annual report

PAN



About Us

The Baltimore Office of Sustainability acts as a resource, catalyst, and an advocate in creating an equitable and resilient Baltimore. We integrate environmental integrity, social equity, and economic prosperity into plans, practices, and policies. Our aim is to provide innovative solutions to our city's challenges while engaging, inspiring and collaborating with all sectors of Baltimore.

We define sustainability as "meeting the current environmental, social, and economic needs of our community without compromising the ability of future generations to meet these needs".

The Baltimore Sustainability Commission was created by the City Council in 2007 to oversee the implementation of the Baltimore Sustainability Plan. The Commission is comprised of 20 members appointed by the Mayor and one City Council member appointed by the City Council President. The Commission is made up of members representing environmental groups, community organizations, labor unions, public health and environmental justice interests, and private industry.

As we implement the 2019 Sustainability Plan, we will expand our expertise and collaborate deeply with government, community, non-profit and institutional partners and make sure that implementation is inclusive, equitable and innovative.

Executive Summary

The Baltimore Sustainability Plan, adopted in 2019, articulates strategies, actions, and measures of success across 5 core themes - Community, Human-Made Systems, Climate and Resilience, Nature in the City, and Economy - and 23 topic areas, with the additional theme of equitable implementation integrated throughout the plan. The 2022 Sustainability Annual Report serves to summarize and highlight many of the accomplishments of individuals and organizations across the city that have supported the implementation of the 2019 Sustainability Plan over the past year. In addition to celebrating our progress, this annual report supports the commitment to transparency and accountability established with the creation of the plan.

The Sustainable Strategies and Actions Implementation section of the annual report illustrates the status and progress of a cross-section of the Sustainability Plan's 243 actions, illustrating the actions that saw the most progress during 2022. As of the end of 2022, a total of 110 actions, or 45%, have reached mid-stages of implementation or beyond, with 82% of the actions reaching at least early-stage implementation. Three additional actions have reached completed or ongoing implementation status, bringing the total actions completed to eleven. This report shares some of the stories from each of the Plan's five themes as examples of this progress.

Community – Resources to create new spaces and support sustainable actions were abundant this year. The Baltimore City Department of Transportation's Community-Led Placemaking Program provided updated guidelines to enhance the impact and reach of public space activation at the neighborhood level. The Farm Alliance of Baltimore secured a 15-year lease with the Baltimore City Department of Recreation & Parks to use parkland for farmer training, with ARPA funding support from the Baltimore City Food Policy & Planning team. Other accomplishments included the launch of Youth Grantmakers, professional development for teachers on outdoor learning, and a federal funding award to support the purchase of 25 electric school buses for the Baltimore City Public Schools' fleet.



Human-Made Systems - New, more equitable decisionmaking processes and climate-oriented regulations are being implemented. The Baltimore City Department of Transportation (DOT) has prioritized equity in its decisionmaking and investments by adopting a "transit equity score" that guides the agency's work in developing capital improvement budget requests, plans, and projects. DOT has also won grants for pedestrian safety improvements and traffic calming initiatives that support Complete Streets implementation. Furthermore, the State of Maryland's Climate Solutions Now Act aims to achieve net-zero emissions statewide by 2045. To achieve this target, the act set requirements and a timeline for decarbonization of the state's transit bus fleet. Additionally, there have been significant investments in neighborhoods, housing affordability, and buildings, including rooftop solar installations and weatherization assistance. This new guidance and investments will assist Baltimore in meeting its climate goals.



Above - "Careers in Conservation" farmer learning event at the Whitelock Community Farm. Photo by Preston Keres, USDA/FPAC

Climate and Resilience - New data, resources, and targets to support city-wide greenhouse gas (GHG) emissions reduction were emphasized in 2022. Mayor Scott announced a goal to achieve city-wide carbon neutrality by 2045, as well as ambitious interim GHG reduction targets that will guide the City's Climate Action Plan update. The Baltimore Office of Sustainability partnered with a team from Johns Hopkins University to analyze the progress made in reducing city-wide greenhouse gas (GHG) emissions in 2018, 2019, and 2020, reporting a decrease of 23.2% from 2007 to 2020. The COVID-19 pandemic had a large impact on GHG emissions in 2020, due to decreased energy usage and reduced traffic. The Baltimore Social Environmental Collaborative, a joint climate modeling project, is expected to inform better implementation approaches, and the Real Property Tax Credit for Energy Conservation Devices will incentivize property owners to choose clean energy systems.

Nature in the City - Enhancing access to quality, wellmanaged natural areas has continues to be a citywide priority. New conservation easements were placed to permanently protect forested areas from development and the 46-acre Masonville Cove Partnership in Baltimore, the first Urban Wildlife Refuge in the US, was protected with a formal conservation easement held by the Maryland Department of Transportation Maryland Port Administration, the Maryland Environmental Trust, and Baltimore Green Space. The work of Baltimore Connecting Children to Nature (BCCN) continued, increasing trauma-informed care practices among the environmental community and nature-based experiences among the childcare community. Other accomplishments include forest management plans, a water discount program, and lawsuits against manufacturers to hold them accountable for cleanup costs associated with their products.

Economy - New funding awards have increased resources for small business support, workforce development, and the arts community. The Mayor's Office of Employment Development (MOED) was awarded \$30 million in federal funding through ARPA to expand workforce development, offering transitional jobs, occupational skills training, and summer jobs for youth. A partnership between the Requity Foundation and Carver Vocational-Technical High School launched an innovative and comprehensive carbon-neutral construction curriculum. Other notable accomplishments in Baltimore's local economy and arts and culture sectors included the release of a disparity study and the provision of technical assistance and funding for small businesses. New initiatives and funding awards supported and elevated local artists and cultural organizations, including festivals, job training assistance, and funding to improve community arts spaces and local arts programs.

While these pages feature a portion of the great work underway, we recognize that the stories shared here do not represent an exhaustive list. There are many additional examples of valuable work being accomplished throughout Baltimore. We look forward to recognizing those efforts in the future. We encourage all to share their efforts to make Baltimore more equitable, sustainable, and resilient by participating in Sustainability Commission meetings, sending us a message at sustainability@baltimorecity.gov, or commenting on our social media. We would be happy to recognize your successes in our monthly newsletter or in next year's annual report.

Message from the Sustainability Commission

2022 was a year when many people and organizations tried to adjust to a "post-pandemic" world that still hosts a pandemic. People were both tired and making change, as were organizations. At the Office of Sustainability, we focused on development of our Commissioners in this time. We refined internal processes, welcomed new Office of Sustainability team members, and looked at how to continue to uplift equity in the implementation of the Baltimore Sustainability Plan.

2022 saw the emergence of a new Sustainability body – the Sustainability Subcabinet, which coordinates agencies' responses to key sustainability issues. It marks an important and positive change in the City's approach since 2007, when the Sustainability Commission was created. Much credit goes to the credibility built up by the Office of Sustainability in the past 15 years. More direct intra-agency work will lead to a shift in the Commission's role to a larger emphasis on providing a forum for important conversations and to our ambassadorial role. In this role, the Commission hosted the Subcabinet's first public meeting in April.

At the state level, we submitted testimony in support of ten bills in the 2022 legislative session. Many of the actions in the Sustainability Plan require state support, so we keep our eye on the key bills that would forward the Plan. We provided responses for three Baltimore City Council bills and resolutions.

We often use our meetings to lift up key conversations, and then follow up on issues that emerge. In May, a presentation about the community-led initiative to reconnect South Baltimore to the 11+ miles of shoreline along the Patapsco River, led to a conversation on what metrics can help us understand if development is done in an equitable way. This conversation is continuing in other venues, including the city's Comprehensive Planning process.

Sustainability Commissioners participate in work beyond our meetings. This year Climate Action Plan (CAP) development has been a focus. Two Commissioners are serving on the CAP's Resident Advisory Council, and four are serving on its Technical Advisory Council. One commissioner is helping with an in-person community engagement participatory event for the CAP. In addition, commissioners helped staff the 2022 Sustainability Open House.





Above - Climate Action Plan Outreach Intern Durmon Jones with Sustainability Commissioner Inez Robb at the 2022 Sustainability Open House hosted at Shake and Bake in June - photo by BoS Staff

Left - Children greet Turtle while Commissioners and attendees mingle at the Open House - photo by BoS Staff

6 | Community

Community

Community-Led Placemaking in the ROW

Black Butterfly Urban Farm

The Baltimore City Department of Transportation (DOT) re-branded its application process for public projects taking place on roadways, sidewalks, alleys, and other public thoroughfares maintained by the City (the "Rightof-Way" or ROW) as the Community-Led Placemaking Program, updating the guidelines to be clearer and more user-friendly with the goal of enhancing the impact and reach of this opportunity for activating public spaces at the neighborhood level. ROW projects are a great way to bring communities together and to increase the beauty and safety of our shared spaces.

One such project completed in 2022 was a re-design of four crosswalks surrounding Johnston Square Elementary School in east Baltimore, where concerned community members had observed high levels of speeding and of cars not yielding to pedestrians. The Rebuild Johnston Square neighborhood organization and the Made You Look Initiative (a project of graduate students from the Maryland Institute College of Art's Center for Social Design to use public art for traffic calming) came together to design large, colorful, eye-catching murals for the crosswalks, which were then painted by volunteers, while DOT installed new curb bump-outs to further slow cars down and give pedestrians safer places to stand.





The Farm Alliance of Baltimore finalized a 15-year lease with the Baltimore City Department of Recreation & Parks to use 6.7 acres of parkland in south Baltimore's Farring Baybrook Park as a new farmer training and demonstration site. Multiple city agencies worked together with the Farm Alliance in developing the parameters of the lease and metrics for evaluating the success of the project, and the Baltimore City Food Policy & Planning team secured \$1.5 million in American Rescue Plan Act funds to support the Farm Alliance in further developing the site.

After taking soil samples, meeting extensively with the community, and clearing out invasive brush, the Farm Alliance is now using this land as the headquarters for training apprentices in their Black Butterfly Urban Farmer Academy program (launched in 2021) and for trying new crops and growing techniques. The program has already trained 18 new local BIPOC farmers, with another cohort currently engaged. The development of this site addresses Recommendation 5C of Homegrown Baltimore: Grow Local (Baltimore City's Urban Agriculture Plan, adopted in 2013), to "Support the creation of a farm incubator in Baltimore City."

Above - Members of the Black Butterfly Urban Farmer Academy -Photo by The Farm Alliance of Baltiomre Left - Work underway on a crosswalk mural in Johnston Square photo by DOT Staff



Neighbors:

• Youth Grantmakers (YG), a permanent, youthled grantmaking body, launched its inaugural cohort. YGs allocated \$525,000 in resources to support Baltimore City youth ages 16-24.

Environmental Literacy & Healthy School Environments:

- 203 teachers received professional development sessions on systemic professional development days covering best practices for outdoor learning, schoolyard gardens, and the National Aquarium's "What Lives in the Harbor" program.
- 35 schools received updated, more efficient and effective HVAC systems, representing 21% of the school system.
- As of 2022, all City public schools designated a Wellness lead who is responsible for increasing student physical activity with support provided by the district in the form of new resources and lesson plans.
- The EPA's Clean School Bus Program rebate competition awarded over \$9.4 million from in federal funds to Baltimore City Public Schools to help the district purchase 25 electric school buses that will accelerate the transition to zero emissions vehicles and produce cleaner air in and around schools and communities.

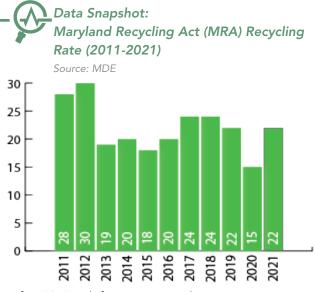
Waste & Recycling:

- In fall 2022, the Baltimore City Department of Public Works hired its first Zero-Waste Manager to advance zero waste infrastructure across the city, enhance recycling, and support waste diversion efforts.
- GRASS Baltimore, a new glass reuse cooperative venture, received both private and state grant funding and launched operations in southwest Baltimore.
- An estimated 20 million single-use plastic bags were prevented from entering our environment through the use of alternative bags throughout Baltimore City in 2022.

Data Snapshot: Baltimore City Public Schools with Local, Potable Water from Drinking Fountains Source: BCPS

40 Schools

Due to concerns about possible lead contamination from old pipes, Baltimore City Public Schools ceased using the water fountains in almost all its buildings in 2002, instead using water coolers throughout the system, which creates significant expense and environmental impacts from trucking. As of 2022, thanks to new construction, renovation, and updated drinking fountains, 40 city public schools now have clean, local, potable drinking water from fountains.



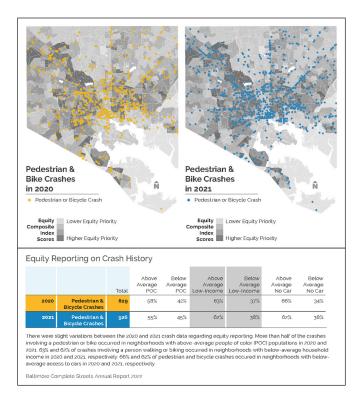
After 2012, ash from incinerated waste was no longer considered a recyclable material for use as a landfill cover material; this reduced the City's MRA defined recycling rate. In 2020, recycling pickup was suspended, reducing the MRA recycling rate.

Human-Made Systems

Equity in Transportation Planning

The Baltimore City Department of Transportation (DOT) began incorporating equity into how it prioritizes investment, adopting the "transit equity score" which will be detailed in the forthcoming Transit Equity Initiative report. This score influences capital improvement budget requests, resurfacing, 311 prioritization, the Charm City Circulator Transit Development Plan, neighborhood traffic calming plans, and quick-build projects that further safety goals. DOT is in the process of creating standard operating procedures to reflect how the transit equity score is to be used in DOT's decision-making and investments. DOT has also applied for and won several grants specifically targeting areas in need, including a Complete Streets planning grant for Wabash Ave and implementation funding for push-button activated pedestrian crossing signals and flashing beacons at an array of high-crash pedestrian crossings in underserved areas.

DOT also applied for and won nearly \$3 million from the State for pedestrian safety improvements, created a neighborhood traffic calming program with a dedicated funding source, in which it proactively engages high-crash neighborhoods to create and implement traffic calming plans and began a partnership around impervious surface removal and green stormwater infrastructure installation at traffic calming projects.



Above - DOT's 2022 Complete Streets Annual Report includes mapping and equity analysis of Complete Streets metrics such as the number and location of Pedestrian & Bicycle Crashes.

Climate Solutions Now Act & BEPS Regulations

In 2022, the State of Maryland passed one of the most ambitious climate bills in the nation - The Climate Solutions Now Act (CSNA). The bill puts Maryland on track to reduce statewide emissions by 60% by 2031 and achieve net-zero emissions (meaning the amount of carbon released by burning fossil fuels is reduced to zero or offset through other approaches) by 2045. CSNA's Building Energy Performance Standards or BEPS standards are a key approach to reach these targets. Buildings 35,000 sq. ft. or more across the state will need to meet two requirements:

- 1. 20% reduction in Greenhouse Gas (GHG) emissions by January 1, 2030, and
- 2. net-zero emissions by January 1, 2040.

Statewide BEPS goals help to propel the reduction of emission across Baltimore City, while aiding in meeting citywide carbon neutrality goals. CSNA in combination with the sweeping climate goals in the federal Inflation Reduction Act of 2022 will assist Baltimore in meeting our bold, audacious climate goals.

Buildings



Neighborhoods:

- A \$41 million American Rescue Plan Act (ARPA) allocation will allow Baltimore City Recreation and Parks to take a much-needed first step in addressing the systemic lack of investment in recreation by allocating approximately \$10 million for public pools, \$20 million for recreation centers, \$5 million for playgrounds, \$1 million for trails, and \$2 million for athletic fields and courts.
- CleanCorps was awarded \$14.6 million to support up to 16 neighborhoods with the maintenance of vacant lots.

Housing Affordability:

- Nearly \$4 million in ARPA funding awards were made to organizations that provide services to empower individuals and families to maintain and preserve homeownership.
- Over \$15 million in ARPA funding was awarded to organizations engaged in creating equitable neighborhood development, affordable homeownership, and the rehabilitation of vacant properties into affordable housing.

Buildings:

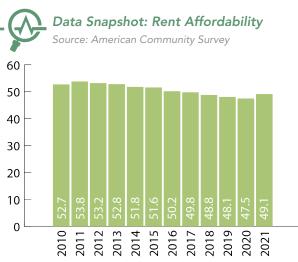
- The Baltimore SHINES program, a collaborative program between Baltimore City Department of Housing and Community Development and Civic Works, opened to applicants. The program provides access to rooftop solar PV installations for low- and moderate-income Baltimore City residents.
- The Weatherization Assistance Program provided 19 older, low-income residents with emergency heat access and health and safety interventions to make their homes more livable and address health risks.

Transportation:

- DOT received 20 applications through its Community-Led Placemaking Program.
- The Climate Solutions Now Act set requirements for electrifying the State's fleet of transit buses.

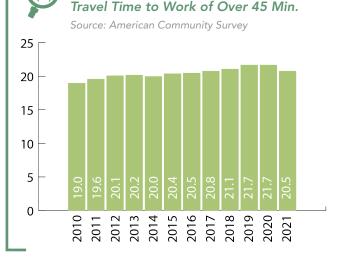
Neighborhoods

Housing Affordability



The percentage of households that pay more than 30% of their total household income on rent and related expenses .

Data Snapshot: % of Population with-



Buildings

Transportation

Noise

Climate & Resilience

Greenhouse Gas Emissions Inventory

In 2022, the Baltimore Office of Sustainability partnered with a team from Johns Hopkins University to analyze and report on the progress made in reducing city-wide greenhouse gas (GHG) emissions in 2018, 2019, and 2020. The analysis determined that in 2020, Baltimore was responsible for emitting the equivalent of 6.7 million metric tons carbon dioxide (or CO2eq). This was a decrease of 23.2% from Baltimore's 2007 baseline, shy of our target of a 25% reduction by 2020.

Baltimore's GHG emissions are dominated by emissions from the stationary energy sector, which contribute 64% of the total, while 22% are from transportation within Baltimore and 14% of emissions are generated by waste management. Some of the long-term factors influencing emissions include:

- little change in electricity consumption since 2007
- decrease in electricity emissions by 32% due to the decrease in the use of coal power and an increase in the use of natural gas to generate electricity for the regional grid
- a nearly 20% increase in natural gas consumption and associated emissions since 2007
- decrease in on-road transportation emissions by 15% between 2007 and 2019.

The COVID-19 pandemic had a large impact on GHG emissions in 2020, which dropped by 12% between 2019 and 2020. Decreased energy usage - 5% less electricity usage and 12% less natural gas usage - was one factor. The largest impacts came from reduced traffic, which resulted in a 16% decrease in transportation emissions from 2019 to 2020.

Though the city fell just short of meeting the 2020 target, actions such as those detailed in the 2022 Climate Solution Now Act and the statewide goal to transition to zero emission vehicles by 2035 are expected to prove instrumental for progress on city-specific emissions.

Baltimore Social Environmental Collaborative



Above - Members of BSEC participate in a breakout discussion. -Photo by Will Kirk, Johns Hopkins University

The U.S. Department of Energy awarded a \$25 million grant for the Baltimore Social Environmental Collaborative (BSEC) in 2022. BSEC is a collaborative climate modeling project between eight academic institutions including The Johns Hopkins, Morgan State and The University of Maryland, Baltimore County BSEC's keen climate and social science measures and analytics will serve as a tool to assess the climate impact of our citywide climate planning efforts, and inform better implementation approaches.

Resiliency Hub Program Growth

In 2022, Baltimore's Community Resiliency Hub Program (CRH Program), which collaboratively cultivates local resilience in climate-vulnerable communities, grew to a network of 17 CRH partners across the city. A \$7 million federal grant application to fund solar power and battery storage for up to 17 CRH Partners was submitted to FEMA and is under review. Three CRH Partners received energy efficiency upgrades to their buildings with support from the Healthy Neighborhoods Initiative, four CRH Partners aligned funding from the Maryland Energy Administration to install solar and battery back up power systems, and over 11 CRH Partners supported the city's extreme heat response.

Community Preparedness Energy Greenhouse Gas Emissions Clean Air Food Systems



Community Preparedness:

- The city's Community Rating System (CRS) was reverified by FEMA, qualifying property owners for 25% reduction on flood insurance. CRS saves Baltimore property owners more than \$800,000 on flood insurance annually.
- The City established a Mayor's Office of Infrastructure Development (MOID). MOID will be primarily responsible for supporting agency leaders focused on identifying, administering, and managing federal infrastructure projects and grant programs.

Energy:

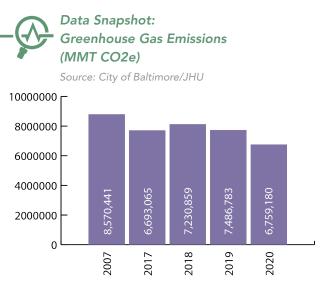
 In September 2022 the Mayor signed into law City Council Bill 22-0193 - Real Property Tax Credit for Energy Conservation Devices. When it becomes effective the new ordinance will allow the City to grant tax credits to homeowners as an incentive for installing solar or geothermal energy devices.

Greenhouse Gas Emissions:

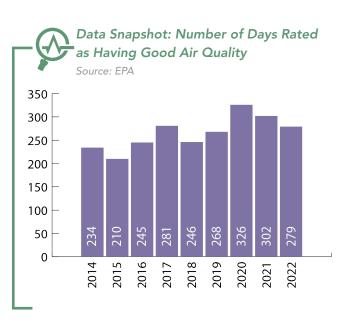
- In January of 2022, Mayor Scott announced a citywide goal to achieve carbon neutrality by 2045, meaning we reduce the amount of greenhouse gasses emitted to zero.
- Baltimore City made the Carbon Disclosure Project's 2022 A-list as one of 123 cities achieving ambitious climate goals.

Food Systems:

- The Baltimore City Food Policy and Planning Division (FFP) was awarded over \$11 million of ARPA funding to support improved food access and food equity.
- Since June 2022, FFP has distributed 1,194,000 pounds of fresh produce and 8,358,000 servings of fruits and vegetables.
- In October, MedStar Harbor Hospital launched the Food Rx pilot program, which helps qualified patients from the communities near the hospital manage diabetes and develop healthier eating habits.



In 2020 and 2022, the City partnered with a team from JHU to complete GHG inventories for 2017, 2018, 2019, and 2020, and update the 2007 inventory.



Community Preparedness

Energy

Greenhouse Gas Emissions

Clean Air

Food Systems

Nature in the City

Masonville Cove Conservation Easement

Masonville Cove Partnership, the nation's first Urban Wildlife Refuge, was protected with a formal conservation easement in April 2022, ensuring that communities will be able to explore and enjoy the 46-acre site in perpetuity. The easement was entered by the Maryland Department of Transportation Maryland Port Administration (MDOT MPA), the Maryland Environmental Trust, and Baltimore Green Space.

As part of a larger mitigation project, MDOT MPA restored the Masonville Cove site as a wildlife sanctuary. For over a decade the Masonville Cove has been serving countless community members through a partnership of neighborhood organizations, The Port of Baltimore, Living Classrooms Foundation, The National Aquarium, and U.S. Fish and Wildlife. Today it is enjoyed by thousands of visitors each year.

Above - Aerial view of Masonville Cove Partnership - Photo by the Maryland Environmental Trust

Right - Participants of the 2022 Nature Nurtures Symposium engage in discussion during a workshop - Photo by Abby Cocke

2022 Nature Nurtures Symposium

Baltimore Connecting Children to Nature (BCCN) took shape in 2018 when our city joined a national cohort of cities working to increase equitable access to nature for children and families. One of BCCN's key strategies is to increase trauma-informed care practices among the environmental community and increasing nature-based experiences among the childcare community. In support of this goal, BCCN held the first Nature Nurtures Symposium in 2020.

After moving to a mix of virtual and outdoor workshops in 2021, Nature Nurtures returned as a large, in-person gathering in summer 2022. Held at the William S. Baer School and attended by approximately 100 participants, the 2022 symposium featured Trauma-Informed Care trainings, workshops on integrating nature and mindfulness into daily practices, and opportunities for networking and conversation. Offerings included sessions like "Nature-Based Mental Health & Resiliency" with the Center for Nature-Informed Therapy, and workshops on storytelling and building youth selfesteem with teens from the Healing Youth Alliance.





Nature for Nature's Sake/Trees & Forests:

- The Reimagine Middle Branch Plan received \$47.7 million in grants for mitigating flood risks and creating and enhancing the city's wildlife habitats. The project will include the creation of over 50 acres of wetland systems.
- Over 730 acres of forest land have been surveyed as part of the creation of Forest Management Plans for three large City parks: Druid Hill, Herring Run, and Cylburn. Natural Resource Inventories will be prepared for 150 acres of smaller parks.

Water in the Environment:

- The Water4All Discount Program was launched to provide more equitable access to financial assistance for eligible Baltimore City residents who need help paying their water bills. This program provides a monthly discount for water and sewer costs based on a percentage of residents' income. For the first time, tenants who do not directly pay their water bills are eligible to apply for water payment assistance.
- The City of Baltimore announced the filing of a lawsuit against over 20 manufacturers of aqueous film-forming foams and certain "forever chemicals" used in those products. The City seeks to hold manufacturers accountable for knowingly allowing the City's waterways and water systems to come into contact with these substances.
- The City announced the joint filing of a lawsuit to hold cigarette manufacturers accountable for cleanup costs associated with tobacco product litter.

People & Nature/Green Infrastructure:

• Nine organizations were awarded funding by the National Fish & Wildlife Foundation to support projects and implement training related to urban forest management, stormwater management, pollinator habitat, tree planting and maintenance, and wetland creation.

Data Snapshot: Acres of Forest in Forest Conservation Easements Source: Baltimore Department of Planning **Added in 2022:** 10.2 Acres Total in Easements: 180.8 Acres Data Snapshot: Number of Acres of Impervious Surface Removal Source: Baltimore Department of Public Works 6.4 Acres in 2022 Data Snapshot: Amount of Trash Collected by Trash Wheels (Tons) Source: Waterfront Partnership of Baltimore 500 400 300 200 100 464 0 2015 2016 2018 2014 2019 2022 2017 2020 2021

People in Nature Nature for Nature's Sake Trees and Forests Water in the Environment Green Infrastructure

Economy

Workforce Development Programs Expand

The Mayor's Office of Employment Development (MOED) was awarded \$30 million in federal funding through ARPA to expand workforce development. This investment will prioritize unemployed and underemployed residents, particularly our most disadvantaged jobseekers, including returning citizens, opportunity youth, and public assistance recipients. The programs that will be supported include Hire Up, Train Up, and YouthWorks.

Hire Up is a transitional jobs program with City and quasi-government agencies. These \$15 per hour, 6-month positions will enable 220 low-income residents to earn wages and support the economic recovery of their households while also delivering public services that will support a cleaner, safer, more welcoming city.

Train Up will offer occupational skills training, industry recognized credentials, and \$100/week stipends for 838 residents to upskill and obtain jobs in high-demand industries in the region, such as biotechnology, business services, healthcare, and information technology.

MOED has operated the YouthWorks summer jobs for over 30 years, providing valuable work experience for city residents ages 14 to 21. MOED will use the ARPA investment to fund 4,000 youth over two summers, as well as 100 youth during the school year through the first-ever YouthWorks Academy.

The funding will also be used to provide behavioral health, legal services, adult education, financial empowerment counseling, and career navigation to residents participating in Hire Up or Train Up. In addition, these funds will support wage subsidies for nearly 20% of program participants at small, minority- and womenowned businesses.

Carver Students Engaged in Carbon-Neutral Construction Curriculum



Above - Mayor Scott joins Carver students and the Requity Foundation at The Carver House to celebrate a donation to the project. Photo by J.J. McQueen

A partnership between the Requity Foundation and Carver Vocational-Technical High School launched to provide an innovative and comprehensive carbon neutral construction curriculum that engages students in activities that the design, renovate, and transform a vacant row house into an affordable net-zero home. The Carver House, located at 2212 Presstman Street, will be renovated through this partnership, allowing thirty students to participate, gaining hands-on experience and construction skills.

A donation from ADT has contributed to this partnership. The company provided \$100,000 in funding towards the project, along with a security system and rooftop solar valued at more than \$30,000.

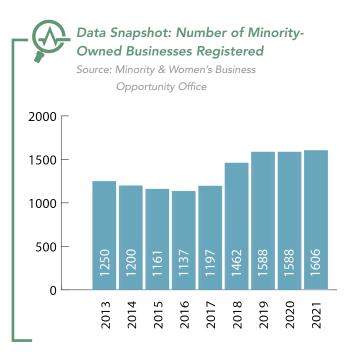


Local Economy:

- The Minority and Women's Business Opportunity Office released the 2022 Disparity Study, which analyzed whether a disparity exists between the number of available minority, women, veteran, LGBTQ, and disability-owned businesses providing goods or services and the number who are contracting with the City as a prime contractor or subcontractor.
- The Baltimore Small Business Technical Assistance Network received \$1.7 million to provide technical assistance, and support small businesses and community-based organizations in obtaining access to capital and sustaining their operations.
- JPMorgan Chase committed to providing \$5 million over the next three years to Baltimore City's Prioritizing Our Women's Economic Rise Collaborative, which seeks to prioritize women of color's economic growth through small business incubators, skills training in highgrowth, nontraditional job sectors and grant funding to develop affordable housing.

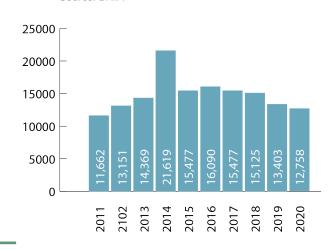
Arts & Culture:

- Waterfront Partnership launched Baltimore by Baltimore, a series of six all-day festivals to elevate local talent and serve as a platform for Baltimore's artists, makers, and creatives.
- The Pennsylvania Avenue Black Arts and Entertainment District, Inc. has been awarded \$1,000,000 to provide job training assistance, workforce development, cash assistance, and small business assistance in the form of sponsorships and fellowships for artists and creative professionals within the Black Arts District footprint.
- Arena Players Incorporated, the oldest continually operating African American Community theatre in the United States was awarded funding for comprehensive upgrades to the main performance space and auxiliary spaces, and improvements to the exterior, including ADA accessibility.





Data Snapshot: Number of Employees in the Creative Economy Source: BNIA



Where Do We Go From Here?

2023 will be another great year for climate action as the Office of Sustainability, city agencies, and the administration lead some key planning processes that will shape the future of climate change planning and implementation for the next decade.

Climate Action Plan

A new Climate Action Plan will debut by December 2023 to guide City climate and resilience initiatives. The forthcoming Climate Action Plan will outline pathways to reduce greenhouse gas emissions in the energy, transportation, and waste sectors. According to the 2020 greenhouse gas inventory, nearly 70% of city-wide emissions come from buildings, meaning the energy we use to heat, cool and light our homes, offices and other neighborhood hubs. Reducing emissions slows climate change, lessens the negative impacts of weather extremes and helps to improve overall quality of life. Climate priorities impact quality of life measures such as neighborhood walkability or blight, green space, and even crime. When we prioritize climate actions, we prioritize our most vulnerable communities, residents and neighbors who are most likely to be negatively impacted by climate change risks.

Disaster Preparedness and Planning Project (DP3)

Over the past few years, the city has experienced a pandemic, a ransomware attack, more intense heat waves, flood risks and there has been an increase nationally in threats of domestic terrorism, violence and crime. Disaster preparedness is essential to the city's resilience. The Office of Sustainability expects to release the next DP3 in December 2023. This plan helps prepare the City for various hazards and qualifies Baltimore for certain FEMA funding.

Solid Waste Management Plan (SWMP)

The Baltimore City Department of Public Works (DPW) is updating the City's 10-Year Solid Waste Management Plan. The plan will identify goals for managing Baltimore's solid waste stream, assessing the existing solid waste collection systems, current and future disposal capacity needs, and the ways in which reuse, recycling, and composting from residential, institutional, and commercial sources are to be implemented.

People & Nature

The City's Sustainability Sub-Cabinet will launch a new People & Nature working group to further inter-agency support for nature connections. City agency staff will continue to work with Baltimore Connecting Children & Nature (BCCN) by continuing work with schools and youth, revisiting the BCCN mission and strategies, performing a landscape assessment, recruiting new members onto the BCCN leadership team and into a new structure for general membership, and holding a 4th Nature Nurtures event.

Staffing

City agencies will hire key personnel to advance sustainability and resilience. For instance, DPW hired the city's first-ever Zero Waste Manager to lead the critical work of expanding zero waste capacity across the city. The Office of Sustainability has added a new position in 2023 focused on climate and resilience that will coordinate implementation of the CAP and DP3. The Energy Office in the Department of General Services has proposed the creation of four new positions focused on implementing strategies to reduce energy usage in City buildings.

The Scott administration has prioritized climate action in the Mayor's Term 1 Action Plan, including improving environmental justice and urban waste management practices, as well as reducing greenhouse gas emissions and the negative public health impacts related to climate change. All of us - City employees, nonprofits, academic institutions and residents - will need to play an active role to meet our climate goals to ensure a vibrant and healthy city for everyone in Baltimore.

A Poem for Baltimore: Baltimore Shores are More

Baltimore is more than the shores of the Chesapeake Bay, And I assure you it is here to stay through the challenges of today. More than blue crabs, what you find here is an urban lab. More than a blue-collar town, the city is full of scholars with PhDs in their communities. More than a polity embracing sustainability, this city is an example of true community resiliency. More than its demographics, statistics, I just need you to know, Charm City is beautiful.

Baltimore provides more than a grim reality of future climate catastrophe. So let me tell you about that story in 2023.

1% increase in tree canopy, Made the A-List of cities with CDP*,

Community Resiliency Hubs for which there is not sub.

20 million bags diverted equals trash averted,
Mr. Trash Wheel cleans the bay with zeal,
Our Climate Action Plan will have a lot of fans,
Not to mention, flood prevention.

Are you listening?

BUT...still there exists a tension.

- Sometimes we don't all share the same vision.
- How often do you question someone's intentions?
- We listen to the opposition to understand their position.
- But yet I question, how can any NOT see this as fundamental to any city's mission? Decisions...Decisions...Decisions...
- Our programs have provided models for the nation to follow,

But we must not let these stories ring hollow.

Baltimore is more than the shores of the Chesapeake Bay and I assure you it is here to stay.

Sustainable Strategies and Actions Implementation

The Baltimore Sustainability Plan articulates strategies, actions, and measures of success across 5 core themes and 23 topic areas. There are 243 actions listed in the Plan, and we report on the implementation status of each action on an annual basis. The charts provided summarize the actions that saw the greatest implementation progress during 2022.

СОМИ	/IUNITY	Still Pending	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
NEIGHBOI	RS					
Action 1.1:	Build capacity and create opportunities for conversations around racial equity to breakdown biases and increase understanding.		•			
Action 1.2:	Engage, promote, and support voices who may not traditionally be heard.		•			
Action 1.3:	Develop avenues for incorporating resident voices into decision-making.		•			
Action 1.4:	Promote resident and neighborhood successes.		•			
Action 2.2:	Expand and elevate low- and no-cost programming in neighborhoods.		•			
Action 3.1:	Envision, create, and activate safe, accessible community spaces.		•			
Action 3.4:	Engage youth and designate spaces for youth to gather		•			
ENVIRON	IENTAL LITERACY					
Action 1.1:	Expand and provide professional development in environmental literacy including environmental justice.		•			
Action 1.3:	Foster sustainability-minded school leaders.		•			
HEALTHY S	SCHOOL ENVIRONMENTS					
Action 1.2:	Provide clean, local potable water via water fountains in all schools.		•			
Action 1.3:	Ensure acceptable temperatures, light, and acoustics in all schools.		•			
Action 3.3:	Promote physical activities.		•			
WASTE &	RECYCLING					
Action 2.3:	Investigate revising codes and creating ordinances to eliminate waste and maximize reuse of materials; Establish businesses that reuse products and marketplaces for selling them.		•			
URBAN AC	GRICULTURE					
Action 1.3:	Create better defined and supported pathways to ownership.		•			
Action 2.1:	Connect growers to educational resources and training.		•			
Action 2.2:	Support existing social networks and non-profits of growers.			•		

Community

HUMA	N-MADE SYSTEMS	Still Pending	Early Stages	Mid-Stages Advanced	Stages Implemented/ Ongoing
NEIGHBOR	RHOODS				
Action 1.3:	Continue to increase resident-led and city-supported improvements with a focus in under-served neighborhoods.		•		
Action 2.4:	Increase funding for affordable housing.		•		
Action 2.6:	Improve the investment landscape in under-invested communities.		•		
HOUSING	AFFORDABILITY				
Action 1.2:	Explore tools to ensure significant new development projects support existing residents and minimize resident displacement.	•			
Action 2.2:	Facilitate the transfer of vacant, abandoned properties to owners who have capacity to rehabilitate them.	•			
Action 3.1:	Increase awareness of financial assistance and incentives to help low-income homeowners maintain their homes.		•		
Action 3.2:	Increase financial resources (and increase awareness of them) to assist low-income and older adults with ADA updates.	•			
Action 3.3:	Increase financial resources (and increase awareness of them) to assist low-income households to become homeowners.	•			
BUILDING	5				
Action 2.2:	Develop programs to retrofit affordable housing units into energy- and water-efficient units.	•			
Action 2.4:	Increase workforce programs in energy efficiency, renewable energy and healthy upgrades, emphasizing local hiring.		•		
TRANSPOR	RTATION				
Action 1.2:	Support a dedicated funding source for public transportation and safety improvements.	•			
Action 2.4:	Alter traffic signal timing citywide.	•			
Action 2.5:	Seek opportunities to implement more pedestrian-only spaces.		•		

CLIMA	TE & RESILIENCE	Still Pending	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
ENERGY						
Action 2.4:	Adopt a goal for electric vehicle charging stations.		•			
GREENHO	USE GAS EMISSIONS					
Action 1.1:	Update the Climate Action Plan.			•		
Action 2.1:	Set an ambitious reduction target.				•	—
Action 2.2:	Require a life-cycle evaluation of energy savings and emission reduction options.	•				
Action 3.2:	Commit to being a "Carbon Neutral City".			•		—
CLEAN AI	IR					
Action 1.2:						
Action 1.2.	Work with federal, state, and regional agencies to reduce toxic air emissions from transportation.	-				/pŧ
	RE IN THE CITY	Still Pending	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
NATUI	air emissions from transportation.	Still Pending	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
NATUI	air emissions from transportation.	Still Pending	Farly Stages	→ Mid-Stages	Advanced Stages	Implemented/ Ongoing
NATUI PEOPLE AN Action 3.4:	air emissions from transportation. RE IN THE CITY ND NATURE Explore the development of a management plan that would identify existing	Still Pending	Early Stages		Advanced Stages	Implemented/ Ongoing
NATUI PEOPLE AN Action 3.4:	air emissions from transportation. RE IN THE CITY ND NATURE Explore the development of a management plan that would identify existing and future threats to our natural resources.	Still Pending	 ◆ ★ Early Stages 	O Mid-Stages	Advanced Stages	Implemented/ Ongoing
NATUI PEOPLE AN Action 3.4: NATURE FC	air emissions from transportation. RE IN THE CITY ND NATURE Explore the development of a management plan that would identify existing and future threats to our natural resources. OR NATURE'S SAKE	Still Pending	 ◆ ■ Early Stages 	Mid-Stages	Advanced Stages	Implemented/ Ongoing
NATUR PEOPLE AN Action 3.4: NATURE FC Action 1.3: Action 2.1:	air emissions from transportation. RE IN THE CITY ND NATURE Explore the development of a management plan that would identify existing and future threats to our natural resources. OR NATURE'S SAKE Link natural systems within the city and to the regional network.	Still Pending	 ◆ ● ■ ■	Mid-Stages	Advanced Stages	Implemented/ Ongoing
NATUR PEOPLE AN Action 3.4: NATURE FC Action 1.3: Action 2.1:	air emissions from transportation. RE IN THE CITY ND NATURE Explore the development of a management plan that would identify existing and future threats to our natural resources. OR NATURE'S SAKE Link natural systems within the city and to the regional network. Complete Forest Management Plans for the largest forested parks.	Still Pending	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing
NATUR PEOPLE AN Action 3.4: NATURE FC Action 1.3: Action 2.1: WATER IN	air emissions from transportation. REINTHE CITY ND NATURE Explore the development of a management plan that would identify existing and future threats to our natural resources. OR NATURE'S SAKE Link natural systems within the city and to the regional network. Complete Forest Management Plans for the largest forested parks. THE ENVIRONMENT Increase restoration of riparian corridors, and pursue other innovative	Still Pending	Early Stages	 → → → Mid-Stages 	Advanced Stages	Implemented/ Ongoing

NATU	RE IN THE CITY - CON'T	Still Pending	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing		
GREEN INI	FRASTRUCTURE							
Action 2.1:	Create a green infrastructure workforce development program.	•						
Action 3.1:	Ensure projects are appropriate within the neighborhood context.	•						
ECON	ΟΜΥ	Still Pending	Early Stages	Mid-Stages	Advanced Stages	Implemented/ Ongoing		
LOCAL EC	ONOMY							
Action 2.1:	Provide support services to grow businesses.		•					
Action 3.1:	Continue to address needs unique to minority- and women-owned businesses.		•					
WORKFORCE DEVELOPMENT								
Action 2.2:	Promote city government workforce training programs that lead to jobs.		•					
ARTS & CU	ARTS & CULTURE							
Action 2.1:	Implement the recommendations of the Mayor's Task Force on Safe Arts Space.		•					
Action 2.2:	Host free or low-cost professional development and entrepreneurial workshops for artists and art-based organizations.		•					
Action 2.3:	Fully implement the City's "1% for Art" program.	•						
Action 3.2:	Equitably distribute funding to artists ensuring broader cultural representations.	•						
Action 3.4:	Provide funding and support for local leaders to engage artists, arts organizations, and residents.	•						



Commissioners & Staff

Baltimore Commission on Sustainability

Miriam Avins, Co-Chair Mia Blom, Co-Chair The Honorable Regina Boyce Donzell Brown Gary Crum Lisa Ferretto Alexandra Grayson William Joyner Cedrick Lee Nicolette Louissaint Jared Lyles The Honorable Phylicia Porter Inez Robb **Bryant Smith** The Honorable Stephanie Smith Benjamin Zaitchik

Baltimore Office of Sustainability Staff

Ava Richardson, Director Bruna Attila, Coastal Resources Planner Joanna Birch, Floodplain Manager Abby Cocke, Environmental Planner Aubrey Germ, Climate and Resilience Planner Amy Gilder-Busatti, Sustainability Manager Durmon Jones, Climate Action Plan Intern Tara Josberger, Climate Action Plan Intern Quentin Klein-Alfano, Climate Action Plan Intern Valerie Rupp, Climate and Resilience Manager

Acknowledgements

Annual Report Project Manager: Amy Gilder-Busatti Report Design - Bridget Parlato, Full Circuit Studio Cover Photo - Kacie Mills Baltimore Shores Are More - Ava Richardson



417 East Fayette Street, 8th Floor Baltimore, Maryland 21202

sustainability@baltimorecity.gov www.baltimoresustainability.org

Published May 9, 2023