

On behalf of the Baltimore Regional Transportation Board (BRTB), I would like to thank you for your comments on the draft Goals and Strategies for Resilience 2050: Adapting to the Challenges of Tomorrow.

Over 1,500 people reviewed the draft Goals and Strategies and 35 participants generated over 165 comments.

BRTB members, Technical Committee members, and BMC staff reviewed all of these comments and a number of changes were made to the proposed Goals and Strategies. These changes can be reviewed on the following pages.

A vote on these revised goals is scheduled for Tuesday, November 30, 2021 at 9 a.m. Those wishing to comment further may do so at the meeting during the discussion of Resolution #22-6. Visit www.baltometro.org for a link to the meeting, which will be live streamed and is open to the public.

Public input is vital. Through our conversations and collaboration, our region can grow stronger and more resilient in facing the challenges of a changing tomorrow. We thank you for taking the time to review and comment on the proposed goals and for being a part of the regional transportation planning process.

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BRTB Chair





Response to Comments

Improve Accessibility

Characterization of comments received:

Many of the comments received about the goal and strategies for *Improve Accessibility* focused on specific strategies and actions to improve accessibility. Commenters suggested more frequent transit services, improvements to the transit network as well as improvements to bike and pedestrian infrastructure as a way to encourage more people to use these modes of travel. Comments also were made suggesting language changes to discourage auto use and encourage other means of traveling across the region. There was also a suggestion to include concepts they felt were not clear or left out of the draft.

Accessibility is how many places you can get to in a given time regardless of mode and is often a measure of how connected the transportation network and land uses are in a region. Good accessibility refers to the ease at which one can get what they need or where they need to be quickly and easily.

Action:

Amended the goal *Improve Accessibility* to explicitly include the words "resilient and sustainable" to promote these concepts and reflect the name of the 2050 long-range transportation plan.

Amended strategy "D" to reflect comments received, add sustainability, comfort and safety concepts and emphasize separation of vulnerable users (i.e. bike/pedestrian) from vehicle traffic.

Amended strategy "F" to reflect comments to acknowledge and include the growing importance of, and need to coordinate, institutional and private (shared) transportation systems with existing services and systems.

Added a strategy "I" to acknowledge comments received about improving existing transit services.

Increase Mobility

Characterization of comments received:

Many of the comments received on the goal and strategies for *Increase Mobility* focused on specific strategies and language to reduce automobile use. Commenters suggested focusing on bike and pedestrian infrastructure as a way to encourage more use of these modes of travel. Comments also were made suggesting language changes to discourage auto use and encourage other means of traveling across the region as well as including concepts they felt were not clear or left out of the draft. Comments also encouraged including the concept of equity in the goal and strategies as well as the costs of improving the system.

The concept of "mobility" in a transportation network refers to how far someone can go in a given amount of time. Central to this concept is delay in the system, be it caused by traffic congestion, incidents, frequency of service, span of service or otherwise. Equity in transportation often relies upon fair access and affordability of a transportation network so



that everyone in the community receives a fair distribution of transportation resources, benefits, costs, programs and services based upon differences in income, ability and other factors affecting transportation choice and impact.

Action:

Amended the goal *Increase Mobility* to reflect comments that will specifically call out the concepts of equity and seamlessness.

Amended strategy "B" to acknowledge and include comments on improving existing services and understanding costs.

Improve System Safety

Characterization of comments received:

The comments related to this goal focused on addressing vulnerable populations, non-motorists, transit use, and the objective of zero traffic deaths similar to national and international programs. All of those concepts were being discussed at the regional level and these additional suggestions were accepted.

Action:

The primary changes to *Improve System Safety* are reflected within the strategies. The goal remains as written to reflect coordination with the Maryland program called Zero Deaths.

Four of the strategies have been enhanced based on the feedback received, notably those related to safe streets and non-motorists.

Amended strategy "C" to address traffic and transit system management to now include further detail related to communication systems and local governance and policies.

Amended strategy "D" to address hazardous and substandard conditions at high-crash locations, which now has additional detail specifying that best practices and proven countermeasures will be used.

Amended strategy "E" to include the term non-motorists in place of pedestrians and bicyclists as a user group to further include operators of scooters, wheelchairs, and other conveyances but not operating a motor vehicle.

Amended strategy "G" related to educating all travelers to expand the use of different outreach methods such as media and educational campaigns.

Improve and Maintain the Existing Infrastructure

Characterization of comments received:

The comments related to this goal focused on improving performance by making strategic, cost effective interventions on the right assets at the right time and improving pedestrian and bicycle infrastructure to make it safer for all users.

Action:

We believe the goal and strategies as written address these comments adequately. In addition, both performance and safety are covered extensively under their own specific goals.



Implement Environmentally Responsible Transportation Solutions

Characterization of comments received and Action:

A variety of the public comments encompassed air emissions and climate change.

In regards to air emissions, comments recommended amending the strategies to address reducing diesel emissions, reducing greenhouse gas emissions, and reducing inequitable health impacts of air pollution. Comments also referenced emissions reductions in the context of support for electric vehicle infrastructure, a transition to alternative energy sources, active transportation, and transit.

In regards to climate change, the comments encouraged incorporating climate change mitigation and resiliency measures in the list of environmental strategies.

Finally, the comments expressed interest in incorporating green space and land use management into the strategies.

Action:

Emissions: Strategy "E" under the *Increase Mobility* goal addresses diesel emissions through support for a regional multimodal freight network for efficient freight movement. Freight transport is a large sector utilizing diesel. Supporting efficiency supports reduction of diesel usage per trip. To address reducing greenhouse gas emissions, strategy "E" under this goal was amended to include reducing transportation related greenhouse gas emissions in accordance with state and local plans.

Inequitable Health Impacts: Two strategies address reducing inequitable health impacts of air pollution. Strategy "D" under the Foster Participation and Cooperation among All Stakeholders goal was updated to prioritize environmental justice through programs and policies to ensure that the benefits and burdens of transportation projects, such as air pollution, are shared equitably. In addition, strategy "F" was added to the Promote Prosperity and Economic Opportunity goal. This strategy involves consideration of the potential harms and inequities associated with prior transportation investments.

Electric and alternative fuel vehicles: Strategy "I" has been added to promote policies and programs encouraging adoption of electric and alternative fuel vehicles, including the installation of infrastructure required for electric and alternative fuel vehicles. This new strategy supports electric vehicle infrastructure as well as a transition to alternative energy sources.

Active Transportation: Multiple strategies address optimizing connectivity for and encouraging active transportation and transit. For example, strategy "D" in the *Improve Accessibility* goal involves investing in high-quality bicycle and pedestrian facilities that link to activity centers and transit. In addition, Strategy "I" was added to the *Improve Accessibility* goal focusing on improving the frequency, reliability, and operating hours of existing transit services.

Climate resilience: Strategy "H" has been added to this goal to incorporate resilience in transportation planning and maintenance. Climate change mitigation also involves the reduction of greenhouse gas emissions. Strategy "E" under this goal addresses the reduction of greenhouse gas emissions.



Land Use: Strategy "A" under the goal to *Promote Prosperity and Economic Opportunity* addresses this by putting an emphasis on coordinating land use decisions and transportation planning.

Improve System Security

Characterization of comments received:

The comments related to the system security goal and strategies addressed several common themes. The most common issue mentioned is the security of public transit users. Another theme for the comments in this section is that risk should be addressed. Risk will be addressed in a holistic manner for all aspects of *Resilience 2050*. The risk section will be included in the draft document and will be prepared subsequent to completion of the goals and strategies. There were several comments related to transport of chemicals and hazardous waste. While a critical issue for the region, the scope of *Resilience 2050* does not address this level of detail.

Action:

Amended strategy "A" to note that personal security will continue to be enhanced, including by adding security staff, acknowledging the comment that technology alone may not address security concerns.

Strategies "C", "G", and "H" were revised to address comments related to how system redundancy can be achieved through non-build options, including enhancing multimodal options and expanded use of transportation systems management and operations approaches to better enable the network to expand as demand increases.

Amended strategy "F" in response to a comment about funding for security strategies. The strategy was revised to better explain funding sources.

Promote Prosperity and Economic Opportunity

Characterization of comments received:

The comments related to this goal focused on several themes. The first theme encouraged transportation investments prioritizing active transportation modes, such as bicyclists and pedestrians, and public transit that all people can benefit from. A second group of comments encouraged transportation investments ensuring that low-income persons and communities of color have equitable access to prosperity and economic opportunity. A final theme in the comments addressed land use policies and urged strategies that increase housing density, limit sprawl, and help people live closer to their work. The primary changes are reflected in the strategies, with the overall goal remaining the same.

Action:

Amended strategy "D" in regards to prioritizing active transportation modes and public transit, to reflect an emphasis on investments that improve access to regional generators of economic activity through active transportation and high quality transit.

Revisions to the strategies for the *Improve Accessibility* goal also seek to prioritize these investments. Amended strategy "D" to emphasize investments in high quality, safe, and comfortable bicycle and pedestrian facilities that are separate from vehicular traffic. In addition, a strategy was added to the *Improve Accessibility* goal focusing on improving the frequency, reliability and operating hours of existing transit services.



Added strategy "F" to further address equity and environmental justice, which are included in other goals and strategies. However, the BRTB agrees that these concepts should be addressed specifically under this goal. Therefore, strategy F was added: "Consider the harms and inequities associated with prior transportation investments and seek to ensure that future transportation investments promote equitable access to opportunity for workers and communities underserved by existing transportation systems — low-income and minority households — as well as disabled, elderly, individuals with Limited English Proficiency, and carless individuals."

In addition, several strategies were revised under the goal to Foster Participation and Cooperation among All Stakeholders. These revisions prioritize environmental justice and equity analyses throughout the region. Finally, a new strategy was added to the Promote Informed Decision Making goal: "Pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality."

Local government members of the BRTB exercise planning and zoning powers and regulate land development. Their comprehensive plans outline strategies, policies, programs, and funding for growth and development, resource conservation, and infrastructure. However, it is important to pursue a way to coordinate these local decisions across the region. Two of the existing strategies, "A" and "B", encourage the coordination of land use decisions, transportation planning, housing, and employment as well as the consideration of affordable housing and workforce/economic development when determining long-term transportation priorities. Strategy "C" encourages the concentration of transportation investments within local- and state-designated growth areas. These include areas designated within local jurisdiction comprehensive plans and areas designated by state programs such as Priority Funding Areas and Sustainable Communities. Strategy "C" is intended to align with strategies encouraging equitable transportation investments in communities underserved by existing transportation systems. The scoring process for candidate projects also addresses the location of transportation investments. Projects submitted for consideration for Resilience 2050 will receive higher scores if they are located within an Opportunity Zone, Priority Funding Area, or Sustainable Community.

Foster Participation and Cooperation among all Stakeholders

Characterization of comments received:

Comments on this goal included recommendations on prioritizing equity and weaving EJ and equity throughout the various goals and strategies, improving communications and public involvement, engaging a wider audience, focusing attention on engaging those who have been traditionally underserved, improving accountability, reporting on progress, and fostering a process that allows for continuous improvements.

Action:

Amended strategy "B" to add language from the BRTB's public participation plan about adequate and timely notice and refer to people with a diverse stake in the transportation system.



Amended strategy "C" to pull language directly from Presidential Executive Order 13985 about building partnerships and increasing communication and engagement with underserved communities.

Amended strategy "D" to emphasize the importance of prioritizing environmental justice as well as actively engaging with those traditionally underserved. Limited English Proficient (LEP) individuals were added to the list to bring the strategy in line with our Vulnerable Populations Index.

Amended strategy "F" to add language about developing common policies and strategies for equity analyses and public engagement strategies.

Added a new strategy "G" to improve upon the planning process through periodic evaluations, as well as to utilize performance metrics and solicit stakeholder feedback to foster continuous improvements.

In addition, a new strategy was added to the goal to *Promote Informed Decision Making*: "Pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality."

Promote Informed Decision Making

Characterization of comments received:

Comments on this goal focused on several themes. The first encouraged the BRTB to identify metrics to evaluate the performance of the transportation system, to align these metrics with regional and statewide objectives, and to share that data. The second theme focused on addressing climate change within the goals, with a focus on electric vehicle infrastructure and active transportation modes. The third theme focused on the evaluation and promotion of emerging technologies such as micro-mobility and trends such as increasing telework options.

Action:

Amended strategy "D" related to emerging technologies and trends to include additional alternatives to SOV travel such as the promotion of active transportation and telework. Strategy "D" was also amended to include the promotion of emerging technologies (as opposed to just considering them) while continuing to take into account their uncertain impacts on traveler safety, congestion, equity, and land use.

Added strategy "F" related equity: "Pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality."

Strategy "A" under *Promote Informed Decision Making*_addresses the need to analyze, compare, and share data on the performance of the transportation system relative to established performance measures and targets. Over the past several years, the BRTB worked cooperatively with the Maryland Department of Transportation to develop and adopt 25 federally required performance measures and targets for the region. They cover several categories including transit asset management, transit safety, highway safety, traffic congestion, emissions, pavement and bridge condition, and travel time reliability. These measures and targets help the BRTB to gauge progress in these key areas. *Resilience 2050*



will include a summary of these measures and targets as well as a system performance report noting progress to date.

Several comments focused on addressing climate change, electric vehicles, and active transportation. These comments are addressed by revisions to the strategies for the *Implement Environmentally Responsible Transportation Solutions* goal. Strategy "E" was amended to focus on reducing transportation related greenhouse gas emissions in accordance with state and local plans. In addition, a new strategy was added recommending incorporating resilience in transportation planning to address current and anticipated climate change hazards. Finally, a new strategy was added to the *Environmental* goal promoting the adoption of electric and alternative fuel vehicles and related infrastructure. Several strategies prioritizing bicycle, pedestrian and transit investments were either added or amended under the *Improve Accessibility* goal.



REVISED GOALS AND STRATEGIES THAT WILL BE VOTED ON BY THE BRTB

Below, please find the revised Goals and Strategies, based upon public feedback.

How to read this section: **Bold with strikethrough** is text that has been deleted (except for goal name) and red is new text that is now included.

GOAL: **Improve Accessibility** - Identify and support multimodal options and systems that promote equity, are resilient and sustainable, and enable all individuals to reach their destinations safely and seamlessly.

- A. Increase transportation options and equity for all segments of the population, including minority and low-income communities, and disabled, elderly, and carless individuals.
- B. Continue to improve conditions for pedestrians and transit riders to meet or exceed Americans with Disabilities Act requirements.
- C. Leverage transportation funds in coordination with other funds to provide affordable options for accessing necessities or amenities (e.g., jobs, health care, child care, education).
- D. Continue to invest in pedestrian and bicycle facilities and programs, especially those that link to activity centers and public transit.
 - Continue to invest in high-quality, safe, sustainable and comfortable bicycle and pedestrian facilities, with an emphasis on facilities that are separate from vehicular traffic and link to activity centers and public transit.
- E. Integrate strategies identified through the Coordinated Public Transit Human Services Transportation Plan into regional planning and decision making.
- F. Improve system connectivity and continuity among all modes and across geographic boundaries, including institutional and private systems, and greater coordination of transit planning and investments, service and consideration of fare integration across the region's public transit a regional transit fare system.
- G. Encourage the private sector to provide appropriate access on commercial properties for bicyclists, pedestrians, transit users, and shared mobility users.
- H. Support operating policies that enable year-round, obstacle-free access to pedestrian, bicycle, and transit facilities.
- I. Improve frequency, reliability, and operating hours of existing transit services.



GOAL: **Increase Mobility** – Help people and freight to move reliably, **equitably and** efficiently, **and** seamlessly.

- A. Continue to coordinate with MDOT and local agencies to improve travel time reliability through performance-based planning and programming.
- B. Continue to refine and implement a Congestion Management Process (CMP) that incorporates transportation systems management and operations strategies to optimize the performance of the existing transportation system and minimize impact and costs.
- C. Analyze congestion causes and mitigation strategies for corridors and locations experiencing recurring high congestion levels.
- D. Consider how all modes roadway, transit, pedestrian, bicycle, and shared mobility
 can work together to address system capacity needs.
- E. Support a regional multimodal freight network for safe and efficient freight movement.
- F. Increase mobility, including traffic and transit incident response and recovery, through traffic and transit system management and operations techniques.
- G. Reduce the effects of non-recurring incidents (e.g., crashes, weather-related delays, and special events) by enhancing methods of sharing information across agencies and modes, responding to and managing these incidents, and sharing information with travelers.
- H. Develop and support a regional, long-distance bikeway network, including consistent guide signage.

GOAL: **Improve System Safety** - Reduce the number of crashes, injuries, and fatalities experienced by all users of the transportation system toward meeting Zero Deaths Maryland.

- A. Continue to coordinate with MDOT and local agencies to improve roadway and transit safety through performance-based planning and programming.
- B. Adopt relevant state and local plans that seek to reduce transportation-related injuries and fatalities.
- C. Improve traveler safety in all modes through traffic and transit system management, communication systems, local governance and policies, and operations techniques.
- D. Eliminate hazardous or substandard conditions in high crash locations and corridors (all modes) using best practices and proven countermeasures.



- E. Improve conditions to enable **pedestrians and bicyclists** non-motorists to travel more safely on a day-to-day basis, including safe interactions with users of other modes and safe access to transit stations and stops.
- F. Support research into better understanding the causes of bicycle and pedestrian crashes and injuries to promote more effective countermeasures.
- G. Educate all travelers of all modes on safe travel techniques using different outreach methods, such as media and educational campaigns.

GOAL: **Improve and Maintain the Existing Infrastructure** - Improve the conditions of existing transportation facilities; systematically maintain and replace transportation assets as needed.

- A. Continue to coordinate with MDOT and local agencies to preserve and maintain the condition of roadway and transit systems through performance-based planning and programming.
- B. Maintain traffic signal and Intelligent Transportation System (ITS) systems on a timely, systematic basis.
- C. Maintain and replace aging transit vehicles on a timely, systematic basis.
- D. Research and invest in cost-effective measures that will reduce emissions and lifecycle costs of transit rolling stock and infrastructure elements.
- E. Continue to improve the condition of existing transit infrastructure and stations/stops.
- F. Increase emphasis on improving the condition of existing pedestrian and bicycle facilities.
- G. Encourage local agencies to develop comprehensive asset management programs to monitor the conditions of transportation assets and repair/replace those assets on a timely, systematic, cost-effective basis.

GOAL: Create an Implement Environmentally Responsible Transportation System Solutions

Pass on to future generations the healthiest natural and human environment possible.

A. Continue to coordinate with MDOT and local agencies to reduce excessive delay and increase the share of non-SOV (single-occupancy vehicle) travel through performance-based planning and programming.



- B. Ensure that the region conforms to the applicable state air quality plan by reducing growth in mobile source emissions, encouraging emission reduction technologies, and reducing congestion. Reduce transportation related criteria pollutant emissions to support improvements in human health and ensure that the region conforms to the applicable state air quality plan.
- C. Reduce surface runoff and water **pollutants** pollution resulting from the transportation system.
- D. Reduce energy use of the transportation system.
- E. **Invest in transportation programs and projects that** Rreduce transportation related greenhouse gas emissions in accordance with state and local plans.
- F. Preserve and protect natural and cultural resources.
- G. Enhance the quality of human health by providing multimodal transportation infrastructure that promotes active living and reduces transportation-related emissions.
- H. Incorporate resilience in transportation planning and maintenance and efforts to address current and anticipated climate change hazards.
- I. Promote policies and programs that encourage the adoption of electric and alternative fuel vehicles, including the installation of the infrastructure required for electric and alternative fuel vehicles.

GOAL: **Improve System Security** - Provide a secure traveling environment for everyone; improve the region's ability to respond to natural and human-caused disasters.

- A. **Provide for the** Continue to improve personal security of transit riders by incorporating tools and strategies throughout the transit system **through** (e.g. closed-circuit TV, additional staff, and other security-related features).
- B. Continue to work with state and local agencies as well as other stakeholders to coordinate responses to large-scale incidents, including evacuation routes and procedures.
- C. Continue to rReview evacuation routes and identify bottlenecks. Consider alternatives that would improve traffic movement through these points of limited capacity in emergency situations (e.g., improving traffic operations, identifying alternative routes and modes, expanding existing roadways).



- D. Improve the capabilities of jurisdictions to respond to and recover from emergencies, including security threats and natural disasters, through traffic and transit system management and operations approaches.
- E. Identify policies and procedures for communication, resource sharing, and cooperative response to emergencies among transportation and non-transportation response agencies.
- F. Identify other Leverage sources of funding (state, federal, private) transportation and security funds that could be used to implement regional security priorities.
- G. Incorporate options for multimodal mobility and strategies for system management Increase redundancy in the overall system transportation network to facilitate expanding capacity for the movement of people during emergencies. Where this is not possible, look for alternatives to existing corridors or facilities.
- H. Plan for the predicted potential transportation-related implications impacts of climate change (e.g., rising sea level, higher storm surge, hotter temperatures) on the transportation system.

GOAL: **Promote Prosperity and Economic Opportunity** - Support the vitality of communities and businesses, opportunities for workers, and the movement of goods and services within and through the region.

- A. Emphasize the coordination of land use decisions, transportation planning, housing availability, and employment opportunities, including consideration of the connections between land use decisions and the costs of transportation.
- B. Consider affordable housing and workforce/economic development planning when determining long-range priorities.
- C. Concentrate transportation investments within local- and state-designated growth areas to enable prosperity in existing communities and the optimal use of prior public investments, including transportation investments.
- D. Invest in transportation infrastructure (all modes) that improves access to regional generators of economic activity (e.g., activity centers and freight corridors) with an emphasis on improving access through active transportation and high quality transit.
- E. Coordinate with communities to provide context-sensitive infrastructure and facilities that integrate with community assets, needs, and preferences.
- F. Consider the harms and inequities associated with prior transportation investments and seek to ensure that future transportation investments promote equitable access



- to opportunity for workers and communities underserved by existing transportation systems low-income and minority households as well as disabled, elderly, individuals with Limited English Proficiency, and carless individuals.
- G. Invest in upgrading transportation assets and facilities that promote tourism and the movement of tourists within and through the region.

GOAL: Foster Participation and Cooperation among All Stakeholders - Enable all interested and affected parties to participate and cooperate to find workable solutions.

- A. Coordinate transportation planning across all modes, across geographic boundaries, and among all stakeholders.
- B. Provide adequate and timely notice for key decisions and planning efforts through traditional means as well as social media options. Engage with and encourage input early and often from interested parties with a diverse stake in the performance of the region's transportation system.
- C. Increase coordination, communication, and engagement with underserved communities. Hold public outreach events at accessible venues within affected communities.
- D. Prioritize Promote environmental justice through programs and policies to ensure that the benefits and burdens of transportation projects are shared equitably. This includes considering the needs of and actively engaging with those traditionally underserved by existing transportation systems low-income and minority households as well as disabled, elderly, individuals with Limited English Proficiency, and carless individuals.
- E. Engage with state and local agencies, businesses, developers, and communities to identify and build support for new approaches and public/private partnerships for funding improvements to the transportation system.
- F. Work with planners and engineers in all jurisdictions to develop common policies and design strategies, including Complete Streets policies, equity analyses, public engagement strategies, and design templates, for transportation facilities.
- G. Improve upon the planning process through periodic evaluations. Utilize performance metrics and solicit stakeholder feedback to foster continuous improvements.



GOAL: **Promote Informed Decision Making** - Ensure that adopted transportation policies and performance measures guide the regional decision making process.

- A. Analyze, compare, and share data on system conditions, system performance, and the effects of transportation investments relative to established performance measures and targets for use in transportation planning and decision making.
- B. Develop regional assessments of demographic, travel, land use, environmental, fiscal, and technology trends for use in all plans, programs, and projects.
- C. Increase the public's and elected officials' understanding of the trade-offs involved in transportation alternatives.
- D. Consider the potential effects of and promote, where appropriate, emerging technologies (e.g., increasing vehicle/infrastructure connectivity) and alternative options to means of SOV travel (e.g., ride hailing services, micro-transit services, ridesharing, active transportation and telework, etc.). This includes considering and analyzing the uncertain impacts of these technologies on traveler safety, roadway congestion, equity, and land use when planning for new and improved transportation facilities.
- E. Improve information systems that all travelers can use to reach destinations easily and safely.
- F. Pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.