**Research Topics Ranking Exercise —Hurricane Research Advisory Committee June 1, 2022**

**Process for Reviewing Research Projects:**

* Projects proposals (3) required for support of the development of the 2023 FBC will be funded by the Commission, and will not be included in the prioritization ranking exercise.
* Remaining project proposals (6) will be tested in turn with a straw poll vote regarding whether they meet the criteria for funding, those that achieve a 75% threshold on the straw poll will then be evaluated by the HRAC. PI’s whose projects don’t achieve a 75% straw poll level of support will be provided up to 3 minutes to address why their research project is consistent with the criteria for funding prior to the HRAC’s formal vote regarding which projects should be prioritized and recommended for funding by the Commission.
* PIs with projects that are deemed to meet the criteria for funding will have 5 minutes total to review their proposal with HRAC.
* Once all research project proposals meeting the criteria are presented by the PIs and public comment received, the HRAC will participate in a ranking exercise to determine the recommended priority for funding the proposed projects based on the adopted criteria and using the ten-point ranking scale described in the Ranking Matrix. The results will be presented to the Commission for their consideration during the June 7, 2022 Plenary Session.

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| **Proposed Research Project Funding Analysis**   * There is ~$450,000 available for FY 2022-2023 funding. * There are 3 projects required for the 2023 Code Development, requiring $189,977 in funding. * There is a request for $630,616 in funding for proposed research projects (6 projects). * There is a total of ~**$260,023 in funding available** for the proposed research projects (6 projects). * Once prioritized and approved by the Commission, staff will fund the research projects in priority order for FY 2022-2023 based on the remaining funding available after funding the 3 required projects. | **Criteria for Funding**  For Each Project In Turn Does the Project Meet the 3 Criteria for Funding?   * Meets Definition of “Research” and/or “Technical Enrichment.” * Within the scope of hurricane resistance research (water and wind resistance). * Urgency/Immediacy: Needed to support the 2020 Florida Building Code, or for the development of 2023 FBC. |

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| **Project Description (State of Florida University: PI/Researcher); [Project Cost]** |

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| **A.) Wind-induced loads on ground-mounted and ground ballasted systems; (FIU: Ioannis Zisis); [$118,000]** |
| **B.) Assessing the Need to Modernize Water Penetration Resistance Test Procedures; (UF: Ryan Catarelli/Brian Phillips/Forrest Masters); [$90,000 - $120,000]** |
| **C.) Assessment of Durability Requirements for Concrete Structures in Florida; (UF: Christopher Ferraro); [$100,000]** |
| **D.) Assessment of Inspection Reporting and Building Conditions in South Florida (Miami-Dade and Broward Counties) – Phase II; (UF: Jennifer Bridge); [$90,000]** |
| **E.)An Investigation of the Factors Leading to Ridge Vent Failure and Possible Mitigation Solutions; (UNF: Cigdem Akan); [$77,616]** |
| **F.) Establishing Inspection Periods and Preliminary Recommendations for Preventive Measures for Mid-Rise Buildings Near Coastal and Inland South Florida Environments; (FIU: Atorod Azizinamni); [$125,000] – Received After May 3, 2022** |

Prioritization Ranking Scale—Scale Range 10 - 1 (10 highest rating to 1 lowest rating)

**10 Highest Level of Priority—Urgent/Critical 5 Medium Level of Priority**

**9 Very High Level of Priority 4 Medium Low Level of Priority**

**8 High Level of Priority 3 Low Level of Priority**

**7 Medium High Level of Priority 2 Very Low Level of Priority**

**6 Moderately High Level of Priority 1 Lowest Possible Priority—Commission Should not Fund**

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| **Proposed Research Topics** | **Rank** | **10** | **9** | **8** | **7** | **6** | **5** | **4** | **3** | **2** | **1** | **Raw Score** |
| **A.)**  **Wind-induced loads on ground-mounted and ground ballasted systems; (FIU: Ioannis Zisis); [$118,000]** |  |  |  |  |  |  |  |  |  |  |  |  |
| **B.)**  **Assessing the Need to Modernize Water Penetration Resistance Test Procedures; (UF: Ryan Catarelli/Brian Phillips/Forrest Masters); [$90,000 - $120,000]** |  |  |  |  |  |  |  |  |  |  |  |  |
| **C.)** **Assessment of Durability Requirements for Concrete Structures in Florida; (UF: Christopher Ferraro); [$100,000]** |  |  |  |  |  |  |  |  |  |  |  |  |
| **D.) Assessment of Inspection Reporting and Building Conditions in South Florida (Miami-Dade and Broward Counties) – Phase II; (UF: Jennifer Bridge); [$90,000]** |  |  |  |  |  |  |  |  |  |  |  |  |
| **E.)**  **An Investigation of the Factors Leading to Ridge Vent Failure and Possible Mitigation Solutions; (UNF: Cigdem Akan); [$77,616]** |  |  |  |  |  |  |  |  |  |  |  |  |
| **F.) Establishing Inspection Periods and Preliminary Recommendations for Preventive Measures for Mid-Rise Buildings Near Coastal and Inland South Florida Environments; (FIU: Atorod Azizinamni); [$125,000] – Received After May 3, 2022** |  |  |  |  |  |  |  |  |  |  |  |  |

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| **The Following Projects are Needed for Support of the Development of the 2023 FBC and Will be Funded by the Commission** |
| **A.) Review of the integrated draft of the 2023 Florida Building Code to identify publication errors, formatting issues, incorrect cross references between sections, missing text, and any other issues related to the integration of the approved amendments into the base code (Consulting service); [$65,000]** |
| **B.) Update and development of wind speed line maps for the 8th Edition (2023) Florida Building Code; (UF: Katherine Norris); [$49,977]** |
| **C.) Survey and investigation of buildings damaged by Category – III, IV & V Hurricanes; (UF: David Prevatt); [$75,000]** |
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