

2023 Disaster Preparedness and Planning Project (DP3) Update

Sustainability Commission Briefing
August 23, 2023

What is the DP3?



- The DP3 is the City's roadmap to reduce the risk of natural and human-caused hazards and build community resilience.
- The DP3 is a **hazard mitigation plan**, meaning it establishes long-term, sustained actions to **reduce losses to people, property, the environment, and the economy** based on existing authorities, policies, programs, resources, and local ability.
- It's also the city's **climate adaptation plan** as it identifies strategies to adapt to worsening impacts
- The DP3 consists of 3 major elements:
 - **Risk Assessment:** Identifies the characteristics of hazards likely to impact the City and the potential consequences of the hazards.
 - **Capabilities Assessment:** Evaluates the City's resources to manage risk, including regulatory, administrative, financial, and staffing capabilities.
 - **Mitigation Strategy:** Sets the priorities and develops long-term strategies to reduce risk.

Hazard Impacts

May 2018
Frederick Ave
Flooding



May 2018
Jones Falls
Flooding

July 2022
North Ave
Sinkhole



July 2021 Code
Red Extreme
Heat (+ Pandemic
social isolation)

Benefits of Hazard Mitigation Planning



- Hazard mitigation saves \$6 for every \$1 spent on average.
 - Maryland can save up to \$100 million in benefits.
- Hazard mitigation can also serve as a catalyst for:
 - Economic Development
 - Revitalization and Beautification
 - Natural Resource Conservation
 - Cost Savings

National Benefit-Cost Ratio Per Peril <small>*BCR numbers in this study have been rounded</small>		Federally Funded
Overall Hazard Benefit-Cost Ratio		6:1
Riverine Flood		7:1
Hurricane Surge		Too few grants
Wind		5:1
Earthquake		3:1
Wildland-Urban Interface Fire		3:1

Source: National Institute of Building Sciences

Opportunities

- Authorized by the Federal Disaster Mitigation Act of 2000
- A FEMA-approved hazard mitigation plan is required for certain Federal disaster **grant funding** programs:
 - Hazard Mitigation Grant Program
 - Flood Mitigation Assistance
 - Building Resilient Infrastructure and Communities
 - Rehabilitation of High Hazard Potential Dams
- Opportunity to access funding to fund projects like the **Middle Branch Resiliency Initiative**
 - \$31.92 Million in FEMA funding
 - Benefits 410,000 nearby residents; representing 21% of the total population of Baltimore City and Baltimore and Anne Arundel Counties.



Overview of the Planning Process



Advisory and Review Teams



2023 Vision and Goals



Vision: Baltimore is a resilient city whose daily activities reflect a commitment shared by all people who work, live, and play in the City to reduce or eliminate impacts from current and future hazards, especially those exacerbated by climate change.

- **Goal 1:** Ensure the equitable protection of the health, safety, and welfare of all people who work, live, and play in the City, with specific consideration for the barriers and challenges that may result in disproportionate hazard impacts to socially vulnerable populations and underserved communities.
- **Goal 2:** Strengthen the resilience of critical government and community facilities, services, and systems, to reduce or prevent impacts from natural and human-caused hazard events.
- **Goal 3:** Enhance the integration of resilience, disaster prevention, and planning into all City programs, policies, and operations.
- **Goal 4:** Enhance the City of Baltimore's adaptive capacity and build institutional structures that can proactively cope with dynamic future conditions.
- **Goal 5:** Promote hazard mitigation and climate adaptation awareness and education throughout the City of Baltimore.
- **Goal 6:** Provide support to increase efforts toward a better Community Rating System (CRS) classification.

2023 DP3 Framework



- Section 1: Introduction
 - Section 2: City Profile
 - Section 3: Risk Assessment
 - Sections 4 to 11: Hazard Profiles
 - Section 12: Capability Assessment
 - Section 13: Mitigation Strategy
 - Section 14: Plan Implementation and Maintenance
 - Section 15: Moving Forward
 - Glossary
 - Appendix A: Engagement Strategy
- Hazards of Concern:
 - Flooding
 - Coastal Hazards
 - Severe Storms
 - Drought
 - Extreme Temperature
 - Earthquake
 - Soil Movement
 - Human-Caused Hazards

Notable Changes from 2018 DP3



- Reorganized hazards based on past events since the 2018 DP3, new data, and input from stakeholders and community members
- Included human-caused hazards (cyber threats and hazardous materials)
- Integrated socially vulnerable populations and underserved communities throughout the plan's development and risk assessment
- Included qualitative assessment of the impacts on natural and cultural resources from hazard events
- Aligned the plan with FEMA's updated guidance that prioritizes the following:
 - Climate Change
 - Future Changes (population and development)
 - Equity
 - Building Code Integration
 - High Hazard Potential Dam Integration

Public Engagement

- Established an **Equity Subcommittee** to ensure community concerns, needs, and lived experiences were heard and addressed directly
- Distributed **surveys** to the 1) general public, 2) stakeholders, and 3) neighboring jurisdictions to assess public awareness and understanding, identify community needs, concerns, and barriers, and assess opportunities for future mitigation strategies.
 - Digital and hardcopies
- Collected feedback on hazard impacts during the 2023 Annual **Sustainability Open House**.



Draft DP3 Public Comment Period



- Public Comment Period **August 11 - Sept 8th**
- Available on the Konveio Public Comment platform
 - <https://baltimoreplanning.konveio.com/>
- Need to create free user account
- Will be able to comment directly in the plan documents
- Each chapter posted separately for easier navigation

A screenshot of the Baltimore Department of Planning Public Comment Portal. The page has a dark navigation bar with "Home" and "My Comments" links. Below the navigation bar is the Baltimore Department of Planning logo and the text "Baltimore Department of Planning Public Comment Portal". The main heading is "User account". There are three buttons: "Create new account", "Log in", and "Request new password". Below these are input fields for "Username *" and "E-mail address *". A section titled "Terms and Conditions of Use" contains a list of guidelines: "- Remember that this is a platform for discussion, not debate.", "- Maintain a collaborative, open-minded approach: consider others values, experience and views; read and respect t", "- Be willing to respond to questions about your views and ask others to clarify their views.", and "- Avoid personal attacks on others." The text is partially cut off at the bottom.

Click anywhere in the document to add a comment. Select a bubble to view comments.

is expected to exacerbate many of these natural hazard impacts resulting in intense and unpredictable events. Regardless of the reduction of greenhouse gas emissions (GHG), climate change impacts will continue to prevail for the City and its people.



Hazard mitigation encompasses all natural hazards, including short-term and episodic events that may or may not be connected to climate change. Climate adaptation is focused on reducing risks to and mitigating climate change impacts.

As natural disasters increase in frequency and intensity, the need for supporting hazard mitigation and climate adaptation plans is greater than ever. A community implements a form of hazard mitigation by adapting to the expected impacts of climate change. An HMP that

addresses climate change in the risk assessment and includes adaptation actions in the mitigation strategy can reduce the community's risk to current and future events (FEMA 2022).

1.1.1.2 Role of Social Vulnerability

Hazards affect all individuals in the impact area, but those with heightened social vulnerability or in underserved communities are impacted at a disproportionately higher rate than others. The whole community must be equipped with the resources and knowledge to prepare for, respond to, and recover from hazardous events.

FEMA defines social vulnerability as "the potential for loss within an individual or social group." The degree to which a community has certain social factors and characteristics (i.e., poverty, crowded households, disabled residents, elderly populations, etc.) can drastically affect their ability to respond to and prepare for impacts. Social vulnerability considers the social, economic, and demographic characteristics that "influence an individual's or group's ability to prepare, respond, cope, or recover from an event" (FEMA 2023).

For the 2023 DP3 update, the City's social vulnerability was measured with a Social Vulnerability Index (SVI) calculated with data from the Center for Disease Control/Agency for Toxic Substance and Disease Registry (CDC/ATSDR SVI). The SVI score represents a national percentile ranking of social vulnerability for a county or census tract compared to all others at the same level. A higher SVI score indicates greater vulnerability to hazard impacts.

Key Terms

- **Social Vulnerability**—Is the susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood (FEMA n.d.).
- **Underserved Community**—Groups that have limited or no access to resources or that are otherwise disenfranchised. These groups may include people who are socioeconomically disadvantaged; people with limited English proficiency; people who are geographically isolated, etc. (FEMA n.d.).
- **Equity**—The consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities (FEMA 2022).



Navigate the plan here

See other people's comments

Add your own comments by clicking anywhere

FEMA Approval + City Adoption Process

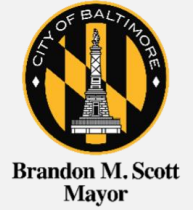


- Draft DP3 Public Comment Period
 - Planning Commission comments
 - **Sustainability Commission comments**
 - City agency and other stakeholder comments
 - Regional partner comments
 - Community comments
 - State (MDEM) Review comments
 - Incorporation of feedback to create Draft #2 DP3
 - FEMA Review of Draft #2 DP3 – 45 Days
 - Incorporation of FEMA feedback to create Final DP3
 - FEMA will grant the plan 'Approvable Pending Adoption' status, meaning FEMA will approve the plan once it has been locally adopted.
 - **Presentation of Final DP3 to Sustainability Commission**
 - **November meeting**
 - **Affirmative vote**
 - Presentation of Final DP3 to Planning Commission
 - November 30th meeting
 - Affirmative vote
 - PC Signs Adoption Resolution
 - Resolution is submitted to FEMA and FEMA grants final approval.
- * Note: the 2018 DP3 expires December 20, 2023

Next Steps for the Planning Commission



- Review and provide comments on the Draft DP3 via the Konveio platform
- Share the opportunity to provide feedback with your networks
- Review and approve the Final DP3 in November
- Sign the Adoption Resolution in early December



Questions

Project Contacts



Aubrey Germ

Baltimore Office of Sustainability

Climate and Resilience Planner

aubrey.germ@baltimorecity.gov