

## HOUSEHOLD ADAPTIVE CAPACITY: ASSESSING AND MAPPING HOUSEHOLDS' ADAPTION BEHAVIOR IN RESPONSE TO RECURRENT FLOODING

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Action in response to recurrent flooding and sea level rise may be characterized as either government-centric or household-centric. Many adaption strategies and behavior in response to increased frequency of flooding is taking place at an individual level. Individual adaption behavior is made within the context of the household unit. Here the perceptions that are formed and validated become translated into behavior and household actions (or inaction). These household mitigation efforts, in various forms, condition the vulnerability of the household and, in totality, form the basis of neighborhood or community vulnerability. Municipal adaption planning must be aware of citizen mitigation strategies and act in concert with these. As a starting point, local governments must have a better understanding of the perceptions of residents as it relates to risk as well as currently engaged household adaption strategies and behaviors. Drawing upon a stratified sampling of nearly 2,000 households within the City of Portsmouth Virginia, this research presents the difference in perceptions, behaviors, and responses among low-to-moderate income communities.

Both tropical storms, such as hurricanes, and extra-tropical storms, such as nor'easters, contribute to surge flooding and precipitation-induced flooding. The risks of recurrent flooding are projected to increase with sea level rise. While sea level rise is an issue for the entire region, Portsmouth's physical geography is unique as is the position of Portsmouth as a geographic center for employment and logistics, boasting several of the regions critical transportation corridors. Flood adaption strategies generally are categorized as retreat, accommodation, and protection and are often viewed as government-centric actions. That is, adaption actions are incorporated into the city's comprehensive planning. However, since citizens are already responding to recurrent flooding and, by definition, are necessarily already engaging in mitigation activities independent of government-centric responses, it is appropriate to document these household-centric responses.