

Brief Description of Proposed Priority Options

Future Built Environment and Infrastructure Technical Working Group

DRAFT

FBEI 1 – Integrated Planning for SLR and Associated Coastal Hazards

Efforts to integrate critical area planning and zoning requirements with comprehensive planning laws, including emergency planning and infrastructure planning requirements will improve the capacity of planners to avoid SLR and associated coastal hazards to the extent possible and minimize risks in other situations. The goal of this policy option is to increase coordination and consistency in planning approaches and support the integration of other climate adaptation proposals, such as new building and zoning codes (FBEI 3), into comprehensive planning.

FBEI 1a - State and Local Coordination to Reduce Risks Associated With SLR and Associated Coastal Hazard

The need for coordination among units of government in developing and implementing a coherent and integrated approach to address climate change is a particular concern in coordinating planning. Therefore, the TWG recommends establishing coordinating mechanism to assure that state programs and local governments act in concert to reduce future impacts from SLR and associated hazards.

The nature of the proposed coordination mechanism has not been discussed in detail.

FBEI 1b - Planning For Reduced Provision and Maintenance of Access Roads

Part of a retreat from areas at greater coastal risk is likely to entail withdrawing public support for transportation infrastructure that becomes significantly damaged and/or at greater risk to future damage. Given that ingress/egress to some areas is currently limited to a few roads, any modifications to access road systems should be considered in light of broader transportation planning and strategies to address reduced infrastructure support should be developed.

FBEI 2 - Mandate integration of MD CCC Findings and Recommendations into All Appropriate State and Local Programs

This proposal calls for a strong statement of support for action on the MD Commission on Climate Change recommendations. Many of the FBEI policy suggestions address existing challenges that will need focused attention. Identification of existing state and local programs that could be modified and /or strengthened to accommodate for climate change, SLR, and the MCCC recommendations and requirements would support capacity for coordinated and more effective response to new information.

FBEI 3 - New Design Standards, Building and Zoning Codes to Facilitate Retreat, Avoid SLR Risks, and Increase Resilience When Other Strategies Are Not Viable

This is a three part strategy to guide risk reduction in areas at risk to sea level rise and associated coastal hazards. It focuses on the development and implementation of new design standards, building and zoning codes in a coordinated strategy designed to avoid development in areas at risk, facilitate retreat from developed areas at increasing risk to SLR and associated coastal hazards, and increased ability to reduce costs (or increase resilience) where retreat or avoidance are not viable strategies.

This proposal would include the use of zoning to guide future development out of areas vulnerable to sea level rise and associated hazards and guide the retreat in areas that become damaged or a greater risk. It would also establish a mechanism to evaluate and recommend new design standards for structures that may be vulnerable to SLR and associated hazards and institute new hazard-resistant building codes and design standards to reduce vulnerability of structures to future sea level rise and associated hazards.

FBEI 4 - Protect Undeveloped, Vulnerable Properties

This proposal is a specific element of broader risk avoidance strategy but it is separated from FBEI 3 because it may be particularly difficult to gather support for and implement it. The goal of this proposal is to avoid future losses by preventing development in areas at higher risk. Strategies, such as purchase programs or easements, may be used to avoid further investment in vulnerable areas.

FBEI 5 – Climate Change and Insurance Commission

Insurance is a central, cross-cutting element in the consideration of risks for the future built environment and infrastructure. The structure of insurance will shape investments and the distribution of costs and risks through society. Because there are a number of strategies being discussed and tested in other states and many changes taking place in the industry, it is important to have a focused assessment of this issue and a strategy for managing the ramification of climate change risks and uncertainties. While the commission structure is mentioned as one approach, advice on the relative merits of other institutional forms would be very welcome if this proposal is accepted.

FBEI 6– Monitor, Map, and Inventory SLR and Vulnerable Areas and Property

Strategies for minimizing future risks will depend on an understanding of the risks and vulnerabilities. This option views local information on sea level rise as fundamental to planning and response activities. It calls for research to track the local rate of sea level rise, recognizing the potential for significant differences in rates between areas in relatively close proximity. In addition, the policy option supports an inventory and mapping of public and private property and sensitive ecosystems so that risks can be tracked and managed. This information would support other planning and design efforts.

FBEI 7 - Evaluate Shoreline Protection Structures

Under conditions of sea level rise, changing coastal dynamics, and new coastal hazard management priorities, the relative merits of shoreline protection strategies are likely to change. In addition, there are gaps in the current state of knowledge on hard and soft structural options. A detailed analysis and inventories of the pros and cons of application of hard structural options (such as dikes, levees, floodwalls, and saltwater intrusion barriers) and soft structural options (such as dune restoration and creation, wetland restoration, creation, periodic beach nourishment, temporary barriers and other options) would inform strategies that anticipate the potential need to retreat or protect and minimize the impacts on systems facing other stresses.

FBEI 8 - Economic Development Initiative

Adapting to sea level rise and associated coastal hazards will entail costs to the economy and individuals but changes may also bring new economic opportunities and development of the skills, expertise, and experience for addressing the many adaptation and mitigation issues may also support a new business sector, particularly in areas that take an early leadership role. This proposal supports early identification and support for those opportunities in Maryland.

FBEI 9 - Training and Capacity Building

Training and capacity building among the multiple different groups involved in addressing the changing risks of sea level rise and coastal hazards will increase Maryland's capacity to respond effectively as new information on risks and policies becomes available. It will also expand the group of people able to explain new policies and support the implementation of new approaches. There are several types of training appropriate to reaching the diverse set of people and possible policy initiatives involved.

Establish structured capacity building and training for key adaptation sectors including building trades, infrastructure, finance and insurance, landscapers and others.

Establish structured training and vocational support for trades and others involved in implementation of new design standards.

Establish structured capacity building and training for public servants.

Integrate climate change and adaptation issues into advanced training in university, community college, and technical training programs.

Provide training for permit and planning agencies staff to address SLR and associated coastal hazards

Provide outreach and education to the broader population