

# HOUSING

## DEFINITION/DESCRIPTION

Safe, decent and affordable housing is a basic need of every City resident and is fundamental to creating cohesive neighborhoods where every resident thrives. Desirable neighborhoods offer housing types that are accessible at all income levels, physical abilities and life stages. Quality and diverse housing offers choices to low and moderate-income families; preserves existing, stable housing, generates interest and investment resulting in desirable schools, usable retail, and proximity to open space, a healthy natural and built environment and engaged community partners.

## CURRENT STATUS

The City is focusing on creating healthy communities and strengthening the connection between housing and health; ensuring stable housing markets and neighborhoods. Vacants to Value is a market-based, data driven, geographically focused initiative to address conditions of blight and abandonment in target areas. Its seven strategies can be applied individually or collectively. The City eliminates blight focusing on a whole-block approach, inspecting and preserving housing and weatherizing homes. These methods attract resources and leverage city investments. An ePermit system launched to streamline the permit process. Providing financial, social and economic support to residents minimizes social and economic disparities that can result when neighborhoods undergo transformative change.

## EQUITY INDICATORS

Baltimore suffers from patterns of racial housing segregation established decades ago: redlining denied homeownership opportunities based on race and ethnicity. These patterns are tied closely to opportunity and wealth disparities. The impacts remain today. Families make housing decisions based on criteria such as income, quality schools and, accessibility to services and employment. Many of the City's communities of color and low-income families do not have these choices and live in neighborhoods that are physically unsafe, environmentally hazardous and psychologically debilitating. And, neighborhoods characterized as desirable frequently lack affordable housing. Families often pay more than they can afford: 55 percent of renters and 32 percent of homeowners are considered to be housing burdened.

## STRATEGIES

- 1. Provide and support a range of housing types that accommodate all income levels, physical needs and life stages and are accessible to transit, employment centers, retail, healthcare and other amenities.** Direct resources to support housing and development in close proximity to critical amenities such as multi-modal transit, employment centers, schools, parks and grocery stores. As neighborhoods are transformed, city resources and policies ensure that new projects include units that are available to very low, low-moderate and working-income households, accommodate a range of physical needs and provide supportive services to all residents.

**Action 1** - Direct city resources to neighborhoods where public investment will leverage additional investment; increase the supply of affordable housing in high market areas and stabilize and protect current homeowner's investment.

**Action 2** - Explore innovative financing opportunities that can leverage City resources, while helping to build the production capacity of its non-profit affordable housing providers.

**Action 3** - Review city regulations and processes, amend to minimize impediments and develop new policies that spur new affordable housing initiatives such as tiny homes.

**2. Use Blight Elimination to create healthy, safe and attractive neighborhoods.**

Working in partnership with its development partners, strategically identify blight opportunities.

**Action 1** - Continue reducing the City's vacant property inventory and transform vacant land to enhance neighborhoods by transforming vacant lots, connecting housing efforts to transportation and workforce development.

**Action 2** - Promote cross-cultural competency (engaging and understanding of different cultures) marketing and celebrating diverse neighborhoods, maintaining and creating high quality infrastructure, preventing foreclosures and piloting intentional integration strategies.

**Action 3** - Continue collaborative efforts and partnerships with community, institutional, public and private stakeholders to identify resources and strategies that will support and expedite Blight Elimination efforts.

**3. Create, strengthen and sustain neighborhood housing markets**

Preventing blight, building and supporting strong neighborhood housing markets requires a combination of financial incentives, technical assistance and individual support to ensure that homeowners can remain in their homes and benefit from increased housing values, while attracting new residents and maintaining existing rental properties.

**Action 1** - Provide additional and flexible funds to prevent blight and enable current homeowners to maintain their properties and seniors to age in place.

**Action 2** - Expand Healthy Neighborhoods, Live Near Your Work and increase homebuyer incentives that are not income-restricted to attract new homeowners.

**Action 3** - Continue and expand efforts to reduce property tax burdens particularly in neighborhoods undergoing revitalization where increasing housing values result in displacement and gentrification.

**METRICS FOR SUCCESS**

**Strategy 1:** Maintain inventory of city-supported housing projects documenting investment and units created

**Strategy 2:** Demonstrate a XX% reduction in the City's vacant property inventory by XX.

**Strategy 3:** Implement a blight prevention program in at least ten city neighborhoods by XX.

**Qualitative:** Improve the quality of housing through engaged community partners



# TRANSPORTATION

## DEFINITION/DESCRIPTION

Our daily choices around how we travel to work, school, shopping and other destinations is a key factor in the sustainability of a community. Our overwhelming dependence on cars creates congestion, noise, and air pollution, an increase in accidents and has a major impact on household costs. Public transportation impacts commuters in terms of money spent on fares and time lost waiting. A sustainable transportation system is based on a compact mixed-use land use and promotes diverse options that are safe, low cost and reduce vehicle miles traveled.

## CURRENT STATUS

The “bones” of Baltimore are supportive of a sustainable transportation system. The City is working with the MTA to reconfigure a century-old network of bus routes, adding dedicated bus lanes and transit signal priority on key corridors. The City established bicycle and car sharing systems and developed a Bicycle Master Plan and a Separated Bike Lane Network. Less progress has been made to improve conditions for walking or address the equity of transportation decisions. The cancellation of the Red Line light rail project and the Master Developer Agreement for the redevelopment of State Center ends or at least delays what would have been Baltimore’s largest transit oriented development project.

## EQUITY INDICATORS

Transportation has an enormous impact on the ability of residents to earn income and get to the services they need. Roughly a third of Baltimore households do not have access to a car. Unreliable, disconnected, and/or slow transportation options have very real impacts on opportunities. Travel time to work is an indicator of poverty. The MTA has begun implementing changes designed to improve reliability and reduce travel times. The City and MTA need to continue working together to ensure efforts are effective and communicated to residents and are equitably distributed throughout the city

## STRATEGIES

### 1. Prioritize Complete Streets

**Action 1** - Adopt a Complete Streets Ordinance that creates a process for evaluating how streets and corridors will serve pedestrians, transit, bicycling, freight, and Single Occupancy Vehicles (SOVs) and improve availability of transportation between low-income neighborhoods and jobs.

**Action 2** - Develop and fund implementation of a Pedestrian Master Plan, including a sidewalk inventory.

**Action 3** - Improve safety for walking by managing speeds around schools and high-crash areas through the built environment and re-establish photo enforcement of speeding and red light running.

### 2. Improve reliability and the level of service of transit; and accessibility to rail and bus stops

**Action 1**- Support and expand dedicated lanes, signal priority, and queue jumps for transit areas with high ridership and congestion.

**Action 2** - Standardize coordination between agencies on transit routes, reliability, development design, roadway design changes, access to stops and other policies and infrastructure.

**Action 3** - Develop a sustainable transit stop design with curb extensions/bus bulbs, stormwater mitigation, solar power, compacting trash can, and/or other sustainable aspects.

**Action 4** - Develop "mobility hubs" (transit transfers, bike sharing, car sharing, EV chargers, and/or ride hailing) within communities.

**Action 5** - Improve water-based transportation options and ensure good oversight.

**Action 6** - Coordinate with on-demand ride hailing services to provide first mile/last mile connections.

**3. Set a course for excellent transportation by citywide and regional visioning and implementation thereby reducing our carbon emissions**

**Action 1** - Work with regional partners to advance the regional rapid transit study and rail plan; assess options for the East-West corridor and develop a strategy

**Action 2** – increase non-car transportation by Improving the safety and accessibility of bicycling through the continued implementation of a high-quality, equitable bike infrastructure; implement the Bike Master Plan and Separated Bike Lane Network Plan, increasing the mileage of on- and off-street facilities by at least 10 miles each year for the next 10 years.

**Action 3** - Establish a strategic plan for the Baltimore Department of Transportation and prioritize capital projects to implement the new plan

**Misc Action Items**

- Encourage carpooling (much of Baltimore's traffic and emissions are not from residents)
- Employers incentivizing transit use by paying for passes
- Procure cleaner, quieter, and lighter revenue vehicles.

## **METRICS FOR SUCCESS**

**Strategy 1:** Reduce pedestrian injuries and fatalities by 20% in five years

**Strategy 2:** Improve bus on-time performance by 20% in five years

**Strategy 3:** Increase the areas that can be accessed through a low-stress bicycling network in five years

# NEIGHBORHOODS

## DEFINITION/DESCRIPTION

Baltimore's greatest assets are its people and its neighborhoods. With over 200 neighborhoods, Baltimore's future success depends on their preservation and improvement. Good urban planning, design patterns and neighborhood revitalization strategies, involving early community input, fosters choice and access to what is important to people: a mix of affordable housing, aging in place, physical locations for people to gather, connections to reliable transit, healthy foods, living wage jobs, good schools, well-maintained open space, cultural and recreational opportunities and successful commercial corridors. When the right mix of ingredients in place, neighborhoods become thriving, desirable places to live.

## CURRENT STATUS

Many Baltimore neighborhoods developed prior to the proliferation of the automobile and were designed for walkability to desirable locations. Other neighborhoods were designed around major corridors and are primarily served by cars and public transportation. Some of our neighborhoods have deteriorated due to population loss and disinvestment. Infrastructure needs are great and go far beyond available funds. As public improvements and private developments are planned their benefits must be evaluated to benefit the public realm.

## EQUITY INDICATORS

Neighborhoods are the root of quality of life for residents. But certain neighborhoods have been left behind. Those with the least means have the least ability to make changes when their neighborhood feels unsafe or otherwise unhealthy. Effectively addressing the problem of concentrated poverty and neighborhood distress requires expanding our portfolio of place-conscious strategies. Good planning improves neighborhood conditions while opening up access to opportunity-rich communities, and realigning development strategies to better connect low-income people and places with opportunities. The best neighborhoods are built from the community up.

## STRATEGIES

### 1. Develop neighborhood revitalization strategies that leverage public dollars with private investment.

**Action 1** – Build upon existing neighborhood strengths, leverage community and partners skills and resources, build partnerships with community members, government, financial institutions, investors, anchor institutions and the philanthropic community to develop strategies to strengthen and revitalize neighborhoods, beginning with those that are disenfranchised.

### 2. Increase the number of safe, clean, well-maintained indoor and outdoor public gathering places.

**Action 1-** Working with the community, city agencies and partners to identify areas lacking safe, well maintained gathering spaces.

**Action 2** –Working with the community, determine if there existing spaces could be made safe and desirable and identify new possibilities. Look at design options for various spaces.

**Action 3** – Identify strategies for improving and creating community spaces. Evaluate short and long-term options and if it can be done as part of a larger project.

- 3. Continue to improve quality of the built environment by reducing vacants, developing high quality infill development, renovation and new construction. As improvements move forward insure they include public realm elements that support walking, transit use and mixed-use development.**

**Action 1** – Continue to monitor existing liquor outlets to make sure they follow all land-use and licensing and are not operating in a nuisance manner.

**Action 2** - Explore expanding historic, incentives and other renovation tax credit programs to reduce vacant buildings while maintaining neighborhood character.

**Action 3** - Adopt Design and Landscape Guidelines for the Zoning Code and monitor their impact. Amend as needed to insure these requirements are leading to improvements in the public realm. This includes storefront designs, new construction and open space and landscaping required of any development.

**Action 4** - Require walkability standards for new development that include sidewalks on both sides of roadways, street trees, crosswalks, roadways designed for maximum speeds of 25 miles mph and maximum block lengths in transit-served areas and areas identified for compact, mixed-use development.

**4. Improve quality of life through walkability**

A good neighborhood has quality housing of varying types, access to desirable locations such as good schools, relevant recreation, well-maintained open space, jobs and transit.

**Action 1** - Work with communities to analyze existing walkability and transit issues and challenges and identify priorities for improvement.

**Action 2** - Support community driven educational and outreach events that promote walking, recreation and alternative transportation. This could include community walks, bike to work, neighborhood based recreation or community activities in neighborhood schools and many more.

**Action 3** - Work with Baltimore Development Corporation and main streets to encourage neighborhood commercial uses and other opportunities for small businesses within neighborhoods.

## **METRICS FOR SUCCESS**

**Strategy 1:** Quantify the number of safe neighborhood gathering places and increase the number by 20% in 5 years.

**Strategy 2:** Quantify the walkability of city neighborhoods through Baltimore designed metrics and improve by 20 % in five years.

**Strategy 3:**



# Buildings

## DEFINITION/DESCRIPTION

Improving the efficiency of the buildings is one of the most effective ways to reduce energy, water usage. In Baltimore, buildings generate almost 80% of the city's greenhouse gas emissions. When buildings are designed properly, energy is saved from the beginning and problems and costs are lessened down the road. And, when there is an emphasis on hiring locally, those who do the work are familiar with our building stock and climate.

## CURRENT STATUS

City government has energy goal reductions for city buildings and there is a citywide goal to reduce greenhouse gases 15% by 2020, using a 2010 baseline. Low-interest loans to small business and nonprofits have been used to finance energy upgrades to improve lighting efficiency, replace old "energy hog" boilers, hot water heaters and HVAC equipment and convert to efficient kitchen appliances. Over the last four years, millions of dollars of grant funding has been made available for energy upgrades to nonprofits serving the poor. And, for income-eligible families, the City delivers weatherization services and services for roofing, heating systems and healthy home improvements. The City and its partners are working to make renewable energy available to low income residents. Solar energy on rooftops can help create jobs, reduce air pollution harmful to public health and avoid greenhouse gas emissions.

## EQUITY INDICATORS

The lack of energy efficient multifamily housing has consequences for low-income families and our communities. When families with limited financial means are saddled with high energy bills that they cannot afford, they face the prospect of losing utility services or, worse, being evicted from their homes. To the extent that high energy costs drive up building operating expenses, building owners have limited means to invest in their properties while keeping rents affordable, threatening the continued availability of good quality affordable housing. Residents and owners of affordable multifamily buildings should have equitable access to the resources and the support they need to improve building efficiency.

## STRATEGIES

### 1. Promote and advance building energy and water efficiency and renewable energy in commercial, residential and institutional buildings.

**Action 1** - Continue and expand education and outreach to commercial and residential occupants and owners to bring awareness about rebates, and behavior change techniques related to water and energy efficiency.

**Action 2** - Develop programs to retrofit affordable housing units into energy and water efficient units: research wall systems used in affordable, high-performance housing.

**Action 3** - Continue to develop solar projects on city-owned property and projects that send solar energy to city buildings; continue to develop and expand financing models to make solar more accessible to low-income customers.

**Action 4:** Promote the use of PACE financing to large building owners to promote energy upgrades.

**2. Develop and adopt an energy and water use information disclosure ordinance requiring energy and water users to disclose consumption levels.**

**Action 1** - Create residential disclosure for energy and water use at time of sale or rental.

**Action - 2** - Develop a commercial benchmarking and disclosure ordinance for yearly energy and water use.

**Action - 3**

**3. Create and adopt programs and codes for promoting efficiency in existing, new and renovated buildings.**

**Action 1** - Adopt IC700 residential green building codes for new construction and major rehabilitation.

**Action 2** - Create a utility sponsored citywide water savers rebate and incentive program.

**Action 3** -

## **METRICS FOR SUCCESS**

**Strategy 1:** Target 10% of all affordable housing developed and/or retrofitted annually as high-performance.

**Strategy 2:** Achieve 80% building energy reduction by 2050 using a 2010 baseline.

**Strategy 3:**

Qualitative Improve \_\_\_\_\_ through \_\_\_\_\_





# ENERGY

## DEFINITION/DESCRIPTION

The electricity that powers the lights in our homes and the natural gas that heats them in the winter are natural resources that we rely on daily, and yet are in limited supply. Consumption of energy puts an unsustainable burden on our coal, natural gas, and oil reserves. Reducing our energy usage can occur by utilizing more efficient power generation technology, changing behavior, utilizing efficient building systems and products and deploying renewable energy. Energy conservation, efficiency, and renewable energy offer cost-saving and clean opportunities for communities while meeting the economic, social and environmental tenants of sustainability

## CURRENT STATUS

The City of Baltimore is a leader in advancing energy efficiency, conservation, and renewable energy. The Baltimore Energy Challenge has assisted tens of thousands of residents to lower energy consumption through peer-to-peer engagement in neighborhoods, schools, businesses and faith communities. In 2014, the City launched the \$52.8 million dollar Baltimore Energy Initiative which has helped low-income residents, small businesses and non-profits lower their bills through expanded and streamlined delivery of energy services. Looking to bolster neighborhood energy saving efforts, the City adopted the International Green Construction Code (IgCC) and the green building code, which creates a regulatory framework for non-residential buildings to comply with stricter energy requirements when building new construction or performing general construction on properties.

## EQUITY INDICATORS

The City of Baltimore is home to the most significant low-income energy needs, costs and challenges in the BGE service territory in the State of Maryland. The City administers Energy Assistance benefits to an average of over 30,000 Baltimore households on a yearly basis. High energy bills often push low-income families and senior citizens into making household decisions about whether to buy basic needs such as food, clothing, and medicine, or to pay the electric bill. Poor housing conditions perpetuate homes that are unhealthy, unsustainable, and inefficient, and contribute to the overall decline of our neighborhoods. Energy strategies and resources must be expanded and focused to empower our poorest, neediest and most vulnerable populations.

## STRATEGIES

### 1. Expand energy efficiency programs in buildings

Buildings comprise the majority of energy usage in the City of Baltimore. In order to create sustainable, energy efficient, and resilient City, our building stock – both new and existing – needs to be transformed into efficient, high performance structures. Resources will be directed to increase the efficiency of buildings – residential, commercial, and industrial.

**Action 1-** Expand existing outreach, education, and engagement for energy efficiency and conservation for residential, commercial and industrial buildings.

**Action 2 -** Explore innovative financing opportunities that can leverage City and State resources to increase opportunities for low-income energy weatherization, cool roofs, oil-to-natural gas furnace replacements,

and other energy efficiency upgrades, as well as retrofit financing options for small businesses, non-profits, and commercial properties.

**Action 3** - Review current building codes and regulations, and adopt a residential green building code such as the National Green Building Standard, to increase energy efficiency in residential buildings.

## **2. Increase renewable energy deployment within the City of Baltimore**

Renewable energy reduces reliance on non-renewable sources such as coal and natural gas, and contributes to a reliable energy grid. Increasing renewable energy opportunities supports efficiency and conservation efforts and continues to lower energy costs.

**Action 1** - Increase equitable access to onsite installation and community solar opportunities for low-income residents, while creating job training and job placement opportunities.

**Action 2** - Expand municipal, and private installation of combined heat and power and district energy systems.

**Action 3** - Continue collaborative efforts and partnerships with community, institutional, public and private stakeholders to identify resources and strategies that expand and support onsite solar installations, community solar projects, and green power purchasing options.

## **3. Support innovate and advanced technology to support reduction in energy usage**

Advancing energy efficiency and conservation, as well as deployment of renewable energy can be expanded and expedited through innovative and advanced technology, systems, products, and techniques. Providing resources, and intellectual space to explore ways that the City of Baltimore can be forward thinking and innovative can create new opportunities for increased energy savings.

**Action 1** - Provide resources, education, and guidance to deploy and utilize real-time energy monitoring across residential, commercial, and institution sectors.

**Action 2** - Increase cool roof deployment, tree plantings, and creation of green space to reduce urban heat island effect.

**Action 3** - Expand deployment of LED streetlights, solar thermal hotwater systems, electric and hybrid vehicles, and other advanced energy efficient products.

## **METRICS FOR SUCCESS**

**Strategy 1:** Realize city-wide reduction in energy consumption

**Strategy 2:** Demonstrate an increase in solar installations

**Strategy 3:** Demonstrate a decrease in urban heat island

**Qualitative** Improve housing and neighborhood conditions through energy efficiency



# NATURAL HAZARDS

## DEFINITION/DESCRIPTION

Baltimore is highly vulnerable to a range of natural hazards, including coastal storms, flooding, extreme heat, and high winds. These types of extreme events are likely to increase in frequency and magnitude over the coming years. As extreme events, combined with a projected rise in sea level, impact our region, the effects will be spread over a much larger area and threaten regionally significant utilities such as sewage treatment plants and Baltimore's waste to energy facility. It is critical to strengthen the resilience of neighborhoods to natural hazards and impacts to built, natural, economic, and social systems from climate change.

## CURRENT STATUS

In 2013, the City of Baltimore developed an integrated All Hazards Mitigation Plan (AHMP) and Climate Adaptation Plan. This Plan, called the Disaster Preparedness Project and Plan (DP3), linked research, outreach, and actions that led directly to a comprehensive system for addressing existing and future climate impacts. Since 2013, several goals, strategies and actions have been carried out in the most vulnerable areas of the city. The DP3 will be updated in 2017.

## EQUITY INDICATORS

Baltimore's significant social and economic issues will be further exacerbated with impacts from natural hazards and climate change. For low-income residents, there is a need for increased capacity to overcome additional stresses that may result from a natural disaster. Directing our efforts in areas most vulnerable neighborhoods strengthens our city overall; it helps empower stakeholders, builds trust, ensure basic needs are being met, and promotes cohesiveness.

## STRATEGIES

### 1. Demonstrate increased resilience to community-wide hazard threats over time

Utilize regulatory code changes and community preparedness programs to guide local government and stakeholder programs that improve protection and increase community adaptive capacity.

**Action 1-** Take deliberate steps to enhance the City Floodplain regulations to ensure that all work in the floodplain is not only designed to safeguard against past events, but also designed in a way that protects against future flood events.

**Action 2-** Integrate climate data and proactive actions into the City's Capital Improvement Process and other City and stakeholder projects and plans.

**Action 3-** Create insurance or incentive structures to help equitably remove residents from hazardous situations

### 2. Develop and maintain a pre-disaster plan that addresses long-range redevelopment issues such as land use, economic development, housing, infrastructure, public services, and environmental restoration

Use the City's Disaster Preparedness Project and Plan (DP3) to guide local government and stakeholder actions that reduce risk and increase community resilience.

**Action 1-** Conduct an all-hazard vulnerability assessment that addresses both impacts from past events and anticipated impacts from climate change based on low, medium and high carbon scenarios.

**Action 2-** Integrate climate adaptation into all-hazards mitigation planning and implementation.

**Action 3-** Require that internal decisions by Baltimore City departments use the most current climate science and that staff monitor climate change impacts.

**3. Increase community awareness of natural hazards and climate change through education and outreach**

City government and stakeholders play a critical role in educating the community about natural and man-made disasters, and the importance of planning and preparation. In addition to actions that residents and businesses can take in advance of impending hazardous events, encourage the community to prepare for future impacts due to climate change.

**Action 1 -** Implement community preparedness workshops focused on community engagement around impacts from natural hazards, disaster preparedness, and assist in building robust networks between the City and community members. Host workshops at non-traditional locations within communities.

**Action 2-** Increase community adaptive capacity through development of community resilience hubs that provide protection and resources to residents during winter storms, excessive heat, hurricanes, and other natural and human-made disasters.

## **METRICS FOR SUCCESS**

- |             |  |
|-------------|--|
| Strategy 1: | Demonstrate a measurable reduction in vulnerability from 2000 to current date  |
| Strategy 2: | Demonstrate integration of natural hazards and climate change into five city plans and projects                            |
| Strategy 3: | Develop two community resilience programs and implement those programs in at least ten neighborhoods within Baltimore City |



# Sustainability Education

## DEFINITION/DESCRIPTION

Thousands of students and staff spend many hours each day at schools throughout our city. The City is committed to sustainability by minimizing the environmental impact of buildings, educating school communities about the connections between their daily actions and the environment, and empowering students to be leaders in creating a more sustainable city and society.

## CURRENT STATUS

Baltimore City Public Schools has a part-time, grant-funded Sustainability Coordinator; has a Sustainability Policy; supports the Green Schools Network of partners; is working to train teachers to teach their students to become environmentally literate; and, is improving daily operations to be more sustainable.

## EQUITY INDICATORS

Baltimore City Public Schools serves approximately 82,000 students each year. Of those: 81% are African American and 9% are Hispanic/Latino, 64.7% are low income, 5.6% are English language learners, and 14.8 % have disabilities. City Schools seeks to systematically integrate environmental literacy at all schools, so that students have the same environmental experience wherever they attend school.

## STRATEGIES

### 1. Graduate students who are environmentally literate

Research shows that well-integrated environmental education, both formal and informal, furthers academic achievement, such as math and literacy.

**Action 1 - Increase the number of teachers integrating environmental literacy** by providing a range of mandatory and optional professional development opportunities delivered by staff and partners, and by connecting teachers to partners for on-site and off-site support including connections to local waterways.

**Action 2 - Meet Next Generation Science Standards (NGSS) and Maryland Environmental Literacy Standards** by developing and instituting aligned curricula in all grades. Ensure the delivery of science curriculum at every grade level including the incorporation meaningful outdoor learning experiences.

**Action 3 – Prepare students for “green” careers** by providing internships, service learning hours, industry certifications, academic credit programs, and fellowships, and by including student learning opportunities in building design and operations.

**Action 4 - Recruit and retain staff interested in sustainability** by sharing sustainability goals, practices and opportunities with potential and current teachers and staff, and by integrating sustainability goals in orientation materials for all staff as a core institutional value.

### 2. Support student leaders

**Action 1: Support student-led green projects by providing** grants, leadership training opportunities, and other resources.

**Action 2: Encourage high school students to gain work experience** by providing paid environmental internships and sharing opportunities for service learning and summer jobs with partner organizations and businesses.

**Action 3: Prioritize youth economic sustainability** to build up independence including but not limited to expanding technical skills programs, teaching financial literacy, connecting students to job opportunities in the sustainability field, and supporting youth in developing business and entrepreneurship skills.

**3. Build and maintain partnerships with public, non-profit, and for-profit entities and individuals interested in sustainability.**

**Action 1: Maintain and nurture the Green Schools Network** by providing monthly updates to network member, holding an annual meeting of the network, and participating in local, regional, and national networking events.

**Action 2: Connect staff, teachers and partners to make and build partnerships** by strengthening opportunities for parental and community involvement, and identifying opportunities for leveraging funding and other support for schools, students, and teachers.

**Action 3: Facilitate sustained engagement and partnership with families and volunteers.** Develop opportunities for parent learning about and involvement in school and community sustainability issues.

**4. Increase the number of schools certified as “green” by promoting certification by a recognized program such as the Maryland Association of Environmental and Outdoor Education (MAEOE) and the National Wildlife Federation.**

## **METRICS FOR SUCCESS**

**Strategy 1:** Provide at least one Meaningful Watershed Educational Experience (MWEE) for all students in each grade band of 1-5, 6-8, and 9-12.

**Strategy 2:** Train all teachers annually to integrate environmental themes and projects into lessons.

**Strategy 3:**

# GOOD SCHOOLS

## DEFINITION/DESCRIPTION

Baltimore City Public Schools (“City Schools”) is committed to healthy environments for its students, staff and teachers, both indoors and out. Active schoolyards, greater conservation of resources, and advances in the procurement processes are ways to be responsible stewards of the environment while ensuring compliance with state and local legislation. City Schools focuses on energy conservation practices, natural resources preservation, and elimination of utility waste. Ultimately, school environments that meet these goals will result in greater academic achievement, greater awareness and personal responsibility, and a reduced carbon footprint resulting in a healthier Baltimore for generations to come.

## CURRENT STATUS

City Schools is striving to implement green and sustainable practices in operations and in the classroom. For the past three years the City Schools’ Green Schools Coordinator and Energy Specialist have focused on saving energy, expanding recycling, promoting the Maryland Environmental Literacy Standards, building environmental awareness, complying with city and state laws, and supporting a Green Schools Network of advocates and partners. This work has lead to operational savings, reduced impact on the environment, and more students who are knowledgeable about sustainability.

## EQUITY INDICATORS

Addressing schools in order of greatest need and identifying, allocating, and disseminating resources to those schools first. Schools should be considered based on historical disadvantages, transgenerational poverty, the least access to resources, and least to see development in their communities in the near future.

## STRATEGIES

### 1. Create Healthy School Environments

**Action 1: Improve indoor air quality** by practicing comprehensive Integrated Pest Management, using approved green cleaning products, improving ventilation, and educating school communities on these practices.

**Action 2: Increase access to healthy foods** by providing nutrition education to all students, increasing fresh and locally-sourced foods into the menu, providing potable water via water fountains, supporting schoolyard gardens that expose students to fresh produce, utilizing the expertise of Great Kids Farm and partners to train teachers on schoolyard gardening.

### 2. Cultivate Green & Active School Yards

**Action 1: Provide attractive outdoor learning using play spaces and schoolyard gardens** by increasing age-appropriate nature-based play spaces and funds for maintenance, outdoor activities and schoolyard gardens, and by training teachers to integrate outdoor spaces into lessons, training grounds staff and contractors to care for spaces, and by promoting Great Kids Farm for student engagement and teacher training, and making schoolyards available for public use during non-school hours.

**Action 2: Improve stormwater management** by maximizing pervious surfaces when building or renovating schoolyards, and working with partners to replace existing pervious surfaces with impervious surfaces, bioretention areas, and native gardens.

### 3. Conserve Resources \

**Action 1: Reduce utility consumption and purchase renewable energy** by closely managing the utility database, benchmarking energy use and performance, procuring energy from renewable sources, improving building energy efficiency (including the promotion of net-zero energy buildings), identifying and repairing leaks, installing low flow fixtures and LED lighting, and engaging staff and students through competitions and recognition.

**Action 2: Reduce waste and increase recycling** by right-sizing food ordering, maximizing food recovery, researching composting of food waste, utilizing reusable, recyclable, or compostable serveware. Additional efforts include recycling electronics, light bulbs, and construction waste, participating in single-stream recycling at all schools, and instituting electronic communication systems (inter-departmental, communications with partners and vendors, and school-parent communications).

**Action 3: Green the fleet** by ensuring all vehicles that City Schools owns or leases meet current emission and fuel efficiency standards, minimizing and eliminating vehicle and bus idling, and exploring alternative fleet vehicle fuel sources.

**Action 4: Follow green design and construction practices** in large renovations and new construction, achieve LEED Silver rating or higher, include life-cycle cost analysis such as energy efficiency and sustainability in facility upgrades.

### 4. Incorporate sustainability criteria into procurement processes.

Promote environmentally preferable purchasing and management practices including environmental product and service label standards, such as Energy Star and EPEAT for electronics.

### 5. Report sustainability metrics and goals annually to the School Board, as developed by an inter-departmental Sustainability Steering Committee.

## METRICS FOR SUCCESS

**Strategy 1:** Increase the number of schools with active school gardens and play spaces

**Strategy 2:** Increase the number of schools with strong recycling programs.

**Strategy 3:** Decrease the average energy use per square foot at schools.

Other ideas:

- Increase the number of pounds of fresh produce served at City Schools' cafeterias.
- Increase the number of schools practicing green cleaning.



# WASTE AND RECYCLING

## DEFINITION/DESCRIPTION

A clean city is a more sustainable one. Baltimore's long-term goal *must* be zero-waste. We must work to nearly eliminate the disposal of waste at landfills and waste to energy facilities and to ensure the majority of municipal solid waste is reused, composted, recycled or prevented through source reduction. Baltimoreans should expect nothing less from themselves and their government.

## EQUITY INDICATORS

The impact of improperly disposed trash and litter is felt more by low income and minority communities. Resources that support proper disposal of trash and litter need to be distributed equitably, including corner trash cans and recycling bins, and the existing sanitation and housing codes need to be strictly enforced in all parts of the city. Baltimore needs to adopt a new mindset, one that emphasizes recycling, composting, reusing, reducing and creating jobs.

## CURRENT STATUS

Baltimore has taken some important steps to become a cleaner city while reducing the amount of waste that is landfilled or incinerated. The City moved from two trash days per week to one trash and one recycling. Citywide mechanical street sweeping increased the number of lane miles swept and the tonnage collected and reduced the amount of street trash from going into the Harbor. Municipal trash cans were distributed to all city households, and requests for rat extermination have gone down by nearly 34 percent. Deconstruction, which takes buildings apart rather than demolishing them was piloted for city contracts in 2014. The nonprofit Humanim launched a social enterprise, Details, which is diverting salvageable materials from landfills and creating jobs for people who have faced barriers to employment. Second Chance, another social enterprise employs 165 Baltimoreans in deconstruction and resale of recovered building materials.

## STRATEGIES

### 1. Double Baltimore's residential recycling rate to 50% by 2022

Baltimore's current residential recycling rate is between 20 – 28%. Currently, Baltimore recycles 25,000 tons of residential waste per year, which represents only 19% of Baltimore's waste. Solid waste disposal costs the city \$52 per ton. Recycling disposal costs \$18 per ton—a savings of \$34 per ton. If Baltimore can double its recycling rate it would save \$850,000 per year in waste disposal costs.

**Action 1** – Provide free 25-gallon recycling bins to all Baltimore residents.

**Action 2** – Install 1,500 strategically placed corner cans across the City within the next two years.

**Action 3** – Launch an education and behavior change anti-litter and a pro-recycling campaign.

### 2. Expand Baltimore's Waste to Wealth Initiative

The vision behind the City's Waste To Wealth strategy is to build Baltimore's economy and transform its communities by managing the waste stream to create jobs and green products. The new model should mimic nature's closed loop system and instead generate value and wealth from our "waste" systems

(producers), the City and partners (processors) will replenish neighborhoods (consumers). Municipal waste streams, wood products and salvaged demolition materials will feed resident-led efforts, create jobs, combat blight, and revitalize our neighborhoods.

**Action 1** – Complete a composting plan for Baltimore City

**Action 2** – Establish Community Centers as market places for recycled urban waste products.

**Action 3** – Expand the use of deconstruction for all City-led demolition projects.

3. **Pursue legislative and policy changes to reduce the waste stream** Source reduction is a crucial first step in the Reduce-Reuse-Recycle paradigm. Plastic bags and polystyrene containers make up as much as half of the litter polluting local streets and waterways.

**Action 1** – Enact legislation to ban or impose a fee for plastic bags

**Action 2** – Support statewide legislation to ban polystyrene food service products and loose fill packaging

**Action 3** – Develop a plan to introduce and implement a Save As You Throw (SAYT) program for Baltimore. SAYT billing systems charge households directly based on how much garbage is placed on the curb. Source-separated recyclable materials can be collected at no charge to the residents. Over 7,000 cities and towns in the US are successfully using a SAYT system.

## **METRICS FOR SUCCESS**

Strategy 1: Achieve a 50% residential recycling rate by 2022

Strategy 2: Create 500 jobs through a Waste To Wealth initiative by 2022

Strategy 3: Reduce by 50% the amount of polystyrene containers and plastic bags in Baltimore's waste stream by 2022



# NEIGHBORS

## DEFINITION/DESCRIPTION

People want and need to belong. They want to be part of something larger, build something that endures. When people come together to connect - to neighbors, their community, and their city - in a diverse, inclusive and equitable way, people have hope, and can thrive. Ensuring access to adequate venues for community interaction is a way of building cohesiveness. Caring for, and about, one's neighbor is the basis for creating a sustainable life. Community should be at the center and community engagement can be the engine that produces and drives change. When neighbors' work together, they are unstoppable. A unified, connected community leads to neighborhood strength and stability.

## CURRENT STATUS

It is the job of all of us: government, its partners and residents to create a sense of building, not just things or even structures, but a sense of place, a sense of home. This helps nurture, grow and hold all of us: a place we belong. Community venues strengthen neighborhood bonds and enhance residents' sense of place. The City's 45 recreation centers and 21 library branches and, nonprofits organizations manager free and low cost programming at venues throughout the city such as the Creative Alliance, Maryland Community Health Initiatives' Penn North Community Resource Center and the Hampden Family Center.

## EQUITY INDICATORS

What is community? Who is part of the community? Who is valued? Sometimes community voices are 'difficult,' and it is hard to listen. In many communities, the dominant model is not working but everyone has something to say. Each voice must be valued. Every story counts when a community and the government, embrace the beauty of differences and diversity. Giving the community their voice, and increasing access to gathering spaces, is a necessary step toward becoming an inclusive city where neighbors value one another. Government and others must go deeper to hear residents, go beyond community meetings and to places where people gather.

## STRATEGIES

- 1. Strengthen neighborhood bonds and enhance residents' sense of place by promoting a positive sense of community by showing that 75% of residents live within ¼ mile of a community space that is open to the public and offers free services and events.**

**Action 1** - Involve residents and partners to create a baseline of community venues.

**Action 2** - Share information about community events, programs, services and activities that are accessible to all including non-English speakers.

**Action 3** - Demonstrate the use of community venues by residents such as community centers, art centers, universities, and similar venues where neighbors can meet together.

2. **Identify and address neighborhoods-specific needs by creating community partnerships with neighborhood groups, city government, residents, experts and stakeholders, with a focus on communities of color and vulnerable communities.**

**Action 1** - Support and encourage resident dialogue and the building of social capital of neighborhoods. Create an online directory of events and resources, a “hub” for neighbors.

**Action 2** – Create a comprehensive capacity building program for residents that builds from existing leadership institutes and initiatives.

**Action 3** – Engage youth in voices that speak to them in order to engage them in their communities.

3. **Ensure that every story counts and diverse voices are heard by creating strategies and partnerships to do a deeper dive in neighborhoods.**

**Action 1** - Continue highlighting good work by residents in neighborhoods to engage a greater number of individuals and communities in shaping the city’s future, especially those voices that have too long been marginalized and are too often most negatively impacted by environmental inequities.

**Actions 2** – Identify, hire and partner with experts in cultural competency, diversity and equity to assist

**Action 3** - Use ‘pop ups’ and other innovative outreach techniques, reach larger audiences by going beyond physical buildings and meet communities where they are, in order to ensure more participation from more residents, in terms of numbers and diversity of voices.

## **METRICS FOR SUCCESS**

**Strategy 1:** 75% of residents live within ¼ mile of a community space that is open to the public and offers free services and events

**Strategy 2:** Increase in the number of residents participating in formal facilitated programs

**Strategy 3:** Increase in the number of events where residents have the opportunity to be heard



# ARTS AND CULTURE

## DEFINITION/DESCRIPTION

Art and culture provide a way for us to better understand our communities and ourselves. A sustainable arts and cultural experience encompasses a broad range of expression, media and materials; provides art and cultural resources in neighborhoods to encourage participation and self-expression; and supports art that reflects the cultural and ethnic diversity that make up Baltimore.

## CURRENT STATUS

The Baltimore Office of Promotion & the Arts (BOPA), (1) allocates grants to increase public access to the arts (The Creative Baltimore Fund, and Free Fall), (2) facilitates the creation and installation of new public art (Percent-for-Public Art program, Transformative Art Prize, Lots Alive) and (3) hosts a youth focused job-training program (Art @ Work). BOPA annually produces three, large scale, cultural festivals (Artscape, Book Festival and Light City), all free and open to the public. Each festival commissions new artwork, readings and performances from visual, literary, and performing artists, and has a significant, positive economic impact. In 2016, 100% of the vendors at these major festivals were from Maryland and compostable cups are used. Styrofoam products are banned and recycling occurs at all BOPA festivals and at the Farmers' Markets. Gleaning is also done at the Farmers' Markets.

## EQUITY INDICATORS

Residents living in areas with the least public investment are least likely to have equitable access to the arts. Creative Baltimore and Free Fall provide small grants to arts organizations but communities that do not have local arts organizations, or do not receive the funding, may not directly benefit. BOPA is collaborating with the Baltimore Neighborhood Indicators Alliance on *GeoLoom*: a project to map equitable access to the arts and art programming. And, the City's Public Arts Program is shifting to include conservation and maintenance, investing in restoration of public artwork that has suffered from years of deferred maintenance.

## STRATEGIES

### 1. Attendance and Participation

Promote residents engagement in the creation of artwork, visits to an art museum or gallery, or attendance at an artistic or cultural program.

**Action 1- Partnership & Collaboration:** Develop strategies of collaboration with local art and cultural institutions, private and non-profit organizations to increase access to and participation in the arts.

**Action 2- Programs & Services** Sustain the production of the City's cultural arts festivals and cultural tourism projects, and ensure that such festivals remain free for the public; simultaneously increasing the financial and logistical support provided to smaller cultural programs, events, festivals and performances.

**Action 3-Practice Improvements & Tracking:** Track standardized participation and attendance data at all major events, exhibitions, community arts experiences, cultural events, performances, festivals and programs.

### 2. Civic Engagement

Engage local leaders and residents in valuing, supporting and cultivating a broad range of arts, cultural, and heritage resources and activities across the City

**Action 1- Policy Adjustment & Education:** Rebalance the focus of the City’s Public Art and historic monuments program to have an equal focus towards conservation of and education about the City’s existing arts and heritage resources. Develop multiple ways to provide the public with information about the history of and stories behind the artwork that can be found throughout the City and encourage public participation in the effort.

**Action 2- Programs and Services:** Incentivize the hiring and inclusion of local artists in publicly funded of public art work and performance projects. Provide job training and informational sessions with the goal of encouraging local artists to apply to public opportunities. And provide a range of artistic opportunities that an artist can participate in and build their career through over time.

**Action 3- Facility and infrastructure Improvements:** Ensure that all arts and cultural facilities, cultural events, and festivals are fully accessible to people with disabilities. Encourage emerging cultural spaces to plan for and accommodate accessibility requirements into their space design and program planning.

3. **Incorporate art into programs and policies across the spectrum including but not limited to stormwater management practices, neighborhood clean ups, tree plantings etc.**

**Action 1**

**Action 2**

**Action 3**

## **METRICS FOR SUCCESS**

**Strategy 1:** Demonstrate that at least 35% of residents engage in the creation of artwork, visit an art museum or gallery, or attend an artistic or cultural program annually.

**Strategy 2:** Demonstrate a measurable increase in resident access and engagement in the arts by 2020

**Strategy 3:** Conduct a conservation assessment of at least a 25% of the City’s public art collection annually so that the 100% of the City’s collection is reviewed on a 4 year cycle.

# LOCAL ECONOMY

## DEFINITION/DESCRIPTION

Growing local businesses within the city contributes to economic stability and resilience. A strong local economy is a sign that the City can support itself and become self-sufficient. The local economy serves as a catalyst in attracting or losing population, fostering job creation and, as a result, reducing crime. Producing and selling locally produced goods and services can strengthen local employment ensuring money spent within the City is kept in the City. Sustaining a strong, growing, local economy lifts the entire City.

## CURRENT STATUS

Baltimore City's unemployment rate has steadily declined since hitting a high in 2010. At the end of 2016, it was at a low of 5.7%. This decline can be viewed as an indicator that the local economy is strengthening. Local initiatives to support business have gained traction. These include the Made in Baltimore Campaign, Baltimore Development Corporation's (BDC) Small Business Resource Center and its partner the Maryland Procurement and Technical Assistance Center. BDC also provides access to financing for small businesses and the Propel Baltimore Fund managed by TCP Venture Capital, makes investments in high-growth, early-stage companies willing to establish headquarters in Baltimore City. But, we can and need to do more.

## EQUITY INDICATORS

The current model of economic development and extraction is not sustainable for many Baltimore neighborhoods. Money flows in but, it either does not circulate into the communities that need it the most, or it is extracted out of the city. The economic systems of how we are interpreting sustainability need to be examined. A new framework should take into account intersectional problems such as race and class. Small, local minority and women owned businesses need access to capital. Equitable practices must be expanded to support greater access to job training and quality jobs, inclusive hiring practices and advocating local and women and minority-owned businesses.

## STRATEGIES

### 1. Proactively embrace local businesses and sustainability practices including green technologies.

**Action 1** - Conduct an assessment of local economic conditions, including economic leakage and targeted sectors for future investment.

**Action 2** - Adopt an economic plan to increase local production for local consumption and export. Use San Francisco's Green Streets.

**Action 3** - Promote purchasing preferences for locally produced goods and services in neighborhoods, anchor institutions and the local government.

**Action 4** – Promote and support the use of green technologies by local businesses.

### 2. Support community wealth building to strengthen communities through broader democratic ownership and control of business and jobs. Community Wealth Building develops local talents, capacities and institutions, rebuilds capital to strengthen and create local and community-owned businesses.

**Action 1** - Connect entrepreneurs and business owners with lenders and investors to facilitate investment in the local economy.

**Action 2** - Create and/or support promotional campaigns to bank locally, buy locally, or buy from small and independent businesses and retailers.

**Action 3** – Partner with city government, anchor institutions and employers to support job growth and equitable access, especially for historically disadvantaged populations. Leverage partnerships to develop industry-led efforts that offer career laddering and advancement opportunities.

**3. Increase, support and promote the number of small manufacturing businesses and minority and women owned businesses**

**Action 1** – Provide support services to strengthen value and develop market channels through programs, trainings and workshops to develop shared ideas and infrastructure, increased energy efficiency or use of new technologies.

**Action 2** – Connect employers to trained workers.

**Action 3** - Streamline city services and increase transparency.

## **METRICS FOR SUCCESS**

**Strategy 1:** # of new local businesses registered annually

**Strategy 2:** Demonstrate that 50% of import sectors have increasing location quotients over the past 3 years

**Strategy 3:** Increase the total funds deposited in locally owned and operated financial institutions over time

**Qualitative** Improve \_\_\_\_\_ through \_\_\_\_\_



# TARGETED INDUSTRY DEVELOPMENT

## DEFINITION/DESCRIPTION

Targeted, economic development can increase local competition by strengthening Baltimore's network of suppliers, businesses and local institutions. It should align with workforce development strategies, coordinate with local research development and encourage public private partnerships. For example, Baltimore has deep roots in manufacturing and shipping. The total value of goods shipped through the Port of Baltimore has increased every year, setting a record in 2016. And, the metro area sits in the middle of a robust supply chain that extends across the dense mid-Atlantic region. Baltimore's concentration of large anchor institutions, proximity to Washington, D.C., and federal contracts create a strong demand for goods produced in the region.

## CURRENT STATUS

While total manufacturing jobs have decreased in recent decades, the number of new businesses in manufacturing has been increasing, signaling a potential reversal. Baltimore should leverage the local demand for goods and the opportunity for global demand presented by the Port of Baltimore to increase our manufacturing capacity, with a focus on industry sectors that are environmentally friendly and suitable for urban neighborhoods. In 2012, the Brookings Institution Metropolitan Policy Program funded "Building From Strength: Creating Opportunity in Greater Baltimore's Next Economy" focused on investing in efforts to grow a more opportunity-rich 'next economy'. In 2017, the Made In Baltimore program emerged to support the local maker economy. Baltimore should target business development in manufacturing and the 're-use' economy, or goods produced through the diversion and re-purposing of waste.

## EQUITY INDICATORS

Manufacturing is one of several industries that have a higher share of workers who are earning a decent living without having completed a 4-year college degree. In addition to job prospects, a focus should be placed on entrepreneurship opportunities for people of color. Dollars flow into certain communities and make communities unsustainable or sustainable. Sustainable models must be researched. A focus must turn inward to examine and build upon the strengths of our local entrepreneurs and small business clusters. Further, environmental justice must be at the forefront when discussing industry whether it be manufacturing or waste repurposing. Every effort should be made to involve communities in the development of these sectors and to ensure that new or expanding businesses are good neighbors.

## STRATEGIES

### 1. Grow existing businesses and increase new businesses in targeted industries over time

**Action 1** - Conduct an economic impact study and create a tracking mechanism for each sector to include existing expanding companies, new and small businesses created, businesses attracted, businesses downsizing and businesses closing, company size.

**Action 2** - Assemble a resource toolbox for businesses to include information about financing, workforce training funds and candidate pipelines, available real estate, and business-to-business networks. Assemble a 'start-up' resource toolbox and make connections between clusters of businesses.

**Action 3** – Improve/Increase access to private and public financial resources for businesses from start-ups to mature companies, with a focus on minority and women owned businesses. Identify and support additional financial resources.

**2. Increase the overall sales or total value of targeted industry sectors over time**

**Action 1-** Conduct an economic impact study and create a tracking mechanism for each sector.

**Action 2-** Support entrepreneurial business development and capacity building services in the targeted industries.

**Action 3-** Market product/service availability for procurement by local businesses/institutions from targeted industries.

**3. Increase local employment in targeted industry sectors over time**

**Action 1-** Conduct an economic impact study and create a tracking mechanism for each sector.

**Action 2-** Strengthen linkages between education (high school/ community college), state/ city / non-profit workforce training initiatives and target industry skill needs.

**Action 3** – Align workforce development with economic development strategies.

**METRICS FOR SUCCESS**

**Strategy 1:** Demonstrate the investment of businesses in target sector from 2015 to present date

**Strategy 2:** Demonstrate an increase in total sales in target sector from 2015 to present date

**Strategy 3:** Demonstrate an increase in people employed in target sector from 2015 to present date

**Qualitative:**

# TRAINING AND READINESS

## DEFINITION/DESCRIPTION

In a city where 75% of adults lack a college degree, job readiness is critical in promoting the economic well being of the city's low-skilled adult population. Launching workforce development strategies, which offer a larger menu of pathways into family supporting careers, can increase access to employment and economic opportunity. A focus on meeting people where they are, particularly people facing multiple barriers to employment such as youth, immigrants, and those with criminal records, must be a priority. In order to ensure training programs teach relevant skills in relatable ways, the emphasis should be placed on engaging employers and participants in the creation of new programs.

## CURRENT STATUS

The City offers customized and on the job training programs as well as apprenticeships, digital learning labs and GED classes. A number of nonprofits offer training and readiness programs. Civic Works' Baltimore Center for Green Careers uses a three-part model of workforce development, social enterprise and high-road business development for building up an inclusive and equitable green economy. Humanim provides career training, job placement and job support services. Services are designed to equip people with the skills to achieve greater financial independence and long-term success. Humanim partners with the HopkinsLocal Initiative to place job seekers into positions at Johns Hopkins institutions. Jobs Opportunities Task Force (JOTF) supports public policy initiatives and budget decisions, including increased investment in adult education and training, expanding the Earned Income Credit, reducing barriers to work for ex-offenders, and unemployment insurance reform.

## EQUITY INDICATORS

Economic inequality is unsustainable. The people most impacted by workforce development programs are without adequate skills for available jobs or have barriers to employment. In order to ensure programs improve employment outcomes for these individuals, participants and employers must work together to develop a sustainable model for program development and implementation. Additional emphasis should be placed on programs designed to connect returning citizens to job opportunities and wraparound services within short timeframes.

## STRATEGIES

### 1. Demonstrate improvements in workforce training outcomes for participants and increased educational attainment opportunities

**Action 1** - Support expansion of vocational training programs for high school and college-aged residents and add more satellite-training sites.

**Action 2** - Provide training and support services tailored to the needs of the local workforce

**Action 3** - Include program participants in the development, evaluation, and adjustment of training programs

**Action 4** - Produce an annual report that tracks workforce readiness performance measures, and relies heavily on participant and employer feedback.

## **2. Reduce barriers to employment**

**Action 1** – Eliminate policies, practices and institutional cultures that promote and support structural racism

**Action 2** – Improve the availability of transportation between low-income neighborhoods and job centers

**Action 3** – Increase availability, awareness and completion of Adult Basic Education and GED preparation courses

## **3. Increase job placement and retention in training program participants over time**

**Action 1** – Align economic development policies with workforce programs

**Action 2** – Require local government contractors and entities receiving financial assistance to hire city residents

**Action 3** – Create incentives for businesses to hire from training programs

## **METRICS FOR SUCCESS**

Strategy 1: Demonstrate increase in program participation and satisfaction over time

Strategy 2: Demonstrate increase in the number of vocational training certifications and degrees awarded by post-secondary educational institutions

Strategy 3: Demonstrate increase in program participants placed in and retaining jobs for more than one year



# Active Living

## DEFINITION/DESCRIPTION

An active lifestyle is one that integrates physical activity on a daily basis, such as a walk in a park, organized league play, or whatever gets your heart rate up. Physical activity improves overall health through cardio-respiratory and muscular fitness while lowering the risk of adverse outcomes such as obesity, early death, high blood pressure and Type 2 diabetes. Open, green spaces offer a place for recreational opportunities for city dwellers. And, the use of active transportation, such as biking and walking, promotes health while reducing air pollution and greenhouse gas emission. Recreation is a means of engaging people and their communities in lifelong healthy pursuits whether it occur outdoors or at a community center.

## CURRENT STATUS

The City is home to 263 parks covering 4,600 acres. There are over 25 miles of public trails, 21 pools, 3 skateboard parks, 12 city farms 3 dog parks, 121 playgrounds, 55 recreation centers, 116 basketball courts as well as 2.8 million trees. The City operates 38 biking, boating, hiking, camping, and trail programs that provides over 13,000 outdoor recreation experiences.

## EQUITY INDICATORS

The City through the Department of Recreation and Parks provides a wide variety of services and programming attractive to all residents with a wide selection of ability levels. Additionally, there is a pricing model adopted to maintain affordable opportunities for all residents. Also, the City works with schools and partners to obtain grant funding to provide free programming and free family passes to participants of youth programming. However, there are residents who are not able of taking advantage of the affordable, relevant indoor or outdoor recreation programming due to a lack of transportation and other factors.

## STRATEGIES

1. **Provide safe, well-maintained recreation space and programming within a ¼ mile of all residents and ensure safe walking and biking access.**

**Action 1:** Enable joint use of school-based recreation facilities during non-school hours.

**Action 2:** Enact Complete Streets to provide traffic calming measures to encourage walking and bicycling, particularly for youth access.

**Action 3:** Create a trail network to create a healthy, safe urban ecosystem. Link existing Baltimore City trails and parks to create a 35-mile loop connecting the city's diverse neighborhoods with downtown.

2. **Ensure Recreation Center and other programs are in alignment with neighborhood interests by engaging residents.**

**Action 1 -** Conduct a listening tour of neighborhoods to learn what types of recreation residents would like

at their local center and ensure that families feel comfortable and involved and their programming needs are offered.

**Action 2** – Partner with schools, libraries, police, private recreation facilities to expand fitness and wellness programs.

**Action 3** – Provide jobs and job training in the recreation field and hire teens and young adults.

**3. Assess Community level of engagement across all targeted areas, both qualitatively and quantitatively.**

**Action 1** - Adopt a contact/data management system to record all participation.

**Action 2** - Create focus groups from the listening tours with various ages and interests.

**Action 3** – Develop marketing and outreach efforts to encourage broader public participation of programs, and ultimately, public support. Create Facebook pages/twitter accounts that are community based.

## **METRICS FOR SUCCESS**

Strategy 1:      Quantitative      \_\_\_\_\_ by \_\_\_\_\_ in \_\_\_\_\_

Strategy 2:      Quantitative      \_\_\_\_\_ by \_\_\_\_\_ in \_\_\_\_\_

Strategy 3:      Quantitative      \_\_\_\_\_ by \_\_\_\_\_ in \_\_\_\_\_

Qualitative      Improve \_\_\_\_\_ through \_\_\_\_\_



# Food Systems

**DESCRIPTION:** The food system encompasses the production, transportation, sale, consumption, recovery and disposal of food; as well as the structures, policies, goals, and values that accompany each step of the process. Food system challenges and opportunities differ with historic, social, economic, and environmental contexts. Because of the complicated and intertwined nature of the food system, and its overlap with many sectors, a comprehensive food policy agenda is crucial.

**CURRENT STATUS:** The Baltimore Food Policy Initiative (BFPI), an intergovernmental collaboration led by Baltimore City guides the City's food systems efforts to refine a food agenda and priorities through sustainability, food access, and economic lenses. BFPI has incorporated food into plans, policies, community-based programming, resources, and incentives. Baltimore City has its own food desert definition, and has conducted extensive food environment mapping and analysis to identify need and better understand how certain populations experience the food environment.

**EQUITY INDICATORS:** Food system inequities are one symptom of a legacy of structural racism. BFPI works with the Food Policy Action Coalition (Food PAC), a group of 60+ organizations and individuals working on food systems issues. BFPI engages Resident Food Equity Advisors to learn about and provide vision and input to policy and planning strategies. Focusing efforts in food deserts strives to drive attention and investment to the areas that have historically been excluded.

## STRATEGIES

### 1. Strategy 1: Understand and create the structural change needed to increase equitable access to healthful food.

**Action 1-** Continue to implement and adapt the Food Desert Retail Strategy to increase access to healthy affordable food through policy, technical assistance, and incentives for retail of all scales.

**Action 2 -** Conduct robust research, strategic planning, and policymaking to enhance the food environment in intentional and equitable ways. This includes food environment mapping, national best practice sharing, and resident engagement and decision-making.

**Action 3 –** Create and implement a comprehensive food plans. Plans may be regional, citywide or neighborhood specific, but should address food retail, food assistance and food production.

### 2. Strategy 2: Reduce food insecurity through policy, programs, and education.

**Action 1-** Maximize the impact of federal nutrition assistance programs such as SNAP and WIC, and federal meal programs such as school breakfast and lunch, summer meals, and senior Eating Together.

**Action 2-** Increase food resilience on all scales – household, neighborhood, city, and region – and incorporate food resiliency into the Disaster Preparedness Plan update.

**Action 3** – Promote knowledge in all populations of growing, storing, preparing, consuming and disposing healthy food and nutrition, and foster buy-in for healthy food environments.

**3. Strategy 3: Strengthen and amplify the local food economy.**

**Action 1** - Leverage the purchasing power of the City and other institutions through Good Food Procurement standards that prioritize healthy, local, and other values-based food.

**Action 2**- Encourage purchase and consumption of local fresh foods to bolster urban agriculture. Encourage innovative direct to consumer models, aggregation to serve small retailers, and public education campaigns.

**Action 3** – Cultivate food-based businesses to circulate local dollars and provide opportunities to marginalized workforce participants. Consider models such as cooperatively-owned or non-profit stores, affordable delivery services, and projects that incubate food-based small businesses, provide job training, and/or offer skills-based employment opportunities.

## **METRICS FOR SUCCESS**

Strategy 1: Increase Healthy Food Availability Index score by 15%, on average, over three years.

Strategy 2: Reduce childhood food insecurity by 5%, over five years.

Strategy 3: Increase the number of local food businesses supported through City-sponsored events and outlets by 25% over three years.

Qualitative: Create and foster a food environment where communities and neighborhoods have the resources and knowledge to achieve self-sufficiency, food sovereignty and resiliency.



# HEALTH

## DEFINITION/DESCRIPTION

The health of Baltimore residents is inextricably linked to the conditions in which people are born, grow, work, play and age. To ensure sustainable, healthy, thriving communities, we must continue to lay the foundation for a healthier future. The Healthy Baltimore 2020 Blueprint, commits to addressing racial and ethnic health disparities. Our approach to sustainability in health includes data-driven, community-informed, upstream approaches that impact four key public health areas: Behavioral Health. Violence Prevention. Chronic Disease. Life Course and Core Services

## CURRENT STATUS

Over the next 10 years, Baltimore plans to reduce racial health disparities in overdose deaths, youth homicides, obesity, cardiovascular disease and infant mortality between black and white Baltimoreans. The B'more for Healthy Babies program has resulted in a 50% reduction in infant mortality and a narrowing in the black-white gap. Over 20,000 people were trained to administer naloxone and over 15,000 naloxone kits were distributed resulting in 642 overdose reversals in 2016. Through Safe Streets, nearly 700 conflicts were mediated, most likely, or very likely, to result in a shooting or homicide. 10 "healthy stores" have been designated through the Baltimarket program. A trauma initiative was recently launched. Often times, unresolved traumas impede health, fuel behavioral health issues and serve to create daily challenges for vulnerable communities.

## EQUITY INDICATORS

An equity lens examines all programs, initiatives and policies and assesses inequities on racial, gender, socioeconomic and geographic lines and the systems, institutions and policies that may perpetuate these inequities. The Health Department will assess health equity using these outcomes: Infant Mortality Rate - Mortality and morbidity rates - Homicide incidences - New HIV cases - Life expectancy. A focus on the SDH will help BCHD tackle the root causes of health the health inequities through the strategies listed below.

## STRATEGIES

1. **Increase the Department's sustainable programing dedicated to addressing the social determinants of health that may lead to health inequities:**

**Action 1:** Reduce the black-white infant mortality rate disparity

**Action 2:** Reduce the disparity between percent of black and white seniors/children living in a food desert

**Action 3:** Reduce the disparity between percent of black and white youth/adults/pregnant women who smoke cigarettes

**Action 4:** Reduce the disparity in rate of drug, alcohol, and mental health ED visits by ZIP code

**Action 5:** Reduce the disparity in black and white children with unmet medical needs

**Action 6:** Reduce the disparity between percent of black and white residents who are obese

2. **Advance a more comprehensive behavioral health system that can rapidly meet residents' needs**

**Action 1:** Establish the first-ever stabilization center for substance misuse disorders in Baltimore City

**Action 2:** Create a trauma-informed health care and behavioral health environmental through trainings

**Action 3:** Expand behavioral health treatment options in the greater Baltimore area

**Action 4:** Support the Law Enforcement Assisted Diversion (LEAD) initiative designed to divert low-level drug offenders to community services – including case management – to avoid contact with the criminal justice system.

**3. Promote safe communities by providing at-risk youth the social support and safety net necessary to succeed.**

**Action 1:** Decrease total number of youth-involved violent acts

**Action 2:** Promote a healthy environment for vulnerable youth

**Action 3:** Advance the Safe Streets program – designed to treat violence as a public health issue – to high risk areas

**Action 4:** Promote a city-wide youth rehabilitation initiative for youth who have been institutionalized

## **METRICS FOR SUCCESS**

**Strategy 1:** Demonstrate a reduction in health disparities based on key health indicators by 50% by 2026

**Strategy 2:** Increase the number of people receiving treatment for mental and behavioral health services by 10% in 5 years

**Strategy 3:** Decrease the number of youth-involved violent acts that occur in schools and communities with high incidences of violence crimes

**Qualitative Metric:** Conduct routine community-conversations to discuss health and social issues plaguing communities and potential community-led solutions.



# Air Quality

## DEFINITION/DESCRIPTION

Baltimore is vulnerable to episodes of poor air quality, causing reduced productivity, school absenteeism, and elevated mortality. While outdoor air quality has improved in recent years, Baltimore currently has a non-attainment status for ozone, and nearby Anne-Arundel county has a non-attainment status for SO<sub>2</sub>, raising concerns in the city for this pollutant as well. Higher temperatures promote the formation of pollutants, and energy production rises on hotter days, meaning that absent action, climate change will worsen air quality. Reducing code severe pollution events or 'Code Red' days is critical to the safety, health, and livability of Baltimore.

## CURRENT STATUS

Air quality has improved in recent years, particularly for ozone and PM 2.5, even though temperatures have risen. At the Port of Baltimore, retrofits of dray trucks improved particulate emissions, trees planting campaigns have added to the tree canopy, and a new protected bike lane connects miles of the city. Additionally, air quality was addressed in the 2013 All Hazards Mitigation Plan and Climate Adaptation Plan, called the DP3 plan. Since 2013, several goals, strategies and actions have been carried out in the most vulnerable areas of the city. The DP3 will be updated in 2017.

## EQUITY INDICATORS

Poor air quality affects the health of Baltimore's most vulnerable residents: the elderly, the young, and the poor. Baltimore's significant social and economic issues are and will be further exacerbated by poor air quality. Equity will be addressed by focusing on air quality measurements and outreach in our most vulnerable neighborhoods as well as focusing transportation, energy efficiency and renewable efforts. Directing our efforts in these neighborhoods strengthens our city overall; it helps empower stakeholders, builds trust, ensure basic needs are being met, and promotes community cohesiveness.

## STRATEGIES

### 1. Inventory air quality variability throughout the City and increase community awareness of air quality through education and outreach

**Action 1-** Partner with researchers at Johns Hopkins University to install air quality monitors throughout the city and determine how air quality varies within the city

**Action 2 –** Integrate air quality education of Code Red and Code Yellow days into community preparedness workshops focused on community engagement and assist in building robust networks between the City and community members

**Action 3-** Link ongoing City efforts with Air Quality Awareness Week by hosting workshops in residential communities throughout the city

**2. Collaborate with local industrial operations to reduce and minimize the release of noxious odors in the community**

**Action 1-** Together with emitters, co-develop an alert system that would encourage power generation facilities to voluntarily reduce emissions on peak days

**Action 2-** Work with regional agencies and transportation companies to minimize oil train shipments & reduce related air toxic emissions

**Action 3-** Work with the Port of Baltimore and MDE to further reduce dray truck emissions through retrofits and replacements

**3. Develop programs that can improve indoor air quality for children and elderly residents**

**Action 1** Implement an IAQ management program for the school district that can centrally monitor issues, log complaints and address problems

**Action 2** Partner with researchers to conduct study examining relationship between indoor air quality and health in schools in at risk neighborhoods

**Action 3** Enact education campaign for older residents targeting residents with older houses that addresses

## **METRICS FOR SUCCESS**

**Strategy 1:** Deploy air quality monitors and implement corresponding outreach programs in at least ten neighborhoods within Baltimore City

**Strategy 2:** Demonstrate a decrease in levels of criteria pollutants and/or air toxics in Baltimore.

**Strategy 3:** Develop programs that can improve indoor air quality in at least 10 public schools and include outreach and education in these programs



# SAFE COMMUNITIES

## DEFINITION/DESCRIPTION

Safe Communities prevent and reduce violent crime and increase perception of safety through interagency collaboration with residents and empowered partners.

## CURRENT STATUS

The Baltimore City Police Department (BPD) works to build safe communities through several strategies, with the ultimate goals of: preventing and reducing crime, improving the perception of safety, improving police-community relations, and promoting cross-sector collaboration. BPD's strategic focus on People and Place involves several initiatives that seek to prevent and reduce violent crime. Additionally, ensuring that BPD has sufficient staffing in place to support those crime prevention and reduction strategies is a priority for the Department in 2017. Finally, under the recently negotiated Consent Decree, BPD will begin implementing a range of reforms, including efforts to improve police-community relationships.

## EQUITY INDICATORS

BPD will incorporate equity into its policies and procedures. These include, but are not limited to:

- Hiring of a Chief Equity Officer at BPD to ensure all reform activities are understood and evaluated through an equity lens.
- Developing and incorporating analysis of pedestrian and vehicle stops to determine if and how any demographic group is disproportionately impacted. Specifically, BPD officers will document demographic information on people subject to stops, frisks, and arrests, and use this information to ensure fair and impartial policing.
- Integrating training on community engagement, implicit bias, the importance of civil rights to the police mission, the history of race in Baltimore, strategies for interacting with LGBT individuals, working with youth, and Constitutional and other legal requirements related to anti-discrimination. BPD will include community members in this training as appropriate.

## STRATEGIES

### 1. Prevent and Reduce Violent Crime

#### Action 1- Focus on People and Place

Based on data and indicators, BPD is focusing its policing efforts on chronically violent geographic locations, individuals, and groups most likely to be associated with violence. This is achieved through:

- Immediate enforcement efforts of individuals on BPD's Trigger Puller List and violent drug organizations, focused on extracting the most violent offenders from our streets and neighborhoods.
- The Gun Violence Enforcement Division (GVED) works to improve outcomes of prosecution against violent gun offenders. Through GVED, BPD and the State's Attorney work jointly on gun cases, and track them from beginning to end in order to identify opportunities for additional training and improvement across the two departments.
- Partnerships with Federal law-enforcement agencies on long-term criminal conspiracy investigations.

- Place-based, cross-sector focus in four ‘Transformation Zones’ – areas with the highest concentration of gun-related crimes and call for service in 2016. Sustainable solutions to gun violence require the support of City agencies and the community. Recognizing this need for cross-sector resources, BPD and the Mayor’s Office have begun a process to coordinate resources with multiple City agencies in the Transformation Zones. For example, Housing and Public works will support strategic remediation of vacant buildings and lots; and Baltimore City Public Schools and Rec and Parks will improve programing and outreach to youth living in these areas. Another key partner in this effort will be the Health Department’s Safe Streets Program, which has boundaries that are adjacent or overlap with the Transformation Zones. With this cross-sector foundation, Safe Streets will be a valuable resource in helping to drive violent crime reductions in the Transformation Zones.
- Pilot the Neighborhood Coordination Officer (NCO) position to improve how the Department works with community members in each of the Transformation Zones. The NCO positions were adapted from a similar program from NYPD, developed to provide the highest quality of policing service tailored to individual community need. In Baltimore, NCOs will work in Transformation Zones to: lead community outreach efforts, participate in community meetings/events, coordinate the Department’s resources with other city agencies, direct problem-solving, and contribute to criminal investigations.

### **Action 2 – Increased Staffing, Hiring and Retention**

Ensuring sufficient staffing levels is critical to preventing and reducing violent crime by addressing current staffing needs with the following efforts:

- Reassigned over 100 officers to sector patrol duty in order to address crime locally.
- Faster processing of applicants’ background investigations through clearing backlogs, automating processes, and outsourcing investigations to expedite hiring.
- Increasing the pool of potential applicants by changing the prior regulation requiring a lifetime ban on marijuana use.
- Restoring the Police Cadet Program that allows hiring of younger prospects and Explorers.

## **2. Improve Police-Community Relationships**

### **Action 1 – Community Policing Strategies and Survey**

BPD will issue an annual report describing community oriented policing efforts by district, noting perceived deficiencies and opportunities for improvement. Further, BPD has integrated foot patrol and community policing curriculum into the Training Academy. Additionally, on an annual basis, the Consent Decree Monitor will conduct a survey to assess community perception of BPD. Both the report and the survey will be made publicly available.

### **Action 2 – Community Oversight Task Force**

An effective relationship between the BPD and the community is essential to rebuilding trust. The Consent Decree requires the establishment of a Mayor-appointed commission of 5 people representing diverse communities of Baltimore, which will be responsible for recommending improvements to the current system of BPD civilian oversight. This new body will be called the Community Oversight Task Force (COTF). Among other things, the COTF will assess the current operations of the Civilian Review Board (CRB) and whether improvements to BPD’s community policing strategies should be recommended.

### **Action 3 – Improving Interactions with Youth**

The Consent Decree requires Baltimore City to assess its efforts to decrease youth involvement with the juvenile and criminal justice systems. To do so, BPD is partnering with community organizations and

programs -- including diversion programs, community-based alternatives to incarceration, and treatment options for youth in need of mental health treatment, drug treatment, or other services, as well as the issuance of a report on the results of its assessment. Initial progress in this effort includes:

- Youth-police dialogue circles during in-service and entry-level training at the Professional Development and Training Academy.
- A new training, beginning in May, that will describe the development of the teenage brain and how that can inform police interactions with youth.
- Establishment of a Youth Advisory Board.
- Youth diversion pilot program to be launched this year in the Western District.

#### **Action 4 – Improving Responses to People with Mental Health Disabilities of in Crisis**

BPD is expanding the level of service the BEST (Behavioral Emergency Services Team) provides by developing a Crisis Intervention Team (CIT) Unit to provide a highly trained, timely response to persons in behavioral health crisis. Under CIT, mental health clinicians (e.g., LCSW-C, LCPC) and police officers will be paired to respond to calls for service to deescalate persons in crisis, to connect individuals with behavioral health care and other resources, provide follow-up support to individuals who have previously interacted with the unit, and outreach to individuals who call the police or 911 but do not require an immediate in-person response. There are several training initiatives that are either underway and/or in development related to CIT:

- 40 hours of BEST training to 30% of Patrol Division personnel across all districts and shifts
- 40 hours of BEST training to Academy recruits (current practice)
- 40 hours of BEST training plus additional specialized training to CIT Unit personnel (approximately 10)
- Up to 8 hours of BEST training to 911 operators and police dispatchers
- Partnership with the Johns Hopkins School of Public Health to collect and analyze data related to BPD's response to behavioral health calls for service
- Selection of Baltimore Crisis Response, Inc. (BCRI) to provide two mental health clinicians who will be paired with two police officers in the Central District for the duration of the pilot program

### **METRICS FOR SUCCESS**

**Strategy 1:** Quantitative \_\_\_\_\_ by \_\_\_\_\_ in \_\_\_\_\_

**Strategy 2:** Quantitative \_\_\_\_\_ by \_\_\_\_\_ in \_\_\_\_\_

**Strategy 3:** Quantitative \_\_\_\_\_ by \_\_\_\_\_ in \_\_\_\_\_

Qualitative Improve \_\_\_\_\_ through \_\_\_\_\_

# GREEN INFRASTRUCTURE

## DEFINITION/DESCRIPTION

Green infrastructure is an approach to managing water that protects, restores, or mimics the natural water cycle. It means planting trees, rain gardens, bioretention areas, grass swales and other Environmental Site Design practices. Given the small size of these practices, they fit well into Baltimore's urban environment of streets, parking lots, small parks, and school grounds. Treatment of impervious surfaces (impenetrable materials such as asphalt, concrete, stone and rooftops) removes pollutants from stormwater, and allows runoff to soak back into the soil. Such practices reduce temperatures, decrease air pollution, provide new community spaces and offer nature experiences. When maintained properly, Green infrastructure is effective, economical and enhances community safety and quality of life, while creating jobs.

## CURRENT STATUS

Baltimore is required by law to remove pollutants and contaminants that stormwater picks up from our neighborhoods before it enters our waterways. Baltimore City adopted a revised Stormwater Management Ordinance with the goal of using Environmental Site Design to the maximum extent practicable. The City also developed a Watershed Implementation (WIP) and a Total Maximum Daily Load (TMDL) plan, which outlines the restoration of 20% of the City's impervious surface area. Meeting this goal requires treating 4,291 acres of impervious surface – the equivalent of 3,000 football fields or 2,000 row house blocks. In addition, the City's Growing Green Initiative and Green Network Plans support the implementation of Green Infrastructure on vacant land. And, the City, in partnership with the Chesapeake Bay Trust, offers grant opportunities to support the implementation of green infrastructure projects.

## EQUITY INDICATORS

There are several locations throughout the City that are prone to flooding and increased stormwater runoff due to topographic low points, undersized storm drains, and failing infrastructure. In addition, Baltimore's neighborhoods are plagued by nearly 30,000 vacant properties. Often these neighborhoods are predominantly communities of color and low income where residents are exposed to the negative impacts of underutilized land. Ensuring that positive and productive Green Infrastructure features are incorporated into public land will bring environmental, economic and social benefits to neighborhoods.

## STRATEGIES

- 1. Demonstrate reduction in impervious areas and increased implementation of Green Infrastructure practices.** Use the City's Watershed Implementation and Total Maximum Daily Load (TMDL) plans to target and guide construction of Green Infrastructure practices on vacant lots, public right of way, school campuses, and Recreation and Parks land.

**Action 1** – Determine interest and demand for an Offsite Stormwater Mitigation Credit program, and establish, if needed.

**Action 2** – Work with community partners and stakeholders to create design specifications and a streamlined permitting process to implement Green Infrastructure practices particularly on smaller projects, under 5,000 square feet.



**Action 3** – Partner with key community members, other stakeholders, and design consultants to ensure that Green Infrastructure practices are used in appropriate settings.

**Action 4** – Establish residential Green Infrastructure incentive program.

**2. Ensure pro-active maintenance of Green Infrastructure installations**

Expand existing maintenance programs to include Green Infrastructure, and improve the function and appearance of Green Infrastructure practices.

**Action 1** – Investigate and document best practices for Green Infrastructure maintenance programs with the intent of building Green Infrastructure workforce.

**Action 2** – Coordinate with city agencies to work with community members and key stakeholders to develop City and resident stewardship programs, design maintenance programs and, monitoring and reporting standards.

**Action 3** – Create a database of Green Infrastructure practices that identifies all parties with maintenance responsibilities.

**Action 4** – Create a standard Maintenance MOU for City agencies on Green Infrastructure practices on public property that will be maintained by entities other than the City.

**3. Increase community awareness of the impacts of stormwater runoff and the benefits of Green Infrastructure through education and outreach.** Resident awareness can lead to further acceptance of green infrastructure practices and adoption of practices on private property.

**Action 1** – Create demonstration projects on public land with educational signage.

**Action 2** – Maintain and promote the use of educational mapping tools (printed map/brochure, mobile app, presentations, tours, etc.) to provide locations and benefits of Green Infrastructure

**Action 3** – Create a citywide public education campaign in partnership with residents and stakeholders, promoting the economic, social and environmental benefits of Green Infrastructure and the impacts of stormwater runoff.

## **METRICS FOR SUCCESS**

**Strategy 1:** Demonstrate an increase in impervious area treated or removed from 2014 to current date

**Strategy 2:** Demonstrate number of acres maintained annually

**Strategy 3:** Demonstrate number of residents reached annually

Qualitative Improve \_\_\_\_\_ through \_\_\_\_\_



# TREES AND FORESTS

## DEFINITION/DESCRIPTION

Trees are essential to healthy, vibrant communities and Baltimore is blessed with an abundance of them. A leafy, green canopy acts as the city's lungs and air conditioner by cooling and cleaning our air and water. Well-maintained trees are known to improve property values, soften hard edges and even reduce incidences of crime. Trees contribute toward improving our health, strengthening our communities, our economy and improving our overall way of life—while providing habitat for wildlife, we might otherwise not see in our urban environment.

## CURRENT STATUS

Baltimore's tree canopy – a measure of the proportion of the city shaded by trees - is at 27.4%, still well below our target of 40%. TreeBaltimore, a city-led public private partnership led focuses on planting and tending trees on city-owned property, putting out a call-to-action to residents by giving away free trees and educating people on their importance. Although we are investing in growing our tree canopy, our trees and forests face greater threats than ever before. The emerald ash borer, invasive vines, an increase in deer population, climate change and development pressures all negatively affect our trees.

## EQUITY INDICATORS

Areas of the city with the least number of trees have higher summer temperatures associated with risk of adverse health impacts, especially for the young, elderly, and the sick. The neighborhoods most impacted by a low canopy are largely, majority communities of color and low-income. Tree planting and preservation, as well as public engagement, will continue to be targeted in the areas of the city with the least amount of trees. Citywide and neighborhood organizations, residents and students will work together to create neighborhood tree planting plans. The City will prioritize proactive pruning and other measures equitably, to ensure that trees have a positive impact on residents. With the help of research partnerships, a tree prioritization map is used to focus on those neighborhoods most in need.

## STRATEGIES

### 1. Increase the city's tree canopy

**Action 1** – Classify trees as infrastructure: require city agencies to plant and maintain trees in capital projects, plans and procedures.

**Action 2** – Expand the call-to-action for residents, organizations and businesses to plant and care for trees including fruit trees. Provide educational opportunities to for residents to learn the benefits of trees in our city for both people and nature.

**Action 3** - Distribute free and reduced cost trees along with education materials to private landowners.

**Action 4** – Open more street tree pits and enlarge those that exist

**Action 5** – Focus planting and maintenance in neighborhoods with the lowest tree canopy; create individual neighborhood-level tree plans.

## **2. Assess and manage the city's tree canopy for long-term health**

**Action 1** – Conduct a complete street tree inventory and forest assessments in large parks

**Action 2** – Create and implement plans to reduce threats to trees such as deer and the emerald ash borer

**Action 3** – Increase resources available for city-led forest management and care

**Action 4** – Support resident education and non-profit and tree management and care

## **3. Preserve the city's existing tree canopy**

**Action 1** – Adopt a Tree Ordinance, stricter standards for utilities and restrict the clearing and sale of publicly owned forests.

**Action 2** – Investigate the creation of a forest land banking credit program or permanent conservation easements.

**Action 3** – Restrict, and possibly prohibit, the clearing or sale of publicly-owned forests

**Action 4** – Hold utilities to strict standards for protecting the tree canopy

**Action 5** – Adopt a no-net-loss-of-canopy policy city-wide.

## **METRICS FOR SUCCESS**

<b>Strategy 1:</b>	Quantitative	Zero loss of existing forests due to human action by 2025.
<b>Strategy 2:</b>	Quantitative	Active management of 75% of forests and trees within the city by 2030.
<b>Strategy 3:</b>	Quantitative	Achieve 40% tree canopy by 2030.
<b>Strategy 4:</b>	Quantitative	Plant # of trees annually
<b>Strategy 5:</b>	Quantitative	# residents who plant and maintain trees

# BIODIVERSITY

## DEFINITION/DESCRIPTION

A diverse ecosystem where all species are protected is important to maintaining the web of life on which all living things depend. Once a habitat, plant or animal species is lost globally or even regionally, it is very difficult, if not impossible, to bring back. Healthy biodiversity contributes to water resource protection, soil health, pollution breakdown and absorption, and climate stability. There is an intrinsic value to ecosystem health as well. Imagine Baltimore without our beloved black-eyed susans, orioles, or blue crabs.

## CURRENT STATUS

The City is working to restore and conserve habitat and manage invasive species on City parkland through programs such as Weed Warriors and the development of a deer management strategy. Organizations including the National Wildlife Foundation, Audubon Society, Wildlife Habitat Council, Blue Water Baltimore's Herring Run Nursery, and others, provide education and support for the creation and improvement of wildlife habitat where people live, work, play, and learn in the city. In 2013, Masonville Cove was designated as the first Urban Wildlife Refuge Partnership, in the country by the U.S. Fish and Wildlife Service. To build off of this success, a plan for an expanded "Baltimore Rivers to Harbor" Urban Wildlife Refuge Partnership is being pursued. The Greater Baltimore Wilderness Coalition, a regional partnership of public, private, and nonprofit organizations connects people to greenspaces and promotes equity, discovery, biodiversity, and resilience.

## EQUITY INDICATORS

The city's existing priority natural systems areas are primarily concentrated in higher income areas with abundant tree canopy and open space. While it is important to restore and conserve habitat in these areas, residents citywide must have the opportunity to share in the benefits of a healthy and diverse ecosystem. Ensuring that biodiversity efforts address existing open space areas on both public and privately land will help residents better understand and experience the benefits of these efforts.

## STRATEGIES

### **1. Demonstrate an increase in restoration, creation and maintenance of habitat for native species, and provide educational opportunities showing its benefits.**

Provide improved and expanded habitat for native species, along with educational materials, by restoring natural systems areas, including forest patches, wetlands, stream valleys, shorelines and other habitat areas, and encourage the creation and maintenance of new habitat on public and private land.

**Action 1** – Work with partners to create and maintain new or improved habitat for pollinators on public lands such as parks, school grounds, and vacant land and provide educational materials.

**Action 2** – Encourage the creation and maintenance of habitat on private properties such as homes and businesses.

**Action 3** – Create a mechanism to ensure that habitat areas created and maintained on public lands be protected in perpetuity.

**2. Demonstrate progress towards the management of invasive species in natural systems areas and implementation of the invasive species management recommendations in existing plans.**

The City is currently pursuing the creation of Forest Health Assessments for the City's four largest forested parks, which will identify recommendations for invasive species management in these forests. The City has also developed a Deer Management Plan for managing the deer population, the growth of which is a threat to both the health of the city's forests and the health of the deer themselves.

**Action 1** – Continue to utilize a site management plan approach to managing invasive species by completing Forest Management Plans the city's largest forested parks and identifying other priority natural systems areas for future management plans.

**Action 2** – Demonstrate progress towards the implementation of invasive species management recommendations identified in the Forest Management Plans.

**Action 3** – Demonstrate progress towards the implementation of the City's Deer Management Plan.

**Action 4** – Create and demonstrate progress towards the implementation of an Integrated Pest Management Plan for City-owned properties.

**3. Increase community awareness of the benefits of biodiversity and the impacts of invasive species through education and outreach.**

Increasing public awareness can encourage stewardship to help to improve biodiversity and reduce the spread of invasive species as well as the restriction of pesticides and herbicides.

**Action 1** – Continue to create and maintain demonstration projects on public land with educational signage.

**Action 2** – Continue to support programs and organizations that provide education and stewardship to promote biodiversity and reduce the spread of invasive species.

## **METRICS FOR SUCCESS**

**Strategy 1:** Demonstrate an increase in habitat area restored, created, and maintained from (XXX) to (XXX)

**Strategy 2:** Demonstrate progress in implementing actions identified in forest management and deer management plans.

**Strategy 3:** Demonstrate number of residents reached annually

# NATURAL SYSTEMS

## DEFINITION/DESCRIPTION

Green, natural spaces improve our mental and physical health, keep our air and water clean, and contribute to safer and stronger communities. In Baltimore, a dense urban environment, our natural systems have been altered through development. Nonetheless, the elements of natural systems, which remain, provide valuable services such as food, flood control, air filtration and emotional rejuvenation among many others. Protecting and enhancing our natural systems increases these benefits and improves residents' access to natural areas for recreation, enjoyment and relaxation.

## CURRENT STATUS

Permanently protected green space has been increasing through the creation of forest conservation easements on private land, and the use of land trusts to permanently protect Community-Managed Open Spaces. City agencies and many partners have improved our natural systems through stream restoration, riparian buffer planting, living shoreline projects, habitat creation and care of forest patches. Building on these efforts, the City's Green Network Plan identifies additional opportunities to expand our natural systems by creating and linking permanent green spaces and better connecting to the region's natural systems.

## EQUITY INDICATORS

Baltimore's natural systems are generally strongest and most abundant in less intensely developed areas of the city. Equitable access to nature requires focused investment in disenfranchised neighborhoods, least connected to nature. There are opportunities for government and, for- and non-profits to work together with communities to transform land into well-maintained parks, gardens, community gathering points, quiet places, play spaces and more. In areas, with demand for redevelopment, existing natural systems should be protected as part of the development review process where possible.

## STRATEGIES

- 1. Improve Baltimore's existing natural systems by increasing the amount of green space and funding for maintenance; and create a streamlined process for groups to enhance and transform city owned open space.**

**Action 1-** Increase the capacity for city agencies, local organizations and communities to maintain natural lands and community green spaces, including exploring public-private partnerships. Develop a clear process for groups to seek approval for conducting short and long-term greening projects on city owned open space.

**Action 2 –** Implement projects identified in the Green Network Plan and future plans to increase and link green space in the city, particularly in neighborhoods least connected to nature, with an abundance of vacant land.

**Action 3 –** Continue efforts to restore and monitor natural lands to increase natural resource resilience, adaptability, biological integrity and places for people to be refreshed, in targeted neighborhoods.

- 2. Increase the area of land directly connected to regional natural systems**

Better connecting local and regional natural areas improves habitat for wildlife and increases opportunities for residents to access and experience nature.

**Action 1** – Implement projects identified in the Green Network Plan and future plans to better connect the natural systems within the city and to the surrounding region.

**Action 2** – Work with Greater Baltimore Wilderness Coalition and other partners to identify and implement projects that strengthen Baltimore’s connections to the regional network of natural systems.

**3. Increase the acreage of land conserved and maintained**

Open space, forested areas and environmentally sensitive land should be protected to ensure they continue to provide ecosystem benefits, recreational opportunities and spaces for imagination to be developed and refreshed, into the future. A few ways partners can work together to protect green spaces are by adding to the City’s parks inventory, acquiring acreage through a land trust or easements.

**Action 1** – Continue to support land trusts in protecting Community Managed Open Spaces and natural areas on private land.

**Action 2** – Identify creative methods for increasing conservation easements, such as incentives for new easements, potential partnerships or land swaps with large landowners.

**Action 3** – Use the Green Network Plan, the Open Spaces and Parks Task Force and others means to identify properties to acquire and maintain for permanent green spaces. Identify and explore sustainable, dedicated funding for public spaces including the capital improvement budget, Project Open Space and other funding.

## **METRICS FOR SUCCESS**

**Strategy 1:** Demonstrate an increase in acreage of green space and natural areas created and maintained with a focus on neighborhoods with abundant vacant land.

**Strategy 2:** Demonstrate an increase in the area of land directly connected to regional natural systems.

**Strategy 3:** Demonstrate increased acreage of land conserved and maintained both publicly and privately.



# Urban Agriculture

## DEFINITION/DESCRIPTION

Urban agriculture occurs in backyards, community and school gardens, and on for- and non-profit farms. It encompasses aquaponics, aquaculture, small animal husbandry, edible landscapes, and non-food agriculture such as flowers. Its benefits include social cohesion, neighborhood vitality, economic benefits and jobs, environmental services, increased knowledge around food, and more.

## CURRENT STATUS

There are over 200 community gardens and approximately 17 urban farms in Baltimore. The City is a national leader in supporting urban agriculture through policy, with emphasis on production farming. This includes the Homegrown Baltimore: Grow Local Urban Agriculture Plan, an urban agriculture tax credit, the Land Leasing Initiative, and improved regulations for animal husbandry and hoop houses.

## EQUITY INDICATORS

Urban agriculture offers opportunities for employment and/or self-sufficiency for populations that face challenges such as low educational attainment, criminal records, limited language proficiency or other barriers to entering the traditional workforce. Long-term access to and/or ownership of land for urban agriculture provides opportunities to create more equitable food systems and food sovereignty in communities that have historically been excluded from equal access to fresh healthy foods. Simply providing access to land is not enough to create equity. It requires support through education, infrastructure and community buy-in.

## STRATEGIES

1. **Ensure Baltimore City creates a productive landscape by protecting land for agricultural purposes and creating a policy environment that encourages food and farm production.**

**Action 1:** Prioritize land use for agriculture and growing. **Public:** Develop site criteria to more readily identify vacant or underutilized parcels of City-owned land that is suitable for urban agriculture, including vacant lots and parkland. **Private:** Encourage private landholders and new development to include space for agricultural activities. Consider incentives to support these efforts. **Institutional:** Encourage schools, universities, religious organizations and other institutions to devote land to agricultural activities and incorporate growing into curriculum and programming.

**Action 2** Create better defined and supported pathways and offer incremental opportunities to guarantee long-term land tenure and ownership of agricultural spaces. Consider models such as a “rent to purchase”, and support the expansion of community-based land trusts specifically with the intention of creating food sovereignty in marginalized communities.

2. **Ensure that growers of are connected to educational and training resources to guarantee that urban food production is grown in safe, environmentally- and socially-responsible ways.**

**Action 1:** Provide training opportunities to growers by strengthening partnerships and programs that provide growing space; consider educational or experiential requirements and opportunities in conjunction with leasing land; and/or create a farm incubator.



**Action 2:** Create a centralized database of urban agricultural sites and projects to connect growers to share/trade skills, expertise and equipment, and to create a collection point for data on food and farm production to better understand the impacts of urban agriculture. Use regional approaches where necessary and appropriate.

**3. Support growers of all scales in building capacity by investing in agricultural infrastructure.**

**Action 1:** Create, expand and connect more growers to local, state and federal programs and/or incentives for increased and improved production, as well as economic sustainability. This could include on-site water, equipment, hoop houses, compost, transportation, or aquaculture infrastructure.

**Action 2:** Amend or create local and state policies that “scale down” existing requirements or qualifications of state programs, incentives and/or policies to make them more appropriate to urban settings. For example, nutrient management plans and organic or sustainable management certification procedures and requirements can be overly onerous or may not be appropriate for smaller scale sites, whereas some tax credits or easements require acreage that is impossible in an urban setting.

**Action 3:** Develop multiple scales of agricultural aggregation for diverse growers and markets. This should include: direct markets such as farmers markets and CSA’s; institutional markets such as schools, hospitals and universities; and retail markets such as corners and public markets.

**4. Increase availability and resident knowledge of urban agricultural activities and products to increase participation in activities, as well as to foster informed consumers that will support purchasing local foods and products at markets of various kinds.**

**Action 1:** Create stronger procedures for engaging communities around urban agriculture projects and initiatives in order to foster shared buy-in. Consider protocols for community engagement for all projects on City-owned land, and encourage engagement on private projects. Develop a public awareness campaign to inform residents of urban agriculture opportunities and resources, and encourage local food and farm product purchase and consumption. Allow public access to grower database mentioned above, in order to make residents more aware of urban agriculture projects, opportunities to get involved, and/or to purchase or obtain food.

**Action 2:** Adapt or create policies and programs that facilitate the sale of urban-produced food and products at markets that provide additional social, cultural or economic benefits to underserved communities. This may include farmers markets, farmstands, CSAs, public markets, or corner stores.

## **METRICS FOR SUCCESS**

**Strategy 1:** Demonstrate an increase in the acreage of urban agriculture

**Strategy 2:** Demonstrate increased participation in educational or experiential opportunities for growers representing all scales of urban agriculture.

**Strategy 3:** Demonstrate improved agricultural infrastructure for urban growers.

**Strategy 4:** Demonstrate an increase in the amount of fresh food sold locally at direct farm-to-consumer activities