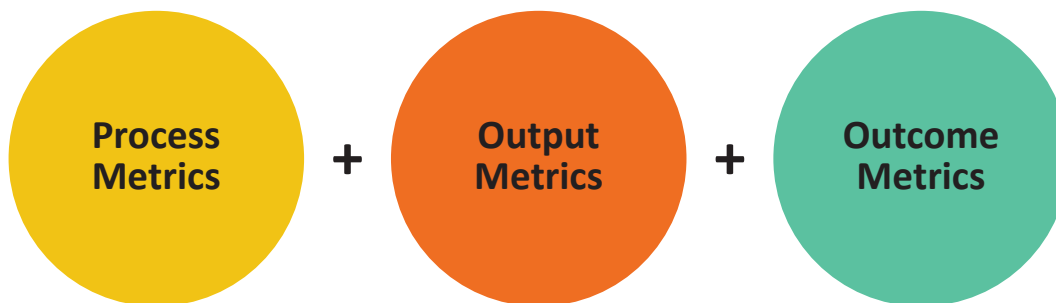# VI. MEASURING PROGRESS

METRICS FOR ONGOING IMPROVEMENT

Measuring how the Green Network is implemented—and what it achieves—will be done according to a set of specific metrics, which stem directly from the Principles and Goals adopted at the outset of the planning process. There are three distinct sets of measures, each serving different purposes: 1) Process Metrics, 2) Output Metrics, and 3) Outcome Metrics. The objective is to quantitatively measure progress toward the plan's aspirational goals, as well as to measure how people are included in the process.

The Green Network will be implemented incrementally, so measurements are likely to reflect the location of investments. Unless noted as relating specifically to pilot projects or Focus Areas, the metrics identified are intended to measure the progress made on achieving the city-wide Green Network vision.

Given that the Baltimore Green Network falls under the umbrella of the Baltimore Sustainability Plan, annual reporting on BGN metrics will be included in the annual sustainability reports produced by the Office of Sustainability.

Process Metrics + **Output Metrics** + **Outcome Metrics**

Process Metrics

The City of Baltimore strives to implement planning and project delivery for Green Network in an equitable manner, including the crucial aspects of public engagement and outreach. Community meetings, social media, and media strategy should all be grounded in a commitment to connecting with diverse stakeholders and involving representatives of the affected communities. In short, how the plan is implemented is important to the success of the Green Network—this is what these Process Metrics are measuring. The metrics are organized according to the overall principles:

Overall Principles	
Overall Reach	• Number of meetings hosted • Number of individuals participating in Department of Planning-hosted meetings (per sign-in) • Number of partner organizations working with the City to support Green Network goals
Diversity	• Department of Planning-hosted meeting participant demographics (race, gender, age)
Recommendation Implementation	• Number of plan recommendations (process improvements, policy changes, etc.) initiated and/or implemented
Education	• Number of public educational events per year concerning community greening by partners
Web and Media	• Number of press releases and media mentions for Green Network projects, meetings, or events (TV/radio broadcasts, articles, editorials, other media) • Number of social media posts from the Department of Planning and Office of Sustainability related to the Baltimore Green Network

Output Metrics

Output Metrics measure the actual work done by (or related to) the Green Network. Through the Office of Sustainability, this work will deliver (or will assist private or public partners to deliver) a variety of green projects, including new or improved parks, trails, forest patches, water quality investments, urban agricultural opportunities, and passive open spaces. While all parties are limited by available resources and competing priorities, the Green Network and partners do have control over delivery of projects and related Output Metrics; these measures are thus useful for performance management purposes—"Are we getting done what we can, given our resources?"

Partner organizations routinely measure project outputs of these types; there is no need to "reinvent the wheel" by creating duplicative metrics (nor take credit for partner accomplishments). Thus, these metrics can capture overall outputs and offer a platform for coordination.

Environmental/Ecological Outputs	
Greening and Treatments	• Square footage/acreage of new parks and greened vacant lots • Square footage of impervious surface treated for Green Network-related projects • Number of street trees planted (along corridors) • Number of meadows, and/or butterfly, bird, and bee habitat areas created or maintained
Stewardship	• Number of new, renewed, and preserved community-managed sites (gardens, pocket parks, forest patches, etc.) by Baltimore Green Space/Adopt a Lot • Number of Baltimore Green Network projects by agency, non-profit, and community partners • Sites receiving proactive/scheduled maintenance or stewardship (including Adopt-a-lot, Forest Patches, Care-a-Lot, Bmore Beautiful, Baltimore Green Space, and others)
Economic Opportunity Outputs	
Investment	• Total direct Green Network investment for Department of Planning-led or partner-led projects, including dollar amounts for both Focus Areas and city-wide • Number of urban farms, farm stands, orchards, nurseries, and other urban agriculture uses
Jobs	• Number of places hosting job training or classes for greening-oriented careers or jobs; number of participants in the trainings

Output Metrics continued

Quality of Life and Connectivity Outputs	
Blight Removal	• Square footage and number of post-demolition vacant lots converted into new maintained green or open spaces open to the public, as well as those converted into new parks
New Connections and Corridors	• Number and total miles of new, off-street trails, paths, and other connecting infrastructure for walking and bicycling in community corridors • Miles of new, on-street protected and enhanced bicycling lanes in community corridors • Number of new, direct connections between parks/open spaces and neighborhoods, such as enhanced crosswalks or traffic calming on park adjacent streets • Block-lengths or miles of streetscape improvements and greening on community corridors
Recreation, Arts, Placemaking, and Amenities	• Number of recreational facilities added (playgrounds, ballfields, courts, exercise equipment) in Focus Areas • Number of recreational facilities refurbished (playgrounds, ballfields, courts, exercise equipment) in Focus Areas • Number of art installations (including murals, sculptures, painted crosswalks, etc.) in nodes and corridors annually

Outcome Metrics

This final set of metrics reflects the broadest, most aspirational, highest-order goals of the Green Network—the reasons why the City and partners are undertaking this project: To improve and enhance environment and ecology, economic opportunity, and the quality of life and connectivity of Baltimore communities and green spaces.

On its own, the Green Network has little control over large-scale issues like the overall quality of the water in Baltimore Harbor, or public safety in Focus Area communities. Yet tracking how projects and other Green Network activities do positively impact environmental, economic, and social outcomes is important to value and prioritize this ongoing work.

Environmental/Ecological Outcomes	
Land Improvements	• Number of sites environmentally improved or permanently preserved in nature nodes and nature corridors
Economic Opportunity Outcomes	
Focus Area Markets	• Change in assessed property value and median sales in Focus Areas (within 0.25 miles from Green Network projects) • Number of new construction permits for work over $10,000 within 0.25 mile range around Green Network projects in Focus Areas
Quality of Life and Connectivity Outcomes	
Blight Removal	• Percent reduction in number of vacant buildings in Focus Areas
New Connections	• Number of census tracts with Green Network projects that have Green Network Capital Improvement Program money or Green Network staff time • Population of census tracts with Green Network projects that have Green Network Capital Improvement Program money or Green Network staff time • Green Network investment by Housing Market Typology
Crime Reduction	Change in Part 1 crime (violent crime and property crime) within 0.25 miles from Green Network projects within Focus Areas

A Note on Tracking and Reporting Metrics

As the Green Network moves forward, implementers may not be in a position to develop baselines, targets, and data collection means for all measures in this metrics framework (which is fairly elaborate). As such, it is recommended that the Office of Sustainability and partners select highest priority measures from a representative cross-section of all metrics. In addition, given the nature of the outcome metrics, the Green Network metrics should integrate closely with the City of Baltimore Sustainability Plan—the update of which is currently under development. Some of the broader ecological, social, and economic measures are more suitable to be undertaken as part of the city-wide sustainability vision, as reflected across many sectors and issues in the Sustainability Plan.

As the Green Network is implemented, there may also be opportunities to partner with the Baltimore Ecosystem Study, local universities, and other experts to research the benefits and impacts of the Green Network on factors including health, resiliency, environmental quality, community cohesiveness, local economy, and others that may not be easily tracked and measured as defined metrics.