City of Baltimore

Annual Sustainability Report

STEPHANIE RAWLINGS-BLAKE
MAYOR

Baltimore Office of Sustainability
People · Planet · Prosperity

SUSTAINABILITY: meeting the current *environmental, social, and economic needs* of our community without compromising the ability of future generations to meet these needs.

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EXECUTIVE SUMMARY

THE BALTIMORE SUSTAINABILITY PLAN, adopted as City Council Ordinance on March 2, 2009, was developed as a direct result of the vision, hard work, and creativity of over 1,000 Baltimore citizens and organizations. The Plan offers a broad, community-responsive sustainability agenda that articulates the type of community Baltimore wants to be – a community that invests in the quality of life of its people, the health and resilience of its environment, and the long-term success of its economy.

We are pleased to report that in 2013, Baltimore – the City government, businesses, institutions, community organizations and citizens – made important progress towards our Sustainability Plan goals. The annual report that follows provides specific measurements for and stories that relate to our 29 Plan goals and 131 Plan strategies.

Some of the key points in this year's report are the following:

Energy usage, both electricity and natural gas, in City government and City schools increased in 2013. This increase was likely caused by the record cold temperatures this winter. Weather extremes, both heat and cold, are becoming more common, and underscores the importance of supporting energy efficiency programs to contain costs and increase the resiliency of our energy supply system. The increase in usage at City schools confirms and reinforces that greater energy efficiency as part of the new school construction program should be a priority. Savings from energy efficiency in the schools can work toward achieving our City's energy reduction goals, our greenhouse gas emission reduction goals, and provide crucial monetary savings for the school system.

Youth engagement in the City around sustainability has been a main focus of efforts in 2013, and we have seen a tremendous growth in numbers. Partners such as the Audubon Center, Parks & People, Blue Water Baltimore, and Masonville Cove Environmental Center have engaged over 5,000 youth and our own "Baltimore City Schools Green, Healthy, Smart Challenge" has engaged over 1300 youth. Involving and educating our children on the principles of sustainability and resilience is crucial to our success in reaching our goals and creating a thriving City for generations to come.

In 2013, the Office of Sustainability completed the development and fostered the adoption of two groundbreaking plans – the Disaster Preparedness Project & Plan (DP3) and Homegrown Baltimore Urban Agriculture Plan. DP3 identifies 50 strategies and 231 actions as an effort to address existing hazards while also preparing for predicted hazards due to climate change. DP3 integrates hazard mitigation planning, floodplain mapping, and climate adaptation planning and links research, outreach, and actions to create a

Mayor Rawlings-Blake holding fresh produce at a market!
Check out the Baltimore Food Policy Initiative story on pg. 38!

comprehensive risk-preparedness program for addressing existing and future climate impacts.

Homegrown Baltimore embodies the "Grow Local" element of Baltimore's Food Policy initiative, "Homegrown Baltimore: Grow Local, Buy Local, Eat Local". The 25 recommendations in the plan include specific ways to expand opportunity and create greater security for starting food-production projects on City-owned land; improve access to water for growers; build rich, safe urban soils; and provide stronger agency and partner support.

These two Plans, which complement and work in concert with the Sustainability Plan, are also critical pieces to creating a growing, sustainable and resilient City. We have added to the Annual Report a detailed "Strategy Implementation" tracker for each of these Plans. As you read through this year's report, you will be able to see which strategies and actions for each Plan have not had any implementation focus, and which ones are in mid-stages or implemented and ongoing. This snap shot provides an easy way to see where resources can be allocated, and what projects or programs could be implemented in the coming year.

In 2012, we introduced a new feature and highlighted a partnership with the Jacob France Institute Baltimore Neighborhood Indicators Alliance, and incorporated data from their Neighborhood Vital Signs, into our report. These maps provide readers with a neighborhood view of key sustainability indicators and supplement our data sets and success stories and we are excited to feature them again in the 2013 report.

It takes action, support and engagement from everyone to achieve the ambitious goals we have set in all of our plans. The Office of Sustainability and Commission on Sustainability cannot do this alone – and we count on many partners to help us achieve our goals. Many of the partners, who are working to advance the Sustainability Plan, and our two new Plans, are listed along with their web addresses for more information at the end of the report. The "Partners List" provides the reader with clear information on how to become involved, and who to contact. We urge you to take action and contact one of our partners today to become involved. The Baltimore Energy Challenge provides free in-home energy saving installations, TreeBaltimore provides free trees to plant in your yard or on your street, Blue Water Baltimore can help you organize a neighborhood storm drain painting project – these are just a small example of the many ways you can get involved.

While the 2013 report continues to tell Baltimore City's progress in sustainability, we recognize that what is contained within is only the tip of the ice berg. There are many additional organizations accomplishing valuable work throughout Baltimore, and we look forward to recognizing those efforts.

We encourage everyone in Baltimore to share their success stories of how they help to achieve the city's sustainability goals at our website www.baltimoresustainability.org or find us on Facebook and Twitter.

Thank you to the countless individuals and organizations that took action this past year to improve the quality of life and sustainability here in Baltimore. We look forward to continuing our work with you to increase our quality of life, and grow Baltimore.

Baltimore Office of Sustainability
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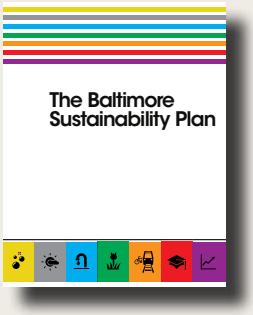
SUSTAINABLE STRATEGIES IMPLEMENTATION

The charts below will allow you the opportunity to re-visit the strategies, and easily get an idea of where we are in implementation. The color red indicates that a strategy is "still pending," and the teal check mark indicates that the strategy has been "implemented and/or is ongoing." Or a strategy may fall somewhere in between, and will be noted by orange, yellow, light green, and green. We will update this feature every year, and hope to see progress. New for the 2013 Annual Report, the City will also be reporting on the progress of the Climate Action Plan (CAP), Disaster Preparedness Project and Plan (DP3), and Homegrown Baltimore, Urban Agriculture Plan.



The **Baltimore City Sustainability Plan** *addresses all three legs of the sustainability stool – people, planet, and prosperity. The Plan was designed to lay out a broad, inclusive, and community responsive sustainability agenda. The Plan is comprised of seven theme chapters: Cleanliness, Pollution Prevention, Resource Conservation, Greening, Transportation, Education & Awareness, and Green Economy. Each chapter contains three to five goals, for a combined total of 29 goals in the Plan. Each goal is accompanied by a non-exhaustive list of recommended strategies. There are 132 strategies listed in the Plan, we report on the implementation status of each strategy.*

CLEANLINESS

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
C1 |	**Eliminate litter throughout the City**						
A	Educate residents and businesses about proper trash storage and disposal	○	○	○	●	○	✓
B	Expand existing programs to maximize public trash and recycling bin use	○	○	○	●	○	✓
C	Launch a public education campaign to change the public's attitude toward litter	○	○	●	○	○	✓
D	Issue every household a large municipal trash can	○	○	●	○	○	✓
E	Improve the enforcement of current sanitation code	○	○	○	○	●	✓
C2 |	**Sustain a clean and maintained appearance of public land**						
A	Establish city-wide maintenance standards for publicly owned land	○	○	●	○	○	✓
B	Build capacity of existing city maintenance staff through training and education	○	●	○	○	○	✓
C	Expand adoption and community stewardship of public land	○	○	○	○	●	✓
C3 |	**Transform vacant lots from liabilities to assets that provide social and environmental benefits**						
A	Strengthen enforcement of dumping and litter laws	○	○	○	○	●	✓
B	Increase participation in community maintenance and stewardship efforts	○	○	○	○	●	✓
C	Create and sustain a land trust to support community-managed open space	○	○	○	○	○	✓
D	Return abandoned properties to productive use	○	○	○	●	○	✓
E	Establish a new fee schedule charged to absentee property owners	○	○	●	○	○	✓

POLLUTION PREVENTION

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
PP1 |	**Reduce Baltimore's greenhouse gas emissions by 15% by 2015**						
A	Create a Climate Action Plan for the City of Baltimore	○	○	○	○	○	✓
B	Implement Climate Action Plan for the City of Baltimore	○	○	●	○	○	✓
PP2 |	**Improve Baltimore's air quality and eliminate Code Red days**						
A	Add an air quality and climate change implication evaluation to all government-funded projects	●	○	○	○	○	✓
B	Create Code Red/Orange day policies	○	○	○	●	○	✓
C	Explore options for more efficient fleet conversion	○	○	○	○	●	✓
D	Institute and enforce a City-wide no-idling policy	●	○	○	○	○	✓
PP3 |	**Ensure that Baltimore water bodies are fishable and swimmable**						
A	Implement recommendations in the City County Watershed Agreement	○	○	○	○	●	✓
B	Study creation of a stormwater utility or other new funding sources	○	○	○	○	●	✓
C	Reduce amount of impervious surfaces and increase on-site stormwater treatment	○	○	○	○	●	✓
D	Protect and restore Baltimore's stream corridors	○	○	○	●	○	✓
E	Create watershed-based natural resource management plans	○	○	○	●	○	✓
F	Increase actions by individual property owners to treat stormwater	○	○	○	○	●	✓
PP4 |	**Reduce risks from hazardous materials**						
A	Adopt the "Precautionary Principle" as the underlying policy standard	●	○	○	○	○	✓
B	Adopt a policy and plan for elimination of pesticide use and other toxic chemicals	●	○	○	○	○	✓
C	Comply with the *Maryland Integrated Pest Management (IPM) in Schools* mandate	○	○	○	○	●	✓
D	Enact an ordinance prohibiting the use of known toxins in health care delivery settings	●	○	○	○	○	✓
E	Aggressively promote the redevelopment of Brownfield sites	○	○	●	○	○	✓
PP5 |	**Improve the health of indoor environments**						
A	Use green cleaning products in schools, government offices, and businesses	○	●	○	○	○	✓
B	Explore the feasibility of making all Baltimore multi-family dwellings smoke-free by 2010	●	○	○	○	○	✓
C	Increase and coordinate all healthy housing efforts	○	○	○	○	○	✓
D	Ensure coordination among weatherization, lead remediation, and healthy homes activities	○	○	○	○	○	✓

RESOURCE CONSERVATION

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
RC1 |	**Reduce Baltimore's energy use by 15% by 2015**						
A	Require aggressive energy efficiency standards as part of the Baltimore Green Building standards	○	○	○	○	○	✓
B	Improve the energy efficiency of existing homes and buildings	○	○	○	●	○	✓
C	Increase renewable energy generation in Baltimore City	○	○	○	●	○	✓
D	Mandate efficiency upgrades to homes at point of sale	●	○	○	○	○	✓
E	Increase energy conservation by residents, City government, businesses, and institutions	○	○	○	●	○	✓
F	Dedicate resources to assist Baltimore in leveraging state and federal funds for energy efficiency	○	○	○	○	●	✓
G	Investigate a "Lights Out" policy for appropriate areas of Baltimore City	●	○	○	○	○	✓
RC2 |	***Reduce Baltimore's water use while supporting system maintenance***						
A	Conduct public education program on reducing water consumption	●	○	○	○	○	✓
B	Study methods to fund the construction and maintenance of Baltimore's water supply system	○	○	○	●	○	✓
C	Maintain a comprehensive water facilities master plan	○	●	○	○	○	✓
RC3 |	**Minimize the production of waste**						
A	Distribute information on waste-reducing purchasing policies	●	○	○	○	○	✓
B	Establish Baltimore City Green Purchasing guidelines	○	●	○	○	○	✓
C	Educate consumers about product life-cycle analysis	●	○	○	○	○	✓
D	Link industrial and commercial users to close waste loops	○	●	○	○	○	✓
E	Expand Baltimore's composting program and opportunities	○	○	○	●	○	✓
F	Develop and implement local legislation related to waste minimization	●	○	○	○	○	✓
RC4 |	**Maximize reuse and recycling of materials**						
A	Increase recycling opportunities throughout the City	○	○	○	○	●	✓
B	Increase resident and business participation in the single-stream recycling program	○	○	○	○	●	✓
C	Expand types of materials accepted by the single-stream recycling program	○	○	○	○	●	✓
D	Preserve, reuse, and recycle buildings and related material	○	○	○	○	●	✓
E	Institute once-weekly recycling and once-weekly trash pick up service	○	○	○	○	○	✓

GREENING

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
G1 |	**Double Baltimore's Tree Canopy by 2037**						
A	Assess current urban forest cover	○	○	○	○	○	✓
B	Protect our existing trees	○	○	○	●	○	✓
C	Build communication and cooperation among City agencies to support Baltimore's trees	○	○	○	●	○	✓
D	Develop a City-wide education program about the values of trees	○	○	○	○	○	✓
E	Develop and strengthen innovative public-private partnerships	○	○	○	○	○	✓
F	Identify and pursue opportunities for increasing trees planted on private property	○	○	○	○	●	✓
G	Increase tree plantings in sidewalks, medians and other public right-of-ways	○	○	○	○	●	✓
G2 |	**Establish Baltimore as a leader in sustainable, local food systems**						
A	Increase the percentage of land under cultivation for agricultural purposes	○	○	○	○	●	✓
B	Improve the quantity and quality of food available at food outlets	○	○	●	○	○	✓
C	Increase demand for locally-produced, healthy foods by schools, institutions, supermarkets, and citizens	○	○	●	○	○	✓
D	Develop an urban agriculture plan	○	○	○	○	○	✓
E	Implement Baltimore Food Policy Task Force recommendations related to sustainability and food	○	○	○	●	○	✓
F	Compile local and regional data on various components of the food system	○	○	○	●	○	✓
G3 |	**Provide safe, well-maintained public recreational space within 1/4 mile of all residents**						
A	Conduct an inventory and assessment of existing and potential outdoor spaces for recreation	○	●	○	○	○	✓
B	Develop a plan with recommendations for increasing the quantity, quality, and use of recreation spaces	●	○	○	○	○	✓
C	Create an inclusive organizational system to support stewardship of public spaces	○	○	○	○	●	✓
G4 |	**Protect Baltimore's ecology and biodiversity**						
A	Manage Baltimore City land to restore, conserve, and create habitat for native species and eliminate invasive plant species	○	●	○	○	○	✓
B	Implement sustainable landscape maintenance practices throughout the City	○	●	○	○	○	✓
C	Develop and implement a system to regenerate soil health in Baltimore City	○	●	○	○	○	✓
D	Build community support to conserve and restore Baltimore's urban stream ecosystem	○	○	○	●	○	✓
E	Support and develop native plant nurseries in the City	○	○	●	○	○	✓

TRANSPORTATION

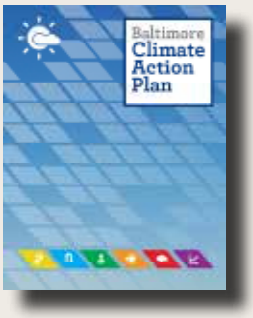
		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
T1 |	**Improve public transit services**						
A	Make software upgrades to allow for transit signal priority	●	○	○	○	○	✓
B	Implement an integrated system of downtown shuttle and trolley routes	○	○	○	○	○	✓
C	Work with the MTA to expand QuickBuses to more high-volume transit corridors	○	○	●	○	○	✓
D	Bring the Red Line Transit project to Baltimore	○	○	○	○	●	✓
E	Work with the MTA to develop and implement an ideal transit service profile for MTA routes	●	○	○	○	○	✓
T2 |	**Make Baltimore bicycle and pedestrian friendly**						
A	Implement the Baltimore Bicycle Master Plan	○	○	○	●	○	✓
B	Develop a Bike to Work program for Baltimore	○	●	○	○	○	✓
C	Evaluate the creation of a bicycle sharing service	○	○	○	○	●	✓
D	Expand the Safe Routes to Schools program	○	○	○	●	○	✓
E	Implement "Sunday Streets" recreational street closure program	○	○	○	○	●	✓
F	Improve public infrastructure for cyclists and pedestrians	○	○	○	●	○	✓
T3 |	**Facilitate shared-vehicle usage**						
A	Establish a Baltimore CarShare program	○	○	○	○	○	✓
B	Expand the CityCommute Rideshare program	○	○	○	●	○	✓
C	Leverage new Baltimore Green Building Standards to increase shared-vehicle use	○	○	●	○	○	✓
T4 |	**Measure and improve the equity of transportation**						
A	Track the disparity of transportation costs by neighborhood relative to income	●	○	○	○	○	✓
B	Identify strategies to reduce the disparity in cost of transportation relative to income	●	○	○	○	○	✓
C	Work with the MTA to measure the quality of transit service in Baltimore neighborhoods	○	○	●	○	○	✓
T5 |	**Increase transportation funding for sustainable modes of travel**						
A	Advocate for more funding for transit and sustainable transportation	○	○	○	●	○	✓
B	Implement goals of Mayor's Transportation Investment Commission (TIC) report	○	●	○	○	○	✓
C	Explore options for a new regional transit funding source and a larger local role in managing the MTA	○	●	○	○	○	✓
D	Expand eligible expense under sustainable transportation programs	●	○	○	○	○	✓
E	Advocate shifting funding from roadway capacity expansion to transit, bicycling, and walking projects	○	○	●	○	○	✓

EDUCATION & AWARENESS

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
EA1 |	**Turn every school in Baltimore City into a green school**						
A	Incorporate sustainability into curriculum and activities	○	○	○	○	●	✓
B	Build and retrofit green school buildings	○	○	●	○	○	✓
C	Adopt a green facilities management guide for school operations	○	●	○	○	○	✓
D	Implement a teacher training and certification program for sustainability	○	●	○	○	○	✓
E	Recognize schools making strides in sustainability	○	○	○	○	○	✓
EA2 |	**Ensure all city youth have access to environmental stewardship programs and information**						
A	Develop a sustainability education and community service program	○	○	●	○	○	✓
B	Create a website devoted to the youth perspective on the environment	○	○	○	●	○	✓
C	Create a Youth Ambassador Team to educate their peers about sustainability	○	○	○	○	○	✓
EA3 |	**Raise the environmental awareness of the Baltimore community**						
A	Utilize a Sustainability Ambassador network for community outreach	○	●	○	○	○	✓
B	Coordinate a Year-Long Baltimore Sustainability Calendar	○	●	○	○	○	✓
C	Increase public knowledge of alternative transportation options	○	●	○	○	○	✓
D	Launch City-wide sustainability challenges to a variety of audiences	○	○	○	○	●	✓
E	Engage membership organizations to develop and disseminate targeted sustainability information	○	○	○	●	○	✓
EA4 |	**Expand access to informational resources on sustainability**						
A	Develop an interactive website for the Baltimore Office of Sustainability (BOS)	○	○	○	○	○	✓
B	Create local Green Pages as resources guide	○	●	○	○	○	✓
C	Utilize existing community centers to distribute sustainability information	○	○	○	○	●	✓
D	Support innovative resources on sustainability	○	○	○	●	○	✓

GREEN ECONOMY

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
GE1 |	**Create green jobs and prepare City residents for these jobs**						
A	Add clean technology to Baltimore's targeted growth sectors	○	○	○	○	○	✓
B	Conduct needs assessment of green job demand	○	○	●	○	○	✓
C	Link existing job training programs to the information provided in the green jobs needs assessment (above)	○	○	●	○	○	✓
D	Encourage employment of Baltimore's residents in City clean energy projects	○	○	○	○	●	✓
E	Convene Green Collar Summit	○	○	○	○	○	✓
F	Develop a strategy to secure available funding	●	○	○	○	○	✓
GE2 |	**Make Baltimore a center for green business**						
A	Leverage Baltimore's natural amenities attractive to green technology businesses and market them	○	●	○	○	○	✓
B	Establish and market creative financing strategies for local green businesses	○	●	○	○	○	✓
C	Encourage construction industry to use "green" building practices	○	○	○	○	●	✓
D	Identify sectors and products for a sustainability-related manufacturing niche in Baltimore	○	●	○	○	○	✓
GE3 |	**Support local Baltimore Business**						
A	Educate Baltimore City residents on the importance of supporting local businesses	○	○	○	●	○	✓
B	Develop tools to connect local suppliers to businesses, consumers, and government	●	○	○	○	○	✓
C	Increase local government purchasing of local products	●	○	○	○	○	✓
GE4 |	**Raise Baltimore's profile as a forward thinking, green city**						
A	Create a brand for Baltimore's Sustainability initiative	○	○	○	○	●	✓
B	Attract sustainablility-related conventions and events to Baltimore	○	●	○	○	○	✓
C	Target the tourism industry to promote Baltimore as a green city	●	○	○	○	○	✓
D	Support innovative an pilot projects and technologies	○	○	○	●	○	✓



There are 29 goals in the **Climate Action Plan (CAP).** Each goal is accompanied by a non-exhaustive list of recommended strategies. The strategies are divided across three sectors: Energy Savings and Supply (ESS), Land Use and Transportation (LUT), and Growing a Green City (GGC). The plan's 37 measures and seven additional actions illustrate how the City will achieve those strategies.

In the 2013 Annual Report, the City will begin reporting on the implementation status of each CAP strategy.

CAP ESS | ENERGY SAVINGS & SUPPLY

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
ESS 1 | Reduce energy consumption of existing buildings							
1.A	Disclose residential energy bills and energy efficiency improvements at the beginning of the sale or rental process	●	○	○	○	○	✓
1.B	Benchmark and disclose energy performance and improvements of city -owned and privately-owned commercial, industrial and institutional buildings	○	○	●	○	○	✓
1.C.a	Require energy audits for city-owned and privately-owned, commercial, industrial and institutional buildings over 10,000 sq. ft.	●	○	○	○	○	✓
1.C.b	Require retro-commisioning for city-owned and privately-owned, commercial, industrial and institutional buildings over 10,000 sq. ft.	●	○	○	○	○	✓
1.D	Conduct commercial and residential energy efficiency outreach	○	○	○	○	●	✓
1.E	Encourage model green lease provisions	●	○	○	○	○	✓
1.F	Conduct outreach programs in schools	○	○	○	○	●	✓
1.G	Retrofit Baltimore's street lights for more efficient energy usage	○	○	○	○	●	✓
1.H	Encourage switch from heating oil to natural gas	○	○	○	●	○	✓
1.I	Promote cool roof installations and other roofing technologies	○	○	●	○	○	✓
ESS 2 | Promote generation of renewable energy							
2.A	Standardize permitting for renewable energy installations	○	●	○	○	○	✓
2.B	Conduct outreach for solar installations, to achieve 30 MW of PV installed in total, across all sectors (government, commercial, institutional, multifamily, and residential) by 2020	○	○	●	○	○	✓
2.C	Encourage State to increase Renewable Portfolio Standard to 26% by 2022	○	○	●	○	○	✓
ESS 3 | Expand and upgrade energy performance for major renovation and new construction							
3.A	Adopt green building standards for new residential construction and major renovation	○	●	○	○	○	✓
3.B	Modify existing new homeowner and rehabilitation tax credit to include energy efficiency standards based on the Energy Star home certification program	●	○	○	○	○	✓
ESS 4 | Promote efficient community energy districts							
4.A	Encourage new facilities to consider connecting to existing, proximate, co-generation facilities	○	●	○	○	○	✓
4.B	Encourage co-generation installation for replacing inefficient boiler plants	○	●	○	○	○	✓

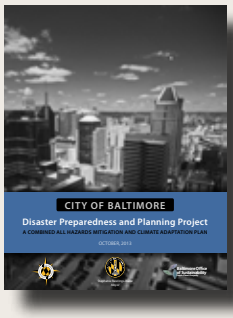
	Baltimore Sustainability Plan Quantification Energy Savings and Supply Activities	Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
>>	Savings due to Baltimore City Green Building Standards (commercial and multifamily)	○	○	●	○	○	✓
>>	Domestic appliance upgrades	○	○	○	●	○	✓
>>	Smart grid roll-out	○	○	●	○	○	✓

CAP LUT | LAND USE & TRANSPORTATION

	LUT 1 | Promote mixed-use development near transit	Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
1.A	Create high-quality pedestrian- and transit-oriented neighborhoods	○	○	○	○	●	✓
1.B	Support mixed-use neighborhoods to increase access to goods and services	○	○	○	○	●	✓
	LUT 2 | Support alternative commutes						
2.A	Develop and promote incentives for individual transportation choices	○	○	●	○	○	✓
2.B	Promote establishment of qualified bike commute reimbursement programs	●	○	○	○	○	✓
	LUT 3 | Explore parking strategy options						
3.A	Explore the creation of a parking plan for city-owned parking	●	○	○	○	○	✓
3.B	Provide alternatives to monthly parking passes	●	○	○	○	○	✓
3.C	Reduce off-street parking requirements	○	○	○	○	●	✓
	ESS 4 | Increase walking and biking						
4.A	Develop a pedestrian master plan	●	○	○	○	○	✓
4.B	Support Safe Routes to Schools	○	●	○	○	○	✓
4.C	Expand and improve bicycle infrastructure	○	○	○	●	○	✓
	ESS 5 | Increase efficiency in city fleet						
5.A	Implement a centralized fueling program and route optimization software	○	●	○	○	○	✓
	ESS 6 | Support cleaner vehicles						
6.A	Support alternative-fuel infrastructure and encourage adoption of alternative-fuel vehicles	○	○	●	○	○	✓
6.B	Promote Fuel Efficient cargo handling in the Port of Baltimore	○	●	○	○	○	✓

CAP GGC | GROWING A GREEN CITY

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
GGC 1 | Divert waste from landfills							
1.A	Develop a comprehensive recycling plan	○	○	○	●	○	✓
1.B	Reduce construction and demolition waste	○	○	○	●	○	✓
1.C	Compost organic material	○	○	○	●	○	✓
GGC 2 | Improve water efficiency							
2.A	Repair water supply infrastructure	○	○	●	○	○	✓
2.B	Improve water efficiency in existing small residential buildings	●	○	○	○	○	✓
2.C	Improve water efficiency for new construction and major renovations of small residential buildings	○	○	●	○	○	✓
GGC 3 | Enhance the Urban Forest							
3.A	Increase the number of trees planted	○	○	○	○	○	✓
Baltimore Sustainability Plan Quantification Growing a Green City Activities							
>>	Water appliance upgrades from new commercial building due to Baltimore City Green Building Standards	○	○	●	○	○	✓
>>	Climate appropriate planting and irrigation retrofits from existing landscaping and new landscaping requirements	○	●	○	○	○	✓
>>	Landscape waste diversion improvements	○	●	○	○	○	✓
>>	Water appliance upgrades during commercial building retrofits	○	●	○	○	○	✓



The **Disaster Preparedness Project and Plan (DP3)** was approved in 2013. There are four primary sectors— Infrastructure (IN), Buildings (BL), Natural Systems (NS), and Public Services (PS)—that provide the structure for the plan's 50 strategies and 231 additional actions.

In the 2013 Annual Report, the City will begin reporting on the implementation status of each DP3 action.

DP3 INFRASTRUCTURE

IN 1 | Protect and enhance the resiliency and redundancy of electricity system

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
1	Work with the Maryland Public Service Commission (PSC) to minimize power outages from the local electric utility during extreme weather events by identifying and protecting critical energy facilities and located within the City	○	●	○	○	○	✓
2	Evaluate the City of Baltimore utility distribution system, and identify "underground utility districts" using BGE's May 2013 short term reliability improvement plan	●	○	○	○	○	✓
3	Support BGE's collaboration with the Maryland Public Service Commission to implement various smart grid solutions that will provide the City with real-time access to data during events	○	●	○	○	○	✓
4	Identify, harden, and water seal critical infrastructure relative to electrical, heating, and ventilation hardware within the flood plain	●	○	○	○	○	✓
5	Increase resiliency in our energy generation system by encouraging the development of decentralized power generation and developing fuel flexibility capabilities	○	●	○	○	○	✓
6	Develop a comprehensive maintenance and training program for City employees at facilities with backup generators to ensure proper placement, hook-up and function during hazard events.	●	○	○	○	○	✓
7	Install external generator hookups for critical City facilities that depend on mobile generators for backup power	●	○	○	○	○	✓
8	Partner with utility to evaluate protecting power and utility lines from all hazards	○	○	●	○	○	✓
9	Determine low-laying substation vulnerability and outline options for adaptation and mitigation	○	○	●	○	○	✓
10	Evaluate and protect low laying infrastructure - switching vaults, conduit and transformers	○	●	○	○	○	✓

IN 2 | Increase energy conservation efforts

1	Increase energy efficiency across all sectors through education, efficiency retrofits, and building management systems	○	○	○	○	○	✓
2	Encourage critical facilities and institutions to connect to existing cogeneration systems, or develop new cogeneration systems	○	●	○	○	○	✓
3	Continue the City's electricity demand-response program during peak usage or pre-blackout periods	○	○	○	○	○	✓

IN 3 | Ensure backup power generation for critical facilities and identified key infrastructure during power outages

1	Investigate off-grid, on-site renewable energy systems, generators, and technologies for critical facilities to ensure redundancy of energy systems	○	○	●	○	○	✓
2	Seek funding to purchase and install generators for all city building designated as critical to agency functions	○	●	○	○	○	✓

3	Develop Combined Heat and Power (CHP) co-generation plants at identified critical facilities	○	●	○	○	○	✓
4	**Evaluate and ensure backup power generation is available to healthcare facilities (nursing homes, critical care facilities, hospitals, etc.)**	○	○	○	○	○	✓

IN 4 | Protect and manage compressed liquefied natural gas sites and (city) fueling stations before and during hazard eventsduring power outages

1	Work with BGE to ensure existing preparedness plans for Spring Gardens liquefied natural gas site incorporate its vulnerability to present and predicted flooding, storm surge and sea level rise	○	●	○	○	○	✓
2	Adopt building code that requires anchoring of 50 gallon storage tanks or larger	●	○	○	○	○	✓
3	Support the Maryland Public Service Commission's effort to accelerate replacement of aging natural gas infrastructure which will harden the system against flooding	●	○	○	○	○	✓

IN 5 | Evaluate and improve resiliency of liquid fuels infrastructure

1	Design and implement a generator program that assists private gas stations in securing backup generators, especially those stations along major evacuation routes	●	○	○	○	○	✓
2	Increase and ensure fuel availability during distribution disruptions	●	○	○	○	○	✓
3	Ensure fuel for generators and delivery priority is given to critical facilities and emergency responders.	●	○	○	○	○	✓

IN 6 | Evaluate and improve resiliency of communication systems that are in place for sudden extreme weather events

1	Utilize new technologies such as fiber optics, external hook-ups, and mobile generators to improve resiliency	○	●	○	○	○	✓
2	Build redundancy into all public and inter-agency warning and communication systems	○	○	●	○	○	✓
3	Identify best practices for the installation and management of flood proofing of all communications infrastructure at risk of water damage	●	○	○	○	○	✓
4	Implement additional nurse triage phone lines and community health centers to reduce medical surge on hospitals	○	●	○	○	○	✓
5	Evaluate and improve early warning systems for hazard events	○	○	●	○	○	✓
6	Ensure continued operation of city governments various computer mainframes for email, control systems, and internet service by having stand-by batteries for each with a capacity sufficient for backup generation to operate	○	○	●	○	○	✓
7	Identify shared communication technology for emergency responders and government agencies to ensure continued and coordinated communication during emergency events	●	○	○	○	○	✓

IN 7 | Integrate climate change into transportation design, building and maintenance

1	Determine the coastal storm vulnerability and complete an exposure assessment of City transportation assets	●	○	○	○	○	✓
2	Improve stormwater management, operations and maintenance for stream flooding that erodes away bridge supports	●	○	○	○	○	✓
3	Incorporate compliance with earthquake standards to withstand a magnitude eight earthquake for all new, improved and rebuilt bridges	●	○	○	○	○	✓
4	Design bridges expansion joints for longer periods of high heat and develop a more robust inspection and maintenance process	●	○	○	○	○	✓
5	Research utilizing existing and new rating systems for all new infrastructure and road projects	●	○	○	○	○	✓

6	Identify, investigate, and incorporate Best Management Practices as they relate to transportation design, construction and maintenance	○	●	○	○	○	✓
7	Require that backup solar powered street lights and signals be integrated along evacuation routes and high traffic areas	●	○	○	○	○	✓

IN 8 | Identify additional alternative routes and modes for effective transport and evacuation efforts during emergency situations

1	Evaluate existing systems and develop a comprehensive evacuation plan	○	●	○	○	○	✓
2	Coordinate evacuation plans with regional partners	○	●	○	○	○	✓
3	Develop and prioritize clearance of specified transportation routes for delivery of emergency response supplies	●	○	○	○	○	✓
4	Educate the public on the dangers of driving through flooded roads	●	○	○	○	○	✓
5	Make available a network of dedicated pedestrian and bicycle transportation routes leading into and throughout the City	●	○	○	○	○	✓
6	Identify and collaborate with bicycle groups and repair shops to assist in emergency response and accommodate alternate transportation needs	●	○	○	○	○	✓

IN 9 | Alter transportation systems in flood-prone areas in order to effectively manage stormwater

1	Prioritize infrastructure upgrades for roads identified at risk of flooding through the use of elevation data and Sea, Lake and Overland Surges from Hurricanes (SLOSH) model results	●	○	○	○	○	✓
2	Raise streets in identified flood prone areas as they are redeveloped	●	○	○	○	○	✓
3	Encourage development of Green Streets in flood prone areas and throughout the City	●	○	○	○	○	✓
4	Encourage use of permeable pavement in non-critical areas – low-use roadways, sidewalks, parking lots and alleys where soils permit proper drainage	●	○	○	○	○	✓
5	Add pumps or other mitigation alternatives to streets as they are redeveloped (if needed)	●	○	○	○	○	✓
6	Assess need for new culvert capacity and identify where upgrades are needed	●	○	○	○	○	✓
7	Conduct an in-depth analysis of the impacts of drain fields that feed the harbor	●	○	○	○	○	✓
8	Expand and reinforce existing stormwater education programs	○	●	○	○	○	✓
9	Design and implement floodgates and barriers in transportation tunnels	●	○	○	○	○	✓
10	Encourage Federal and State Government to design and install floodgates and barriers at vulnerable transportation tunnels	○	●	○	○	○	✓
11	Upgrade existing floodgate hardware and mechanisms to control rise rate of water into all city tunnels	●	○	○	○	○	✓

IN 10 | Ensure structural stability of all transportation tunnels to reduce impact from seismic activity

1	Repair cracks and leaks in all tunnels to reduce impact of seismic activity	●	○	○	○	○	✓
2	Follow Federal, State and Local criteria for the stabilization of Historic transportation tunnels (e.g. Howard Street)	●	○	○	○	○	✓
3	Install a seismically resistant fire standpipe, air monitoring, and automatic valve system in all tunnels to provide a fully automated and monitored fire suppression system	●	○	○	○	○	✓

IN 11 | Evaluate changes to road maintenance and construction materials based on anticipated changes in climate

1	Implement a repaving strategy that reduces heat-related damage to asphalt and incorporates maintenance and operations that extend the life of the road surface	●	○	○	○	○	✓

2	Develop a reconstruction and repair strategy that reduces damage to concrete and incorporates better maintenance and operations	●	○	○	○	○	✓
3	Develop deicing strategies and materials that are effective in extreme cold temperatures and prolonged events to stabilize roadway and bridge surfaces	●	○	○	○	○	✓
4	Design pavement sections and materials that withstand longer periods of extreme heat events	●	○	○	○	○	✓

IN 12 | Enhance the resiliency of the City's waterfront to better adapt to impacts from hazard events and climate change

1	Raise bulkhead height along shoreline areas most at risk	●	○	○	○	○	✓
2	Utilize vegetation and stone to stabilize and armor unprotected shorelines	○	●	○	○	○	✓
3	Encourage the development of integrated flood protection systems that use structural (engineering) and non-structural (wetlands) measures	○	●	○	○	○	✓
4	Review and enhance coastal area design guidelines to better mitigate the impacts of flooding	○	●	○	○	○	✓
5	Enhance and strengthen waterfront zoning and permitting	○	●	○	○	○	✓

IN 13 | Increase the resilience of all wastewater systems and protect them from current and projected extreme weather events

1	Ensure all water and wastewater pumping stations have off-grid, on-site energy sources and/or reliable backup power sources by increasing the number of backups and pulling electricity from different grids	●	○	○	○	○	✓
2	Evaluate the sewer system to identify and develop key areas for prevention of raw sewage overflows	●	○	○	○	○	✓
3	Develop and adopt increased level of protection for construction, redevelopment, and design of all water and wastewater facilities that incorporate future climate projections	●	○	○	○	○	✓
4	Retrofit and harden low-laying pumping stations and treatment plants in flood hazard areas	●	○	○	○	○	✓
5	Ensure effective operations and security for wastewater treatment plants if facilities are overwhelmed by hazard event	●	○	○	○	○	✓
6	Establish the capability of wastewater treatment plants to function during large storm events and establish protocols for storms that overwhelm the system	●	○	○	○	○	✓
7	Increase stormwater recharge areas and quantity management to prevent flooding from overflows	●	○	○	○	○	✓
8	Conduct an assessment of the City's current water system to identify age, condition of infrastructure, capacity, weaknesses and areas for priority upgrades	●	○	○	○	○	✓
9	Conduct and utilize a detailed risk assessment to determine vulnerability of the sewage treatment plant to prevent overflows from extreme storm events	●	○	○	○	○	✓
10	Determine the elevation of sewage treatment buildings, tank construction details, and if the plant is at risk of back flow, for improvements to withstand coastal storm events	●	○	○	○	○	✓
11	Retrofit wastewater treatment facility and methane gas storage system to withstand seismic activity to protect against earthquakes. Design facility to exceed current building codes	●	○	○	○	○	✓

IN 14 | Integrate resiliency, redundancy, and structural stability into the City's drinking and water system to ensure safe and reliable water storage and distribution

1	Repair leaks and improve connection from all City reservoirs and the Susquehanna River	●	○	○	○	○	✓
2	Provide water conservation education, and continue to protect our watersheds to assist in maintaining water quality	●	○	○	○	○	✓

3	Ensure dam emergency plans account for impacts of climate change	●	○	○	○	○	✓
4	Identify and document post damage responsibilities in memorandums of understanding as addendums to Reservoir Watershed Management Agreement	●	○	○	○	○	✓
5	Review dam capacity, load and failure points and review them against 1,000 year and 10,000 year precipitation events	●	○	○	○	○	✓
6	Conduct a study to determine seismic design standards and seismic resiliency of drinking water distribution system (tunnels, piping, clean water pump stations, dams, shafts, and tanks)	●	○	○	○	○	✓
7	Increase stormwater recharge areas and quantity management	●	○	○	○	○	✓
8	Evaluate the impacts of sediment loading on reservoir capacity	●	○	○	○	○	✓
9	Manage watershed forests to provide maximum benefits for water quality and to maintain resiliency during extreme weather events	●	○	○	○	○	✓
10	Adopt new policies on salt application to prevent high salinization on drinking water supplies	●	○	○	○	○	✓
11	Establish a structured Firming Program to maintain adequate storage and water quality in the source-water reservoirs during drought conditions	●	○	○	○	○	✓
12	Maintain appropriate agreements with Susquehanna River Basin Commission (SRBC) and the Exelon Power Company to ensure adequate water withdraws from the Susquehanna River during drought emergency	●	○	○	○	○	✓

IN 15 | Conduct an assessment that evaluates and improves all pipes' ability to withstand extreme heat and cold

1	Replace old and malfunctioning pipes with new pipes or retrofit existing pipes with new lining	○	●	○	○	○	✓
2	Evaluate and utilize new technology that allows for greater flexibility in pipes as they are replaced	○	●	○	○	○	✓

IN 16 | Enhance and expand stormwater infrastructure and systems

1	Implement the requirements of Baltimore's MS4 (separate stormwater and sewer system) permit	○	○	●	○	○	✓
2	Prioritize storm drain upgrades and replacement in areas with reoccurring flooding	○	●	○	○	○	✓
3	Install backflow-prevention devices or other appropriate technology along waterfront to reduce flood risk	●	○	○	○	○	✓
4	Preserve and protect natural drainage corridors	○	○	●	○	○	✓
5	Review and revise storm drain design on a continuous basis, to accommodate projected changes in intense rainfall	●	○	○	○	○	✓

IN 17 | Modify urban landscaping requirements and increase permeable surfaces to reduce stormwater runoff

1	Support existing stormwater requirements and continue to evaluate and improve Best Management Practices	○	○	●	○	○	✓
2	Encourage urban landscaping requirements and permeable surfaces into community managed open spaces	○	○	●	○	○	✓
3	Utilize water conservation elements such as green roofs, rain gardens, cisterns, and bioswales on residential, commercial, industrial, and City-owned properties to capture stormwater	●	○	○	○	○	✓
4	Encourage permeable paving on low-use pathways	●	○	○	○	○	✓

IN 18 | Evaluate and support DPW's stream maintenance program

1	Review and improve status of standing maintenance requirements	○	●	○	○	○	✓
2	Ensure adequate funding is in place to support stream maintenance	○	●	○	○	○	✓
3	Identify opportunities where stream restoration efforts will off-set maintenance costs	●	○	○	○	○	✓
4	Identify interdependencies and benefits of stream maintenance with other transportation programs	●	○	○	○	○	✓
5	Clear streams on a regular basis, prioritize dredging the stream beds, and increase inspection and cleaning of culverts and storm drains to prevent flooding	●	○	○	○	○	✓

IN 19 | Support and increase coordination and information sharing across jurisdictions to better enable mitigation of cross-border impacts on the regions watersheds (e.g., understanding flood conditions upstream in the County)

1	Partner with local counties to evaluate major tributaries in all watersheds to determine best management practices for capturing run-off and slowly releasing it (stormwater quantity management)	●	○	○	○	○	✓
2	Encourage information sharing within the Chesapeake Bay community to assist in developing best management practices	○	●	○	○	○	✓

IN 20 | Reevaluate and support a comprehensive debris management plan for hazard events

1	Investigate best practices for managing and disposing of downed trees, yard waste, building debris, as well as additional household garbage	●	○	○	○	○	✓
2	Expand and integrate existing programs to reduce or intercept debris before it gets into the streams and harbor	○	●	○	○	○	✓
3	Develop and promote solid waste management actions for citizens to implement before a hazard event	●	○	○	○	○	✓

IN 21| Encourage the integration of climate change and natural hazards into private and State planning documents, systems, operations, and maintenance

1	Incorporate consideration of hazards and climate adaptation efforts into all plans, systems, operations, and maintenance	○	●	○	○	○	✓
2	Ensure Red Line planning incorporates adaptation strategies	○	●	○	○	○	✓
3	Ensure hazard scenarios, utilized in vulnerability assessments, are at a minimum 25% greater in intensity and impact than historical record events to date	●	○	○	○	○	✓
4	Develop guidelines for hospital, health care facilities and other institutional entities (e.g. Universities)	●	○	○	○	○	✓
5	Partner with regional air quality institutions to integrate air quality measures and messaging into City climate change policy efforts	●	○	○	○	○	✓

IN 22 | Develop City policy which requires new city government capital improvement projects to incorporate hazard mitigation principles

1	Discourage new public projects in hazard-prone areas such as floodplains or the coastal high hazard areas	○	○	●	○	○	✓
2	Utilize hazard mitigation design requirements that exceed minimum standards for critical facilities	○	●	○	○	○	✓
3	Use comprehensive infrastructure assessments to identify infrastructure in need of replacement and prioritize funding for those projects	○	●	○	○	○	✓

DP3 BUILDINGS

BL 1 | Develop and implement hazard protections for critical facilities including hospitals, fire stations, police stations, hazardous material storage sites, etc.

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
1	Conduct educational outreach for city-owned, residential, commercial, and industrial buildings about proper storage and disposal of hazardous materials and heating oil	●	○	○	○	○	✓
2	Require hazardous materials stored in city-owned, residential, commercial, and industrial buildings within the floodplain to be elevated a minimum of three feet above the freeboard	○	○	○	○	○	✓
3	Require new critical facilities to be designed with redundant operating systems	○	●	○	○	○	✓
4	Require pre-wiring for generators at all facilities designated critical to agency operations and hazard response	●	○	○	○	○	✓
5	Develop stricter flood regulations for critical facilities	●	○	○	○	○	✓
6	Develop partnership with private fueling stations to provide backup generators in exchange for a commitment to fueling emergency response vehicles during a hazard event	●	○	○	○	○	✓
7	Ensure storage of and access to fuel for generators in critical facilities	●	○	○	○	○	✓

BL 2 | Enhance City building codes that regulate building within a floodplain or near the waterfront

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
1	Design new projects to be resilient to a mid-century sea level rise projection and adaptable to longer-term impacts	●	○	○	○	○	✓
2	Incorporate climate change and coastal hazard considerations into building codes by increasing freeboard requirements to two feet as buildings are redeveloped and renovated	○	○	○	○	○	✓
3	Continue to regulate to the existing tidal floodplain delineation as adopted 2 February, 2012	○	○	○	○	○	✓
4	Incorporate outfall elevation regulations	●	○	○	○	○	✓
5	Develop Construction Best Practices for development within floodplains	●	○	○	○	○	✓
6	Train all code enforcement and building inspectors about flood proofing techniques and the local floodplain ordinance	●	○	○	○	○	✓
7	Encourage green roof installations to include vegetative and reflective technologies for all new commercial, industrial, multifamily, and city-owned development	●	○	○	○	○	✓

BL 3 | Strengthen City zoning, floodplain and construction codes to integrate anticipated changes in climate

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
1	Review zoning and strengthen language (where necessary) in order to better protect citizens and increase resiliency in buildings	○	○	●	○	○	✓
2	Review and amend existing building and floodplain regulations to require more flood resistant new and existing structures when located in the floodplain	○	○	○	○	○	✓
3	Utilize open space category in zoning code to protect sensitive areas (e.g. stormwater sites, steep slopes, floodways, etc.)	○	○	○	○	●	✓
4	Review and increase Flood Protection Elevation (Base Flood Elevation + Freeboard) standards to the highest available State, Federal or local elevation level	○	○	○	○	○	✓
5	Evaluate and update stormwater management regulations to avoid increases in downstream flooding	○	○	●	○	○	✓
6	Adopt design requirements that include wet and dry flood proofing techniques	●	○	○	○	○	✓
7	Review and consider adoption of the International Green Construction code	○	○	●	○	○	✓

BL 4 | Update a list of flood prone and repetitive loss buildings to consider for acquisition

1	Continue to acquire property (including repetitive loss properties) in the special flood hazard areas where feasible and appropriate	○	○	●	○	○	✓
2	Prioritize Hazard Mitigation Assistance funding for mitigation of repetitive loss properties and severe repetitive loss properties	○	●	○	○	○	✓
3	Develop a creative financing program for flood resiliency in industrial buildings	●	○	○	○	○	✓

BL 5 | Improve wind resiliency of new and existing structures

1	Review local building codes to determine if revisions are needed to improve the structures ability to withstand greater wind velocities and storm impacts	●	○	○	○	○	✓
2	Retrofit emergency shelter windows to withstand winds associated with coastal storm events	●	○	○	○	○	✓

BL 6 | Evaluate various seismic design enhancements using prototypical Baltimore City building types

1	Determine engineering effectiveness and cost-benefit of various earthquake mitigation measures using computer modeling	●	○	○	○	○	✓

BL 7 | Retrofit existing buildings in the designated Flood Area to increase resiliency

1	Target and encourage flood resiliency retrofits for buildings in the designated Flood Area	○	●	○	○	○	✓
2	Prioritize retrofitting and increasing resiliency of Public Housing units in the designated Flood Area and other high risk areas	○	●	○	○	○	✓
3	Educate building owners within the floodplain to ensure that all electrical, mechanical, and key building systems are above the base flood elevation and meet existing codes	○	●	○	○	○	✓

BL 8 | Improve resource conservation practices in all city owned buildings

1	Install energy-efficient and low-water-use equipment during renovations in all City-owned buildings	○	○	●	○	○	✓
2	Support energy efficiency and weatherization as part of Baltimore City schools ten-year plan	○	○	○	●	○	✓
3	Update Baltimore green building standards by offering multiple compliance paths for new and substantially renovated construction	○	○	○	○	●	✓

BL 9 | Conduct educational outreach to increase resource conservation practices in private buildings

1	Conduct educational outreach and provide information about savings related to reduced water use	○	●	○	○	○	✓
2	Educate and provide resources and information about utility rebate programs	○	○	○	○	●	✓
3	Provide energy efficiency education to include information on conserving electrical power. Emphasize reductions during summer peak demand hours	○	○	○	●	○	✓

BL 10 | Use HAZUS-MH computer modeling to determine losses generated by coastal storms

1	Utilize engineering studies and cost-benefit analyses to identify additional mitigation needs and actions	○	●	○	○	○	✓
2	Evaluate various building design enhancements to reduce losses generated by earthquakes, floods, and storm surge	●	○	○	○	○	✓

DP3 NATURAL SYSTEMS

NS 1 | Utilize green corridors and parks to help protect surrounding communities from the impacts of hazard events

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
1	Evaluate green corridors and parks for possible improvements for floodplain management	●	○	○	○	○	✓
2	Increase the resiliency of park facilities and buildings	●	○	○	○	○	✓

NS 2 | Increase and enhance the resilience and health of Baltimore's urban forest

1	Anticipate the impacts of future changes in temperature and weather on the urban forest by developing a comprehensive list of plant and tree species known to have a broad range of environmental tolerances	○	○	●	○	○	✓
2	Establish and routinely update a comprehensive tree inventory to anticipate insect and forest structural impacts of climate change	○	●	○	○	○	✓
3	Establish a comprehensive maintenance program that includes pruning for sound structure and the removal of hazardous limbs and trees. First focus on areas where vulnerable infrastructure is nearby such as energy supply and roads	○	●	○	○	○	✓
4	Continually adjust and modify planting details and specifications to assure the health and longevity of trees	○	○	○	●	○	✓
5	Increase the urban tree canopy and target areas with urban heat island impacts	○	●	○	○	○	✓

NS 3 | Create an interconnected network of green spaces to support biodiversity and watershed based water quality management

1	Utilize the Growing Green Initiative to increase green spaces in areas where there is available vacant land in order to reduce the heat island effect	○	○	○	○	●	✓
2	Convert vacant land and row houses into meaningful and connected open space	○	○	●	○	○	✓
3	Complete a habitat analysis and plan for the City	○	●	○	○	○	✓
4	Create a strategic plan that identifies areas of focus for tree planting, stormwater management, and forest preservation	○	○	●	○	○	✓
5	Certify Baltimore as a Community Wildlife Habitat through the National Wildlife Foundation (NWF)	○	○	●	○	○	✓

NS 4 | Expand, protect and restore riparian areas in the city

1	Conduct regular maintenance of stream restoration projects and stormwater quality facilities	●	○	○	○	○	✓
2	Evaluate current regulations regarding stream buffers and floodplains and modify them (if appropriate) to assure they adequately protect perennial stream corridors	○	○	●	○	○	✓

NS 5 | Preserve and create new coastal buffer efforts and support creating more wetlands and soft shoreline along coastal areas

1	Integrate natural buffer requirements, such as wetlands and soft shorelines, into new development or redevelopment	○	○	●	○	○	✓
2	Complete stream restoration projects in Baltimore City and County stream valleys that lead into the coastal wetlands so as to increase habitat and reduce sedimentation	○	○	●	○	○	✓
3	Identify and evaluate areas in the Critical Area buffer to prioritize ecological buffer restoration efforts	○	●	○	○	○	✓

NS 6 | Require the City's drought management plan to account for changes in climate

1	Map drought risks and water availability via climate change scenarios	●	○	○	○	○	✓

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
2	Update drought management plans to recognize changing conditions	●	○	○	○	○	✓

NS 7 | Integrate climate change and natural hazards planning into small watershed action plans (SWAPs)

1	Review existing watershed management plans and identify future actions to address climate impacts	●	○	○	○	○	✓

NS 8 | Conduct detailed ongoing analysis of climate information, trends in storm events and hydrology to support policy changes responding to climate change

1	Expand the use of climate information (e.g. seasonal forecasts) in water resources planning and management.	●	○	○	○	○	✓
2	Research and actively monitor trends in storm events, stream flow and other conditions affecting hydrology and water	○	●	○	○	○	✓
3	Update flood maps to reflect changing risk associated with climate change.	○	○	○	○	○	✓
4	Continuously improve and enhance flood vulnerability data.	○	○	●	○	○	✓

DP3 PUBLIC SERVICES

PS 1 | Strengthen emergency preparedness coordination between local government, NGOs, and private entities by updates to the City Emergency Operations Plan (EOP) and related Emergency Support Functions (ESF)

1	Identify and develop a common database that all city government agencies and departments should utilize for hazard information, preparedness and response	●	○	○	○	○	✓
2	Ensure consistency and integration with existing and future response plans within and between agencies	○	○	●	○	○	✓
3	Continue to identify and improve coordination with Key Partners including private sector, State partners, Federal partners, community, universities and industry leaders through Local Emergency Planning Committee	○	○	○	●	○	✓
4	Coordinate outreach efforts of the Mayor's Office of Emergency Management, Mayor's Office of Neighborhood and Constituent Services and Baltimore City Health Department to leverage messages related to all-hazards emergency preparedness	○	○	○	○	●	✓
5	Develop strong working relationships with local experts to provide technical assistance to refine and improve city government emergency preparation	○	○	●	○	○	✓
6	Review and improve specific response plans contained in the EOP and related ESFs that relate to extreme weather events (snow, heat, flood, wind, electrical outages, and other hazard events)	○	○	○	●	○	✓
7	Ensure equipment purchases and communication systems are compatible across agencies and jurisdictions	●	○	○	○	○	✓
8	Encourage all animal rescue and care shelters to further develop their internal plans for animal's health and safety during and after a hazard event	●	○	○	○	○	✓
9	Ensure all animal rescue and care shelters located within the floodplain are provided the support to apply for and obtain funds to relocate	●	○	○	○	○	✓
10	Develop and implement a case study of hospital-based practices that foster community resilience to climate change	●	○	○	○	○	✓

PS 2 | Develop a Hazard Awareness Program

1	Create a standardized early warning system for members of the public	○	○	●	○	○	✓
2	Evaluate and improve community health center strategies for communicating with patients during an emergency	●	○	○	○	○	✓

3	Educate citizens about the existing early warning systems and actions they should take when alarms sound	○	●	○	○	○	✓
4	Prepare and integrate occupational health and safety messages and instructions for first responders	●	○	○	○	○	✓
5	Hold climate specific seminars, in partnership with MDH2E and MHA, for hospital emergency and sustainability managers	●	○	○	○	○	✓

PS 3 | Designate community leaders and organizations that can assist and provide support during hazard events

1	Prior to a hazard event, identify lead contacts serving vulnerable populations and coordinate actions to maximize safety and information sharing	○	○	●	○	○	✓
2	Develop a community group coordination plan and implementation guide	●	○	○	○	○	✓
3	Identify and evaluate plans already in place and work to improve utilization of community based leaders to assist in preparedness and response	○	●	○	○	○	✓

PS 4 | Integrate climate change and natural hazards planning into all City and community plans

1	Develop guidelines to include proactive resilience planning into plan development process	●	○	○	○	○	✓
2	Incorporate language that strengthens the ability of city government officials to enforce rules and restrictions that support public health, safety and welfare related to hazard events and conditions	●	○	○	○	○	✓
3	Partner with Maryland Department of Health and Mental Hygiene or other pertinent entity to develop institutional checklist and materials for health care specific resilience plans	●	○	○	○	○	✓

PS 5 | Better equip emergency workers for natural hazards.

1	Research and identify personal protective equipment (PPE) needs based on specific hazards	●	○	○	○	○	✓

PS 6 | Anticipate and address potential disease outbreaks caused by extreme weather events and changing climatic conditions

1	Support studies of heat and flood related vector borne diseases in the Baltimore the region based on changing temperature and moisture	○	○	●	○	○	✓
2	Evaluate existing programs that detect disease outbreaks to determine their flexibility to respond to new conditions	●	○	○	○	○	✓

PS 7 | Protect Baltimore residents from the effects of hazard events and plan for more frequent hazard instances

1	Re-evaluate and update existing heat alerts, advisories, and updates to healthcare and emergency service providers	○	●	○	○	○	✓
2	Ensure that residents and visitors have access and transportation to cooling centers during extreme heat events	○	●	○	○	○	✓
3	Evaluate code red plans to ensure all agencies adequately protect their own workers	●	○	○	○	○	✓
4	Consider extending hours for public wading pools during extreme heat events	●	○	○	○	○	✓
5	Include information about Code Red in the event permitting process, and incorporate language that allows BCHD to cancel outdoor events	●	○	○	○	○	✓
6	Work with Regional, State and Local partners to improve air quality and reduce respiratory illnesses	○	●	○	○	○	✓
7	Create and implement programs to manage combined health impacts of heat and air pollution	○	●	○	○	○	✓

PS 8 | Conduct climate, resiliency, and emergency planning education and outreach

1	Incorporate environmental health and climate change into curriculum at schools, universities and health care facilities	●	○	○	○	○	✓
2	Educate communities on how city agencies respond to hazard events, their role in an event, and how agencies work together	○	○	●	○	○	✓
3	Educate and train community groups to participate in responding to hazards	○	○	●	○	○	✓
4	Generate a comprehensive community-specific all hazards outreach campaign	○	○	●	○	○	✓
5	Develop and communicate a simplified process for Baltimore residents to follow after a hazard event	●	○	○	○	○	✓
6	Create curriculum for hospitals to teach communities about climate change as part of hospital community benefits programs	●	○	○	○	○	✓
7	Utilize existing preparedness messaging to include information on universal precautions to insect-borne and other infectious diseases	●	○	○	○	○	✓

PS 9 | Improve awareness and education about the importance of flood insurance and preparation for Baltimore citizens

1	Create an educational program centered on flood hazards, coastal construction practices and evacuation procedures	●	○	○	○	○	✓
2	Encourage owners of properties to purchase flood insurance and improve policyholder awareness at time of sale or renewal	○	○	●	○	○	✓
3	Inform property owners who have paid off their mortgage that flood insurance is still necessary	○	○	●	○	○	✓
4	Identify programs and grants that assist citizens in purchasing flood insurance and making flood proofing changes	●	○	○	○	○	✓
5	Develop an annual newsletter to inform and remind owners of property in the floodplain about flood insurance and flood proofing activities they should undertake	●	○	○	○	○	✓
6	Provide information on how to file for reimbursement for impacts of hazards	●	○	○	○	○	✓
7	Require a flood disclosure form, and educational information as part of lease agreements for commercial and residential properties	●	○	○	○	○	✓
8	Develop floodplain awareness information for rental tenants and ensure distribution as tenants change	●	○	○	○	○	✓

PS 10 | Increase Baltimore's Food Security

1	Double the size and number of food producing community gardens by 2025	○	●	○	○	○	✓
2	Link Jessup, Maryland Food Hub, and regional/local food producers to local distributors	○	●	○	○	○	✓
3	Incorporate Baltimore's food policy initiative into planning efforts	○	●	○	○	○	✓
4	Develop a food security plan for Baltimore	○	●	○	○	○	✓
5	Increase land under cultivation for commercial urban agriculture	○	○	●	○	○	✓

HOMEGROWN BALTIMORE

		Still Pending	Very Early Stages	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
LAND							
1	Develop Automatic Notification of License Renewal	○	○	●	○	○	✓
2	Streamline Community Managed Open Space Process	○	○	○	●	○	✓
3	Incorporate Community Farms Into Existing Land Trust	○	○	●	○	○	✓
4	Approve Direct Land Purchasing	○	●	○	○	○	✓
5	Improve Land Leasing Initiative	○	○	○	●	○	✓
6	Strengthen Tenure of Adopt-a-Lot program	○	○	○	●	○	✓
7	Support Incentives for Commercial Farms on Privately-Owned Vacant Land	○	○	●	○	○	✓
WATER							
1	Improve Payment Process for Water Access Program	●	○	○	○	○	✓
2	Develop Options for Winter Water A ccess	●	○	○	○	○	✓
3	Provide Resource s for Sites without a Water Meter Pit	○	○	○	●	○	✓
4	Preserve Existing Water Infrastructure	○	○	●	○	○	✓
5	Support the Development of Rainwater Capture Systems	●	○	○	○	○	✓
SOIL							
1	Increase Equipment Availability	●	○	○	○	○	✓
2	Develop Soil Standards	○	○	○	○	●	✓
3	Provide Soil Testing	○	●	○	○	○	✓
4	Support Composting at All Levels	●	○	○	○	○	✓
CAPITAL							
1	Funding Assistance	○	○	○	○	●	✓
2	Support Garden Irrigation Fund	○	○	○	○	●	✓
SUPPORT							
1	Designate DHCD Staff Position	●	○	○	○	○	✓
2	Create and Support Staff Positions	○	○	●	○	○	✓
3	Support Farm Incubator Development	●	○	○	○	○	✓
4	Assess New Zoning Code 's Permit Process	●	○	○	○	○	✓
5	Assess Animal Regulations	●	○	○	○	○	✓
6	Explore Liability Insurance Options	●	○	○	○	○	✓
7	Ensure Citizen Education and Engagement	○	●	○	○	○	✓

SPOTLIGHTS AND SUCCESS STORIES

The following pages highlight efforts by some of the many partners that work to advance the goals of the Sustainability Plan.

> ***Act as if what you do makes a difference. IT DOES.***
>
> -William James

NEIGHBORHOOD SPOTLIGHT: GREENMOUNT WEST

The Greenmount West community is a 16-block residential, rapidly revitalizing, diverse neighborhood. The community, located in Baltimore's Station North Arts and Entertainment District, is quickly becoming home for many young professionals, artists, and commuters.

The New Greenmount West Community Association (NGWCA) aims to improve the standard of living, quality of life, and economic status of Greenmount West residents by being proactive. The NGWCA is proactive and looks at the big picture, recognizing that all of the challenges that the Greenmount West community faces go hand in hand, and no single challenge can be solved if other challenges remain unaddressed. Thinking holistically, the NGWCA takes comprehensive actions, including forming a committee for addressing crime and drug problems, encouraging a number of residents to participate in programs that weatherize homes and increase energy efficiency, and even initiating a trap and release effort for managing populations of feral cats.

The successful NGWCA Clean and Green efforts have been spearheaded by a handful of key community leaders, with support of residents and volunteers from local universities and other institutions. Across the City, the role of managing litter is left up to the community. That's a hefty undertaking to say the least, but the Greenmount West community is making the best of its resources. Starting with only three public trash cans, litter had typically been one of the principle concerns in the community. Partnering with Blue Water Baltimore, the NGWCA installed three additional bins and this made a noticeable difference. At the same time, to make it easier for residents to recycle, the NGWCA purchases city recycling bins to sell, at cost, to residents at the local community center.

Their successes at cleaning the community, through the Clean and Green efforts, have been truly impressive. In 2012, Greenmount West won the Mayor's Clean Community Competition, and was awarded $5,000. With this award money, NGWCA established its first official tool shed in the community center.

The NGWCA was then awarded an additional $1,000 in 2013 when Greenmount West placed 2nd place in the same competition. With this award, NGWCA has been able to purchase supplies for the community, such as soil for planting trees and organic weed killer to de-weed sidewalks and alleys. Leftover award money was donated to local organizations and reinvested back into the community.

Contributing to the Greenmount West community's impressive cleanliness efforts, the NGWCA hosts spring and fall clean-ups each year. During a community clean-up last year, practically no waste had been thrown into the dumpster aside from tree limbs and other natural debris. The rest had instead been collected, sorted, and recycled. This "zero-waste" clean-up, with each volunteer instructed to collect specific materials, ends up being the same amount of effort, but has a much greater return. In fact, the NGWCA was able to return collected metal in exchange for cash, which was invested back into community programs. At the next clean-up, TreeBaltimore came to recycle the tree limbs into mulch.

NGWCA also strives to be proactive about litter. During clean-ups, volunteers approach nearby residents. While doing so will sometimes help recruit some extra help, one of the greatest benefits of this technique is the collection of unwanted items that might have otherwise become litter in the future. Items that are collected are often in usable condition, and go on to find new homes—frequently to the NGWCA community center which opened in 2012, or to the local Salvation Army and Baltimore's architectural salvage non-profit, Second Chance.

At one point many of the challenges that the community faced were believed to be tied to high renter populations. Since NGWCA has been actively addressing community challenges, there have been noticeable improvements, particularly related to litter.

In 2013, NGWCA developed the Façade Improvement Project and was awarded a Spruce-Up Grant of $10,500 to facilitate its implementation. Façade improvements, give old buildings new faces, helping residents to see how majestic the buildings actually are. Using artwork raises spirits and helps to give people hope for their community. As residents become less, they also become are less likely to litter.

The spring and fall clean-ups also provide opportunities to plant trees. The NGWCA planted 12 trees during the 2012 Community Service Day, and 30 on the 2013 Community Service Day. Currently, NGWCA is maintaining the health of existing trees by removing constricting tree wells. At the same time, NGWCA is working with Tree Baltimore to have 250 additional trees planted in the community over the next 3 years; beginning in spring 2014.Their approach is setting the

community on the right path to success. With additional supplies and nutrients being provided by project partners, along with a water maintenance plan, Greenmount West's tree planting efforts promise better chances for tree survival.

Another key to success is that NGWCA is focusing plantings in limited areas to increase both the visual and environmental impacts of the trees. While previous plantings had been concentrated more heavily in the southeast areas of the community, this effort focuses in northwest areas—bringing trees into the community rather than plantings around the perimeter.

With other tree planting projects lined up, the community sees the potential to generate multiple benefits; hoping, for instance, to integrate stormwater management, reduced impervious surfaces, and increased greenspaces into their 2014 projects.

With a collection of vacant lots, the Greenmount West community has a number of potential sites for future greenspaces. In one year, the community was able to adopt a significant number of those lots and transform them into community managed open spaces. Greenspaces, like one of the community's central greenspaces, can be used for youth activities and community block parties. Alternatively, on another property, the Greenmount West community expects to install its first official sculpture garden later in 2014 in a commons area. These new spaces mark a tremendous shift—from properties that had become eyesores and dumping grounds to gardens and green spaces that are cultivated, cleaned, and even provide food for the community. What a remarkable transformation that has made!

A lot of the NGWCA's work has been about increasing awareness and educational opportunities that help change resident attitudes and perceptions, particularly though engaging kids. With help from Blue Water Baltimore and MICA students, the community has painted and stenciled storm drains to remind residents that the storm drains lead to the Harbor and other vital waterways.

The NGWCA and the residents of Greenmount West face real challenges. The work to enhance the community is rewarding, but at the same time difficult and sometimes discouraging. It can be disheartening for a resident to invest time and energy into cleaning their community only for litter to reappear in a month or two. Fortunately, when the community comes together more frequently, they can reduce the frequency of these challenges.

Looking ahead, the NWGCA is staying focused on identifying new greenspaces and meeting the vision of their master plan. It's a growing community in a stage of rebirth. With recent development in the area, a number of noteworthy accomplishments, and more homeowners, Greenmount West becomes a more attractive neighborhood each day.

Learn more about Greenmount West and the New Greenmount West Community Association; visit their facebook page:

http://www.facebook.com/NGWCA

BEMORE PHOTOGRAPHY

PARTNER SPOTLIGHT: BLUE WATER BALTIMORE

Blue Water Baltimore is a nonprofit environmental organization whose mission is to restore the quality of Baltimore's rivers, streams, and Harbor to foster a healthy environment, a strong economy, and thriving communities.

Blue Water Baltimore operates many programs to support their mission and help accomplish goals set by the Baltimore City Sustainability Plan. In 2010, Blue Water Baltimore was formed through the merger of five watershed organizations that previously worked in Baltimore's major stream valleys and the Baltimore Harbor. Since then, the organization has grown to a staff of twenty individuals and an annual budget of 2.7 million dollars. Their headquarters, the first LEED Gold certified building in the City, is located in northeast Baltimore.

Blue Water Baltimore is unique in that it works holistically to achieve its mission of clean water—through organizing communities around trash and litter, planting trees in Baltimore's parks and along its streets, and helping to slow and treat polluted stormwater run-off at homes and institutions.

A core value of the organization is that clean water is a responsibility that is shared among citizens, government, and the business community. In 2013, Blue Water Baltimore had over 4,000 individuals and students volunteer with us, not just for improved water quality, but to make Baltimore a more livable and sustainable place. Additionally, Blue Water Baltimore uses legal and legislative advocacy to help complement community-based restoration projects. These efforts help ensure that strong laws are passed and enforced at the local, state, and federal levels, and that there is dedicated funding for local government partners to have sufficient resources for addressing water pollution problems.

Patrolling the Harbor by boat, Blue Water Baltimore also has a rigorous water-quality monitoring program where data is collected from 30 sites. Samples are tested at certified labs, and the results are assessed and reported annually through the Healthy Harbor Report

Card. This effort helps create a baseline so that we can see progress in the coming years as additional infrastructure improvements are made to Baltimore's stormwater and wastewater systems.

One of Blue Water Baltimore's leading efforts is the Clean Water Community program, a partnership with the Healthy Harbor Initiative, where public and private partners have set the goal of a Fishable, Swimmable Harbor by 2020. To make this goal a reality, it is important to work upstream of the Harbor, engaging and empowering communities to get involved and reducing pollution before it hits waterways. This program has helped targeted communities install new trash cans to help reduce littering; and to stencil and paint murals on over 280 storm drains to raise awareness about stormwater and the need to keep drain areas clear of trash and debris.

As part of the program, Blue Water Baltimore raised and directed $65,000 to street tree projects in three Clean Water Communities: Highlandtown, Sharp Leadenhall, and Reservoir Hill. In total, these projects planted 88 trees and expanded tree pits, removing over 5000 square feet of concrete in 2013. Blue Water Baltimore plans to install more than 300 additional trees in two Clean Water Communities, Greenmount West and Highlandtown, in 2014. Street trees help improve neighborhood air quality, improve property values, and create shade, in addition to keeping our waterways cleaner.

Blue Water Baltimore's Clean Water Schools project, a partnership with the Office of Sustainability, has been another great success. Working with five schools, highlights of the Clean Water Schools project include working with school Green Teams to create peer-to-peer trash awareness through engaging activities, including skits, song and dance, videos, and artwork created by students.

Supplying many of the trees used in Blue Water Baltimore's street and school planting projects, Blue Water Baltimore operates the Herring Run Nursery, a native plant nursery in the City. Native plants promote a healthy urban environment: they support wildlife, and reduce air and water pollution. The nursery sells plants to wholesale and retail clients. Check the Blue Water Baltimore website, or call the nursery, to find out what dates it will be open for retail sales!

While there have been many accomplishments, much work remains to be done. Baltimore's waterways suffer from chronic pollution caused by generations of industrial pollution, aging sewer and stormwater infrastructure, large amounts of paved surfaces, and trash issues. Tackling these challenges, Blue Water Baltimore looks forward to continued strong partnerships and engaging with more citizens, businesses, and members of the faith community to join in pursuit of clean water and thriving communities.

Learn more about Blue Water Baltimore by visiting their website:

http://www.bluewaterbaltimore.org/

SUCCESS STORY: COMMUNITY WILDLIFE HABITATS

In August, Annapolis became Maryland's second National Wildlife Federation (NWF)–certified Community Wildlife Habitat (CWH). The first, Takoma Park, was certified in 2011. The Town of Centerville, in Queen Anne's County, became the state's third CWH in September, but it won't be the last. While working with First Lady of Maryland, Katie O'Malley, to certify Annapolis, NWF became interested in the City of Baltimore. While Annapolis, with 38,000 residents, is the largest CWH in Maryland, it's not the largest along the entire East Coast. NWF imagined Baltimore would take that title. Once certified, Baltimore will not only be the largest CWH on the East Coast, but it will be one of the largest certified cities in the entire country.

In May 2013, Baltimore launched the CWH program with an event at the National Aquarium, announcing that the program will green city streets, backyards, schools, and community areas. "Baltimore has always been a city for the birds," acknowledged Regional NWF Executive Director, Hilary Harp Falk, "and we intend to work with partners in the City to create beautiful places which will offer opportunities to learn about and connect with the outdoors."

Now that the City of Baltimore is a registered community with NWF, it can begin earning the points that will ultimately award certification. The number of points required for a community to be certified depends on its population. In 2012, the U.S. Census Bureau estimated Baltimore's total population to be just over 621,000 residents. For a city of this size, NWF requires 1,000 points for certification. There are a number of ways that points can be secured. Registration alone already granted the City 40 points. The remaining 960 points can be earned by performing activities sorted into four goal categories: Habitat Certification, Education, Community Projects, and Administrative goals.

Most points are earned through Habitat Certification goals, within which there are three sub-categories: Homes, Common Areas (i.e. parks or community facilities), and Schools. Meeting minimum requirements for each sub-category will earn the city 616 points. The remaining 88 points needed to

reach 750 points for the Habitat Certification requirement will most easily be earned through projects in parks and in community facilities, and projects at local schools.

Baltimore is well on its way to meeting the requirements. Prior to pursuing certification, a handful of residents and property owners had already certified their properties individually. Points earned by these properties count towards the City's total. In 2013, two schools, one park, and 37 homes were certified—bringing the total to 315 certified properties.

There are a number of properties that already meet certification criteria but simply aren't certified as of yet. NWF is recognizing 30 homeowners in five Baltimore neighborhoods who have already installed habitat gardens and demonstrate sustainable gardening practices, and the City is exploring ways to encourage additional property owners to complete their certification, including incentives such as a pre-paid application fee (basic certification costs $20). Currently, members of Baltimore's CWH advisory committee are working with the Reservoir Hill neighborhood to install native plant gardens in 20 yards, one schoolyard, and one park space.

Once certified, property owners receive a number of benefits, including a personalized certificate or plaque; subscription to the Wildlife Online-Habitats Edition e-newsletter for learning habitat tips; and a free, full year's membership in NWF, with a subscription to National Wildlife® magazine.

Baltimore is excited to have launched the CWH program. Urban biological diversity ("biodiversity") is one of the more challenging indicators to measure. The CWH program will help the City keep track of biodiversity progress, and will also help Baltimore achieve other sustainability goals. For instance, there are direct conservation gains from increasing urban wildlife habitats. Native vegetation attracts more wildlife, enhances communities, and helps to improve air quality. Furthermore, with new gardens filtering rain water as it falls, the CWH program will help to replenish groundwater supplies and improve the health of our Harbor.

These habitats create better places for raising the young of all of the City's creatures, including people. The program presents new opportunities for educating children of all ages about the wonders and importance of urban nature and the public health benefits of maintaining a wildlife habitat. Often, residents in communities that are more engaged with the local wildlife go on to become stewards of nearby nature, supporting Baltimore's environmental conservation efforts.

Baltimore's Certification Point Requirements	
Habitat Certification	**750 for Baltimore's Size** *- 600 homes at 1 pt. each* *-10 "common areas" at 3 pts. each* *-6 schools at 5 pts. each*
Education	**40 (required minimum)** *-12 possible activities, ranging from 5-10 pts. each*
Community Projects	**50 (required minimum)** *-15 possible activities, ranging from 5-10 pts. each*
Administrative	**20 (required minimum)** *-6 possible activities (2 are required), ranging from 3-10 pts. each*

SUCCESS STORY: BALTIMORE FOOD POLICY INITIATIVE

Food ties into all aspects of daily life. From what we eat, to how many options we have for shopping; from what grows on urban lots to what retailers can stock on their shelves; food has far-reaching influence. In the same way, food intersects all aspects of City government. In May 2011, recognizing food's importance, Mayor Rawlings-Blake created the Baltimore Food Policy Initiative (BFPI). BFPI brings the Department of Planning, Baltimore Office of Sustainability, Baltimore City Health Department (BCHD), and Baltimore Development Corporation (BDC) together with community partners to understand the many pieces that tell the story of food in Baltimore.

The following vignettes highlight just a few of the ways BFPI is working on food issues in Baltimore City.

Baltimore City Public Schools | A perfect example of a key partnership in Baltimore is the relationship between BFPI and Baltimore City Public Schools (BCPS). With 80% of students qualified for free and reduced lunches, school food impacts the majority of Baltimore's kids and BFPI and other partners are committed to supporting BCPS in its efforts to provide the highest quality food in the best environment. In addition to providing funding assistance to increase the number of salad bars in cafeterias, BFPI assisted BCPS in securing grant funding to help with assessments and evaluations required to develop a systems approach to Food and Nutrition services in schools.

SNAP & Baltimore Bucks | In 2012, BFPI helped the Baltimore Office of Promotion and the Arts (BOPA) establish the SNAP (Supplemental Nutrition Assistance Program, formerly food stamps) program at the Baltimore Farmers Market and Bazaar in order to expand options

and improve food access at these markets. Shoppers can now use benefits to purchase fresh and local produce, meats, cheeses and more; and the Baltimore Bucks program will double SNAP purchases up to $10 per week. In 2013, SNAP customers redeemed over $36,000 for food at the markets and received an additional $8,400 in Baltimore Bucks. BOPA now runs the program with very little technical assistance from BFPI.

Food Desert Map | One tool BFPI uses to help put all the food pieces into context is the food desert map. In collaboration with Johns Hopkins Center for a Livable Future (CLF), BFPI released a City-approved food desert map and definition in 2012. The food desert map reveals areas where residents lack access and sufficient economic resources to obtain healthy food. BFPI and CLF have been working to refine the measurement tools and collect additional data for the next update, which is scheduled for release in March 2014.

Food Desert Retail Strategy | BFPI uses the food desert map to understand Baltimore's food environment and to prioritize initiatives in certain areas. The Food Desert Retail Strategy—a collaboration between BFPI, BCHD and BDC—is one such initiative. In 2013, these partners began to lay the groundwork to accomplish goals for retaining and expanding quality grocery stores, creating a grocery job training facility, supporting food entrepreneurism, and providing technical assistance for healthier corner stores. Projects are currently in development for all of the above goals.

Food Policies | In addition to the above programmatic work, food policy measures aim to address underlying causes and barriers to healthier sustainable food provisions. For example, because all components of BFPI's work are impacted by the federal Farm Bill, BFPI used a variety of political channels to advocate for many of the Bill's programs. Furthermore, BFPI is also engaged in a number of other initiatives. Just to name a few tasks at hand, BFPI is working to extend the number of days that SNAP benefits are distributed throughout the month, ensuring that SNAP stores and vendors provide healthy options, using technological improvements to help farmers markets become more viable with better food access, and much more.

By balancing programs with research and policy, BFPI aspires to truly understand the role of food in Baltimore City and identify ways to expand a positive, healthy food environment for all of Baltimore's residents.

Learn more about the Baltimore Food Policy Initiative online:

https://www.baltimorecity.gov/Government/AgenciesDepartments/Planning/BaltimoreFoodPolicyInitiative.aspx

SUCCESS STORY: HOMEGROWN BALTIMORE

In June 2013, Mayor Stephanie Rawlings-Blake announced Homegrown Baltimore: Grow Local, Buy Local, Eat Local. It was the City's overarching initiative to support the growing, sales, and consumption of healthy, local, fresh food. This initiative stems from the work of the Baltimore Food Policy Initiative, as well as from key strategies specified within the Baltimore Sustainability Plan. In particular, Greening Goal 2, Strategy D, of the Sustainability Plan calls for the city to "develop an urban agriculture plan."

In early fall 2013, the City met that goal by releasing "Homegrown Baltimore: Grow Local," Baltimore's first urban agriculture plan. In response to the draft plan, farmers and other stakeholders submitted twenty sets of comments which were incorporated into the final version. The final plan received support from the Commission on Sustainability in October, and was adopted by the Planning Commission in November 2013.

The plan documents the history, benefits, and types of urban agriculture in Baltimore, including urban farms, community gardens, youth gardens and farms, home and rooftop gardens, aquaculture and aquaponics, and other uses, such as apiaries and orchards. It then lays out current local urban agricultural efforts and the policies that affect them, identifies challenges, and provides recommendations for City decision-makers, planners, and partners for building a more robust urban agriculture sector for Baltimore. The 25 recommendations in the plan are divided into five categories: Land, Water, Soil, Capital, and Support.

One recommendation—re-releasing and improving the Homegrown Baltimore: Land Leasing Initiative Request for Qualifications—was already underway before the year's end. Other priority recommendations are currently in the works, such as providing effective, accessible standards and guidance around identifying and managing soil contamination; and supporting incentives for commercial farms on privately-owned vacant land.

Read *Homegrown Baltimore: Grow Local*:
http://www.baltimoresustainability.org/homegrown-baltimore-grow-local

SUCCESS STORY: BALTIMORE CITY PUBLIC MARKET FEATURE

Anyone who has visited Baltimore's public markets knows that the wide variety of food options make choosing what to eat or purchase an overwhelming decision. In 2011, the Baltimore Food Policy Initiative (BFPI), in collaboration with the Lexington Market Corporation, launched Get Fresh Get Fit (GFGF) at Lexington Market to make the healthier choices the easiest choices. What started as an initiative to add new menu boards that would highlight healthy options has become a multifaceted program that strives to make public markets places where Baltimoreans can enjoy healthy food in lively and welcoming environments.

Each stall in the public markets is its own small business. BFPI and market management understood that vendors, due to the realities they faced as small businesses, would need extra support and technical assistance to serve and promote healthier options. In addition to providing nutritional analysis for participating GFGF vendor menu items, BFPI helped vendors make their customers' favorite food items healthier while tasting just as great. On market menu boards, these healthy choices are denoted by a green leaf symbol. In total, GFGF has installed 38 new menu boards across four markets.

To also increase the demand for healthy food, GFGF now offers social media assistance

to participating vendors to help boost their reach to new and existing customers. GFGF even created a new website that profiles healthy carryouts, helping customers decide where to eat! Many vendors have also committed to carrying more staple foods—milk, bread, meats, cereals, etc.—in order to make the markets more of a "one stop shop" for grocery needs.

Many pre-school aged children visit Lexington Market with their parents during the day; and older children come after school and on weekends. Through an assessment, the need for appropriate dining options for these young customers became apparent. GFGF is working with healthy carryout vendors to develop kids' menus that will offer kid-friendly portions at reasonable prices. GFGF is also developing interactive food-related art workshops to teach families about nutrition and portion control while kids make fun snacks. These Get Fresh Kids' initiatives will launch in spring 2014.

Northeast Public Market went through a major renovation in 2013 to make the market more vibrant and open to the local community. The market now has a "day stall" that will feature health-related programming by Johns Hopkins, as well as opportunities for small businesses. In 2014, the market plans to utilize the day stall as an occasional small business incubator for use by local food and craft entrepreneurs looking to understand the demand for new or unique products.

Baltimore is fortunate to have the country's longest running public market system. With innovative and healthy programming, GFGF is helping Baltimore's small businesses and market vendors thrive. BFPI values this Baltimore tradition and sees the markets serving as go-to places to shop, eat and visit for many years to come.

Find our more at:
http://getfreshbmoremarkets.com/

SUCCESS STORY: TREEKEEPERS

"TreeKeepers Rock!" So reads the subject line of one TreeKeepers' email messages, shared following a class on tree pruning. TreeKeepers is a city-wide tree stewardship program that launched in 2012 and is open to anyone interested in trees. TreeKeepers promotes healthy trees for Baltimore by educating people on the value of trees and best practices in tree planting and tree care. Through a series of in-class trainings and outdoor workshops, people can become certified Tree Planting Leaders and tree pruners in order to advocate for, as well as plant and care for trees in neighborhoods throughout the City.

TreeKeepers is the result of collaboration among many Baltimore groups involved with tree health. As a program of the Baltimore City's Department of Recreation and Parks, the TreeBaltimore program, and the Baltimore City Forestry Conservancy District Board, TreeKeepers is administered and funded by the Baltimore Tree Trust. Partnering organizations include Baltimore Green Space, Blue Water Baltimore, Parks & People Foundation, and the U.S Forest Service. The Office of Sustainability and the City's Horticultural Division are also contributing partners.

The response within this first year has been overwhelming, with 183 people attending and representing over 50 Baltimore City neighborhoods in addition to places in Harford, Baltimore and Carroll Counties, and even Portland, OR! Of these participants, nearly half have gone on to volunteer at tree plantings and nearly a quarter have completed the requirements to be certified as TreeKeepers Planting Leaders. As a result, more tree plantings are taking place all over the city and county. In 2013, TreeKeepers' partners had held 55 different volunteer events. TreeKeepers helped with tree plantings along neighborhood streets in McElderry and Morrell Park, on the grounds of Govans and Moravia Park Elementary schools, and within parks such as Cherry Hill, Gwynns Falls, and DeSoto.

Planting new trees, mulching, watering, and weeding around existing trees improves the chances of Baltimore's tree canopy to

flourish and continue to provide the greatest benefits, including cooling the air and our homes, giving off oxygen, slowing and filtering stormwater, and removing pollutants from the atmosphere among a number of other environmental returns on the original investment. Trees give back.

TreeKeepers give back. TreeKeepers are advocates, leaders, and forces of change. More people are now taking action to improve the tree canopy in their own neighborhoods. In Tuscany Canterbury, for instance, TreeKeepers finished a tree inventory this fall, researching and learning what species of trees grow in their public spaces. TreeKeepers in Fells Prospect, Butchers Hill, and Upper Fells Point surveyed and documented the unhealthy and dead trees, stumps, and opportunities for new plantings. Other neighborhoods—such as Greenmount West, McElderry Park, Mount Vernon-Belvedere, Bolton Hill, and Reservoir Hill—are 'treeing up' with the support of TreeKeepers. All of these accomplishments are welcome news, as healthier trees are critical for the health of our city, the urban ecosystem, and of our beloved bay! And it's all because people care and want to do something positive for their community.

Looking ahead to 2014, TreeKeepers are learning how to prune young trees and are anxious to learn how to identify tree species. A summer picnic is currently being planned as well as several signature social gatherings, known affectionately as 'TreeBeers.'

Tree advocacy and community forestry is a very positive movement growing in our city. Trees are good; but our TreeKeepers are truly awesome!

Learn more about TreeKeepers:
http://baltimoretreetrust.org/treekeepers

SUCCESS STORY: BMORE RAD

On a Sunday in October 2013, a crew from Civic Works, along with soil scientist Stuart Schwartz, cleared a vacant lot in east Baltimore to become the site of the "B'More Rad Project". This unassuming site is a pilot project to test the potential for using inexpensive, low-tech treatments for improving the soils in Baltimore's vacant lots. The "Rad" comes from the planting a cover crop of forage radish (also known as Daikon Radish), a practice that is being used in agricultural fields to improve soil conditions and enhance the yield of row crops. In agricultural settings, the radishes are killed by winter frost, leaving a hole in the ground bigger than the size of a carrot that loosens soils and creates pores for deeper water infiltration.

Throughout Baltimore, the highly compacted soils found on vacant lots present a challenging environment for efforts aimed at returning this land to beneficial uses, ranging from community gardens and urban agriculture to pocket parks. Soil improvements that help sustain grass and other vegetation also enhance the infiltration of rainfall and reduce polluted runoff to the harbor and Chesapeake Bay.

This first experiment on Perlman Place (which will be the future home of a satellite site of Civic Works' Real Food Farm) is intended to see how effectively the benefits observed in agricultural settings translate to the harsher environment of Baltimore's vacant lots. A 4,000 square foot area was tilled and seeded

with a mix of forage radish, clover, and oat. Soil conditions will be monitored by Stuart Schwartz and his students into the spring and summer of 2014 to identify any changes in the compaction, infiltration, and water-holding capacity of the soil. Two other small test plots, where the seed mix was distributed with no soil preparation, are also being informally tracked. Based on results, the plan is to expand the project to other vacant lots in Baltimore in 2014.

The project is a partnership between the non-profit Civic Works; the Center for Urban Environmental Research and Education at the University of Maryland, Baltimore County; the Baltimore Office of Sustainability; Department of Public Works / Surface Water Management Division, and Baltimore City Department of Recreation and Parks.

"B'More Rad" is a project of the Growing Green Initiative (GGi), a city-led effort to use sustainable, innovative, and cost-effective practices for re-using vacant land, reducing stormwater runoff, growing food, and greening neighborhoods to help mitigate the negative impacts of vacant land and set the stage for future redevelopment.

SUCCESS STORY: CARBON CHALLENGE

Residential housing represents a large portion of our carbon emissions. As noted by Bob Clark, Senior Engineered Wood Specialist for the American Plywood Association (APA), "when the industry and the public think about the environmental footprint of a home, it's often the energy use that's considered. But that discounts the amount of CO2 emitted to create the structure's materials—called embodied carbon." While most people are aware that forests help to address climate change by absorbing carbon dioxide, less well-known are the benefits of harvested wood products. Wood products emit less carbon during the manufacturing process and can actually store carbon, preventing it from being released and keeping it out of the atmosphere indefinitely. Substituting wood products in place of fossil fuel-intensive alternatives results in significant amounts of "avoided" GHG emissions.

On January 15th, 2013, Baltimore kicked off its participation in the nationally recognized, USDA Forest Service Carbon Challenge with the Baltimore Design Competition. This was one in a series of local Residential Carbon Challenge design competitions and educational seminars, where the USDA Forest Products Laboratory (FPL) and APA engages designers and builders to meet environmental challenges by rethinking current perceptions of construction materials. Envisioning a new urban future for the City of Baltimore, the Challenge encouraged students, professionals, and other participants to promote environmentally-friendly residential designs that would reduce carbon footprints and lower fossil fuel use.

"The row house is iconic to our City, and finding ways to advance its design for the future is beneficial to the City as a whole… Encouraging the design of a row-home that reduces greenhouse gases, and one that is affordable, helps us achieve our goal of a 15% reduction in greenhouse gas emissions by 2015." - Stephanie Rawlings-Blake, Mayor, City of Baltimore

Helping to implement the City's Sustainability Plan, the Carbon Challenge encourages recycling waste products and improving our urban forest. Furthermore, the Carbon

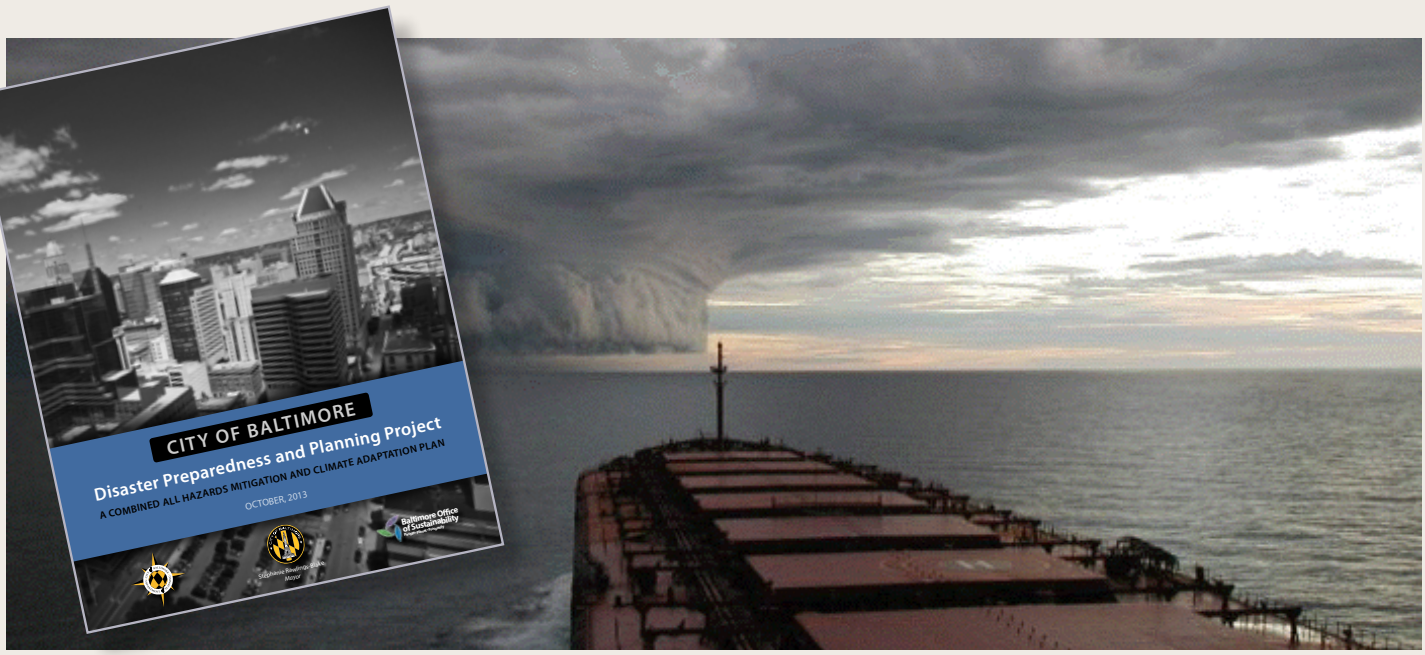
Challenge helps raise awareness about the potential to realize Baltimore's goal of reducing greenhouse gas emissions.

Helping participants make environmentally-conscious and sustainable choices in their designs, the Challenge used cutting-edge life-cycle assessment software from the Athena Sustainable Materials Institute. This software allowed designers to determine the impact of their proposal's GHG emissions, and propose designs with the smallest-possible carbon footprint for a Baltimore row house. Entries were judged according to several important environmental and construction-related criteria. Prizes were awarded based on a proposal's life-cycle assessment score and for demonstrating the best curb appeal, the most affordability, and the best use of wood products. As such, the Challenge served to educate today's architects, builders, and community groups about how sustainable design strategies can reduce fossil fuel use and address climate change.

The Carbon Challenge is a critical first step in rebuilding and revitalizing distressed Baltimore neighborhoods in ways that utilize undervalued wood resources, encourage the use of green infrastructure, create jobs, and spur local enterprise. Connecting to a real Baltimore neighborhood, the Challenge helps demonstrate how sustainable homes can positively impact a community.

The Carbon Challenge Baltimore Design Competition continues a long-standing relationship with the Forest Service, and implements innovative programs which build a new sustainable economy for Baltimore and help to grow our City. As we achieve success in transforming and growing our neighborhoods, this program will be used as a national model for sustainable urban wood resource management.

The Carbon Challenge Baltimore Design Competition was held in partnership with the City of Baltimore and AIA Baltimore, and supported by sponsors LP Building Products, Boise Cascade and Roseburg Forest Products.



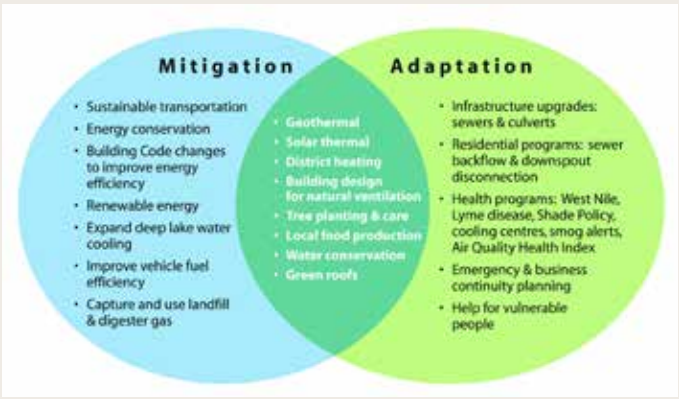
SUCCESS STORY: DISASTER PREPAREDNESS PROJECT & PLAN

Baltimore City is highly vulnerable to many natural hazards, ranging from coastal storms and flooding to extreme heat and high winds. There is strong consensus that these types of extreme events will increase, both in frequency and intensity, over the coming years. Recognizing the city's vulnerability to severe hazard events, Baltimore has undertaken a thorough, forward-thinking approach to resiliency planning. The Disaster Preparedness Project and Plan (DP3) builds upon the City's previous All-Hazards Mitigation Plan (2006) by integrating mitigation and adaptation considerations into a comprehensive plan. This 236-page document is comprised of three elements—hazards mitigation planning, floodplain mapping, and climate adaptation planning. This unique approach proactively strengthens Baltimore's resiliency now and for the future.

DP3 links research, outreach, and action to create a comprehensive and innovative risk-preparedness system for addressing existing and future impacts. Recognizing the interrelatedness of many of the City's systems, DP3 provides clear guidance to City government and citizens for taking action. The actions and recommendations identified in DP3 are wide-reaching, and impact every

HAZARD MITIGATION is sustained action taken to reduce or eliminate risk to people and their property from hazards. The purpose of mitigation planning is to identify policies and actions that can be implemented over the long-term to reduce risk.

CLIMATE ADAPTATION intends to reduce long-term risks from hazards associated with climate variability and climate change. More specifically, adaptation refers to changes that are made to better respond to new climate conditions, thereby reducing harm and taking advantage of present opportunities.



facet of planning and development. The plan focuses on mutually beneficial solutions that enhance existing systems while simultaneously increasing future resilience, and aims for economic, equitable, and environmental growth for Baltimore. The development of DP3 also included a vulnerability assessment of social, legal, economic and environmental consequences of various hazards, and conducted climate modeling for current and predicted impacts. This allowed the City to identify strategies to help minimize the City's vulnerabilities, reduce or eliminate loss of life and property damage, upgrade essential infrastructure and buildings, integrate redundancy into our existing systems, and increase overall resiliency to natural hazards.

A unique element of the DP3 process was the 40-person Advisory Committee, which brought together stakeholders from key agencies, institutions, businesses, and neighborhoods to help gather essential data and draft recommendations. The Advisory Committee met five times as a full committee and multiple times as subcommittees throughout the winter and spring of 2013; members participated in subcommittees based on the four main sectors identified in the plan (Infrastructure, Buildings, Natural Systems, and Public Services) as well as their specific areas of expertise.

Community input was essential in the development of DP3. The City held two large town hall events and nine small interactive community meetings that focused on gathering input, educating residents, and identifying actions. These meetings provided citizens with a better idea of how current and predicted hazards may affect them, and gave them an opportunity to identify actions for the city and their community in mitigating and adapting to those impacts. The City also met with local businesses, the Port Administration, private sector constituents, and local NGO's to gain support and integrate specific considerations from these groups. Engaging these stakeholders and community groups led to a much more comprehensive plan with a great deal of support and ownership by stakeholders.

DP3 provides a comprehensive framework for all of Baltimore's resilience and sustainability efforts moving forward. It prioritizes actions, identifies overlaps with existing efforts, recognizes opportunities for collaboration in implementation, and creates metrics for both short- and long-term success.

To learn more about the DP3, check out these resources:

http://www.baltimoresustainability.org/disaster-preparedness-and-planning-project

Or, visit our resiliency website:

http://baltimorehazards.wordpress.com/

SUCCESS STORY: FOREST PATCHES

In 2011, Baltimore Green Space received a call from concerned residents who feared that a beloved wooded area was going to be cleared. Baltimore Green Space, the City's land trust for community-managed open spaces, did its best to help the community—but there was no way to prevent the clearing of nearly 5,000 square feet of forest.

Spurred by this misfortune, Baltimore Green Space decided to learn more about non-park forested areas in the City and, in 2013, published "Baltimore's Forest Patches: Emerald Assets for Ecosystem Services." A forest patch is defined as a canopy of at least 10,000 square feet. While forest patches make up more than a third of Baltimore's canopy, only a small percentage of that canopy is protected within a city park; and patches that are outside of parks make up 20% of the City's overall tree canopy. The paper also highlights the role of residents who care for neighborhood forest patches and includes 4 goals to increase the preservation and health of forest patches. Since the paper was published, the Department of Housing and Community Development has agreed to not sell the forested land under its control.

Forest patches are areas with large trees, understory plants, and a "floor" of decomposing leaves and vegetation that absorbs rain like a sponge. These forest patches will play an increasingly important role in the coming years, as City government works to reduce the stormwater that flows to the Chesapeake Bay, reduce the heat island effect, improve air quality, and improve biodiversity.

Yet, most forest patches, especially those outside of parks, are vulnerable to being cleared. First, most of Baltimore's forest patches are smaller than the area required to be protected under current regulations. Second, many of our forest patches cross property lines. When a large forest is split into small pieces with different owners, it may not even technically "exist" under regulatory definitions and terms. Additional threats to forest patches include invasive plants—such as English Ivy, which can smother a forest—

and illegal dumping. That's when Forest Stewards entered the picture.

Since 2012, Baltimore Green Space has used the Forest Stewards Network to work with residents interested in learning to care for their local forest patches. The organization coordinates with volunteers, offers training and educational opportunities, and provides information about Baltimore's resources. Since the start of this program, the changes in Baltimore's forest patches have been impressive: dumping has been removed, trees now have relief from constricting ivy or other vines, numerous tree species were identified, and pathways were formed and cleared to encourage and guide visitors.

Many partners helped to create "Baltimore's Forest Patches" and guide the Forest Stewards Network, including the University of Maryland, Baltimore County; the Office of Sustainability; the U.S. Forest Service; and the Baltimore Ecosystem Study.

Forest patches provide residents with recreational opportunities, while providing valuable ecological services to the City as a whole. They clean water, clean the air, create healthier neighborhoods, and reduce summer temperatures. They provide crucial habitat for migratory and breeding birds. They can provide a venue for education and community involvement. Though, Baltimore currently lacks the appropriate tools to protect forest patches from destruction, Baltimore Green Space, and Baltimore's Forest Patches report identify critical steps and a plan of action for protecting these valuable resources.

Read the Baltimore Forest Patches Report online:

http://baltimoregreenspace.org/downloads/ForestPatchesWeb.pdf



SUCCESS STORY: BALTIMORE ORCHARD PROJECT

What if there were orchards instead of vacant city lots? What if anyone with even the smallest morsel of land could plant a tree and receive guidance for sustaining and harvesting it? And what if there was a way to grow fruit on public lands, or on private properties, and deliver to the approximately 120,000 Baltimoreans who are living in food deserts? Imagining the possibility, Rabbi Nina Beth Cardin considered all of these questions when she founded the Baltimore Orchard Project in 2011.

The Baltimore Orchard Project (BOP) is dedicated to improving the health of Baltimore's neighbors and neighborhoods through the creation of civic orchards and food forests, and through the distribution of fresh, healthy, local fruits to those in need. The BOP plants neighborhood-appropriate and neighborhood-run orchards and food forests by working with schools, congregations, universities, and community associations. The Project then harvests and distributes the fruit from these orchards along with harvests from other local mature fruit trees. To date, BOP has planted 240 trees—including apple, peach, fig, and chestnut—at 30 locations, and has helped organizations steward over 196 additional trees. "Planting young trees and stewarding legacy trees are both essential to bringing the gifts of fruit trees to Baltimore," says Cardin. "Fruit trees are a gift that one generation gives another."

Fruit and nut trees are prodigious; just one mature apple tree can yield up to 1,000 pounds of fruit every year for decades to come. The local green spaces that are created by these efforts also produce additional benefits, such as cleaner and better-managed soils, healthier air, plentiful stormwater absorption, neighborhood pocket-parks, renewable sources of free urban fruit, improved nutrition among neighborhood residents, increased agricultural skills and knowledge, and strengthened civic and community pride.

The BOP currently runs three major programs: (1) harvesting mature urban fruit trees and distributing their fruit through charitable organizations (food pantries, soup kitchens, shelters, congregations, etc.) and mobile food markets; (2) partnering with local groups

to provide the guidance and skills to design, plant, and manage their own orchards/food forests; and (3) reclaiming and teaching the lost knowledge of propagating and managing local fruit and nut trees, and about the emerging field of food forests, so that these resources may thrive in our city.

The BOP recently expanded its mission to include the distribution of harvested fruit beyond the charitable sites to include mobile food markets that visit neighborhood food deserts. While the BOP continues to donate the bulk of its harvest through charitable distribution channels, it has been increasing distribution through a market-based response in order to expand the consumer base for fresh fruits in food deserts and to create an economically sustainable model for fresh, local, fruit distribution.

Furthermore, the BOP is in the midst of the inaugural year-long Fruit and Nut Tree Academy, where the BOP teaches 30 students how to care for and manage fruit and nut trees in the Baltimore area. Several of these students will go on to become volunteer BOP site consultants who will work with schools, congregations, and other planting partners to guide them through the planning, designing, and implementation of their orchards or food forests.

In January 2014, the BOP was recognized as one of Baltimore's new social innovators by the Baltimore Social Innovation Journal. Additionally, in February 2014, the BOP presented at the USDA's annual Forestry forum in Washington, DC, as a premier representative of this dynamic food forestry movement that the agency believes holds great promise.

Rabbi Cardin has a rich vision of BOP's future: "Through the partnership of hundreds of neighborhood orchards and food forests, we help Baltimore feed all her inhabitants, strengthen her economy, green her environment, guarantee her resilience and deepen our shared sense of pride, caring and belonging."

Read more about the Baltimore Orchard Project!

http://www.baltimoreorchard.org/

SUCCESS STORY: GREENSCAPE

In 2011, the Baltimore Office of Sustainability started the Student Environmental Leadership Action Team (SELAT), an arm of the Baltimore Green Schools Network. More than 80 students, teachers, parents, and supporters have participated in SELAT meetings since then, representing schools from across the city. The group provides the youth voice on environmental issues to the Baltimore City Public School System, and has made two presentations to the Baltimore City School Board so far.

In 2013, one of SELAT's major goals was to hold an end-of-the-school-year event to recognize student environmental work. Part celebration, part conversation, and all about building youth environmental leadership in Baltimore City, GreenScape 2013: A Green Schools Summit took place on Tuesday, May 28, 2013 at Baltimore Polytechnic High School, and was attended by hundreds of Baltimore City students, parents, teachers, and youth advocates. Highlights from the event included:

- The premiere screening of Baltimore City Green Teams Speak Out, a new video by New Lens Productions that explores the work of youth environmental leaders at five Baltimore City public schools. Watch it here: http://vimeo.com/68800599
- An interactive visual exhibit combined with peer interviews based around the question "What is a green school?", curated by the Neighborhood Design Center.
- Recognition for fifty-four City Schools doing great green projects, as well as six newly certified (and one recertifying) Maryland Green Schools in Baltimore City.
- Green Games contests provided by the Greater Baltimore Children and Nature Collaborative.
- Food by the locally-owned Boheme Café, and music by the Frederick Douglass High School Jazz Band Trio.

GreenScape 2013 served as a platform for empowering the green youth movement in Baltimore in a broader way than ever before. Check out a video of the event, also created by New Lens, here: http://vimeo.com/73144789. SELAT is currently working on planning the 2014 end of year celebration.

SUCCESS STORY: GOING FOR THE GREENEST GOLD

Is orange the new green? The Baltimore Orioles would certainly say so! The renovation of the Ed Smith Stadium, the Orioles' Spring Training home in Sarasota, FL, was registered for the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) certification in 2010. Its "green" and sustainable practices offset 70% of energy; conserve and recycle water; use solar-heating systems for locker room showers; use creative helmet-shaped bins called "Fan Cans" to encourage recycling; and donates leftover concessionaries to the All Faith's Food Bank to ensure leftover food is not wasted. Additionally, the Sarasota stadium has partnered with other local organizations to improve community outreach and involvement.

The Orioles continue to demonstrate their dedication to supporting environmental causes; for instance, by auctioning their green St. Patrick's Day ball caps to benefit local organizations. In 2013, shortly after the Orioles became a member of the Sarasota County Green Business Partnership, the team auctioned off the green caps worn during two games in support of Sarasota-based hospitals that treat animals harmed by environmental causes.

On Earth Day, after the Orioles returned to Baltimore, the team announced a series of "Go Green" initiatives to make their in-season home, Oriole Park at Camden Yards, more environmentally friendly. Targeting everything from ballpark operations to transportation, Oriole Park is working hard to reduce its impact. While Oriole Park is already conveniently accessible by Baltimore's Light Rail, Metro Subway, and Bus services, the stadium now encourages guests to bike by providing a designated Bicycle Parking Area, accommodating more than 100 bikes. According to their "Go Green" webpage, additional efforts include:

- More than 100 recycling containers to recycle over 600,000 lb. annually.
- Paperless ticket options to reduce paper waste.
- Efficient fixtures to conserve electricity and water resources.
- Use of only "green-friendly" cleaning products.

- Enhanced air quality due to its smoke-free facility designation.
- A composting program, adding that Dempsey's Brew Pub & Restaurant will practice composting year-round.
- Turning nearly 5,000 gallons of cooking oil into biodiesel annually.
- Eco-friendly concession supplies.
- Partnership with the Greener Fields Together program to source local and sustainable food.

But the Orioles aren't Baltimore's only green team, and in 2013 the Baltimore Ravens enjoyed a golden year. Not only did the team become a two-time Super Bowl champion after their victory against the San Francisco 49ers at the Super Bowl XLVII game, but their home, the M&T Bank Stadium ("The Bank"), beat the 49ers' Levi Stadium in a race to be the nation's first outdoor professional sports facility to earn a LEED "Gold" rating. Baltimore proudly earned that title when The Bank's 1.6 million square foot, two-part renovation and energy reduction project was completed in 2013.

What originally started as an attempt to reduce utility expenses enough to fit a constrained budget, the sustainability initiatives at The Bank turned into something larger. By initiating strategies like cutting power to refrigerator units during off-peak hours, installing LED score boards, and using automatic light switches, The Bank brought electricity use down more than 30% from nearly 16 million kilowatt hours (kWh) in 2005 to just under 11 million in 2012. This generated a savings of over 5 million kWh, or enough to heat about 440 homes for a year! In addition to the incredible energy savings, The Bank boasts:

- Offsets of 123,070 metric tons of GHG emissions.
- A "Green Cleaning" program: improving air quality and reducing wastes.
- 43% reduction in water consumption: made possibly by installing 400 waterless urinals and using other water efficient restroom fixtures.
- Additional 30% reduction of potable water consumption: generated by the stadium's efficient irrigation system and adaptive vegetation.
- Recycling 31% of waste: Seven years ago, the Stadium was recycling only 2 tons of trash per game. In 2012, The Bank recycled 13 to 14 tons. "And what wasn't recycled was burned and converted into steam. Nothing goes into a landfill" (Quoting Jeff Provenzano, in Rathbone 2013).
- A Sustainable Purchasing Policy for all purchases.
- Public transportation use: encouraging visitors to use public transportation by offering a "Ravens Ride" program. Additionally, 38% of Stadium staff use alternative transportation.

Together, these two teams demonstrate how Baltimore strives to set high, national standards. They are supporting the work of the Green Sports Alliance, a non-profit organization started in 2010 to help sports teams, venues, and leagues enhance their environmental performance. Members include Major League Baseball and other national sports leagues. Likewise, the Baltimore Orioles and the Oriole Park at Camden Yards Ballpark are members of the Alliance. However, while the Baltimore Ravens are a member team of the Alliance, the National Football League, as a whole, is not. In fact, the Ravens are one out of only 12 of the 32 NFL teams that are member organizations.

Learn more about the two stadiums:

http://www.baltimoreravens.com/gameday/mt-bank-stadium/stadium-info.html

http://baltimore.orioles.mlb.com/bal/ballpark/gogreen.jsp

SUCCESS STORY: STORMWATER BILL

A collapsed culvert leaves a street impassable and a neighborhood destabilized. An unstable slope washes away into the river below, leaving the above roadway unusable. A faulty storm drain outfall erodes, polluting the water downstream. All of these problems—on Race Street in South Baltimore; at Biddison Run, along Moravia Road in East Baltimore; and in the Gwynns Falls of West Baltimore's Leakin Park—have lingered for years without adequate funding for permanent fixes.

Fortunately, all three of these hazards have repairs getting underway in the coming year, leading the way toward a safer, cleaner, healthier Baltimore. And at least three more capital projects, in addition to preparations for thousands of new storm sewer inlet screens, are also in the near future. This robust, ambitious schedule was made possible thanks to funding generated by the Maryland Stormwater Fee.

The fee, authorized in 2012 by the Maryland General Assembly, required Baltimore and nine of the state's largest jurisdictions to establish a funding mechanism to finance the management and reduction of polluted runoff. In November 2012, Baltimore City residents voted in support of legislation to create a new Stormwater Utility to manage these fees, which are levied on all private property, in addition to properties owned by the federal government. Fees are based on the amount of impervious surface area contributing to Baltimore's runoff problem, and vary depending on the property type and ownership. For example, non profits pay a flat rate at a significantly reduced cost.

In addition to hardship exemptions, customers can lower fees by taking steps to reduce the amount of impervious surfaces on their properties. In 2013, property owners learned how to take advantage of numerous credits that rewarded them for reducing runoff and protecting the Baltimore's streams. The fee went into effect in the summer of 2013, and the first bills were mailed out in September with quarterly water bills.

In addition to updating critical infrastructure malfunctions, Stormwater Fee revenues help to fund a dramatic expansion of mechanical street sweeping in Baltimore. This service, traditionally confined to the City's central core and commuter routes, is now reaching into every community. Regular removal of trash and grit, as well as yard and automotive wastes, will help keep Baltimore's neighborhoods and urban streams clean and healthy.

Work funded by the Maryland Stormwater Fee, and work that earns fee credits, is making Baltimore cleaner, greener, and safer.

A wealth of additional information about the stormwater fee is available on DPW's website under the 'stormwater' tab.

http://cleanwaterbaltimore.org/

Customers may earn credits against their fee by removing impervious surface from their property, or adopting best management practices like installing rain gardens or planting trees. Single-family properties may also earn credits by participating in organized clean ups or other approved activities.

SUCCESS STORY: TOUR DEM PARKS

A hidden treasure, Baltimore's new Gwynns Falls Trail was falling short of its potential in 2003. Although the City and its partners had invested a great deal of energy and resources into the Trail, bicyclists weren't taking advantage of this gem. Perhaps cyclists were unaware of the Trail, or maybe they were wary to ride in the City. Whatever the reason, one thing was certain: the glaring absence of bicyclists on the Gwynns Falls Trail was a challenge that needed to be addressed.

The intent was to attract bicyclists and pedestrians to the Trail; but that idea grew. In promoting the Gwynns Falls Trail, there appeared an opportunity to showcase all of Baltimore's fantastic parks. In a moment of inspiration, the Mayor's Bicycle Advisory Committee imagined an event that would invite participants to ride along the Gwynns Falls Trail and throughout other parks while reassuring local cyclists that riding in the City can be both safe and fun! Even more, funds raised by such an event could support the growth and maintenance of Baltimore's public parks and trails. This proposal, however, was no small order. At that time, the City probably wouldn't have been described as "bike-friendly." Nevertheless, avid cyclists saw great promise, and Tour Dem Parks was born.

Tour Dem Parks offers four different routes of varying distances, all of which are leisurely rides. The shortest route, a 12-mile Family Ride, is focused exclusively on the Gwynns Falls, meandering through its lush greenery. This route is ideal for families with younger children because, with the exception of a

few street crossings where volunteers help direct traffic, the ride is separated from traffic.

Participants can also choose from the 25-mile Le Petite Tour, the 36-mile Le Grand Tour, or the 65-mile Metric Century—all of which begin at Carroll Park. In addition to the Gwynns Falls and Jones Falls Trails, the routes travel through some of Baltimore's largest parks, including Leakin/Gwynns Falls Park, Druid Hill, Wyman Park, Clifton Park, Herring Run, Patterson Park, Federal Hill, Riverside, Latrobe Parks, and Lake Montebello.

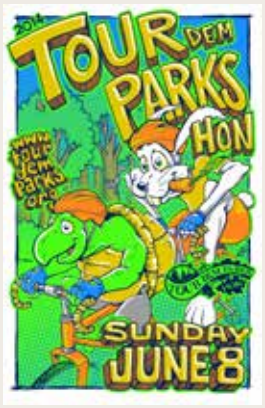
Tour Dem Parks intentionally does not close roads or reserve lanes for its riders. Instead, the event introduces cyclists to biking in the City. If participants enjoy the ride, they'll be comfortable returning for every other weekend of the year!

Of course, the fun doesn't stop at the end of the ride. As cyclists complete their routes and return to Carroll Park, they enjoy a cook-out and some live-music. Then, while cyclists wait another 364 days until the next Tour Dem Parks, they can make a fashion statement by wearing the unique Tour Dem Park tees, designed each year by a local artist.

Overall, the success of Tour Dem Parks was unimaginable. The positive experience provided by Tour Dem Parks, along with the City's improved bike accommodations, has led to a steady increase in the number of bicyclists seen throughout Baltimore's vibrant streets, neighborhoods, and parks. Every year, Tour Dem Parks has attracted more riders. In June 2013, in its eleventh year, Tour Dem Parks had more than 1,100 pre-registered participants. In addition to last-minute riders who joined the festivities that morning, it was the best turn-out yet! Tour Dem Parks continues to raise more money for Baltimore City parks, as well as for various cycling and "friends of" groups. And just as important (if not more so), thousands of cyclists have been exposed to riding in Baltimore while they discover hidden parks, trails, and neighborhoods that many

would have never experienced had they not participated in Tour Dem Parks!

Thanks to Tour Dem Parks, cyclists are exposed to areas of Baltimore that they may have never seen and ride through areas they may have never considered. Beyond having a good time and supporting Baltimore's parks and green spaces, participants learn something about bicycling in the City and they learn something about themselves: they discover that they are capable. Biking in Baltimore is not reserved to the fearless and brave; it's an activity that anyone can enjoy!



Be sure to check out the Tour Dem Parks website and register for the 12TH annual ride on Sunday, June 8, 2014!

http://tourdemparks.org/

SUCCESS STORY: BROADWAY EAST COMMUNITY PARK

On June 15, 2013, a joint effort between the Parks & People Foundation, Humanim, and the City of Baltimore transformed a block of 18 vacant rowhouses in Broadway East into a new community park. This collaboration was recognized by the Maryland Department of the Environment and the Maryland Department of Natural Resources (MDNR) as the recipient of the 2013 Smart, Green, and Growing Award.

The City invested over $875,000 to initiate the project. The Office of Sustainability worked with Humanim to develop the park concept design, which was further developed by engineers at QODESHCM and landscape architects from Mahan Rykiel. Nearly $179,000 in park improvements were funded primarily through MDNR's Maryland Chesapeake and Atlantic Coastal Bays Trust Fund, and through Boise ASPEN Recycled Papers, through their "Project UP" partnership with the Alliance for Community Trees.

Partners came together with 60 volunteers from the community and nearby churches to plant 30 trees and hundreds of shrubs and other plants. Youth participants were engaged in storm drain stenciling.

The park boasts a number of sustainability improvements. Significant soil removal replaced compacted urban soils with soils that can absorb rain water and support plant growth. Allowing stormwater to drain to the improved soils below, the sidewalks around the perimeter, the circular gathering space at the center of the park, and the site's parking area had been constructed using pervious concrete and pavers. Other features include benches and a trash/recycling container made of recycled materials.

"This community gem is a beautiful example of what happens when partners come together with a common purpose that truly care about Baltimore and its communities," stated Humanim CEO Henry Posko. "Without the vision and work of Parks & People Foundation, this could have never happened. The park transformed a place of despair into a place where people of all ages come together…it has been amazing to witness the transformation."

DATA AND INDICATORS

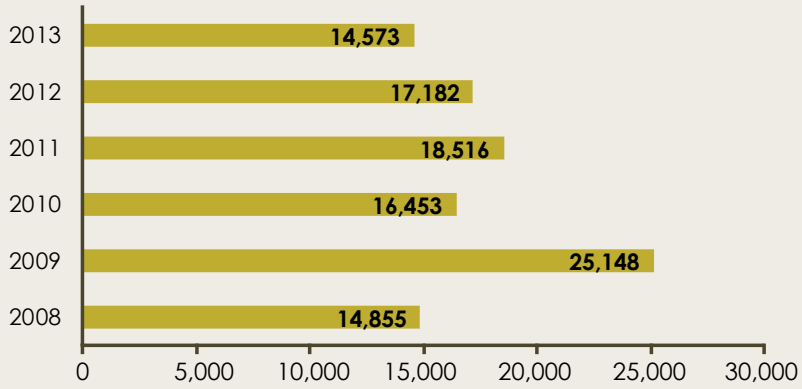
The proper use of science is not to conquer nature but to live in it.

-Barry Commoner

CLEANLINESS

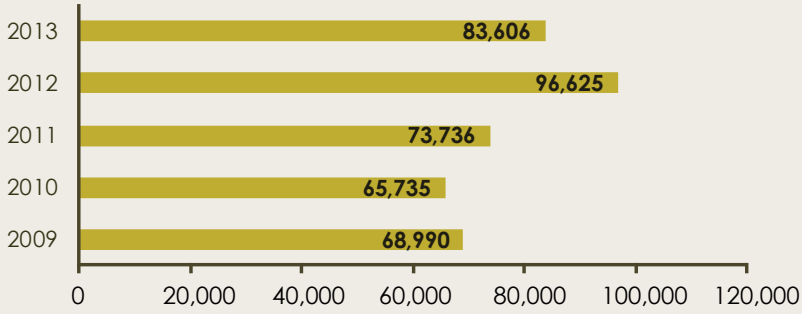
CLEAN STREETS

NUMBER OF SERVICE CALLS FOR DIRTY STREETS



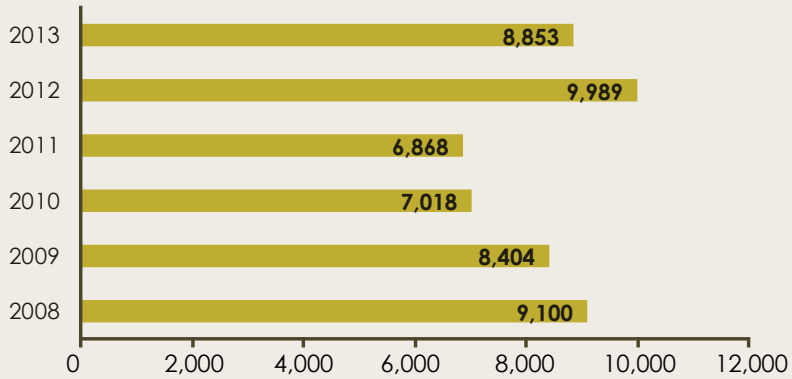
As noted in the Sustainability Plan, litter in the streets, neighborhoods, public spaces, and stormdrains of Baltimore is a significant challenge. Efforts have been made to improve enforcement of the sanitation code, but the city also relies on residents to place calls and alert officials to issues in their community. In 2013, there were 14,573 calls made, fewer than in 2012. However, there were an additional 44,982 Proactive Dirty Street Service Requests (not shown in the chart) created by the Bureau of Solid Waste, for a total of 59,555 in the 2013 calendar year.

MILES OF STREETS SWEPT



In 2013, there was a decrease in the number of miles of street that were swept. In 2012, there were more than 96,000 miles of street swept. In 2013, there were 83,606 miles of street swept.

TONNAGE COLLECTED FROM STREET SWEEPING

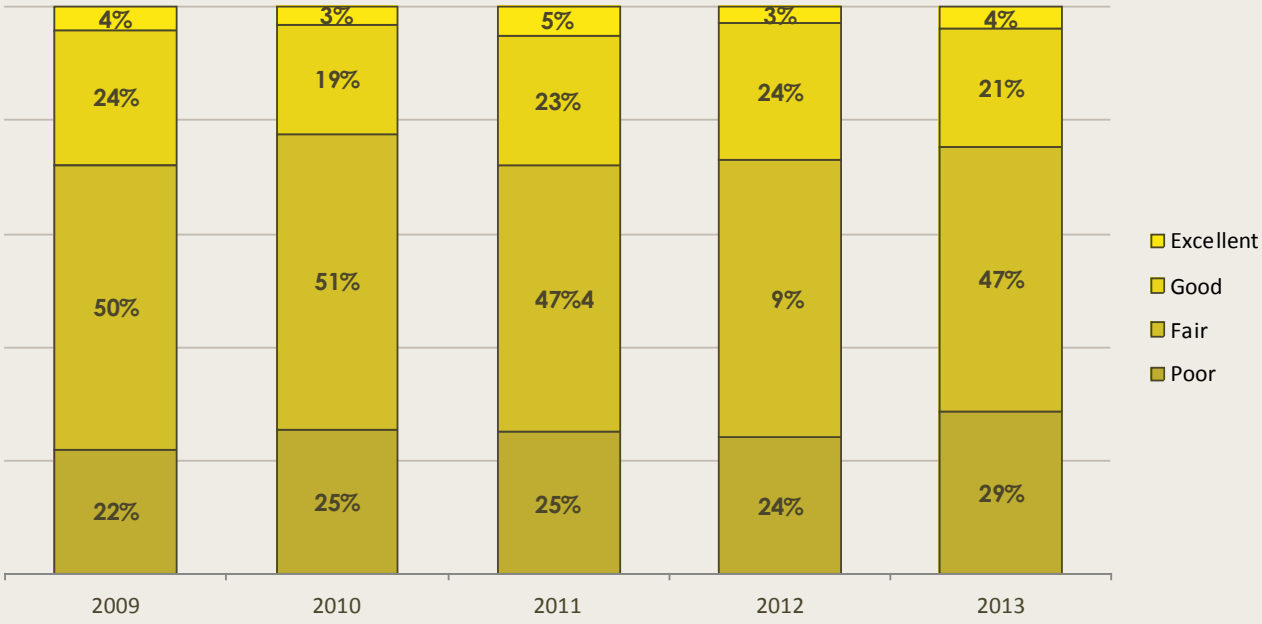


In 2013, there was a decrease in the tonnage collected from street sweeping in the City of Baltimore. Tonnage was down to 8,853 from 9,989 in 2012.

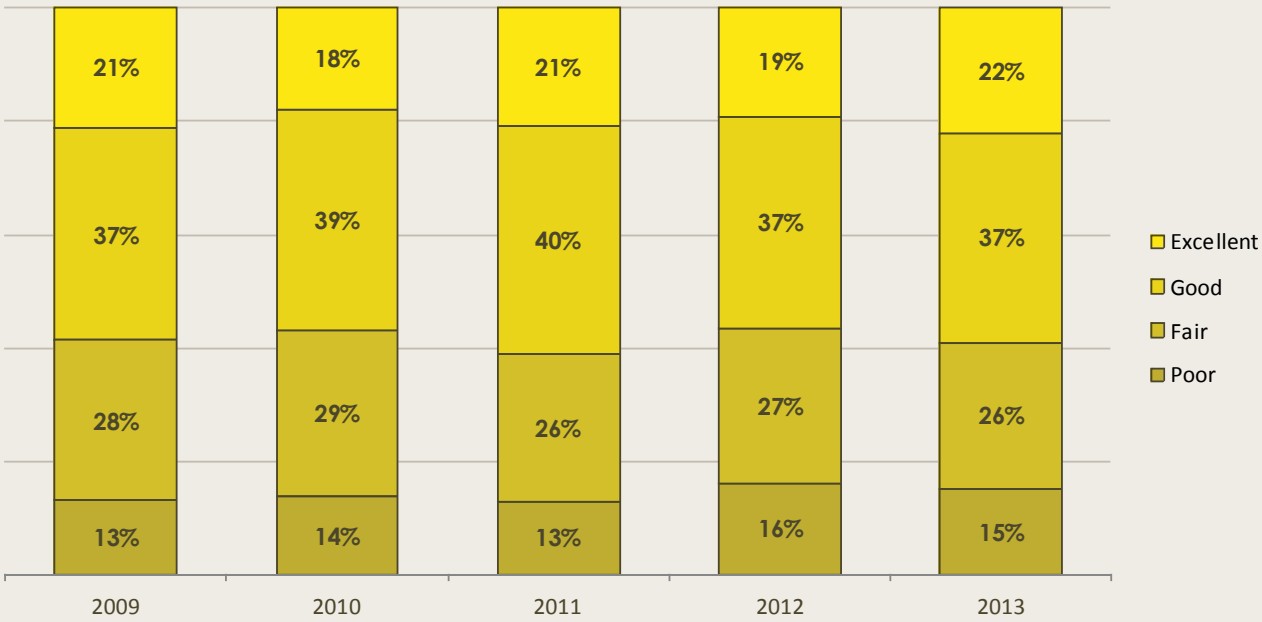
CLEANLINESS

PERCEPTION OF CLEANLINESS

PERCEIVED CLEANLINESS OF THE CITY



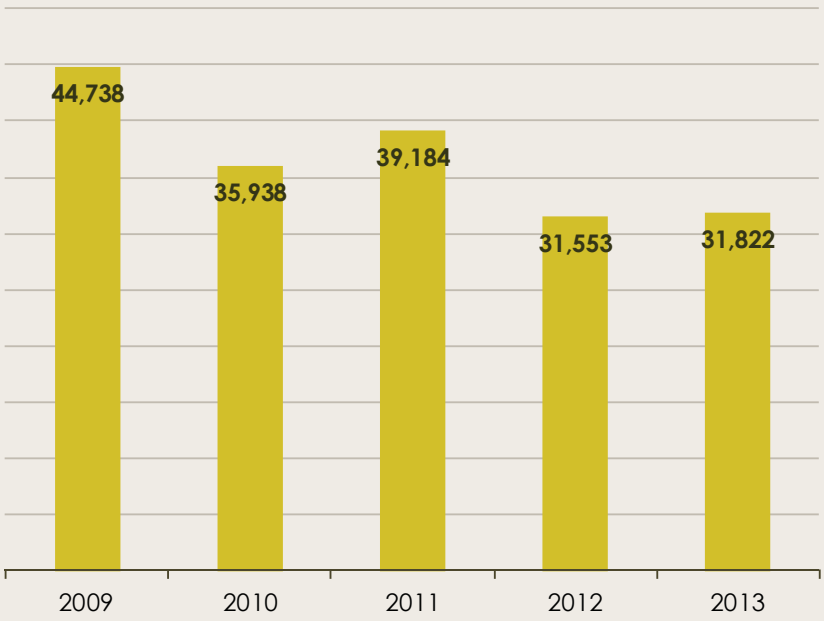
PERCEIVED CLEANLINESS OF "MY" NEIGHBORHOOD



The Baltimore Citizens Survey is conducted every year by the City's Finance Department. Citizens respond to a variety of questions, including their perception of cleanliness, both citywide (top), and for their own neighborhood (bottom). Residents typically believe their own neighborhoods to be cleaner than the City as a whole. In 2013, 23% reported that they felt their neighborhood's cleanliness was excellent, the highest since 2009. At the same time, 29% of respondents rated their overall perception of cleanliness for the entire city as being poor, the highest yet.

CLEANLINESS

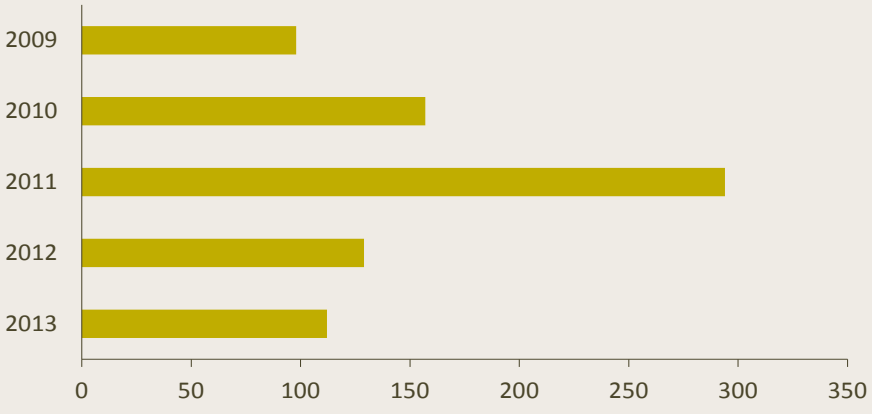
HCD ISSUED TRASH RELATED CITATIONS



The Housing and Community Development Code Enforcement Division continues to focus substantial resources on enforcing sanitation codes involving trash and litter. In addition to the use of citations, DHCD also maintains 26 cameras located at sites with a history of illegal dumping. Individuals caught on camera dumping are prosecuted by DHCD under the State Litter Control Law.

ADOPT-A-LOT LICENSES

NUMBER OF LOTS ADOPTED

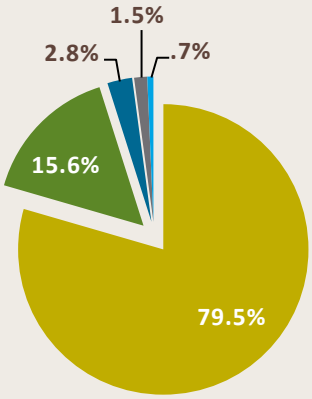


The City of Baltimore's Adopt-A-Lot program is specifically designed for community gardens and neighborhood beautification. Residents and neighborhood organizations can complete an Adopt-A-Lot License Agreement, and transform vacant lots into assets for their communities. In 2011, the City partnered with the Water Department to provide access to water for adopted lots for a low fixed rate, making it easier to maintain these beautified spaces. For information on available lots in your neighborhood, or for an application, call 410-396-4111, email V2V@baltimorecity.gov, or visit http://www.baltimorehousing.org/vtov_adopt

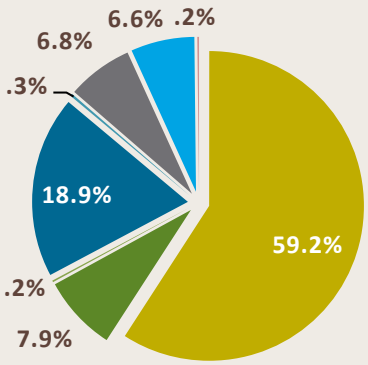
POLLUTION PREVENTION

GREENHOUSE GAS EMISSIONS INVENTORY

BALTIMORE COMMUNITY-WIDE GREENHOUSE GAS EMISSIONS INVENTORY, 2010 BASELINE



BALTIMORE CITY GOVERNMENT GREENHOUSE GAS EMISSIONS INVENTORY, 2010 BASELINE

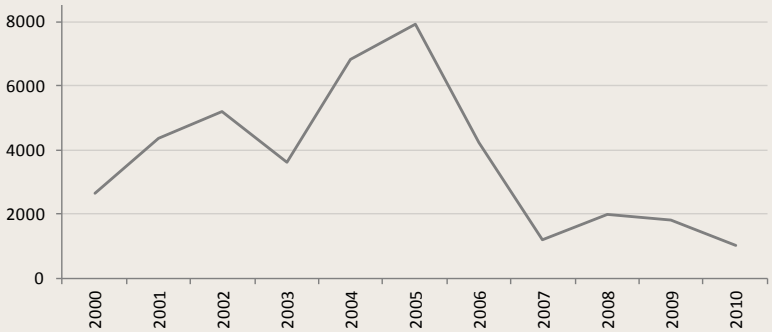


These charts remain unchanged since 2010, when Baltimore completed its Greenhouse Gas Emissions inventory for the City's Community-Wide data. The City of Baltimore Greenhouse Gas Emissions Inventory update occurred as part of the Climate Action Plan development that occurred in 2012. The City's consultant, AECOM, also completed a peer review of the data and assisted in analysis. The 2010 Greenhouse Gas Emissions inventory for the City's Community-Wide data, showed total emissions of 7,579,144 MT CO2e/yr. Total emissions for City Government were 588,170 MT CO2e/yr. The 2010 Greenhouse Gas Emissions Inventory will now serve as the baseline inventory for the City of Baltimore. With the development of the City's Climate Action Plan, we expect to see reductions as measures are implemented. The next emissions inventory will take place in 2014.

- Buildings & Facilities
- Streetlights & Traffic Lights
- Water Delivery Facilities
- Wastewater Facilities
- Solid Waste Facilities
- Vehicle Fleet
- Employee Commute
- Transit Fleet

STORM DRAIN AND INLET CLEANING

AMOUNT OF DEBRIS REMOVED (in Tons)

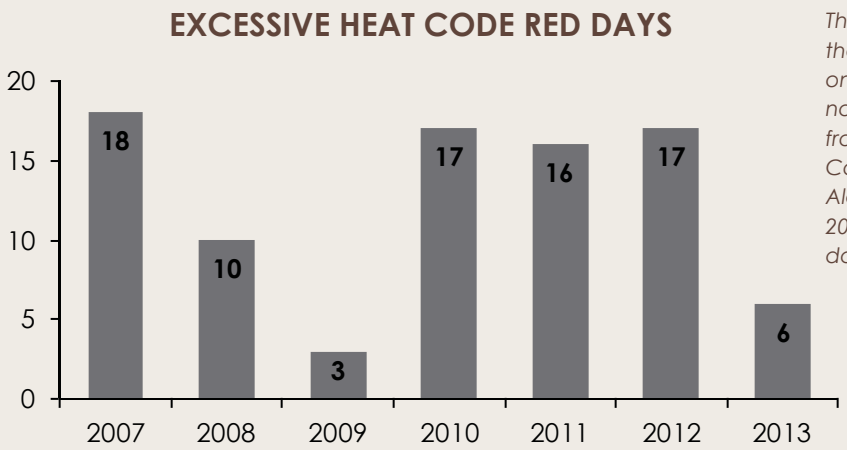


An important aspect of ensuring that our water bodies are swimmable and fishable is keeping trash and debris from entering the stormwater system.

At the time of publication, storm drain and inlet cleaning data for 2013 was not yet available. Updates to the data, when available, will be made available online.

POLLUTION PREVENTION

CODE RED DAYS IN BALTIMORE CITY



The Health Department has established the Code Red declaration criteria based on historical information, climatological norms, and guidance documents from other jurisdictions. The City Health Commissioner declares a Code Red Heat Alert during periods of extreme heat. In 2013, Baltimore experienced 6 code red days which was a decrease from 2012.

AIR QUALITY CODE RED DAYS

	Number of days				
	2009	2010	2011	2012	2013
Very Unhealthy	0	0	0	0	0
Unhealthy	1	6	5	2	0
Unhealthy for Sensitive Groups	10	30	19	20	7
Moderate	58	66	53	60	136
Good	252	259	286	284	222

The Air Quality Index (AQI) is used to forecaste and report on daily air quality for Metro Baltimore. The AQI utilizes a numerical, and color coded scale to report on the air quality, and it is calculated on the presence of the following five air pollutants: particulate matter, ozone, carbon monoxide, sulfur dioxide, and nitrogen oxide. In 2013, we see a large jump in the number of Moderate AQI days. It's important to recognize, however, that values of recent years are preliminary data and are subject to revision. For a description of each classification, see http://www.cleanairpartners.net/
Source: Clean Air Partners

POLLUTION PREVENTION

PREVENTION PROGRAMS IN BALTIMORE

GREEN & HEALTHY HOMES INITIATIVE

	2009	2010	2011	2012	2013
Properties receiving lead hazard reduction interventions	323	165	121	139	53
Properties receiving Healthy Homes interventions to reduce indoor allergens and safety hazards	261	201	123	127	102
Tenants provided with tenant's rights assistance to repair lead hazards in their home	414	152	153	3,093	195
Families receiving relocation assistance from lead hazardous housing to lead certified housing	213	62	43	35	33
Properties receiving weatherization and energy efficiency interventions	*New for 2013*				283

While not exhaustive, these figures illustrate examples of ongoing efforts in Baltimore to improve the health of indoor environments. Educating home owners on the risks of lead and indoor environmental hazards is crucial to help abate the problems that exist in Baltimore.

HEALTH DEPARTMENT INDOOR ENVIRONMENT IMPROVEMENT PROGRAMS

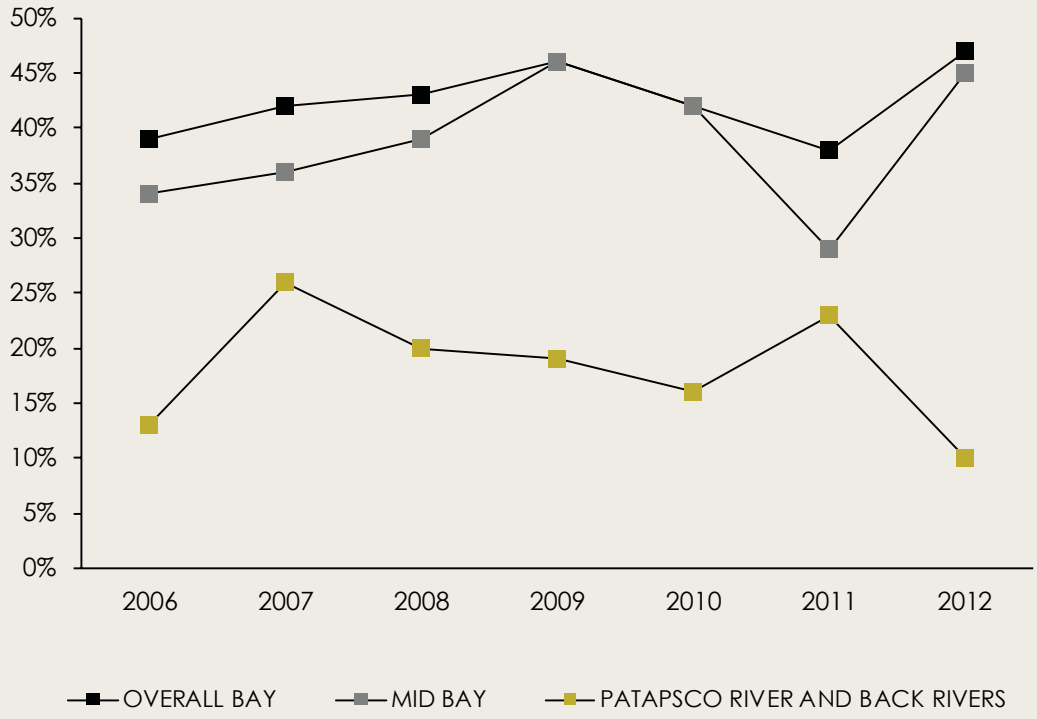
	2009	2010	2011	2012	2013
People trained in home environmental asthma	N/A	368	365	455	359
People trained in lead and healthy home interventions	1,580	1,058	400	378	268
People trained on integrated pest management/bed bugs	N/A	1,750	N/A	556	360
Families provided with a comprehensive home visit to assess conditions	2,633	1,108	600	502	553
People who received lead and healthy homes materials and outreach at health fairs	37,269	39,229	N/A	10,000*	8,425*

**Approximate*

Effective education and outreach by City government and non-profit partners has helped combat lead poisoning cases in the City of Baltimore. The City and its non-profit partners are committed to lowering the number of ER visits related to asthma by offering comprehensive education programs geared towards asthma management. Integrated Pest Management (IPM) is an effective approach to pest management that is environmentally friendly and cost effective. In 2012, the CDC revised the level of concern for lead exposure from 10ug/dL to 5ug/dL. The City is offering a voluntary program to residents to address the concerns around low level lead exposure.

POLLUTION PREVENTION

BAY HEALTH INDEX SCORES



The Bay Heath Index rates 15 reporting regions of the Bay using six indicators that are combined into a single overarching index of health. The 2012 Index is the most recent report available. Included are figures for Overall Bay, Mid Bay, and Patapsco and Back Rivers which flow through Baltimore. In 2012, we saw a rise in scores for the Overall Bay and Mid Bay. However, the reverse trend was seen in the Patapsco and Back River areas, which dropped from a score of 23% to 10%. This is a significant drop in the Bay Health Index for the region most closely associated with Baltimore.

EPA & BROWNFIELDS PROGRAMS

	2009	2010	2011	2012	2013
EPA-funded Site Assessments	4	1	7	6	8
Baltimore Brownfields Tax Credits	4	0	1	8	0

Enacted in 1998, the Baltimore Brownfields Tax Credit is designed to encourage the cleanup and redevelopment of contaminated and often abandoned and/or underutilized properties in the City of Baltimore. This program offers a city property tax credit on the increased property taxes owed following the completion of eligible improvements (improved value). As part of the City's Brownfields Initiative, grant funding is available from the US Environmental Protection Agency on a first-come, first-served basis to developers that need to conduct Phase I and Phase II environmental site assessments on sites that are in the redevelopment process. Preference is given to properties that will be redeveloped in a timely fashion and that will generate new jobs and associated tax revenue for the City. Although there were no approved tax credits in 2013, there were a total of eight EPA-funded site assessments.

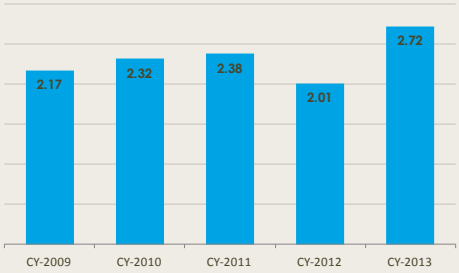
RESOURCE CONSERVATION

BALTIMORE CITY ENERGY USAGE

CITY GOVERNMENT ENERGY USAGE

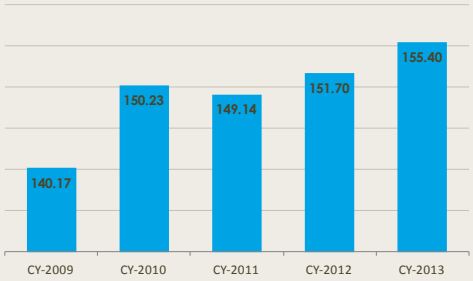
Electric Usage (in millions of kWh)

Natural Gas Usage (in millions of Therms)

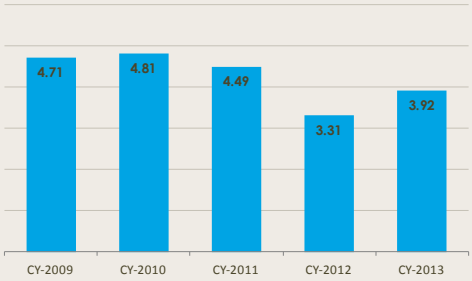


BALTIMORE CITY PUBLIC SCHOOLS ENERGY USAGE

Electric Usage (in millions of kWh)



Natural Gas Usage (in millions of Therms)

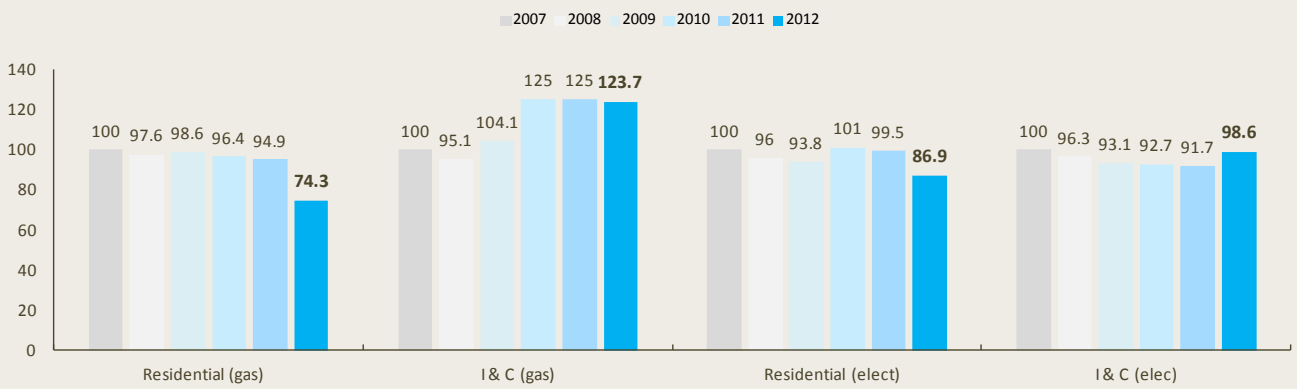


This data section reports on energy usage for City Government and Baltimore City Public Schools.

The City of Baltimore has been implementing energy saving features in a number of City buildings. However, while energy usage was much lower in 2012 than in previouis years, the City's 2013 energy usage increased once again.

Similarly, 2013 energy usage for BCPS increased for both electric usage and for natural gas usage. There was a 2.4% increase in electric usage 2013, and nearly a 19% increase in natural gas usage.

ENERGY USE RELATIVE TO 2007 BASELINE

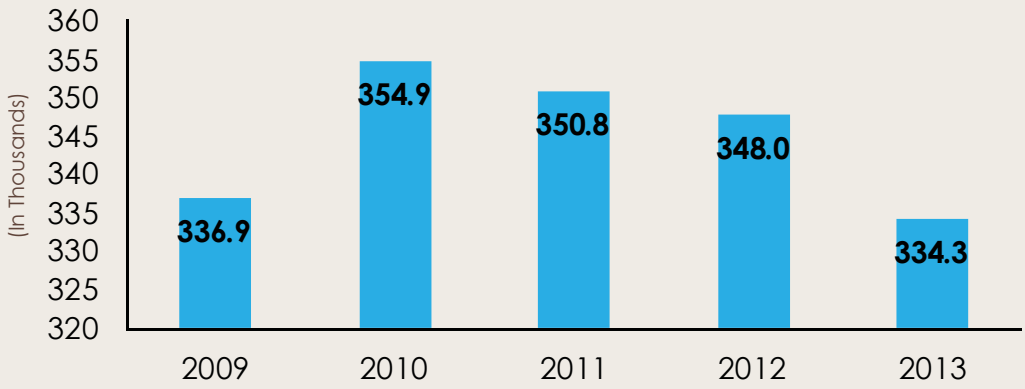


Changes in electricity and natural gas consumption are affected by a variety of factors including weather variations, behavior changes, economic health, technology, and population shifts.

RESOURCE CONSERVATION

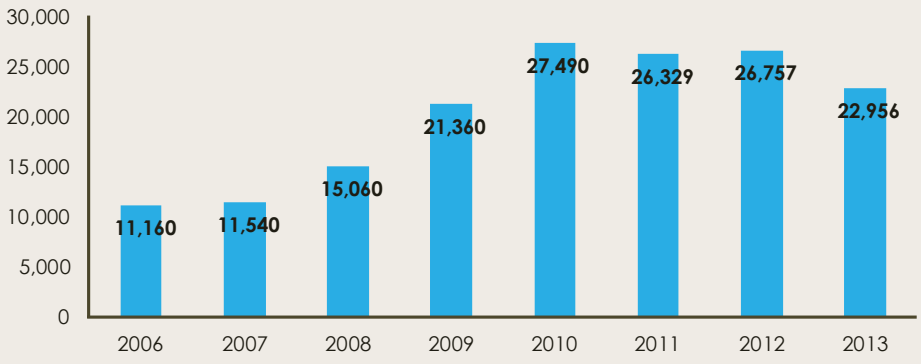
QUARANTINE ROAD LANDFILL TONNAGE

TOTAL TONNAGE TAKEN TO LANDFILL



The City of Baltimore disposes of some municipal solid waste at the Quarantine Road Landfill. Over half of the tonnage per year disposed of at Quarantine Road, is the ash from Wheelabrator BRESCO waste-to-energy facility.

RECYCLING TONNAGE COLLECTED BY DPW



Recycling since 2009 has increased overall dramatically due to the introduction of Single Stream Recycling. In 2013, there was a decrease in the total recycling tonnage collected, dropping from 26,757 tons to 22,956 tons.

RESOURCE CONSERVATION

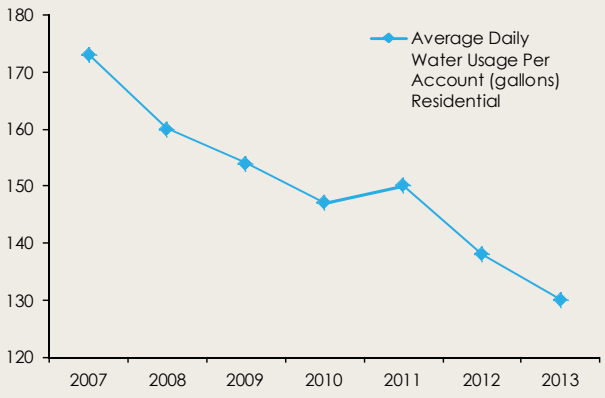
WHEELABRATOR BRESCO BALTIMORE TONNAGE

	2009	2010	2011	2012	2013
January	17,176.40	14,102.40	12,459.26	13,806.20	14391.64
February	15,055.20	10,348.14	13,855.96	12,701.31	11950.75
March	14,885.81	17,328.57	16,924.04	11,488.27	13672.89
April	19,935.24	18,586.33	16,845.42	13,332.49	14744.39
May	21,697.62	16,618.95	17,412.99	17,280.10	15176.43
June	21,882.62	16,725.41	14,291.52	15,243.21	15644.08
July	20,417.32	17,695.03	14,277.79	16,564.85	16006.2
August	17,451.42	16,987.97	16,978.73	18,613.11	16116.69
September	17,527.79	16,669.13	16,913.47	15,410.25	11189.43
October	16,647.44	16,373.14	14,293.77	15,604.60	14207.74
November	17,242.22	16,321.13	16,319.69	15,122.22	13611.02
December	16,868.13	16,314.38	16,711.82	13,692.94	15660.59
TOTAL	216,787.21	194,070.58	187,284.46	178,859.55	172371.85

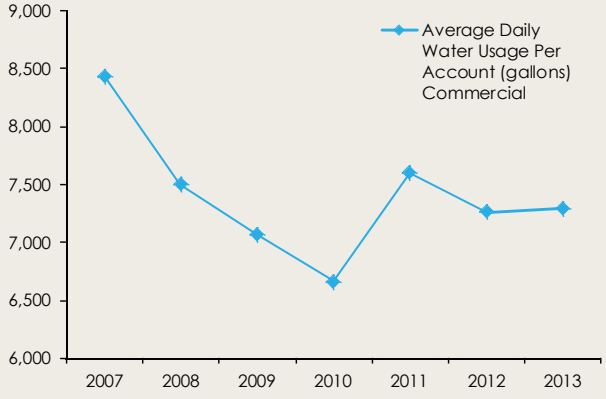
The City of Baltimore diverts and disposes of most municipal solid waste to the Wheelabrator Baltimore (BRESCO) waste-to-energy facility. Since the implementation of the ONE Plus One program, the total tonnage of waste being diverted to BRESCO has declined. The facility can generate up to 60,000 kilowatts of electricity per day.

AVERAGE DAILY WATER USAGE

RESIDENTIAL



COMMERCIAL



Under the Resource Conservation chapter of the Sustainability Plan, Goal 2 is to "Reduce Baltimore's water use while supporting system maintenance". Water consumption had declined steadily since 2007, but we did see an increase in usage in 2011, in both the Residential and Commercial sectors. Excessive water use depletes our freshwater sources, and requires significant energy use to treat and deliver. The City and its partners have several programs that promote water conservation through the use of low-flow faucets and showerheads, and toilet tank banks. Though commercial water use increased slightly in 2013, residential use continued to drop to an average of 130 gallons per day.

GREENING

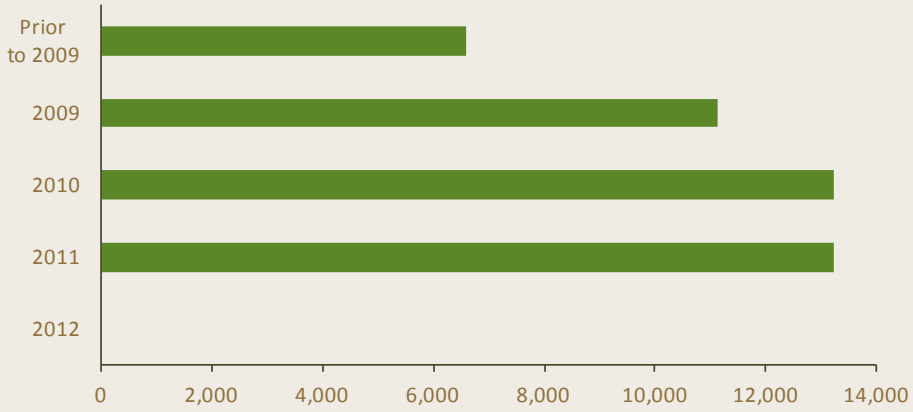
TREE CANOPY: NET GAINS AND LOSSES

	Number of Trees				
	2009	2010	2011	2012	2013
Residential Plantings (1)	3,391	2,780	2,575	2,950	**1,536**
School, Park & Community Plantings (2) (3)	852	2225	2,864	3,386	**6,646**
City Street Tree Plantings (4)	1,800	900	485	1,285	**1,292**
Road Reconstruction Plantings (5)	500	500	500	500	**500**
Trees Lost to Storms & Poor Health (6)	-2,750	-3,094	-4,259	-3,195	**-2,549**
Net Increase or Decrease (7)	3,793	3,311	2,165	4,926	**7,425**
Running Total (8)	128,793	132,104	134,269	139,195	146,620
Canopy Coverage (9)	27%	--	--	--	--

(1) TreeBaltimore donations to home owners to plant on Private Property. (2) Larger specimen trees from TreeBaltimore, planted in cooperation with NGO partners. (3) Reforestation plantings are excluded. They are considered zero net gain. (4) Large street tree specimens currently planted under contract with Urban Forestry Division. (5) Department of Transportation tree plantings (Estimate). (6) Based on tree losses reported to Urban Forestry through the city's CSR system. (7) Net increase for each year is conservative. (8) Based on tree inventory estimate for all city streets and developed parkland. (9) Based on satellite imagery provided by USDA Forest Service every three years.

STREAM RESTORATION

CUMULATIVE RESTORATION



At the time of publication, stream restoration data for 2013 was not yet available. Updates to the data, when available, will be made available online.

GREENING

BALTIMORE FOOD POLICY INITIATIVE

Metric	2010	2011	2012	2013
Number of Participating Markets	3	7	7	11
Electronic Benefit Transfer Transactions	763	1,656	3,294	4,259
Electronic Benefit Transfer Sales	$15,113	$27,664	$54,948	$72,609

Metric	2010	2011	2012	2013
Number of Public Market Vendors with Healthy Carry-out Menus	0	4	24	34

Sources: Baltimore Office of Sustainability; MD Hunger Solutions

Farmers Markets

11 markets now accept SNAP benefits in Baltimore City and the surrounding area. BFPI helped to establish the program at Farmers Market Bazaar in 2012, which grew from 39 to 74 vendors and had SNAP sales of $36,000 in 2013.

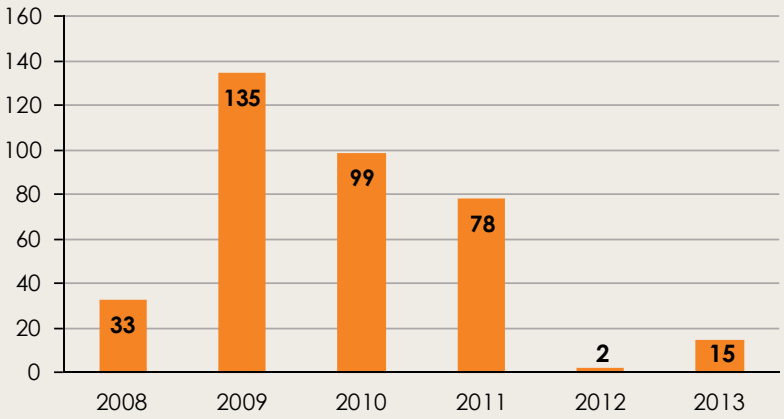
Public Markets

In 2013, Baltimore increased the number of carryout vendors participating in the program at Lexington Market and expanded to the Northeast Market.

TRANSPORTATION

BICYCLING IN BALTIMORE

NUMBER OF BIKE RACKS INSTALLED

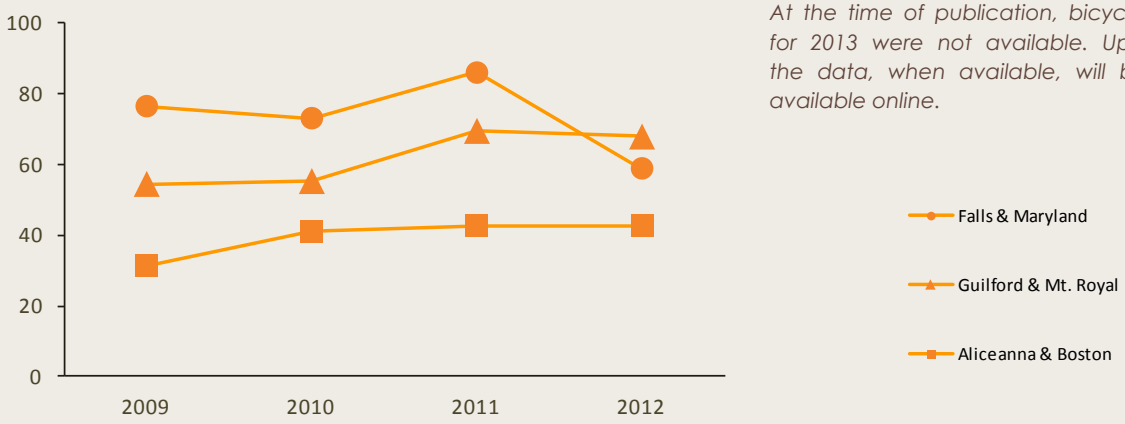


We are now reporting on all of the different on-street bike facilities. The number of new bike lanes in Baltimore drastically reduced in 2013, with 10 miles being installed, compared to 45 miles in 2010 and 13.2 in 2012. In 2013, 15 bike racks were installed.

LANE MILES OF NEW ON-STREET BIKE FACILITIES

Year	> 2006	2006	2007	2008	2009	2010	2011	2012	2013
Bike Lane	1.7	0.6	8.4	4.5	6.1	16.9	3.2	7.1	-
Contraflow	-	-	-	-	-	0.5	-	-	-
Shared Bike/ Bus Lane	-	-	-	-	1.5	0.5	-	-	-
Sharrow	0.6	-	7.1	13.4	0.9	21.2	-	2.7	-
Sidepath	-	-	-	0.3	-	0.1	-	-	-
Signed Route	2.7	-	14.2	-	-	6	1.6	-	-
Bike Boulevard	-	-	-	-	-	-	-	3.4	-
TOTAL	**5**	**0.6**	**29.7**	**18.2**	**8.5**	**45**	**4.8**	**13.2**	**10**

PERCENT CHANGE IN BIKE RIDERSHIP

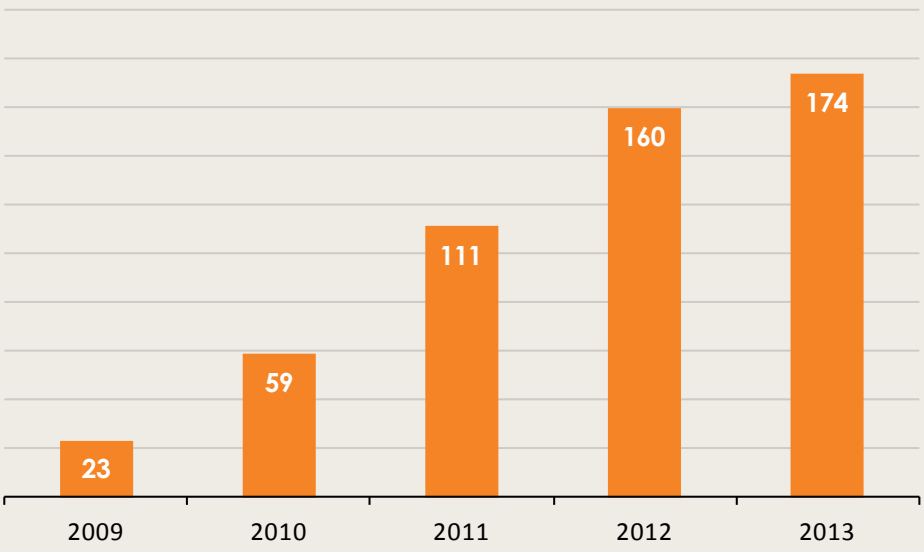


At the time of publication, bicycle counts for 2013 were not available. Updates to the data, when available, will be made available online.

TRANSPORTATION

ZIPCARS

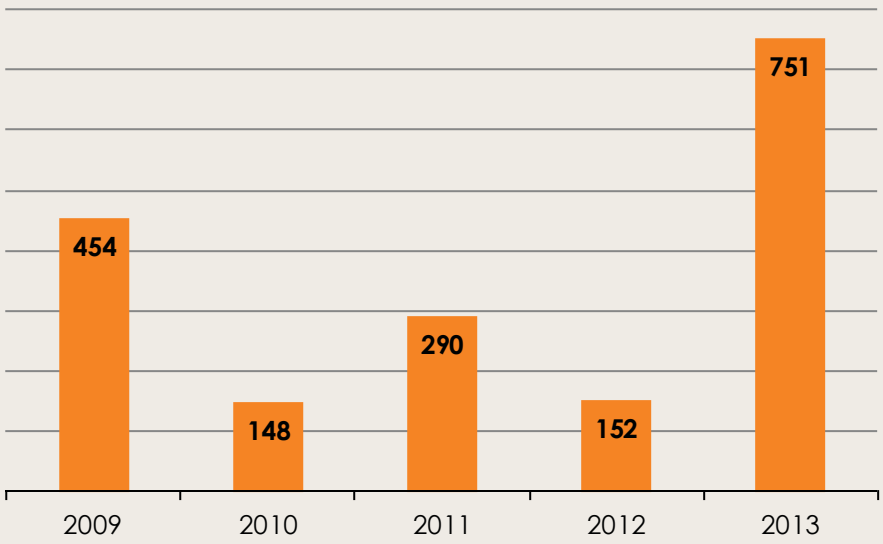
ZIPCARS AVAILABLE IN BALTIMORE



As of December 30, 2013, Baltimore had 174 Zipcars available, with plans to continue expanding. As more Baltimore City residents opt to use public transit, sell their personal vehicle, or forego purchasing an additional vehicle, we are seeing an increase in membership in Baltimore.

PEDESTRIAN SIGNALS

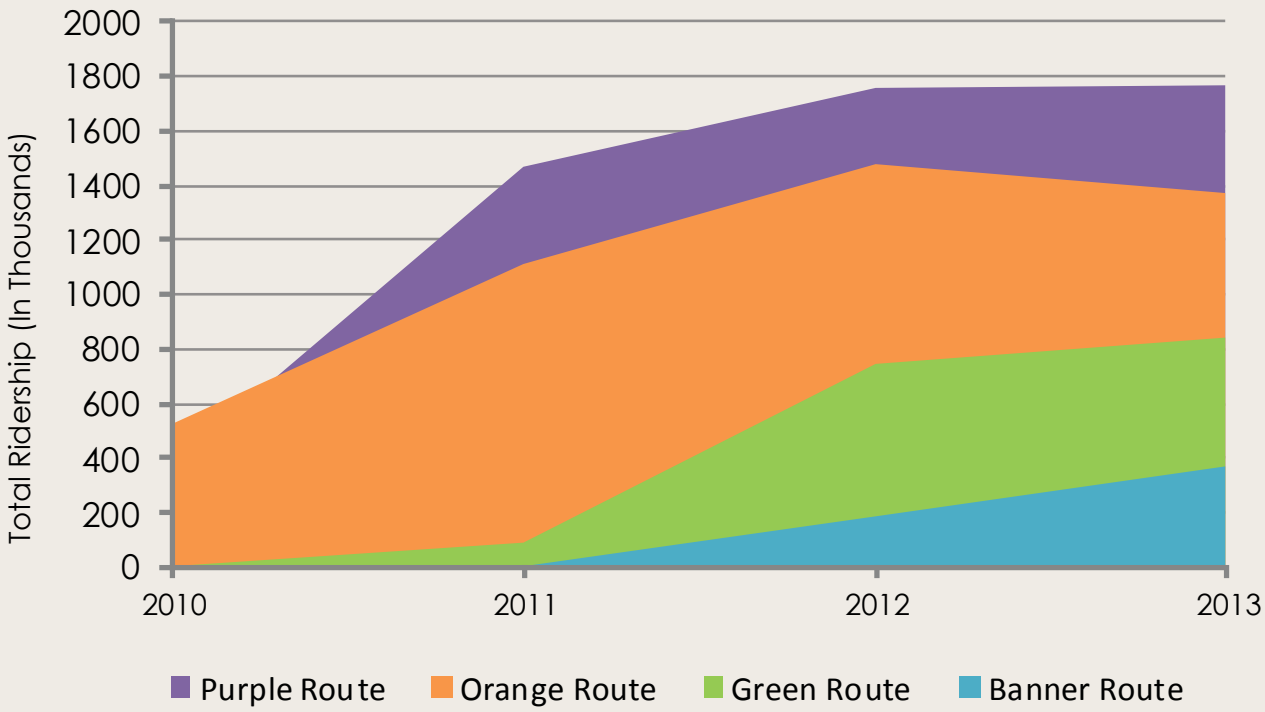
COUNTDOWN PEDESTRIAN SIGNAL UNITS INSTALLED



This metric is used to track improvements in pedestrian facilities, specifically CPS units the Traffic Signal Construction & Maintenance Division has installed. It is not inclusive of the number of signal units installed by TEC contractors. In 2013, there were 751 signals installed

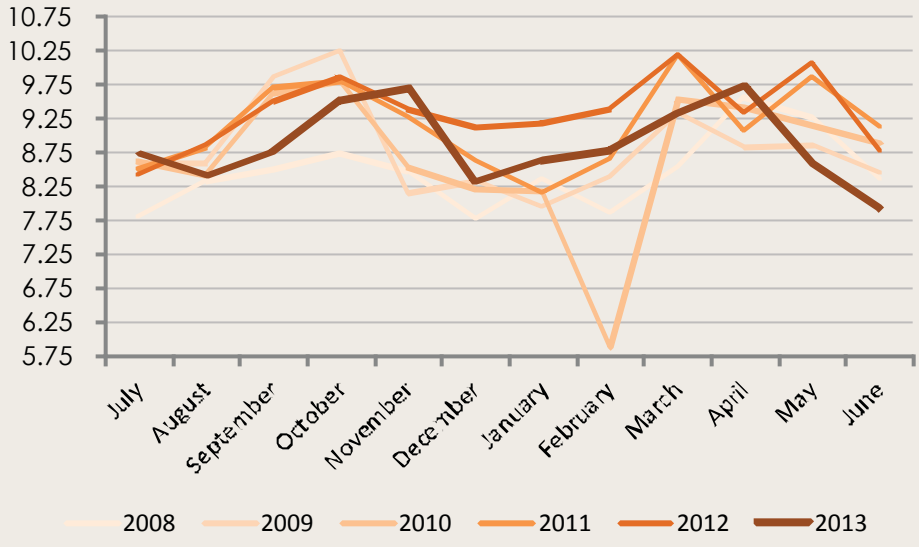
TRANSPORTATION

YEARLY CIRCULATOR RIDERSHIP



The Charm City Circulator, with Baltimore's first hybrid buses, provides free rides throughout the City on four different routes. In 2013, more than 4,000,000 riders took advantage of the Circulator routes.

MTA RIDERSHIP



This chart represents the number of trips taken on MTA's various forms of public transit state-wide between 2008 and 2013. In 2013, there had been a total of 106,377,024 trips taken, a decrease since 2012, when MTA recorded 112,125,017 total trips.

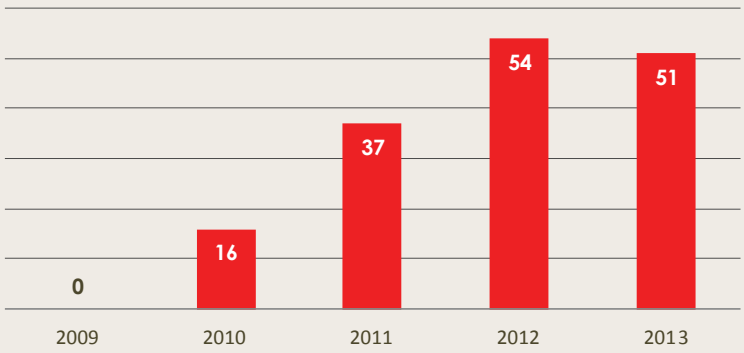
EDUCATION & AWARENESS

YOUTH PARTICIPATION IN ENVIRONMENTAL PROGRAMS

	2009	2010	2011	2012	2013
Baltimore Conservation and Leadership Corps	32	30	30	36	33
Masonville Cove	1,143	1,500	1,200	1,700	2,250
Living Classrooms BUGS Program	75	75	60	60	60
Civic Justice Corps	240	250	250	120	207
Baltimore City Schools Green, Healthy, Smart Challenge	N/A	150	564	546	1,305
Parks and People Foundation	1,900	1,275	1,577	1,213	1,175
Holistic Life Foundation	350	425	650	725	-
Real Food Farm	*New for 2013*				267
Patterson Park Audubon Center	*New for 2013*				6,114

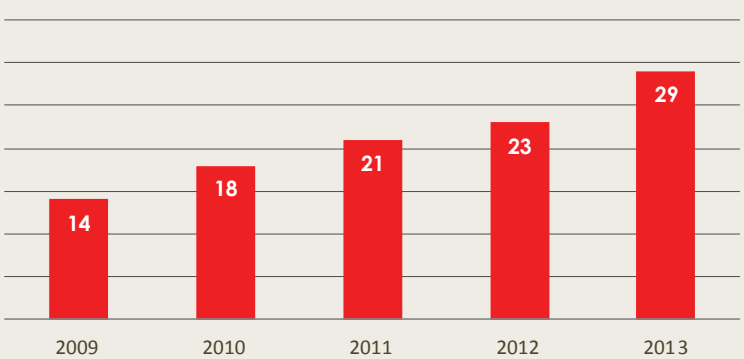
This is a sampling of community service projects, after-school groups, summer camps, and summer youth job training programs that have an environmental focus. The 2013 added two new programs.

BALTIMORE CITY SCHOOLS PARTICIPATING IN THE GREEN, HEALTHY, SMART CHALLENGE



The Green, Healthy, Smart Challenge (previously referred to in this report as the 'Sustainability Challenge') is a mini-grant program that supports student-led environmental projects such as DIY energy audits, recycling campaigns, rainwater recycling initiatives and schoolyard gardens. As of 2013, approximately $182,000 has been distributed through the program to a total of 90 schools (out of 204 total in the district), engaging thousands of students in making hands-on improvements to their schools and communities.

CERTIFIED GREEN SCHOOLS IN BALTIMORE CITY

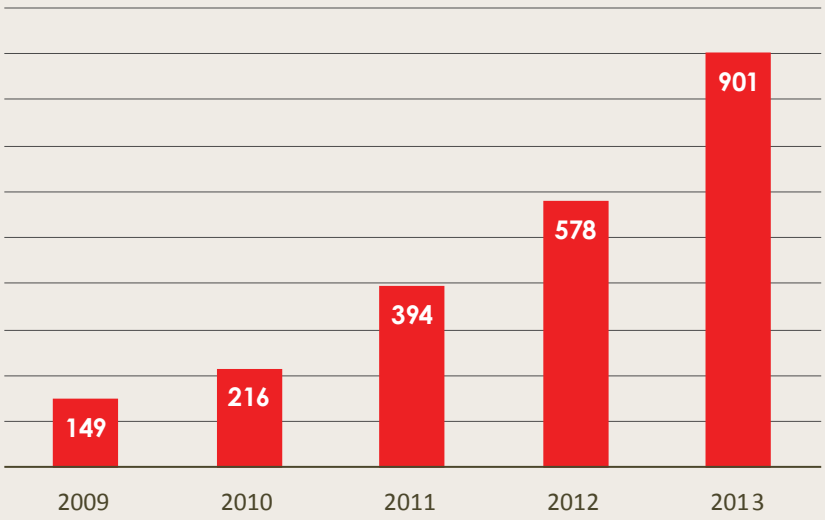


The Maryland Green School Awards program, run by the Maryland Association for Environmental and Outdoor Education, is a holistic, integrated approach to authentic learning that incorporates local environmental issue investigation and professional development with environmental best management practices and community stewardship. All Maryland schools pre K-12, public, charter and private are eligible.

EDUCATION & AWARENESS

SOCIAL MEDIA

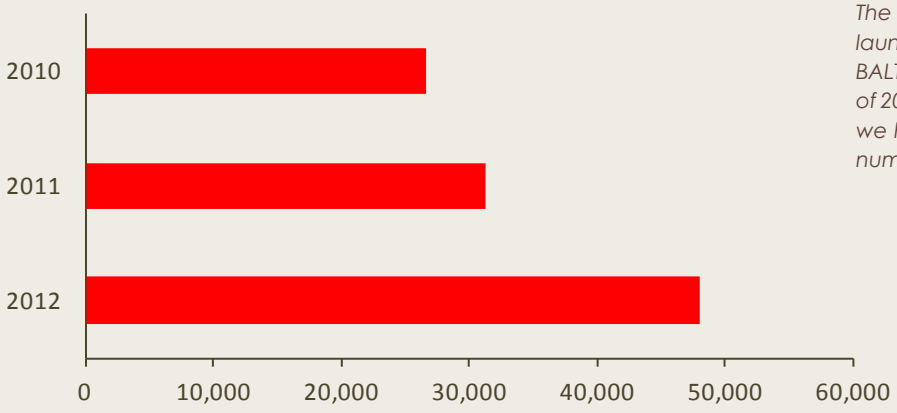
FOLLOWERS OF THE OFFICE OF SUSTAINABILITY FACEBOOK PAGE



The Office of Sustainability Facebook page was created in 2009. Since its creation, we have seen an increase in the number of followers. The total number of "likes" has nearly doubled each year, with the largest increase between 2010 and 2011. The Office posts regularly to the site, sharing a variety of information regarding sustainability iniatives in Baltimore. In recent years, the Office has placed additional focus on communications and outreach. As of December 31, 2013, there were 901 "likes."

Pssst! Have YOU liked us? http://www.facebook.com/baltimoresustainability

MONTHLY VISITS TO THE OFFICE OF SUSTAINABILITY WEBSITE



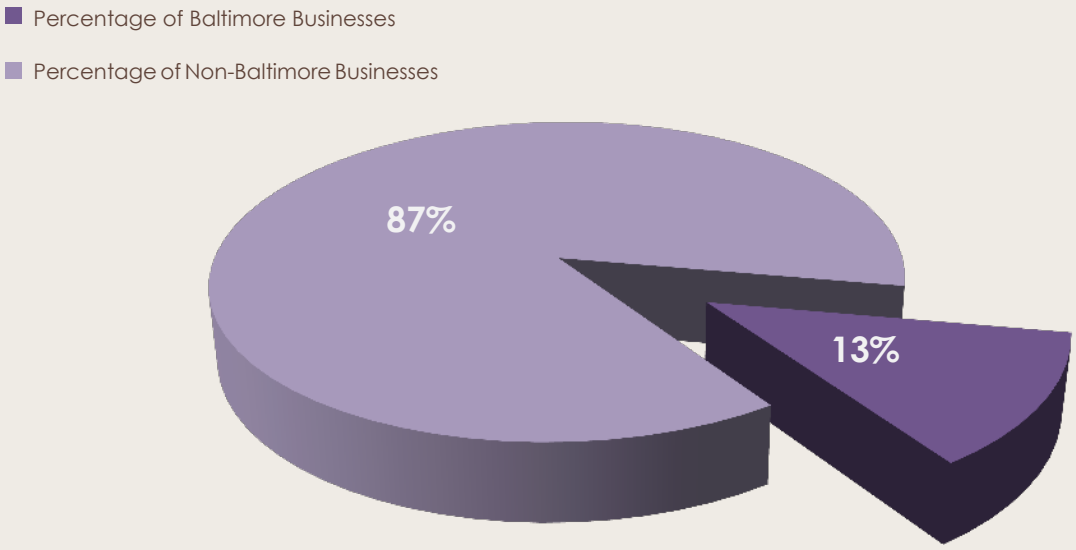
The Office of Sustainability Officially launched the new website WWW.BALTIMORESUSTAINABILITY.ORG in June of 2009. Since the launch of the website, we have seen a steady increase in the number of visits to the website.

TWITTER ACTIVITY	Tweets	Twitter Followers
	412	1,685

At the time of publication, the Office of Sustainability had 1,685 followers on Twitter and posted 412 "tweets".

GREEN ECONOMY

GREEN BUSINESSES



The Maryland Green Registry is a voluntary, self-certfiication program offering tips and resources to help organizations set and meet their sustainability goals. There are 335 businesses participating state-wide, and 45 of those are located in the City of Baltimore. To find out more, or to register your business, visit: http://mde.maryland.gov/MarylandGreen/Pages/Home.aspx

WORKFORCE DEVELOPMENT

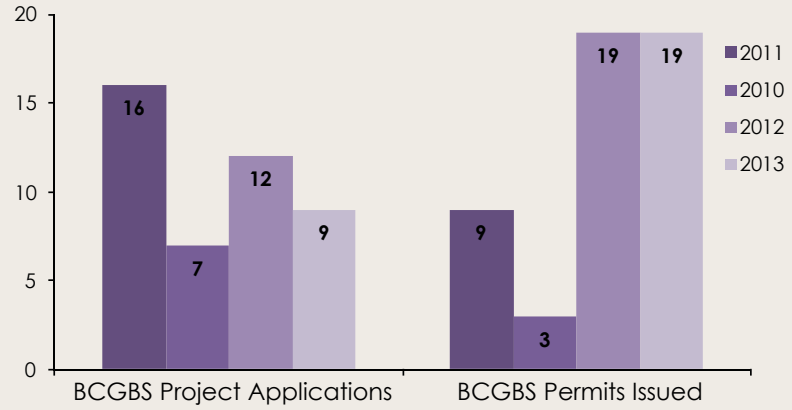
	2009	2010	2011	2012	2013
Baltimore City Public Schools Graduation Rate (Based on 4-Year Adjusted Cohorts)	N/A*	61.46	65.80	66.49	68.50
Baltimore City YouthWorks - Green Jobs Youth Corps	360	360	300	300	N/A
Baltimore City Community College (BCCC) Degrees and Certificates Awarded (FY)	497	466	532	601	499
Civic Works Bmore Green Job Training	36	27	33	62	74

**The 4-Year Adjusted Cohort Graduation Rate was first published in 2010. Data for 2009 is unavailable. In the past, this report has published the BCPS Graduation Leaver Rate.*

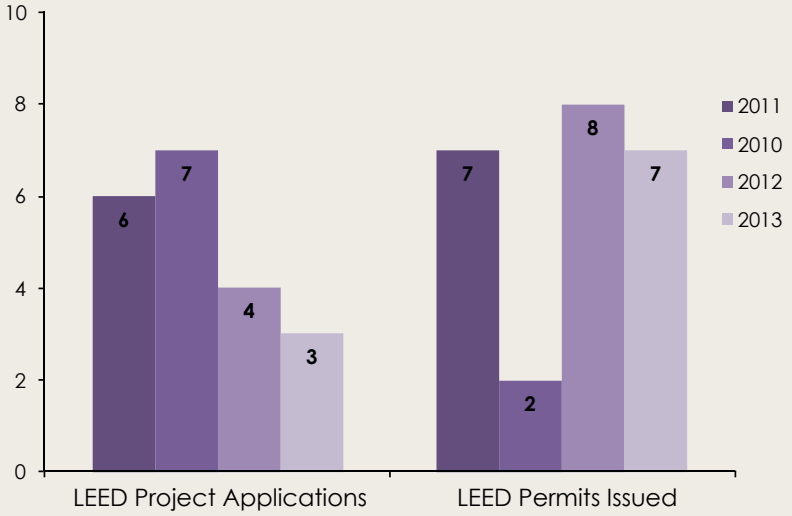
The preparation for employment begins with elementary and secondary education, and continues through higher education and certificate programs. Exposure to green jobs at a young age can encourage students to explore opportunities for their future. A broad educational background with varied skills can be utilized across many sectors, including green jobs. Since 2010, the Baltimore City Public Schools 4-year adjusted cohort graduation rate has continued to increase.

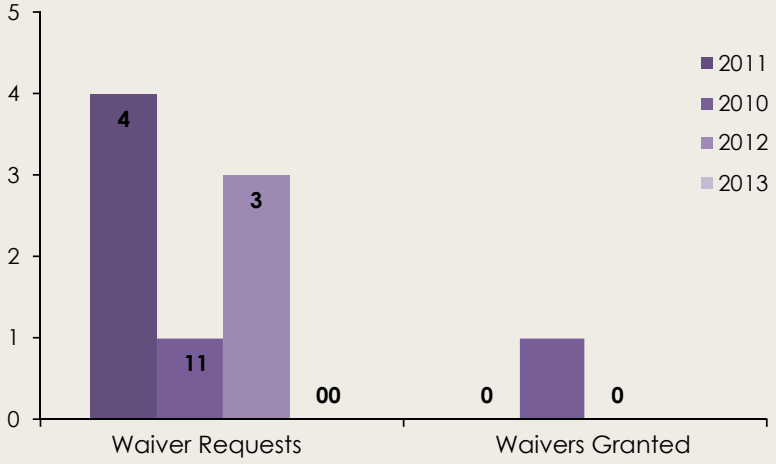
GREEN ECONOMY

GREEN BUILDING REQUIREMENTS



In August 2007, City Council pass a bill mandating the City establish Green Building Standards for commercial and multi-family residential buildings over 10,000 square feet being either newly constructed or extensively modified. The standards were created, and implemented in 2010. In 2013, like in 2012, a total of 19 permits were issued.





BALTIMORE NEIGHBORHOOD INDICATORS ALLIANCE VITAL SIGNS

We do not inherit the earth from our ancestors, we borrow it from our children.

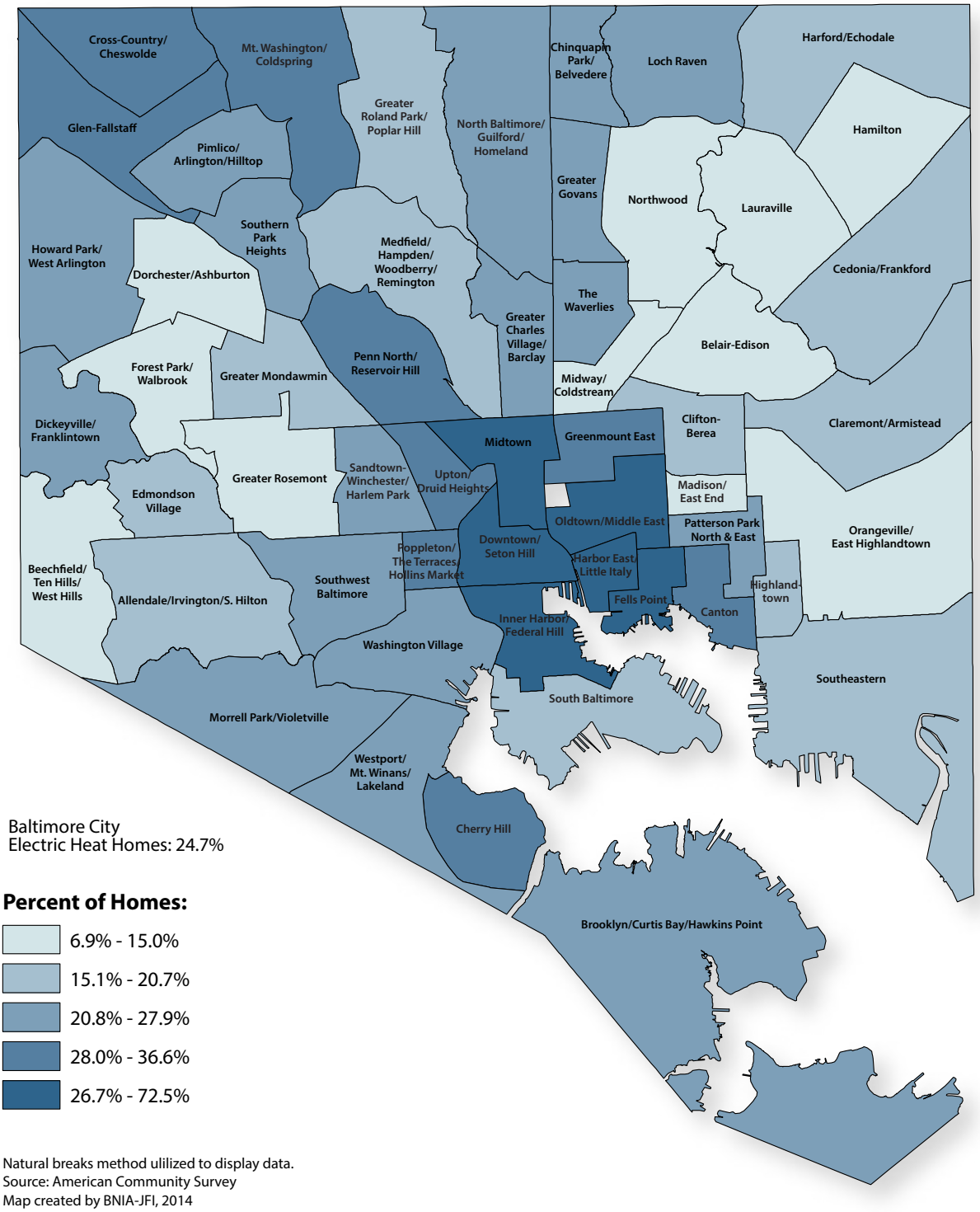
- Native American Proverb

BALTIMORE CITY MAPS

For more than 10 years, the Baltimore Neighborhood Indicators Alliance-Jacob France Institute (BNIA-JFI) has been committed to enabling decision-making for neighborhood change, using accurate, relevant and accessible data and information for improving the quality of life in Baltimore neighborhoods. Along with an alliance of diverse organizations, BNIA-JFI empowers neighborhoods with measures and indicators to track success across common goals. BNIA-JFI produces an annual report called *Vital Signs* that "take the pulse" of Baltimore's neighborhoods by measuring approximately 110 quality of life indicators for all 55 Community Statistical Areas (CSAs). These indicators were first established through a community-based visioning process in 2000 and revised through a strategic planning process in 2012. The 11th edition of *Vital Signs* was released in April 2013 includes a section dedicated to community-based sustainability indicators on sanitation, transportation, green space, energy efficiency and community engagement. *Vital Signs* indicators are available online and have been used to track and monitor quality of life in neighborhoods as well as plan for the future, advocate for change, leverage funds through grant writing and community-based research.

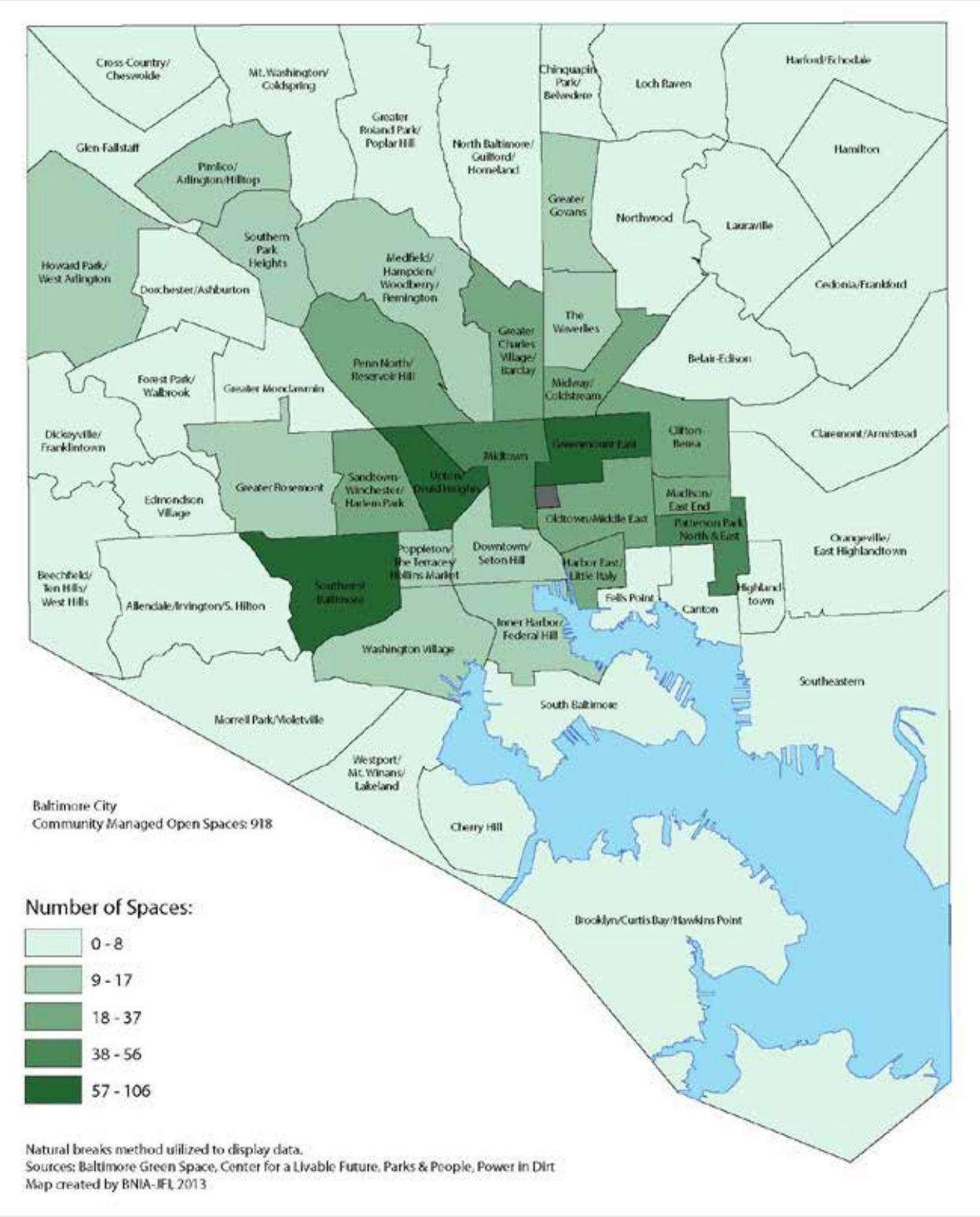
The Office of Sustainability has partnered with BNIA-JFI to incorporate their community-based sustainability indicators into the Annual Sustainability Report. We feel that being able to look at critical issues on a community level help evaluate progress, as well as where more efforts are needed. We will continue to use these indicators in future years, and hope to expand indicators as we move forward.

City Residences Heated by Electricity
By Community Statistical Area



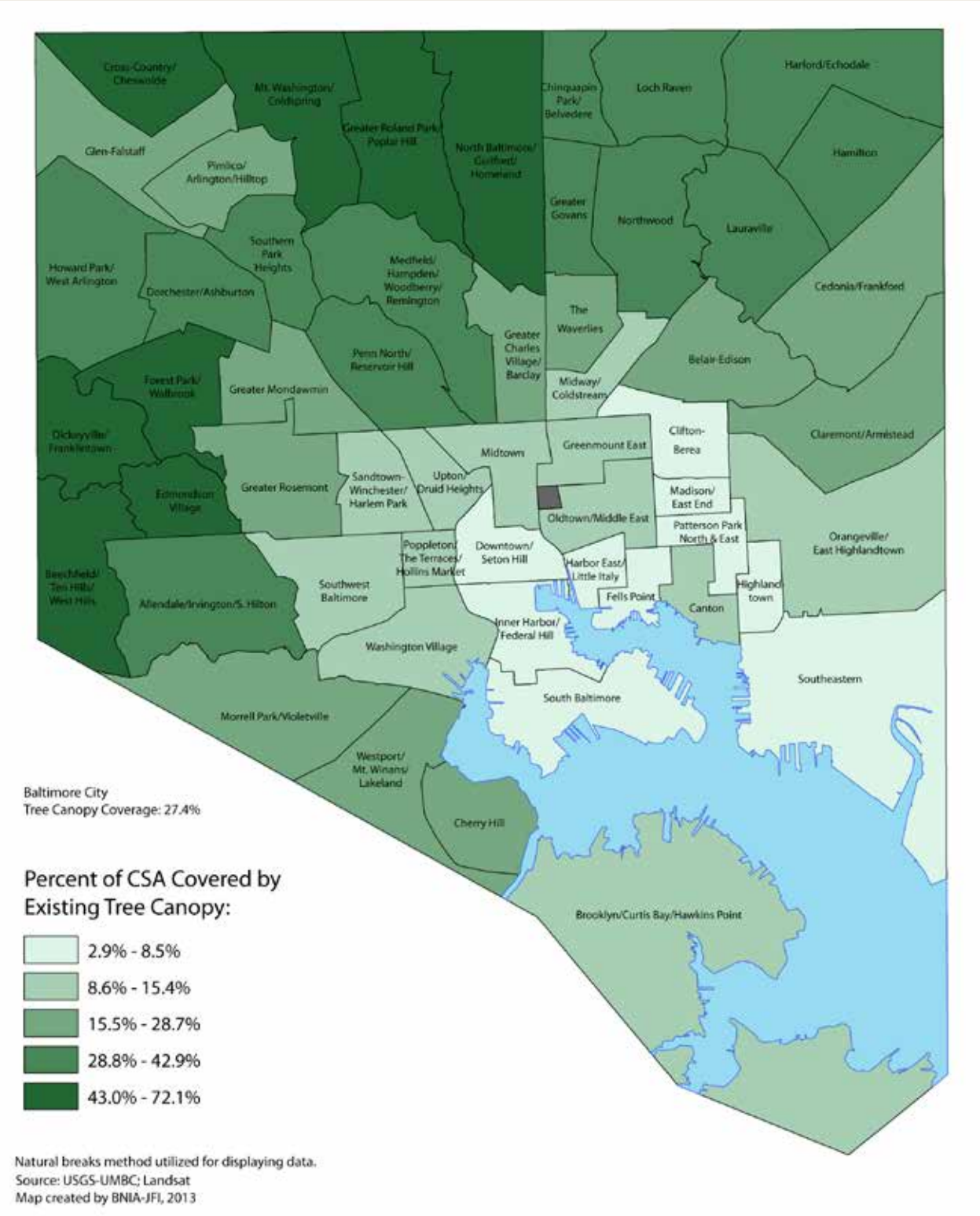
Natural breaks method ulilized to display data.
Source: American Community Survey
Map created by BNIA-JFI, 2014

Community Managed Open Spaces*
By Community Statistical Area



*Unchanged since 2012 Annual Report

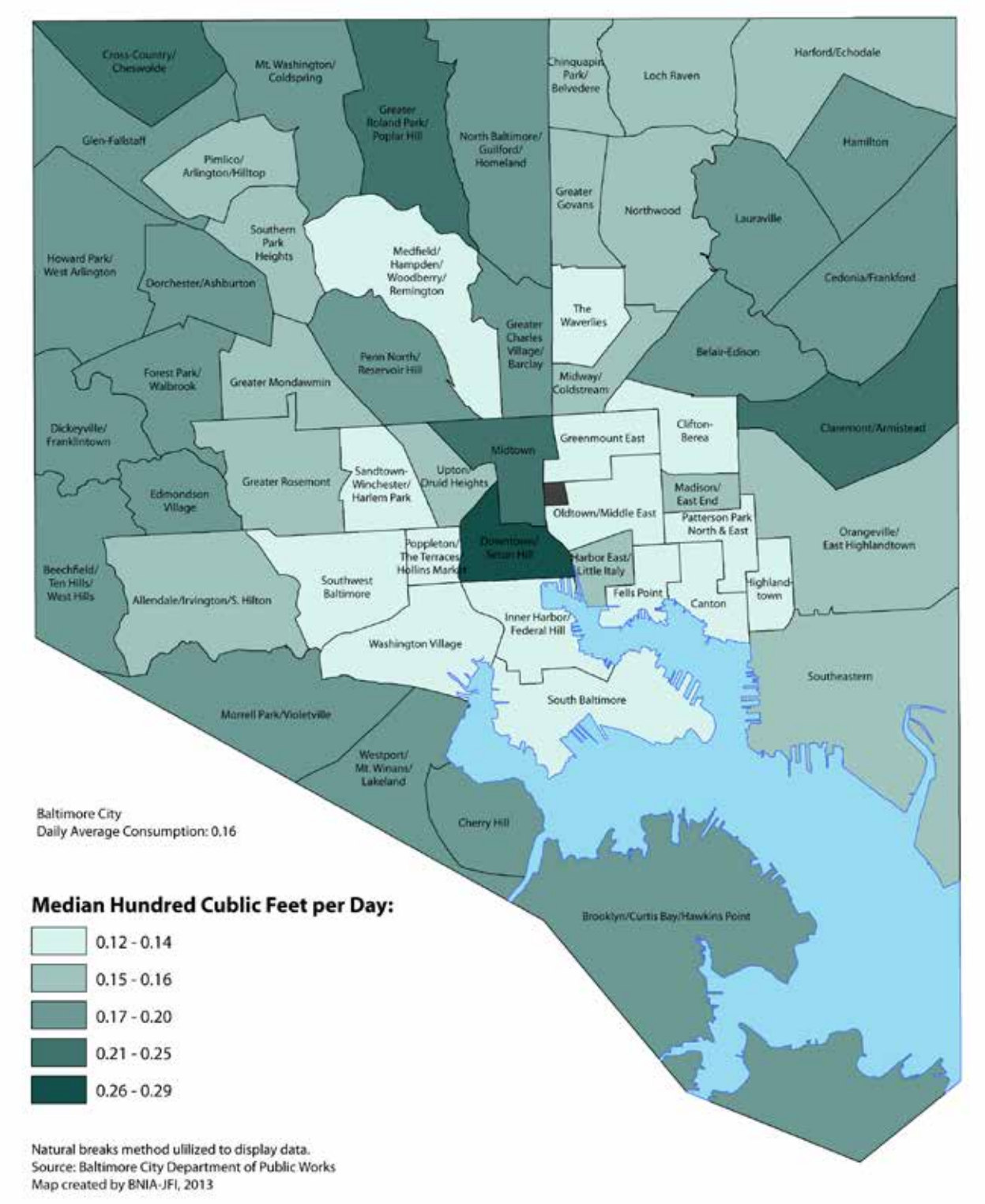
Tree Canopy*
By Community Statistical Area



*Unchanged since 2012 Annual Report

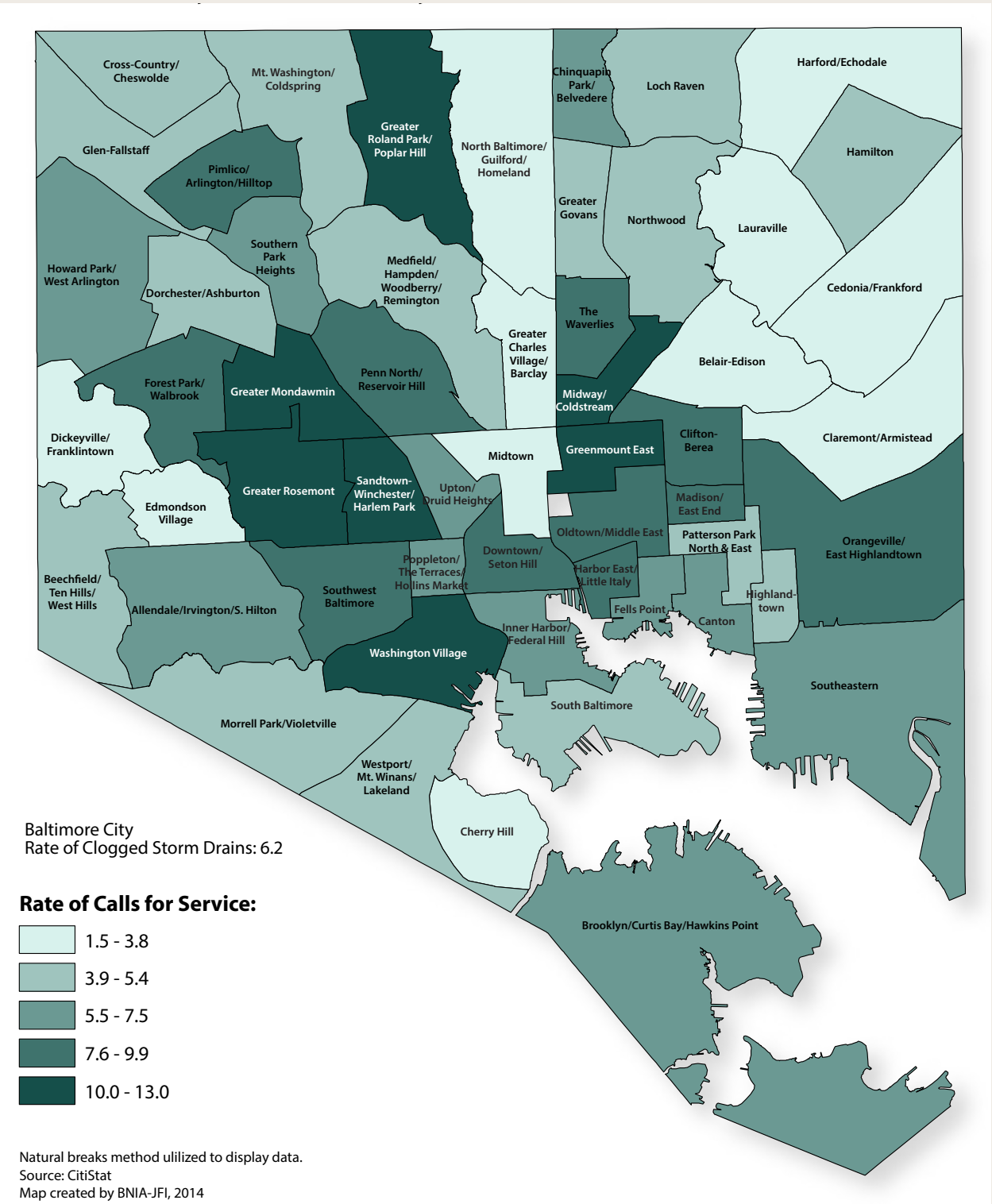
Daily Average Consumption of Water*

By Community Statistical Area



*Unchanged since 2012 Annual Report

Rate of Clogged Storm Drains
By Community Statistical Area



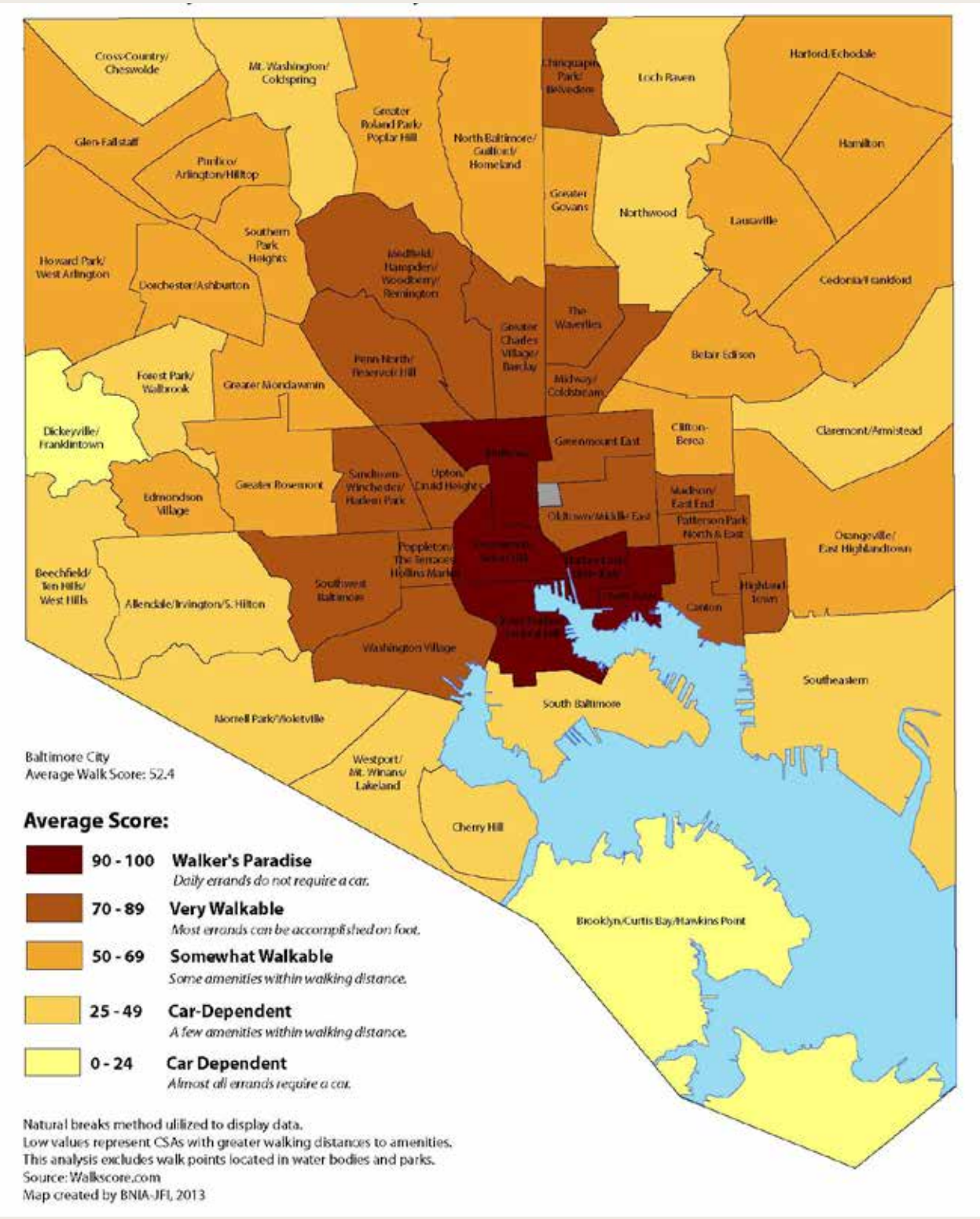
Baltimore City
Rate of Clogged Storm Drains: 6.2

Rate of Calls for Service:

- 1.5 - 3.8
- 3.9 - 5.4
- 5.5 - 7.5
- 7.6 - 9.9
- 10.0 - 13.0

Natural breaks method ulilized to display data.
Source: CitiStat
Map created by BNIA-JFI, 2014

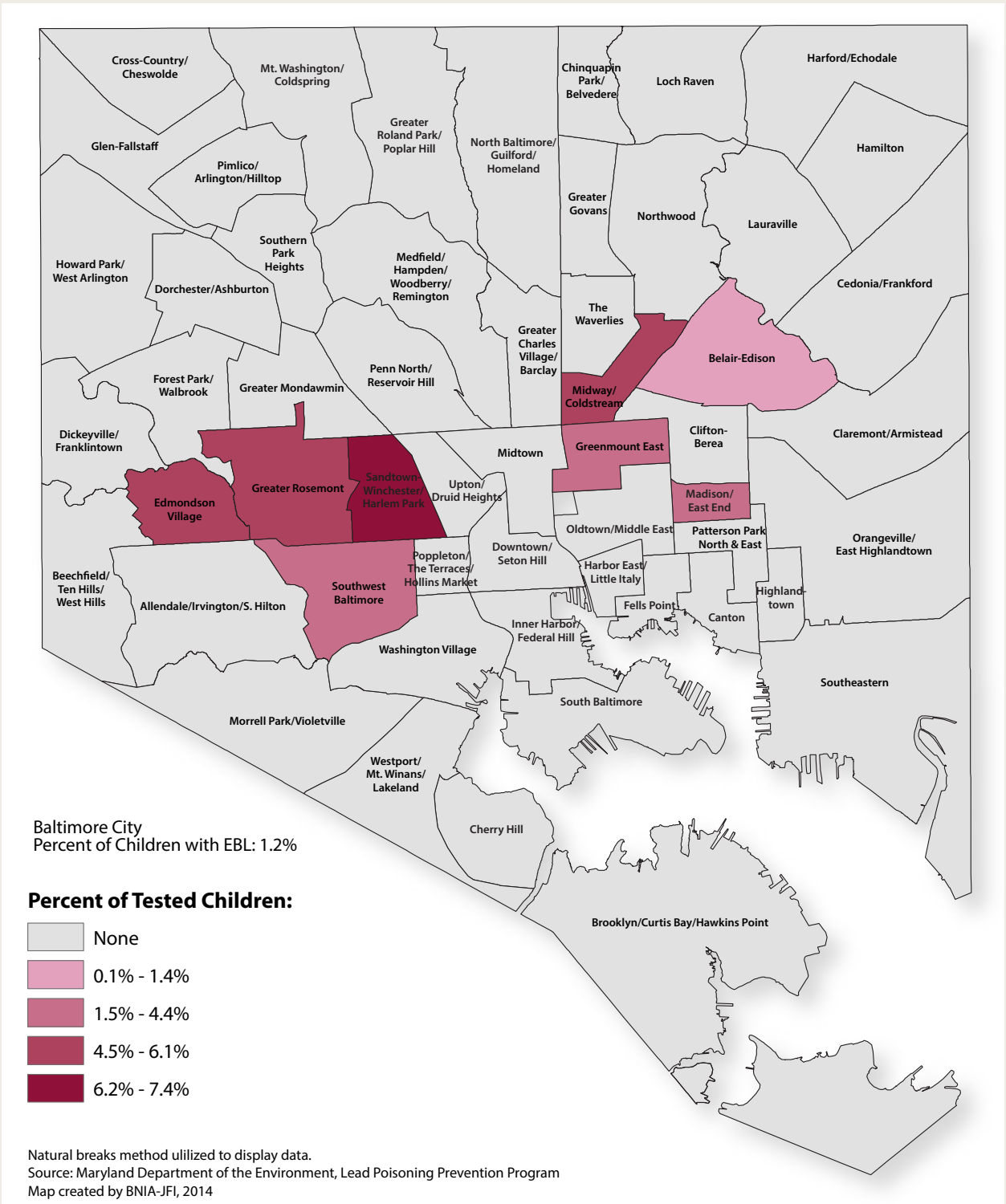
Average Walk Scores*
By Community Statistical Area, 2012



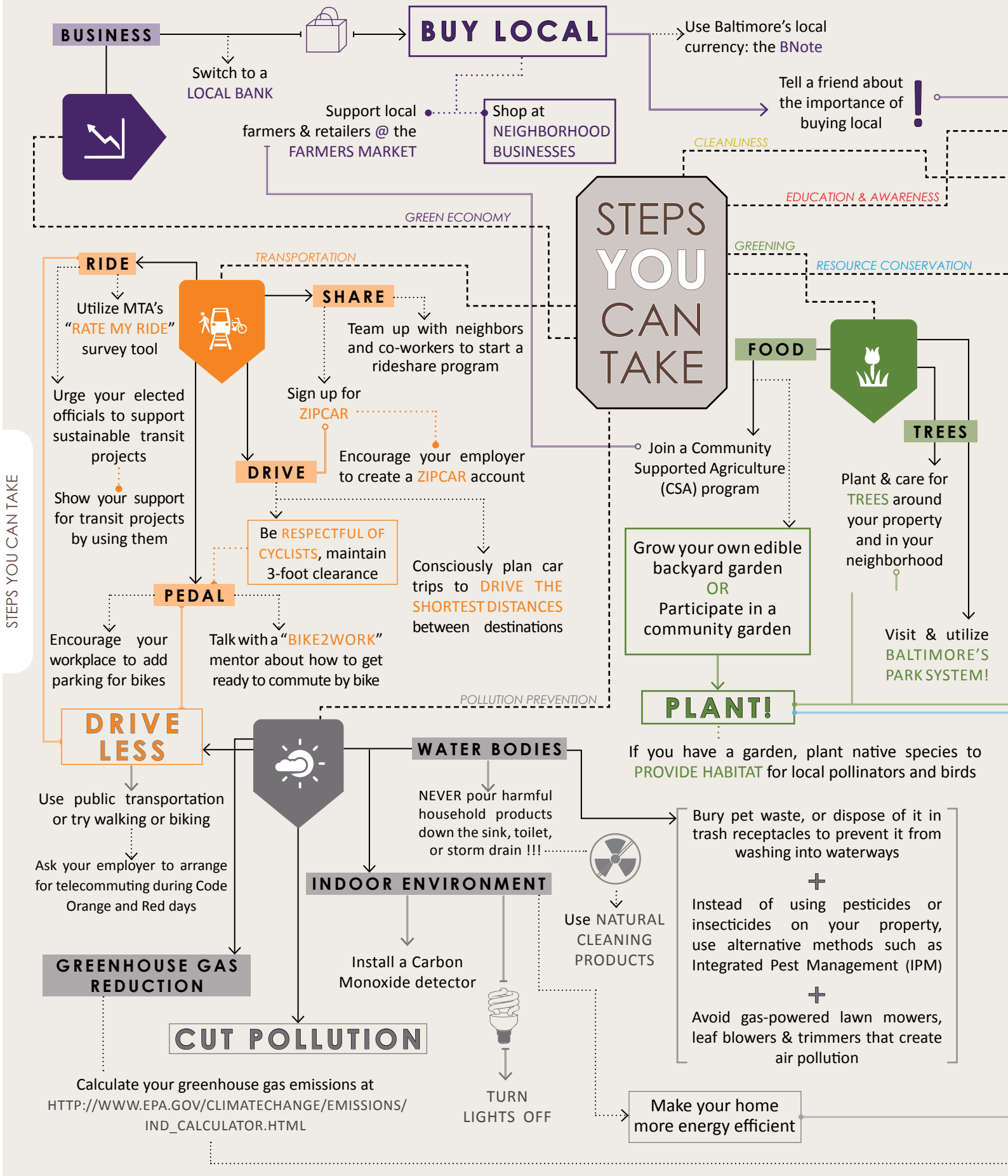
*Unchanged since 2012 Annual Report

Children Tested with Elevated Blood Lead Levels

By Community Statistical Area



Natural breaks method ulilized to display data.
Source: Maryland Department of the Environment, Lead Poisoning Prevention Program
Map created by BNIA-JFI, 2014


STEPS YOU CAN TAKE
BUSINESS
Switch to a LOCAL BANK
BUY LOCAL
Use Baltimore's local currency: the BNote
Tell a friend about the importance of buying local
Support local farmers & retailers @ the FARMERS MARKET
Shop at NEIGHBORHOOD BUSINESSES
CLEANLINESS
EDUCATION & AWARENESS
GREEN ECONOMY
STEPS YOU CAN TAKE
GREENING
RESOURCE CONSERVATION
TRANSPORTATION
RIDE
Utilize MTA's "RATE MY RIDE" survey tool
Urge your elected officials to support sustainable transit projects
Show your support for transit projects by using them
SHARE
Team up with neighbors and co-workers to start a rideshare program
Sign up for ZIPCAR
Encourage your employer to create a ZIPCAR account
DRIVE
Be RESPECTFUL OF CYCLISTS, maintain 3-foot clearance
Consciously plan car trips to DRIVE THE SHORTEST DISTANCES between destinations
PEDAL
Encourage your workplace to add parking for bikes
Talk with a "BIKE2WORK" mentor about how to get ready to commute by bike
FOOD
Join a Community Supported Agriculture (CSA) program
Grow your own edible backyard garden OR Participate in a community garden
TREES
Plant & care for TREES around your property and in your neighborhood
Visit & utilize BALTIMORE'S PARK SYSTEM!
PLANT!
If you have a garden, plant native species to PROVIDE HABITAT for local pollinators and birds
POLLUTION PREVENTION
DRIVE LESS
Use public transportation or try walking or biking
Ask your employer to arrange for telecommuting during Code Orange and Red days
WATER BODIES
NEVER pour harmful household products down the sink, toilet, or storm drain !!!
Use NATURAL CLEANING PRODUCTS
Bury pet waste, or dispose of it in trash receptacles to prevent it from washing into waterways
+
Instead of using pesticides or insecticides on your property, use alternative methods such as Integrated Pest Management (IPM)
+
Avoid gas-powered lawn mowers, leaf blowers & trimmers that create air pollution
INDOOR ENVIRONMENT
Install a Carbon Monoxide detector
TURN LIGHTS OFF
GREENHOUSE GAS REDUCTION
CUT POLLUTION
Calculate your greenhouse gas emissions at HTTP://WWW.EPA.GOV/CLIMATECHANGE/EMISSIONS/IND_CALCULATOR.HTML
Make your home more energy efficient

STEPS YOU CAN TAKE

Organize a COMMUNITY **CLEAN-UP**

Adopt a vacant lot in your neighborhood & transform it into COMMUNITY GREEN SPACE

Work with neighbors to manage community open space

With the Community Greening Resource Network (CGRN)

Encourage your local school to work towards Maryland Association for Environmental and Outdoor Education "GREEN SCHOOL" certification

INFORMATION

Utilize the local resources featured in the PARTNER LIST on the following pages

VOLUNTEER

YOUTH

With a park stewardship program

With an organization that works w/ youth in Baltimore City

Organize a TREE PLANTING at your local school

Help your local school create or maintain an outdoor education space

Always place your trash in a can with a TIGHTLY FITTING LID...

..... In the proper location the morning of your scheduled pick-up

CALL 311 to report excessive trash, mini landfills, or illegal dumping!

SPREAD THE WORD!

Participate in community outreach and awareness activities to promote the 3Rs: reduce, reuse, recycle!

HOST A SUSTAINABILITY HOUSE PARTY to exchange tips & information with your friends & neighbors

Stay informed about ENVIRONMENTAL ISSUES and support legislature which will progress Baltimore's sustainability goals by voting and writing to your representatives!

Share Your Sustainability Success Story @ www.BALTIMORESUSTAINABILITY.org

WATER

Replace your old toilet with a *WaterSense* or *Dual Flush* model

Fix leaky faucets

Utilize only native plants {WHICH REQUIRE LESS WATERING} in your landscape

Install a RAIN BARREL to collect rain for watering the garden

Install a low-flow showerhead

ENERGY

Call the Baltimore Energy Challenge {410.927.6088} to receive your free Energy $avers Kit

Get in-home education & FREE INSTALLATION of a programmable thermostat

Set it no higher than 68° in the winter, and no lower than 78° in the summer

Power-off all unused devices & use power strips

{ Most electronic devices still pull several watts of power when in standby mode. }

"WASTE"

Reduce

Reuse

DO MORE WITH LESS

DONATE to BALTIMORE FREE STORE

PURCHASE IN BULK to reduce packaging waste

Visit WWW.DMACHOICE.ORG & stop any unwanted mail

CARRY REUSABLE BAGS

Purchase items that are *RECYCLABLE* & *RECYCLED*

Find creative ways to re-use your stuff

RECYCLE

Compost yard & food waste

Participate in the *Single Stream Recycling* program

RECYCLE. Just one person recycling for one year is enough to save 471 pounds of greenhouse gases

CREATED BY MEGAN GRIFFITH

$AVE $70+ A YEAR on your energy bills.

Replace the light bulbs in your **5 MOST FREQUENTLY USED FIXTURES** with ENERGY STAR® qualified bulbs [EPA]

Protect your home with flood insurance.

Stay hydrate

especially in periods of extreme heat.

Trees & their limbs may fall during a storm.

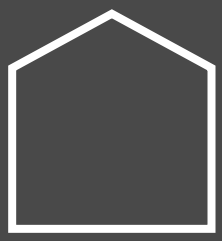
Proactively pruning trees will reduce hazards that could cause injury to people or damage to property.

Reduce your carbon footprint!

WEATHERIZE YOUR HOME.

Insulate walls & ceilings
+
Caulk & weatherstrip around doors & windows, and
+
Wrap your water heater in an insulating jacket

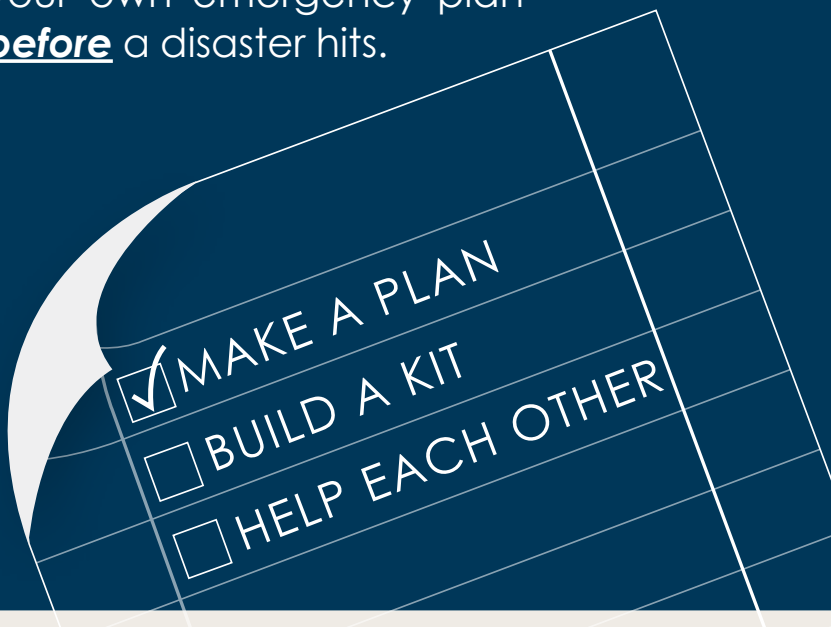
Reduce up to 4,000 lbs CO_2 emissions a year! [EarthShare]



Plant a vegetable garden on your property to produce FREE & FRESH FOOD

Make a Plan

Reducing Baltimore's vulnerability begins with its residents. Make sure that you and your family are prepared with your own emergency plan ***before*** a disaster hits.



ed,

Build a Kit

A disaster supply kit should include basic items that you and your family may need in the event of an emergency.

Water conservation lessens load on infrastructure, and rainwater capture strategies collect rainwater reserves for use during low-precipitation periods

Rain barrels can save most Mid-Atlantic homeowners

1,300 GALLONS OF WATER

during peak summer months.

[EPA]

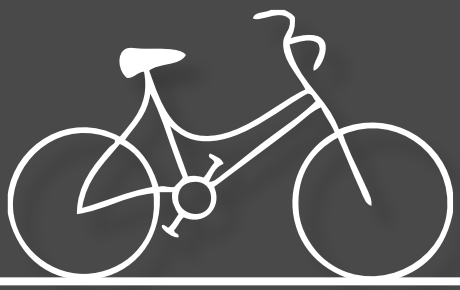
Help Each Other

Know your neighbors & check in with each other regularly.

Walking and/or cycling provide redundancy in the transportation system in the event of an emergency or storm event, when public transit may be temporarily disrupted or vehicular access may be more difficult.

Bike, walk, or use public transportation just 2 DAYS A WEEK.

1,590 lbs CO_2 A YEAR



SAVE UP TO 20% ON HEATING & COOLING COSTS

Improve home comfort with insulation & sealing. [EPA]

Know the warnings.

Understand Baltimore's early warning alert system so that you will be prepared when disaster strikes.

CREATED BY MEGAN GRIFFITH

PARTNERS LIST

1000 Friends of Maryland
www.friendsofmd.org
410.385.2910

Altcar
www.altcar.org
410.814.3000

Amtrak
www.amtrak.com
1.800.USA.RAIL

Art Blocks
www.artblocks.org
410.243.3834

B Corporation
www.bcorporation.net

B-more Mobile
www.bmoremobile.org

Back River Restoration Committee
www.savebackriver.org

Baltimore Area Convention and Visitors Association
www.baltimore.org
877.225.8466

Baltimore Biodiesel Coop
www.baltimorebiodiesel.org
410.889.6842

Baltimore Business Journal
www.bizjournals.com/baltimore/
410.576.1161

Baltimore Center for Green Careers
www.baltimoregreencareers.org
410.929.6120

Baltimore City Commission for Historical & Architectural Preservation
www.baltimorecity.gov/Government/BoardsandCommissions/HistoricalArchitecturalPreservation.aspx

Baltimore City Department of General Services
www.baltimorecity.gov
410.396.3704

Baltimore City Department of Health (BCHD)
www.baltimorehealth.org
410.767.5300

Baltimore City Department of Housing and Community Development (HCD)
www.baltimorehousing.org
410.514.7000

Baltimore City Department of Planning (DOP)
www.baltimorecity.gov/Government/AgenciesDepartments/Planning.aspx
410.767.4500

Baltimore City Department of Public Works (DPW)
publicworks.baltimorecity.gov
410.396.6070

Baltimore City Department of Recreation and Parks (BCRP)
bcrp.baltimorecity.gov
410.396.7900

Baltimore City Department of Transportation (DOT)
www.baltimorecity.gov/Government/AgenciesDepartments/Transportation.aspx
410.396.7665

Baltimore City Mayors Office of Employment Development
www.oedworks.com
410.396.1910

Baltimore Community Foundation
www.bcf.org
410.332-4171

Baltimore Development Corporation
410.837.9305

MAIN STREETS PROGRAM
baltimoredevelopment.com/baltimore-main-streets

BROWNFIELDS PROGRAM
www.baltimoredevelopment.com/brownfileds

Baltimore City Farms Program
bcrp.baltimorecity.gov/ProgramsandInitiatives/CityFarms.aspx
410.396.0181

Baltimore City Food Policy Initiative
http://www.baltimorecity.gov/Government/AgenciesDepartments/Planning/BaltimoreFoodPolicyInitiative.aspx

Baltimore City Forestry Board
www.baltimoreforestry.org

Baltimore City Parking Authority
www.baltimorecity.gov/Government/QuasiAgencies/ParkingAuthority.aspx
443.573.2800

Baltimore City Public School System
www.bcps.k12.md.us
443.984.2000

Baltimore County Environmental Protection and Sustainability
www.baltimorecountymd.gov/Agencies/environment
410.887.3733

Baltimore Ecosystem Study
www.beslter.org
410.448.5663 | ext. 125

Baltimore Energy Challenge
www.baltimoreenergychallenge.org

Baltimore Free Farm
www.baltimorefreefarm.org
410.575.4BFF (4233)

Baltimore Gas & Electric Smart Energy Savers Program
www.bgesmartenergy.com/
1.877.685.SESP (7377)

Baltimore Green Currency Association
www.baltimoregreencurrency.org

Baltimore Green Forum
www.baltimoregreenforum.org

Baltimore Green Map
www.baltimoregreenmap.org
410.235.0838

Baltimore Green Space
www.baltimoregreenspace.org
443.695.7504

Baltimore Green Works
www.baltimoregreenworks.com

Baltimore Heritage
www.baltimoreheritage.org

Baltimore Metropolitan Council
www.baltometro.org
410.732.0500

Baltimore Neighborhood Indicators Alliance
www.bnia.org
410.837.6651

Baltimore Office of Promotion & the Arts
www.bop.org
410.752.8632

Baltimore Orchard Project
www.baltimoreorchard.org
410-695-3445

Baltimore Tree Trust
www.baltimoretreetrust.org

Baltimore Running Festival
www.thebaltimoremarathon.com
410.605.9381

Baltimore Workforce Investment Board
www.Baltoworkforce.com
410.396.1910

Bethesda Green
www.bethesdagreen.org
240.396.2440

Big City Farms
www.bigcityfarms.com
443.890.3280

Bike Baltimore
www.baltimorecity.gov/Government/AgenciesDepartments/Transportation/Planning/BikeBaltimore.aspx

Bike Maryland
www.bikemd.org
410.960.6493

Biohabitats
www.biohabitats.com
410.554.0156

Blue Water Baltimore
www.bluewaterbaltimore.org
410.254.1577

BMore Streets for People
www.facebook.com/pages/BMore-Streets-for-People/121281651312486

Boone Street Farm
www.baltimorediy.org

Butterbee Farm
www.butterbeefarm.com

Carrie Murray Nature Center
www.carriemurraynaturecenter.org
410.396.0808

CDM eCycling
www.cdm4recycle.com

Center for Community Progress
www.communityprogress.net
DC Office | 877.542.4842

Central Maryland Transportation Alliance
www.cmtalliance.org
410.332.4172 | ext. 123

Charm City EcoVillage
www.facebook.com/CharmCityEcovillage

Cherry Hill People's Garden
cherryhillpeoplesgarden.wordpress.com
410.704.2553

Chesapeake Bay Foundation
www.cbf.org
1.800.SAVEBAY

Chesapeake Bay Trust
www.cbtrust.org
410.974.2941

Chesapeake Climate Action Network
www.chesapeakeclimate.org
+1.240.396.1981

Chesapeake Compost Works
www.chesapeakecompost.com

Children in Nature Network
www.childrenandnature.org

Citizens Planning & Housing Association
www.cphabaltimore.org
410.539.1369

City Bizlist
baltimore.citybizlist.com
443.562.9472

Civic Works
www.civicworks.com
410.366.8533

CleanerGreener Baltimore Initiative
www.cleanergreenerbaltimore.org
410.396.3835

College of Notre Dame
www.ndm.edu
410.435.0100

Community Greening Resource Network
www.parksandpeople.org/greening/resource-network/
410.448.5663

Commuter Connections | *GUARANTEED RIDE HOME PROGRAM*
www.mwcog.org/commuter2/commuter/grh/index.html
1.800.745.RIDE (1.800.745.7433)

Constellation Energy
www.constellation.com
1.866.237.7693

Construction and Energy Technologies Education Consortium
www.cetecmd.org
443.840.4661

Coppin State College
www.coppin.edu
410.951.3000

CSX Corporation
www.csx.com
1.877.ShipCSX (1.877.744.7279)

East Coast Greenway
www.greenway.org
+1.919.797.0619

Eat Fresh Maryland Network
www.eatfreshmd.com
+1.301.891.7244

Eco-check
www.eco-check.org
410.221.2005

EnviroEducation
enviroeducation.com/states/Maryland

Environmental Justice Partnership
www.environmentaljusticepartnership.org

The Environmental Literacy Council
www.enviroliteracy.org
202.296.0390

The Farm Alliance of Baltimore City
www.farmalliancebaltimore.org

Friends of...

- CARROLL PARK
  www.friendsofcarrollpark.blogspot.com
- DRUID HILL PARK
  www.druidhillpark.org
  443.469.8274
- GWYNNS FALLS/LEAKIN PARK
  www.friendsofgwynnsfalls leakinpark.org
- HERRING RUN PARKS
  www.thefhrp.org
- MARYLAND'S OLMSTED PARKS AND LANDSCAPES
  www.olmstedmaryland.org
- PATTERSON PARK
  www.pattersonpark.com
  410.276.3676
- STONY RUN
  www.stonyrunfriends.org/srcms/
- WEST BALTIMORE SQUARES
  www.westbaltimoresquares.org
- WYMAN PARK DELL
  www.wymanparkdell.org

Future Harvest
www.futureharvestcasa.org

Gather Baltimore
www.gatherbaltimore.org

Great Kids Farm
www.baltimorecityschools.org/greatkidsfarm
443.642.3928

Great Kids Up Close
www.greatkidsupclose.org
443.642.3954

Green & Healthy Homes Initiative
www.greenandhealthyhomes.org
410.534.6447

Green Building Institute
greenbuildingnetwork.groupsite.com/main/summary
443.733.1234

Green Jobs Network
www.maryland.greenjobs.net

Greening Reservoir Hill
rhicgreen.org
410.225.7547

Greenspring Energy
www.greenspringenergy.com
443.322.7000

Hamilton Crop Circle
www.facebook.com/HamiltonCropCircle?ref=ts
1.910.200.9181

Healthy Harbor Initiative
www.healthyharborbaltimore.org

Hidden Harvest Farm
facebook.com/groups/hiddenharvestfarm

Holistic Life Foundation
www.hlfinc.org
410.669.0645

Housing and Transportation Affordability Index
htaindex.cnt.org

Interfaith Power & Light
interfaithpowerandlight.org/
+1.415.561.4891 [California]

Irvine Nature Center
www.explorenature.org
443.738.9200

Johns Hopkins University
www.jhu.edu
410.516.8000

Johns Hopkins Center for a Livable Future
www.jhsph.edu/clf
410.502.7578

Johns Hopkins Sustainability Office
www.sustainability.jhu.edu
410.516.5544

Johns Hopkins ZipCar
www.zipcar.com/jhu
1.866.4ZIPCAR (1.866.494.7227)

Living Classrooms
www.livingclassrooms.org
410.685.0295

The Loading Dock
www.loadingdock.org
410.558.3625

Main Street Maryland
www.neighborhoodrevitalization.org/programs/mainstreet/mainstreet.aspx

Maryland Association for Environmental and Outdoor Education
www.maeoe.org
443.733.1220 | ext. 114

Maryland Clean Energy Center
mdcleanenergy.org
443.949.8505

Maryland Department of Agriculture
www.mda.state.md.us
410.841.5700

Maryland Department of Business & Economic Development
www.choosemaryland.org
410.767.6300

Maryland Department of the Environment
www.mde.state.md.us
410.537.3000

Maryland Department of Natural Resources
www.dnr.state.md.us
1.877.620.8DNR (8367)

- *PROGRAM OPEN SPACE*
  www.dnr.state.md.us/land/landconservation.asp
- *TREE-MENDOUS MARYLAND*
  www.dnr.maryland.gov/forests/treemendous/

Maryland Department of Planning | *SMART, GREEN & GROWING*
www.green.maryland.gov
410.260.8021

Maryland Division of Labor and Industry (DLLR)
www.dllr.state.md.us/greenjobs/
410.230.6001

Maryland Energy Administration
energy.maryland.gov

Maryland Farm-To-Table Produce
www.mdfarmtotable.com/web/content/Home.aspx
443.762.1677

Maryland Green Registry
www.mde.maryland.gov/MarylandGreen
410.537.3000

Maryland Hospitals for a Healthy Environment
mdh2e.org

Maryland Institute College of Art (MICA)
www.mica.edu
410.669.9200

Maryland Hunger Solutions
www.mdhungersolutions.org.
410.528.0021

Maryland League of Conservation Voters
www.mdlcv.org
410.280.9855

Maryland Master Gardeners
www.mastergardener.umd.edu
410.531.5556

Maryland Native Plant Society
www.mdflora.org/chapters/baltimore/baltchapter.html

Maryland Pesticide Network
www.mdpestnet.org

Maryland Port Administration
www.mpa.maryland.gov

Maryland Sierra Club
www.maryland.sierraclub.org
301.277.7111

Maryland Transit Administration
mta.maryland.gov

Maryland Transportation Authority
mdta.maryland.gov
410. 537.1000

The Maryland Zoo in Baltimore
www.marylandzoo.org
410.396.7102

Masonville Cove Environmental Education Center
www.masonvillecove.org
410.246.0669

Morgan State University
www.morgan.edu
443.885.3333

National Aquarium
www.aqua.org
410.576.3800

Neighborhood Design Center
www.ndc-md.org

Northeast Maryland Waste Disposal Authority
www.nmwda.org
410.333-2730

Parks and People Foundation
www.parksandpeople.org
410.448.5663

Patterson Park Audubon Center
pattersonpark.audubon.org
410.558.2473

Pescatore Backyard Delicacies
www.adamopescatore.com

Power in Dirt
www.powerindirt.com

Real Food Farm
www.realfoodfarm.org
443.531.8346

Rebuilding Together
www.rtbaltimore.org
410.889.2710

Relay Foods
www.relayfoods.com
202.618.6048

Retrofit Baltimore
www.retrofitbaltimore.org
410.929.6139

The Samaritan Women Farm
www.thesamaritanwomen.org

Second Chance
www.secondchanceinc.org
410.385.1101

Sojourner-Douglass College
www.sdc.edu
410.276.0306

Terracyle
www.terracycle.com
609.393.4252

Transit Riders Action Council
getontrack.org
410.837.0225

TreeBaltimore
www.treebaltimore.org
410.458.7888

Under Armour
www.underarmour.com
888.727.6687

Urban Farmhouse
www.urbanfarmhouseonline.com
410.963.2712

US Green Building Council | Maryland
www.usgbcmd.org
202.828.7422

Waste Neutral Group
www.wasteneutral.com
443.838.1826

Waterfront Partnership of Baltimore
www.waterfrontpartnership.org
410.528.1523

Walkscore
www.walkscore.com/

Whitelock Community Farm
www.whitelockfarm.org
410.205.OKRA (6572)

Youthworks
www.oedworks.com/youthserv/summer.htm
410.545.1820

Zero Litter
www.zerolitter.com
www.facebook.com/ZeroLitter

Zipcar
www.zipcar.com/baltimore/find-cars
410.685.1867

SUSTAINABILITY PLEDGE

SUSTAINABILITY: Meeting the current environmental, social and economic needs of our community without compromising the ability of future generations to meet these needs.

Name: _____

Address: _____

Phone: _____

Email: _____

I pledge to:

- ☐ Become a Sustainability Ambassador for my neighborhood **sustainability@baltimorecity.gov** or **410-396-4556**
- ☐ Become a Baltimore Neighborhood Energy Challenge Captain **info@baltimoreenergychallenge.org** or **410-927-6088**

- ☐ Place trash in a can with a tight fitting lid
- ☐ Volunteer with one of Baltimore's many park stewardship groups
- ☐ Organize a Community Pitch-In through DPW
- ☐ Work with neighbors to create and manage a community open space
- ☐ Drive less – use public transit, walk or bike to your destination
- ☐ Use natural household cleaning products
- ☐ Use a push lawn mower or battery operated lawn mower
- ☐ Participate in Blue Water Baltimore watershed activities
- ☐ Use power strips for electronic devices and turn them off when not in use
- ☐ Look for and stop water leaks around the home which can waste more than 10% of your water
- ☐ Compost yard and food waste
- ☐ Encourage the reuse of materials by donating to Baltimore Free Store or The Loading Dock
- ☐ Plant and care for trees at home
- ☐ Grow vegetables and herbs at home or in a community garden
- ☐ Plant native species in the garden
- ☐ Volunteer at the local park or community-managed open space
- ☐ Utilize the "Rate My Ride" survey by texting the word "ride" to 30802
- ☐ Sign up for Zipcar
- ☐ Bike to work or to run errands
- ☐ Carpool with family, friends and neighbors
- ☐ Tell a friend about the Baltimore Sustainability Plan
- ☐ Share a sustainability success story at **www.baltimoresustainability.org**
- ☐ Volunteer to help a school create or maintain outdoor education space
- ☐ Host a sustainability house party to exchange information with friends and neighbors
- ☐ Support locally owned and operated businesses
- ☐ Tell a friend about the importance of buying local
- ☐ Register a business with the Maryland Green Registry
- ☐ Shop at one of the many farmers markets located in Baltimore City

To learn more and to find out what you can do, visit: www.**baltimoresustainability**.org

or email us at sustainability@baltimorecity.gov or call us: 410-396-4556

Baltimore Office of Sustainability
People · Planet · Prosperity

You may view the Annual Sustainability Reports from previous years by clicking on the **RESOURCE CENTER** tab of the Baltimore Office of Sustainability Website. Or, by entering the following url into your browser:

http://www.baltimoresustainability.org/resources

The Resource Center is your go-to source for information on all things relating to sustainability in Baltimore. It offers a variety of downloadable content as well as links to outside resources.

At the Resource Center, you may view information on current **PROGRAMS** or download past **EDUCATIONAL PRESENTATIONS**—like those given at Commission on Sustainability meetings. Additionally, the site offers a number of downloadable **SUSTAINABILITY GUIDES,** including:

- *Baltimore's Eco-Friendly Holiday Guide*
- *Bicycle Commuter Resource Guide*
- *Energy Saving Tips and Resources*
- *Greening Neighborhoods Guide*
- *Guide to Composting in Baltimore*
- *Guide to Preserving Community Managed Open Spaces*
- *Guide to Turn Vacant Lots into Gardens*

In addition to the abovementioned resources, the site offers information on the Baltimore City Plastic Bag Reduction Program, Community Energy Savers Grant, School Programs, Urban Agriculture, and much more.

As of 2014, the Commission on Sustainability meets on the 3RD Tuesday of every month. Check the website for any changes.

ACKNOWLEDGEMENTS

BALTIMORE COMMISSION ON SUSTAINABILITY

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Baltimore Office of Sustainability
People · Planet · Prosperity

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Baltimore, MD 21202

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www.facebook.com/BaltimoreSustainability

@SustainBmore