

2015 Report



THE CITY OF
COLUMBUS
ANDREW J. GINTHER, MAYOR

DEPARTMENT OF
PUBLIC UTILITIES

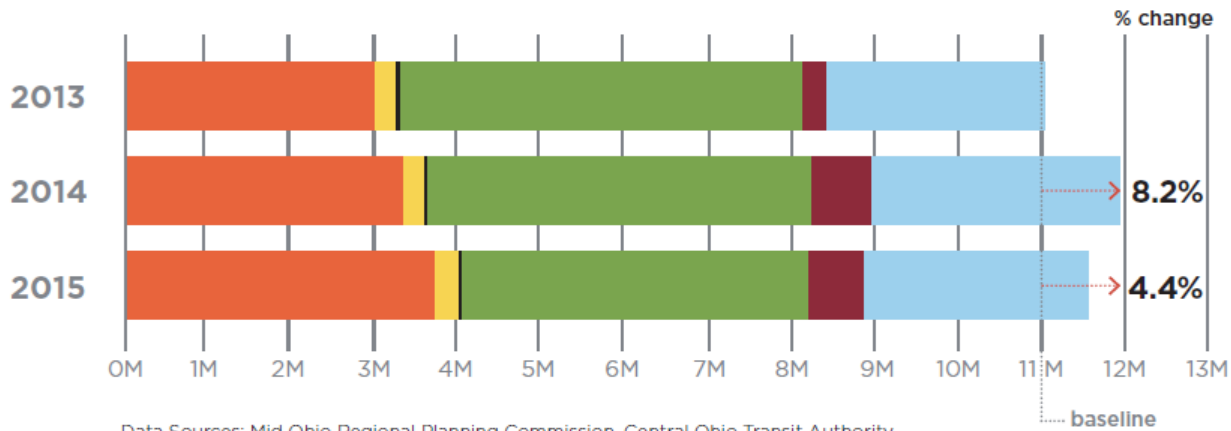
Columbus Green Team

- **Advise** the City on sustainability efforts and educate the public about environmental stewardship efforts taken or that are underway. The Team will formulate actions, make recommendations for such actions and support programs as it deems necessary.
- **Meet quarterly** (Feb 11, May 12, August 11, November 10)
- **Meet 10:00-11:00am** at Grange Insurance Audubon Center (with 9:00-10:00am reserved for the Working Group chairs)
- **Working Groups:** Climate Change & Energy; Built Environment & Transportation Infrastructure; Community Engagement; Branch Out Columbus. Under evaluation: Water Quality & Ecological Systems. Merging: Waste Reduction with MORPC Materials Management.

Climate Change & Energy

Community Inventory - Summary by Sector

	Transportation & Mobile Sources	Solid Waste	Water & Wastewater	Commercial Energy	Industrial Energy	Residential Energy	total ghg (mtCO2e)
2013	2,988,680	249,006	3,196	4,883,763	287,151	2,641,935	11,053,731
2014	3,337,869	249,876	2,336	4,640,653	713,266	3,020,840	11,964,840
2015	3,719,033	244,372	2,195	4,216,227	657,966	2,700,722	11,540,515

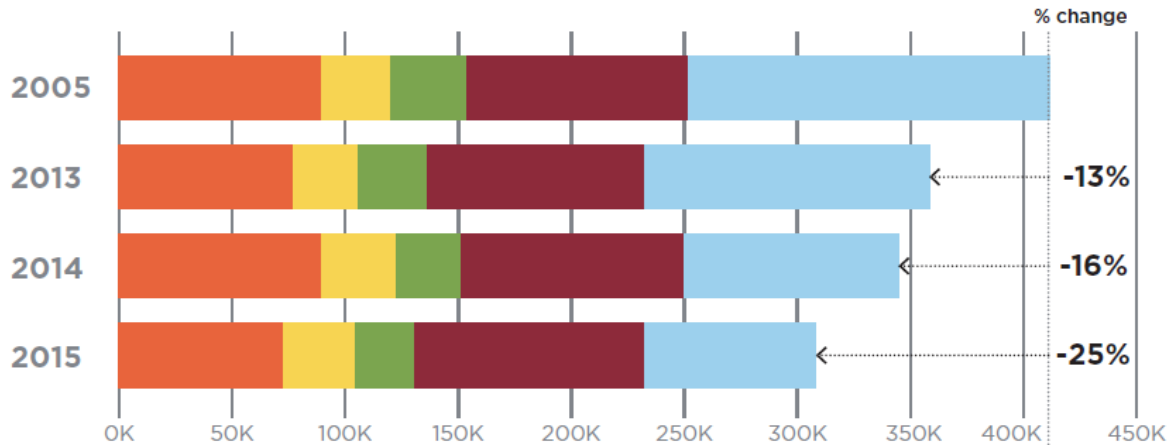


Data Sources: Mid Ohio Regional Planning Commission, Central Ohio Transit Authority, City of Columbus, AEP Ohio, Columbia Gas of Ohio; utilizing the ICELI Clear Path tool following the Global Protocol for Community Scale Greenhouse Gas Emission Inventories.

Climate Change & Energy

Government Operations Inventory - Summary by Sector

	Buildings & Facilities	Street Lights & Traffic Signals	Vehicle Fleet	Solid Waste Facilities	Water & Wastewater Treatment Facilities	total ghg (mtCO2e)
2005	87,930	29,134	33,965	97,244	160,091	408,364
2013	76,430	26,749	30,281	97,217	124,895	355,572
2014	87,308	32,441	29,458	98,596	94,581	342,384
2015	71,215	30,824	26,184	102,290	75,336	305,849

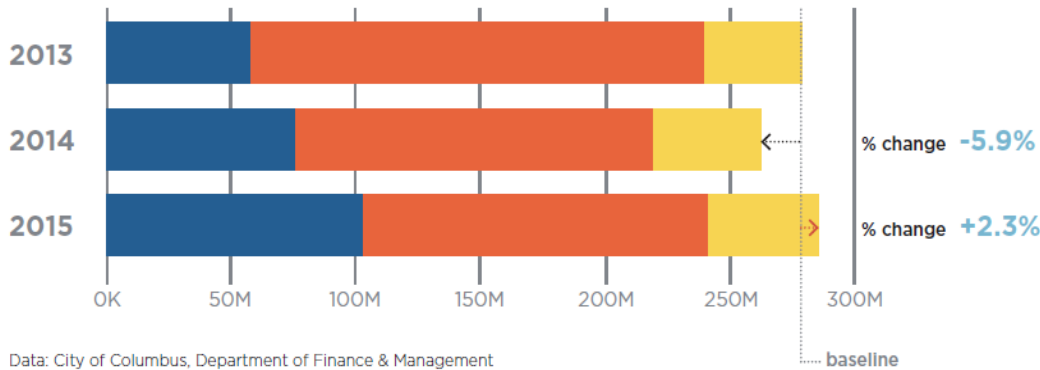


Data Source: City of Columbus utilizing the ICLEI Clear Path tool following the Local Government Operations Protocol.

Climate Change & Energy

City Operations Energy Use by Sector

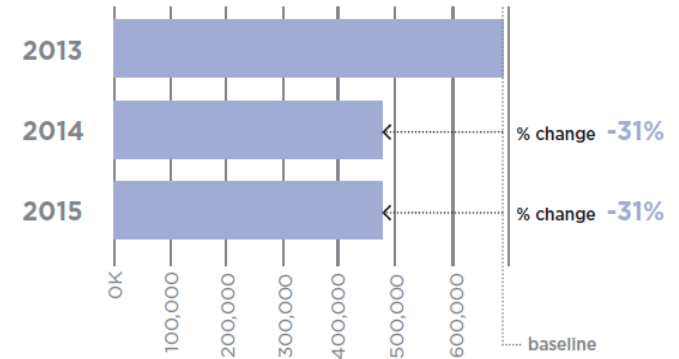
	Building Energy Usage (kWh)	Water and Waste Water Treatment Plants (kWh)	Street and Traffic Lights Energy Usage (kWh)	Total Electricity Energy Use (kWh)
2013	58,067,209	182,067,579	39,020,640	279,155,428
2014	76,298,744	143,184,884	43,069,460	262,553,088
2015	102,729,965	138,095,337	44,849,607	285,674,909



Data: City of Columbus, Department of Finance & Management

Total Natural Gas Building Energy Usage (mcf)

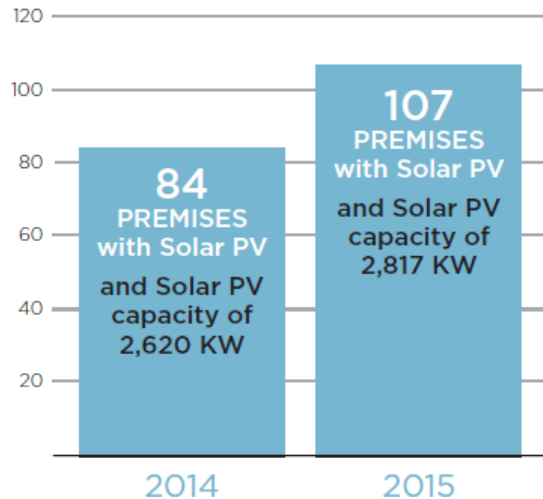
2013	688,005
2014	475,581
2015	471,657



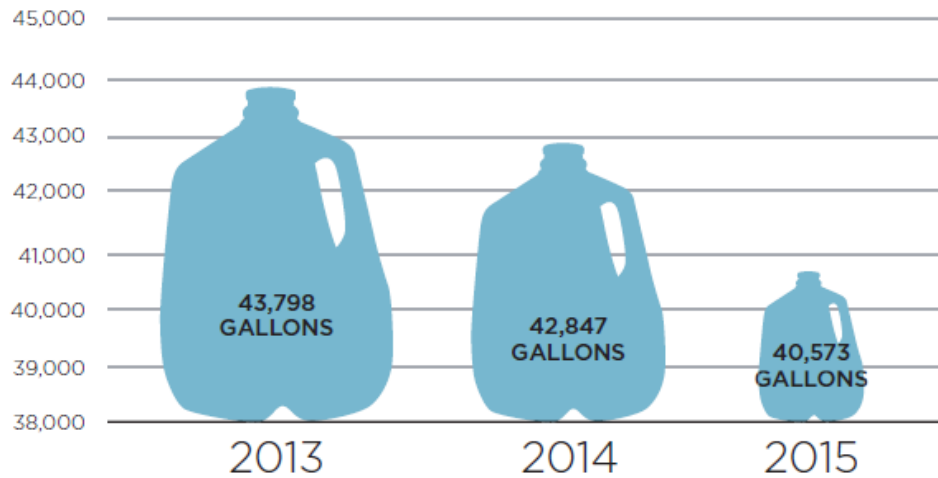
Climate Change & Energy



In 2015, the City of Columbus procured 44,743,289 KW of green wind energy to power 15.6% of its energy needs.



Reduce Water Usage

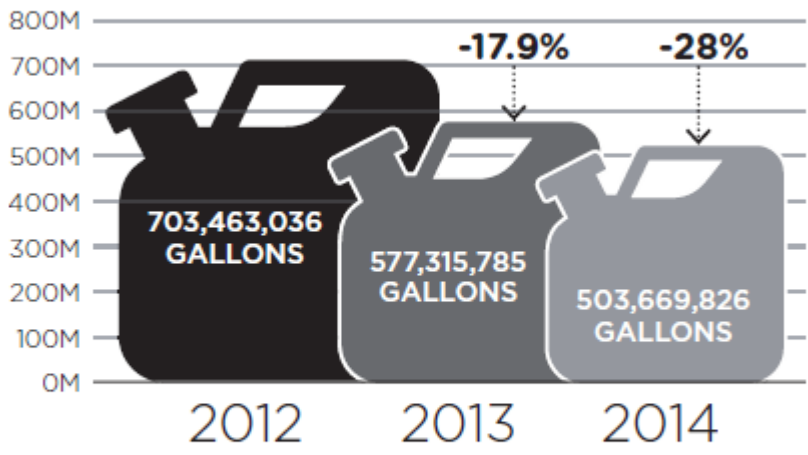


Data Source: City of Columbus, Department of Public Utilities



Reduce Petroleum Based Fuel Usage

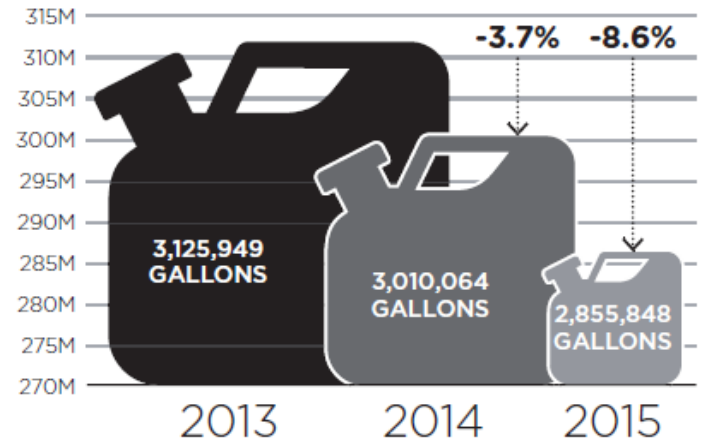
Community:



Source: Fuel estimates from the US Energy Information Administration, Population estimates from the US Census Bureau / MORPC, data not available for 2015 at time of annual report issuance

City Operations:

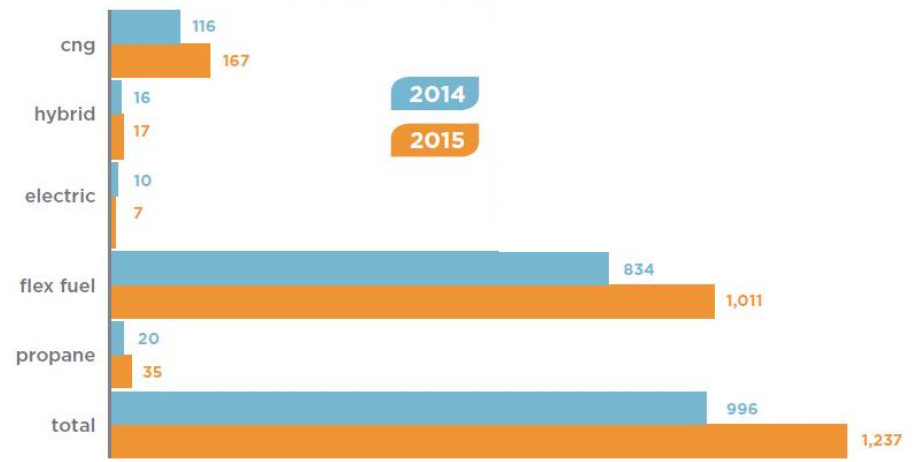
Gallons of petroleum fuel used by city vehicles.



Data Source: City of Columbus Fleet Management Division

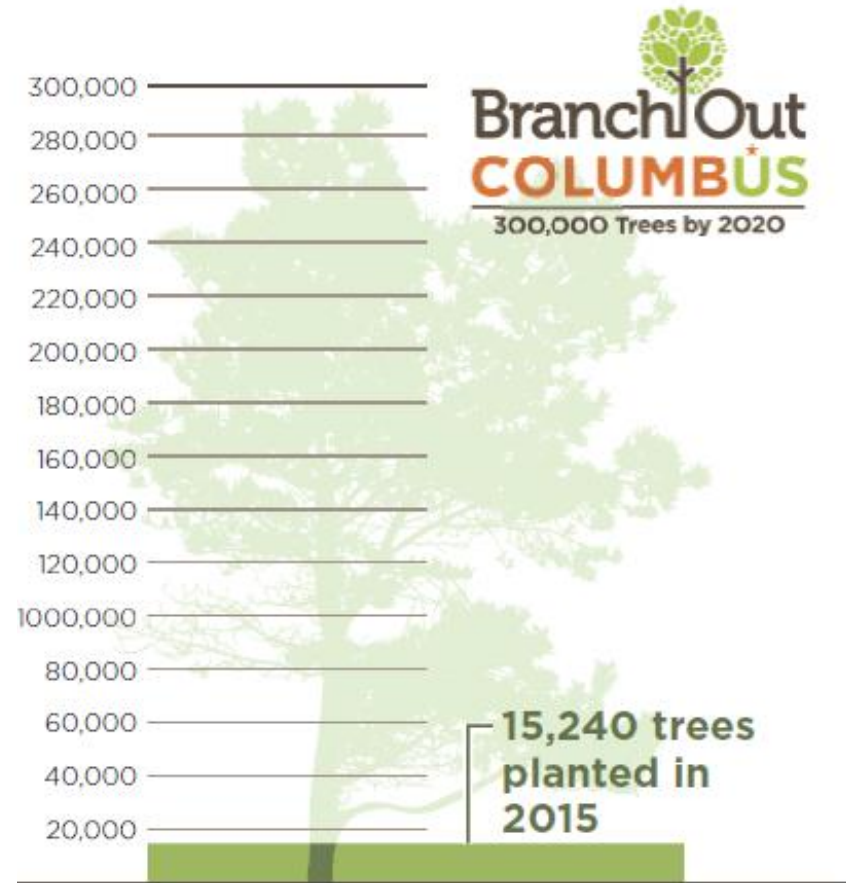
Total "Green" Vehicles In Columbus Fleet

Source: City of Columbus Fleet Management Division





Increase tree canopy



Data Source: Green Columbus and Branch Out Columbus tree tracker.

Waste Reduction

Total tonnage of all waste sent to Solid Waste Authority of Central Ohio's (SWACO) landfill in:

2013: 1,020,127 tons

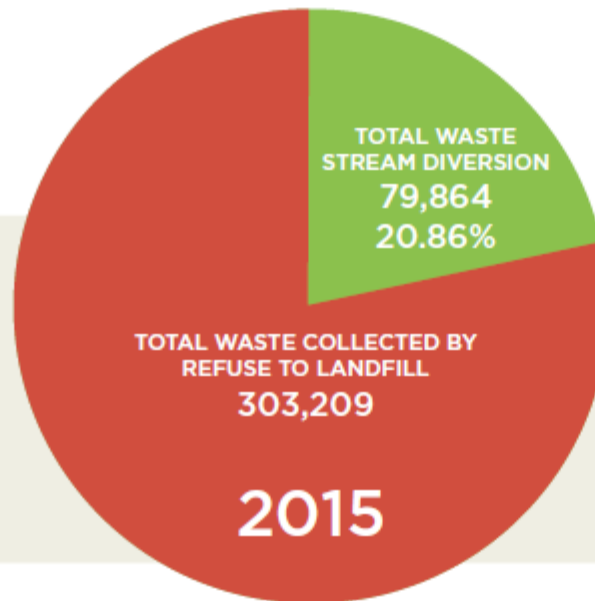
2014: 1,008,982 tons

2015: 1,063,428 tons

Data Source: SWACO

Total Tonnage Report
(2014/2015). All waste accounted for in Columbus, managed by the City (does not include businesses or high density residential)

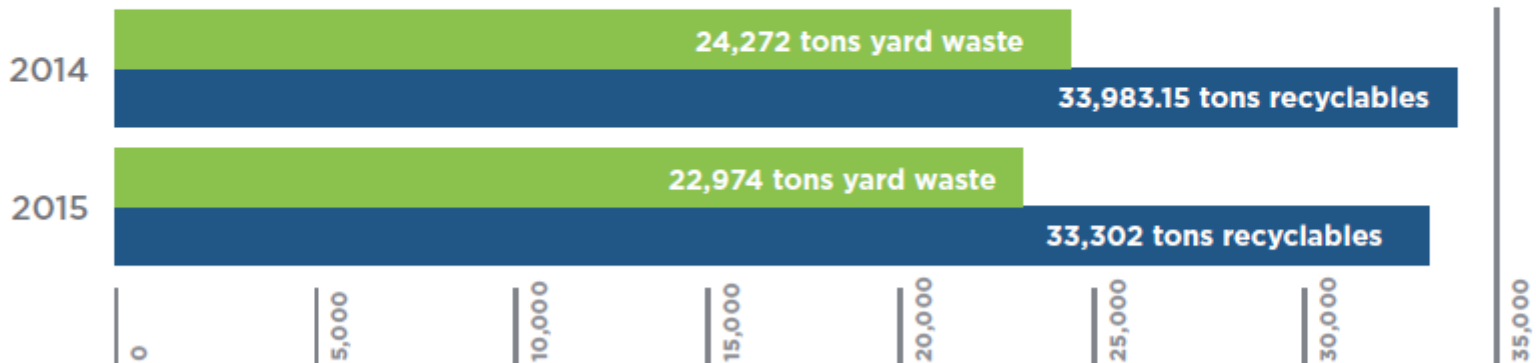
Data Source: City of Columbus
Department of Public Service



RECYCOLUMBUS

We were meant for each other.

Tonnage Report - residential recycling and yard waste collected. Data Source: Rumpke Inc.



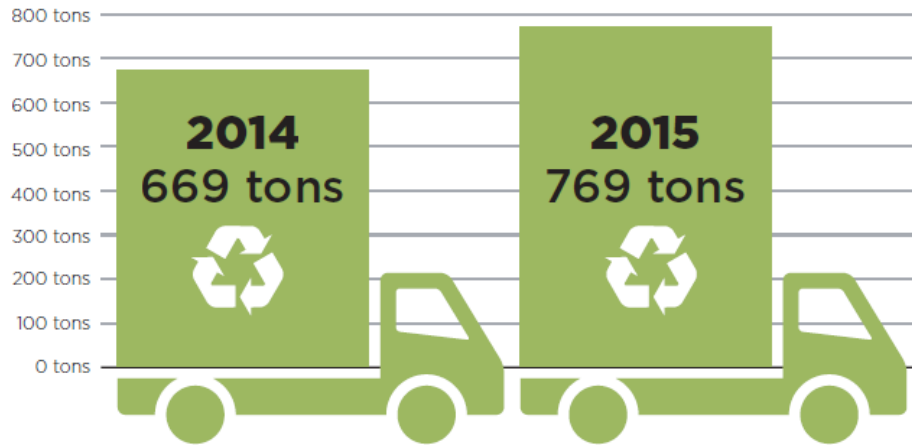
Participation Survey 4 times a year, counts are taken by Rumpke drivers showing the amount of carts that are placed out for collection.

RecyColumbus Participation Survey (4 times a year)

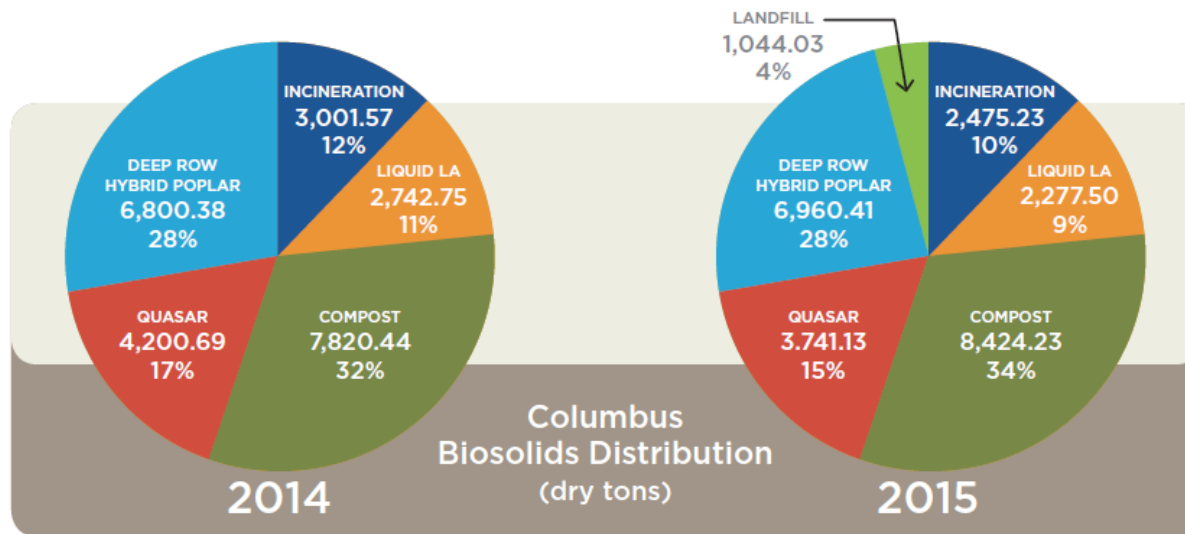
Count Results	Carts Serviced	Actual Carts In Field	Participation (%)	Tons	Lbs.	Lbs/cart
August 2014	150,302	201,473	74.60%	1,295.85	2,591,700	17
September 2014	150,912	201,453	74.91%	1,271.62	2,543,238	17
November 2014	146,726	201,326	72.88%	1,295.87	2,591,740	18
April 2015	150,670	201,221	74.88%	1,334.71	2,669,420	18
July 2015	157,107	201,220	78.08%	1,356.35	2,712,700	17
Sept./Oct. 2015	157,096	200,844	78.22%	1,227.87	2,455,740	16
December 2015	157,404	201,243	78.22%	1,313.82	2,627,640	17

Data Source: Rumpke Inc.

City Operations: Office Recycling



Data Source: City of Columbus, Keep Columbus Beautiful



Data Source: City of Columbus, Department of Public Utilities

2015 Keep Columbus Beautiful (KCB) Community Litter Index

On July 17 and 22, KCB scored the Litter Index. Designed for Keep America Beautiful (KAB), the Litter Index is a visual scoring system that enables KAB affiliates to use trained scorers to measure and assess the impact of litter in a community. Applied annually, at approximately the same time each year, the Litter Index requires driving and scoring selected manageable areas.

	2012	2013	2014	2015
Linden	2.8	2.98	2.8	2.55
Weinland Park	2.2	2.08	2.74	1.93
Franklinton	2.45	2.48	2.47	2.13
Hilltop	2.4	2.63	2.77	2.03
Southeast	2.43	2.05	2.33	1.84
Downtown	1.14	1.06	1.41	1.03

Data Source: City of Columbus, Keep Columbus Beautiful

The Litter Index

1

Minimal or
No Litter

2

Slightly
Littered

3

Littered

4

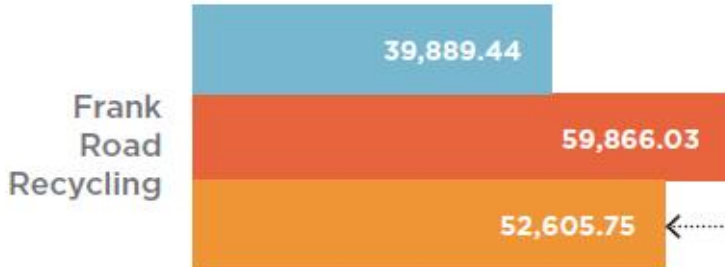
Extremely
Littered

C&D Waste 2013-2015

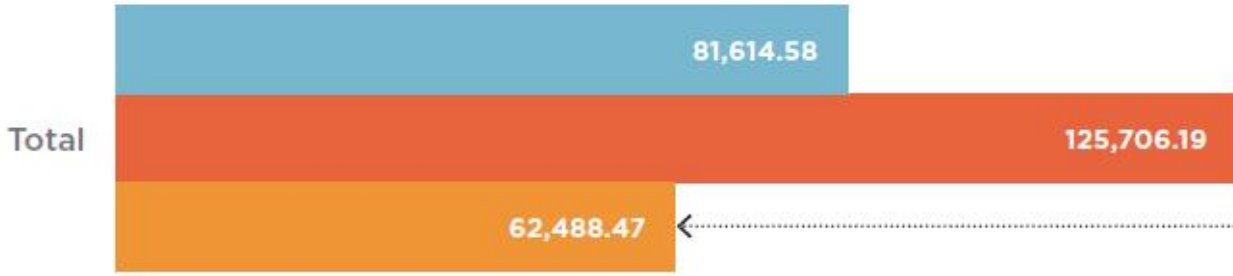
2013
2014
2015



**76.31%
REDUCTION**



**31.88%
REDUCTION**



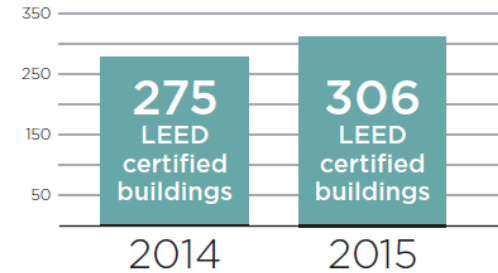
**23.43%
REDUCTION**

Data Source: Franklin County Public Health

Built Environment & Transportation Infrastructure

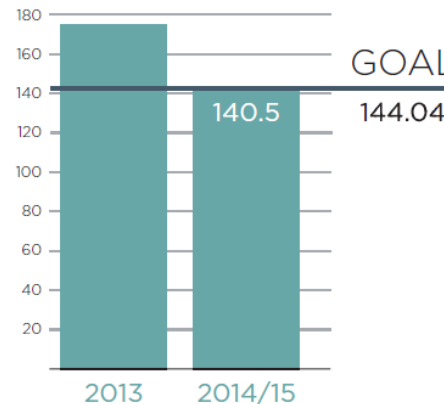
In 2013, 174.04 acres of brownfields existed

In 2014 and 2015, there were 33.54 acres remediated through the Clean Ohio projects managed by the City of Columbus.



LEED logo is the property of, and provided courtesy of, the U.S. Green Building Council.

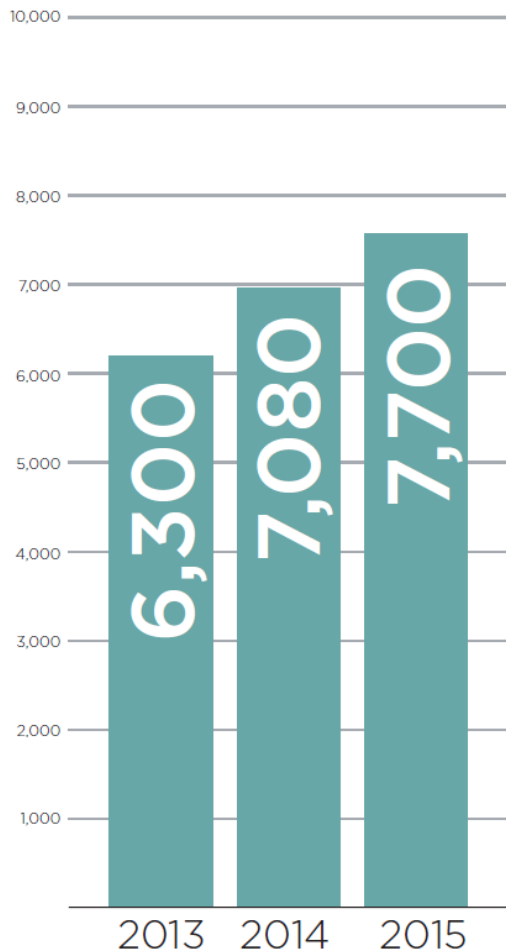
Data Source: City of Columbus, Economic Development Division



Summary of 2015 Green Columbus Fund Grant Fund Project and Awards

UPH Holdings - Brownfield Grant	6/1/2015	\$200,000
CHP Barrett Developer, LLC - Brownfield Grant	11/23/2015	\$200,000
Burwell Investments, LC/115 E. 5th Ave - Brownfield Grant	12/7/2015	\$80,000
Grange Mutual Casualty Company - 671 S. High St. - LEED Grant	12/7/2015	\$47,700
Grafton Park, LLC - 2960 Cranston Dr. - Brownfield Grant	12/7/2015	\$100,000

Increase population living downtown core to 10,000.



Data Source: Capital Crossroads and Downtown Special Improvement Districts.

2013: 79% of Columbus residents drove a single-occupancy vehicle to work (390,170 workers 16 and over, of those 314,771 drove alone to work, 32,971 carpooled and 11,612 took public transportation (excluding taxicab).

2014: 80% of Columbus residents drove a single-occupancy vehicle to work (398,227 workers 16 and over, of those 320,311 drove alone to work, 33,902 carpooled and 12,407 took public transportation (excluding taxicab).

2015: Data unavailable at time of report.

Data Source: 2010-2014 American Community Survey 5-Year Estimates

2010-2014 American Community Survey 5-Year Estimates	
Subject	Columbus, Ohio
	Total Estimate
Workers 16 years and over	398,227
MEANS OF TRANSPORTATION TO WORK	
Car, truck, or van	88.9%
Drove alone	80.4%
Carpooled	8.5%
In 2-person carpool	6.9%
In 3-person carpool	1.0%
In 4-or-more person carpool	0.6%
Workers per car, truck, or van	1.05
Public transportation (excluding taxicab)	3.1%
Walked	2.9%
Bicycle	0.8%
Taxicab, motorcycle, or other	0.9%
Worked at home	3.3%

115,483 TRIPS TAKEN

Over 13.7 million calories burned

1,866 SUBSCRIPTIONS CREATED

41 STATIONS
365 BIKES

218k

LBS CARBON SAVED

320,000 MILES RIDDEN

ALMOST THIRTY TIMES AROUND THE EARTH

TOP 5 STATIONS BY USE

- BICENTENNIAL PARK
- HIGH ST & LINCOLN ST
- 3RD ST & GAY ST
- HIGH ST & 2ND AVE
- COLUMBUS COMMONS

AGE/COUNT	TOP ZIPCODES
< 20: 15	1. 43215
20-29: 325	2. 43206
30-39: 445	3. 43201
40-49: 224	4. 43205
50-59: 171	5. 43202
60+: 78	

GENDER

477

781

US POWERED
COLUMBUS

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

Greening America's Capitals is a project of the Partnership for Sustainable Communities between U.S. Environmental Protection Agency (EPA), U.S. Department of Housing and Urban Development (HUD), and U.S. Department of Transportation (DOT) to help state capitals develop an innovative and implementable vision of distinctive, environmentally friendly neighborhoods that incorporate innovative green building and green infrastructure systems. The city of Columbus was selected to be a participant in the program. USEPA provided assistance to incorporate green infrastructure elements, parks, and open space into the Milo-Grogan neighborhood. The project explored design options that use green infrastructure to improve water quality and reduce flooding risks, and encourage walking and biking within the neighborhood and to adjacent neighborhoods.



PERMEABLE
PARKING



BIORETENTION
CELLS



NEW
SIDEWALKS



PARK
SPACE



INFILL/
CANOPY
TREES



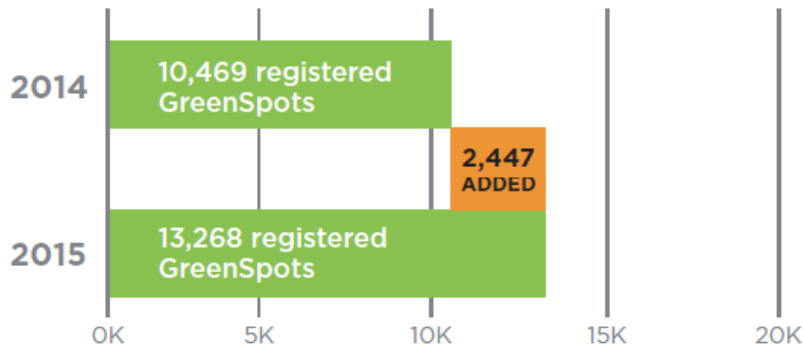
GREEN
ALLEYS



Community Engagement

GOAL

Increase GreenSpot membership to 20,000



2,187 likes



203 followers

GreenSpot Backyard Conservation Program

The program has distributed 3,734 rain barrels since 2010. The native plants and compost bins were included for the first time in 2015 and those numbers are as follows: native plants rebates: 121; compost bin rebates: 115.

Community Engagement

Offer 5 million participant experiential educational opportunities



Data Sources: City of Columbus: GreenSpot Program, Keep Columbus Beautiful, Indian Village Outdoor Education Center, Children's Water Festival; Green Columbus, Grange Insurance Audubon Center, Franklin Park Conservatory, Columbus and Franklin County Metro Parks and Pelotonia.



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