

**ATKINSON, ODU**  
**DHS Coastal Resilience Center**  
**Research Project Work Plan**

**1. Project Title:** A Tool to Measure Community Stress to Support Disaster Resilience Planning and Stakeholder/End User Engagement Support of Two CRC Projects

**2. Principal Investigator:** Larry Atkinson, Slover Professor and Eminent Scholar, Department of Ocean Earth & Atmospheric Sciences, College of Sciences

**3. Other Research Participants/Partners**

*Old Dominion University Co-PIs:*

- Joshua Behr, Research Associate Professor, Virginia Modeling, Analysis, and Simulation Center (VMASC)
- Michelle Covi, Assistant Professor of Practice, Department of Ocean Earth & Atmospheric Sciences, College of Sciences and Virginia Sea Grant Extension
- Jose Padilla, Research Assistant Professor, Virginia Modeling, Analysis, and Simulation Center (VMASC)
- Wie Yusuf, Associate Professor, School of Public Service, Strome College of Business

**4. Short Project Description.**

This project will support at least two Coastal Resilience Center projects, building on project team's expertise in stakeholder engagement, leveraging information already collected from initial case studies, and utilizing existing connections to stakeholders and possible end users in Hampton Roads. Two projects that will be supported are: (1) Organizing a panel for the Maritime Risk Symposium that addresses "Integrating Maritime and Coastal Resilience;" and (2) supporting stakeholder engagement and end user translation efforts of ' *The Incorporation of Rainfall into Hazard Estimates for Improved Coastal Resiliency* ' project. *The project team will remain engaged with the CRC and can assist with communications efforts and help provide linkages between research or education projects and Hampton Roads Resilience Initiatives*

**5. Abstract.**

The original project involved development of a Hazards Stress Test Tool (HSTT) that supports coordinated actions in all risk management and mitigation phases involving collaboration between federal, state, local, tribal, and private sector partners. From our meetings with use case stakeholders, we found that the HSTT project, as originally proposed, did not meet end user needs and would not gain traction within the end user community as a decision support tool. We concluded that the project direction should be adjusted to produce a decision support framework that supports not only planning, but the integration of planning within a broader decision making context including

implementation and funding. This revised project will support at least two Coastal Resilience Center projects, building on project team's expertise in stakeholder engagement, leveraging information already collected from initial case studies, and utilizing existing connections to stakeholders and possible end users in Hampton Roads. Two project that will be supported are: (1) Organizing a panel highlighting Hampton Roads resilience projects, including the Intergovernmental Pilot Project, for the Maritime Risk Symposium that addresses "Integrating Maritime and Coastal Resilience;" and (2) supporting stakeholder engagement and end user translation efforts of '*The Incorporation of Rainfall into Hazard Estimates for Improved Coastal Resiliency*' project.