Recycling Efforts & Reducing Solid Waste

Columbus is committed to providing a convenient and efficient way for residents to recycle. In 2005, the City of Columbus and SWACO piloted a blue bag recycling program. The purpose of the pilot was to provide an easy way for residents to recycle without the need to collect the recyclables separately from the trash. Each household in the pilot areas were provided blue bags to put recyclables into. The blue bags were picked up by the City, along with the regular trash. The blue bags were then removed at the transfer stations and taken to the recycling processing facility. The pilot was not successful due to low participation rates and difficulties pulling the blue bags from the tipping floor of the transfer stations.

Through partnership with SWACO and Columbus City Schools, Columbus now has one of the largest drop box recycling programs in the country. In 2009, 15,126 tons of materials were recycled, up from 7,948 in 2005. Every resident in Columbus is within a few miles of a drop box location, there are nearly 200 locations throughout the City, for a listing visit www.swaco.org .

Columbus also has a subscription program available for residents through Rumpke Inc. 4,382 tons of materials were recycled from this program in 2009 with an average of 12,000 subscribers annually. The cost of this service ranged from \$5.00 per month in 2005 to \$8.25 per month in 2009.

Columbus has partnered with SWACO and Capital Crossroads Special

Improvement District on the Downtown Recycling Program pilot. Detailed solid waste information was obtained from 35 properties who are now working together to recycle 66% of solid waste that would normally have gone to the Franklin County Landfill.

The City of Columbus' office recycling program expanded from accepting only paper to accepting co-mingled paper, aluminum and plastic. In 2009, 627 tons were recycled which was a 69% increase in recycling volume compared to 2007. In addition, city agencies are taking measures to recycle items such as batteries, asphalt, fly ash for concrete, tires, used oil, scrap steel and aluminum.

Using the City's purchasing power, measures were taken to increase the use of green products by adopting Environmentally Preferred Purchasing language in procurement code, issuing an Executive Order to purchase and use at least 30% post consumer recycled content paper and paper products as well as reduce the amount of paper used. As purchasing contracts expire, the City has entered into several Green Universal Term Contracts whereby city agencies can purchase from. They include janitorial, safety and office supplies, office chairs, fleet items including alternative fuels, pest control services and maintenance and repair of HVAC systems.

To encourage the building industry to recycle building materials, the City's building code was changed to require at least 25% of the construction and demolition debris to be recycled.



# Addressing Outdoor & Indoor Air Quality

The single largest accomplishment in this category is the creation, • Green Grants: The City received a Midwest Clean Diesel adoption and implementation of the City of Columbus Green Fleet

Action Plan.

Green Grants: The City received a Midwest Clean Diesel Initiative grant in 2008 for approximately \$79,000 which installation of 16 hydraulic heaters for Refuse vehicles a

Green Fleet Action Plan – The City's first Green Fleet Action Plan was issued January 1, 2008. The action plan sets goals with targets, reviews current initiatives, outlines strategies and recommends actions to green the City's fleet. A status report on the plan is provided biannually and is available on the City's website (www.getgreencolumbus.org).

- Fuel Reduction: As a result of strategies implemented in the Green Fleet Action Plan and subsequent reduction of on-road vehicles (185 units), the City used 4.5% less total fuel (includes all fuel used-bio, ethanol, petroleum, CNG, etc.) in 2009 than in 2008.
- Biodiesel: In 2009, the City purchased 764,311 gallons of biodiesel, accounting for approximately 62% of all bulk diesel purchases. Approximately 90% of diesel fuel used in off-road vehicles was biodiesel in 2009. As a result of the increased use of biodiesel, the City used almost 6% less petroleum fuel in 2009 than in 2008. In tanks that use biodiesel, the City operates on B20 from approximately March 1 to early November, and then switches to B5 for the colder months.
- Compressed Natural Gas (CNG): The City's first CNG Refuse rear loader truck was put into service during the first quarter of 2009. Fleet Management is working with the Refuse Division to purchase 9 additional CNG Refuse trucks using Congestion, Mitigation and Air Quality (CMAQ) grant funding in 2010. As part of its Department of Energy Clean Cities funding request, Fleet Management was awarded funding for 6 CNG heavy duty vehicles and the construction and operation of one CNG fueling station to be located at Groves Road. As CNG fuel becomes more available it is anticipated that additional vehicles will be purchased as CNG.

- Green Grants: The City received a Midwest Clean Diesel Initiative grant in 2008 for approximately \$79,000 which funded the installation of 16 hydraulic heaters for Refuse vehicles and 7 diesel oxidation catalysts (DOCs) for Transportation vehicles. Fleet is currently implementing projects in a CMAQ grant award for \$1.3 million that goes until July 2010. The 2009 portion of the CMAQ project funded diesel emission reduction retrofits (DOCs and diesel particulate filters) and anti-idling equipment (hydraulic heaters and engine heaters). The 2010 project will fund the purchase of 9 CNG Refuse and 5 other heavy duty CNG vehicles. The City was awarded a \$1.27 million Clean Cities grant through the Department of Energy to purchase 6 heavy duty CNG vehicles, 5 heavy duty hybrid vehicles and to construct a CNG fueling station at the Groves Road Fleet facility.
- "Green" Purchasing language: Green language that gives preference to hybrids, flex fuel vehicles and CNG vehicles was included as part of the 2009 and 2010 light duty vehicle bid specifications. This "environmentally preferable purchasing" language gives preference to environmentally preferable products.

#### Green Fleet Awards:

Top 40 *Government Green Fleet Winner* for 2009 – Columbus ranked 22<sup>nd</sup> overall for its green fleet efforts.

Fleet Environmental Leadership award for 2009 presented to Mayor Coleman in Chicago by Bobit Publishing at a Green Fleet Conference.

2009 Public Servant award from the Ohio Environmental Council for green fleet initiatives.

The City currently owns approximately 250 flex fuel vehicles, 5 CNG fueled vehicles, and 2 hybrids. Columbus' Fleet Management Division reviews and approves all vehicle bid specifications to ensure that the most fuel efficient vehicles possible are being purchased. Additionally, in an effort to reduce staff driving and vehicle emissions, small bike fleets were established for staff work and/or lunch hour use.

Columbus' commitment to green fleet objectives has inspired other public and private fleets throughout central Ohio. For example, the Coca -Cola Bottling Company of Columbus, a division of Coca Cola Enterprises (CCE), delivers products throughout Columbus using hybrid electric tractor trailers. CCE deployed 185 total hybrid electric trucks in 2009, bringing their total to 327, the largest such fleet in North America.

In addition to taking measures to reduce fleet emissions, Columbus has been steadily rising its leadership in promoting various transportation options. Columbus has a goal to shift 10 percent of the City's transportation to bicycling, walking, transit, carpooling and other modes of transportation by 2012. The message is "2 by 2012", meaning that if each worker took an alternate mode of transportation two times a month, collectively we would reach a 10% mode shift.

In June 2008, Columbus adopted the Columbus Bicentennial Bikeways Plan. The Plan includes construction of 300 miles of bikeways and 100 bike parking facilities. Columbus currently has 78.3 miles of bike routes and trails with an additional 94 miles planned. Since adopting the Plan, the City has enacted a Complete Street Ordinance, has initiated a Citywide Share the Road Campaign, and has initiated and created a Division of Mobility Options.

Pedal Instead was created by the Mayor's Green Team in 2006 to provide secure, supervised bike parking at no cost for community events. Each year, thousands of people are served by the program, resulting in substantial reductions in auto emissions. www.pedalinstead.org

To help at risk citizens during air quality alert days, Columbus has partnered with the Mid Ohio Regional Planning Commission (MORPC). MORPC monitors and issues air quality alerts to the public with recommended actions. Columbus works with MORPC's Center for Energy & Environment Energy & Air Quality Working Group to reduce emissions regionally and created and adopted an internal Air Quality Action Plan. The Air Quality Action Plan calls for measures to notify employees when there is an Air Quality Alert issued and details how department operations are to be altered during air quality alert days.

For indoor air quality, Columbus received grants to assess families with asthma and provide tips on how to reduce risks. This Healthy Homes Program and has improved the indoor air quality and reduced asthma triggers within approximately 500 homes. Measures include substituting hazardous cleaning chemicals and pesticides with green cleaning products and less toxic pest control.



# Protecting Our Water

This category calls for the protection of water, both the quality of our waterways and flood reduction impacts through stormwater management, stream restoration and multi-jurisdictional watershed planning efforts.

The City of Columbus' Stormwater Manual was updated and includes riparian buffer, floodplain and wetland protections. Several stormwater innovation demonstration projects have been implemented including native prairie installations (ie. 910 Dublin Road Public Utilities Complex, Whetstone Park of Roses) bioretention areas downtown (ie. Gay Street, Town Street, Front Street), rain barrels (partnered with Friends of the Lower Olentangy Watershed to cost-share over 500 rain barrels and hold educational workshops), a 5,000 square foot green roof installation at the Whetstone Recreation Center, several rain gardens (ie. Casto Park, Westgate Park, Center of Science and Industry) and the establishment of the Central Ohio Rain Garden Initiative and website www.centralohioraingardens.org where you can submit your garden (32 posted to date).

In 2005, the Columbus Division of Sewerage and Drainage launched Project Clean Rivers which includes various programs and services to achieve clean water goals. This includes the Wet Weather Management Plan, \$2.5 billion plan to eliminate combined and sanitary sewer overflows.

In an effort to help protect surface and groundwater resources, Columbus Public Health annually permits and inspects private household sewage treatment systems. The department inspected over 300 such systems in 2009.

Stream restoration work includes natural channel design restoration on Glen Echo, a tributary to the Olentangy River, and Clover-Groff Run, a tributary to the Big Darby Creek, low head dam removal on Alum Creek (two dams near Nelson and Wolfe Parks) and the 5<sup>th</sup> Avenue Dam

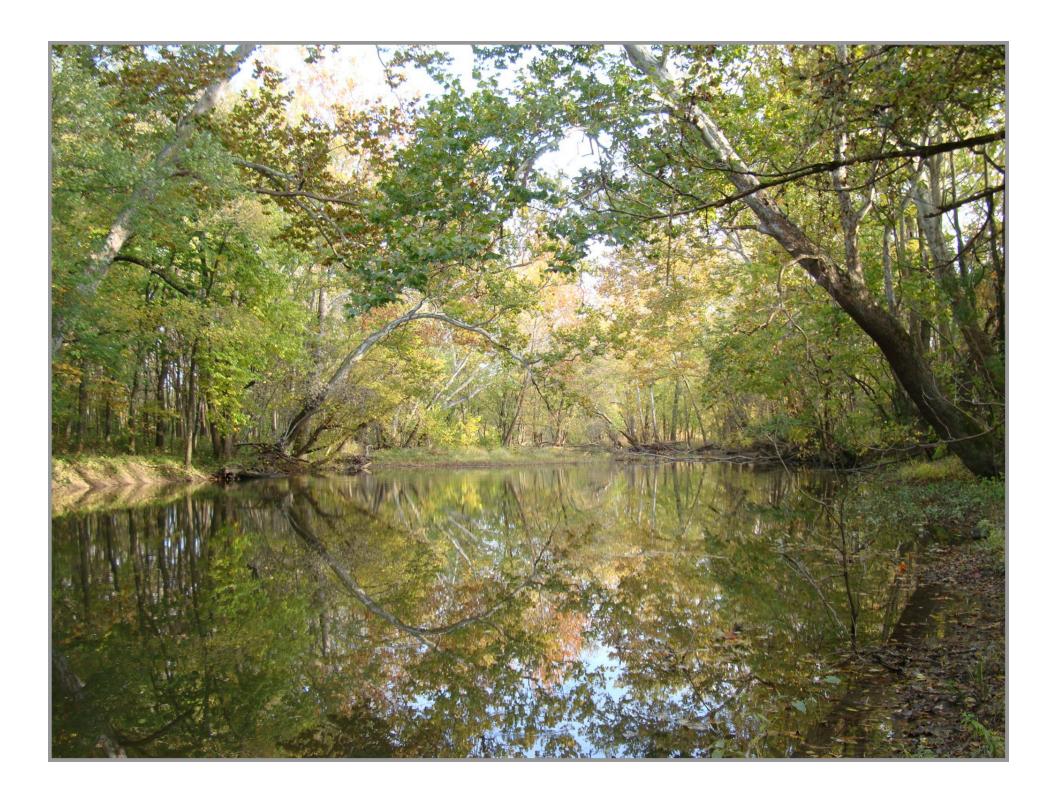
removal on the Olentangy River is underway.

Columbus is working hard to conserve natural areas, especially greenway corridors along rivers and streams. In the five year period, nearly 500 acres of land were acquired through the parkland dedication ordinance, development negotiation and grant purchases. This includes a 70 acre wetland preserve in northeast Columbus, which is home to a significant heron rookery.

Columbus has participated in many valuable multi-jurisdictional watershed planning efforts. The most note worthy was the establishment of the Big Darby Accord and Master Plan. Ten jurisdictions in the Big Darby Watershed within Franklin County have cooperatively developed a multi-jurisdictional plan to preserve and protect the National and State Scenic River, Big Darby Creek, and its tributaries. The Plan includes preservation and growth strategies, is capable of implementation and provides mechanisms for monitoring and oversight.

Additional watershed planning efforts have included the state endorsed Lower Olentangy Watershed Action Plan, the Lower Alum Creek Watershed Action Plan, the Lower Big Walnut Creek Watershed Action Plan, the Rocky Fork Watershed Action Plan, and most recently drafted is the Blacklick Watershed Action Plan. These plans were created by the local nonprofit watershed protection organizations in cooperation with local, state and regional jurisdictions and watershed stakeholders such as business owners and residents.

Franklin County, the City of Columbus and MORPC partnered on a public education campaign to educate citizens on water quality issues and raise awareness about the water quality effects of dumping down storm drains. The campaign included a humorous public service announcement that aired on local TV stations and an interactive website, www.KeepOurWatersClean.org .



# Promoting Green Businesses

In July 2008, Mayor Coleman launched the GreenSpot program. The program was created to inspire, educate and recognize those making efforts to get green. More than 1600 businesses, residents and community groups have been recognized as GreenSpots. Members of the business community, families and local organizations used the web-based program as a framework, providing direction on ways to conserve resources and money. The program has been truly successful and is serving as a public engagement model for other communities throughout Ohio and North America.

- Ads continue in Business First (program's business media sponsor) as space allows
- Mayor Coleman presented the first annual GreenSpotLight awards during the Green Building Expo/Green Business Conference to Battelle Memorial Institute, Whole Foods Dublin and Homeport
- Columbus Metropolitan Library's Green Team contest resulted in 200 employees (27%) becoming residential GreenSpots
- Nationwide became the largest GreenSpot business with 2 downtown buildings and 7,600 employees
- Summit County Green Policy Task Force is piloting the program

Mayor Coleman's Green Team organizes an annual Green Business Conference and Green Business Case Competition.







## Fostering the Greening of Columbus

As part of the Get Green Columbus initiative, on February 22, 2007, Mayor Michael B. Coleman signed onto the U.S. Mayors Climate Protection Agreement. Since then, the City has conducted a greenhouse gas emission inventory of the City's operations. Columbus operation 2005 baseline emissions are 317,926 metric tons of carbon dioxide equivalent. The City of Columbus has set a goal to reduce greenhouse gas emissions by 2% / year until 2030 (40% below 2005 levels). The sources of the City's emissions are:

- Buildings- 31%
- Wastewater Treatment- 37%
- Drinking Water Treatment- 18%
- Transportation- 12%

More recently, on May 4, 2009, Mayor Michael B. Coleman rolled out the "10 Year Reform and Efficiency Action Plan". The list of reforms and efficiencies resulted from the work of the Economic Advisory Committee and were meant to partially solve the structural imbalance in the General Fund. A recommendation was made to continue and expand energy efficiency measures including building weatherization, installation of more efficient lighting and HVAC system upgrades.

City agencies have implemented several energy conservation measures within City buildings and recently became engaged with the United States Department of Energy and United States Environmental

Protection Agency's Energy Star Portfolio Manager energy management tool. By participating, the City of Columbus is able to track and assess energy and water consumption across its entire portfolio of buildings in comparison to similar facilities nationwide.

Get Green Columbus included a mix of City operational initiatives and challenges to the community and we are seeing progress on both fronts. In addition to improving our energy efficiency in older City facilities, every new City construction project is LEED certified by the U.S. Green Building Council. Together with private partners we saved the historic Lazarus Building and made it among the nation's largest green rehabs. We also opened our first sustainable residential neighborhood at Green-View Estates and recently adopted the AWARE Green Universal Design Standards and began Green Contractor 101 Training for all publicly funded green housing projects. The first LEED Platinum home in the Midwest was built on 21<sup>st</sup> Street in the North of Broad neighborhood of the King Lincoln District as a model (www.chpcolumbus.org/news\_2009\_LEED\_Platinum\_Certification.htm).

Columbus also fostered green development through modifications to development regulations. Significant changes were made to the commercial overlay code and new designations resulting in reduced parking requirements and enhanced landscaping for miles of City corridors.

"Green Memo" called for the City to plant trees and construct capital improvements that protect the environment. The goal was to plant 20,000 trees. Columbus averaged 5500 trees / year planted with loss of 1500 trees/year resulting in a net of 4000 trees / year planted, therefore meeting the 20,000 tree goal. In addition a GIS tree cover layer was created and an internal Tree Preservation & Restoration Task Force formed to examine strategies to protect or increase the urban tree fresh, nutrit canopy. Street trees are routinely incorporated when designing roadways.

Columbus has been particularly successful in securing Clean Ohio funds for nearly twenty projects to clean up and develop brownfields, with \$30 million of Clean Ohio funds expected to leverage \$500 million in development. Most notably was the clean up and development of the Whittier Peninsula. In 2003, Audubon Ohio, Metro Parks, and the City of Columbus agreed to collaborate on a project to reclaim and restore 160 acres on the Whittier Peninsula along the Scioto River near downtown Columbus. Of this acreage, Metro Parks has created the 71-acre Scioto Audubon Metro Park. Visitors can enjoy birding, fishing, boating, hiking and jogging. Audubon Ohio operates a downtown nature center inside the park, the Grange Insurance Audubon Center at 505 W. Whittier

Street, which opened in August 2009. When the redevelopment of the Whittier Peninsula is completed, the site will showcase the resilience of nature and the power of intelligent, conservation-minded development and design.

Columbus has also worked with local partners to improve access to fresh, nutritious foods for residents in most need. Columbus Public Health held an annual farmers market serving over 9,000 customers per year and distributing 4,500 free produce vouchers to Women, Infant and Children (WIC) clients. Community farmers markets were organized throughout the City, the most visible is the downtown Pearl Market, located in Pearl Alley one block north of the Ohio statehouse www.downtowncolumbus.com/pearlmarket. Columbus became home to the American Community Garden Association and Franklin Park Conservatory opened the unique Community Garden Campus www.fpconservatory.org/community garden.html . There are over 130 community gardens established in Columbus which transform unused abandoned spaces into attractive, productive green spaces for the benefit of neighborhood community groups. These groups work to provide fresh, local produce to neighborhoods and food pantries and provide ecological awareness to youth and adults.





City of Columbus Michael B. Coleman Mayor

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