

RESEARCH PROJECT RANKING EXERCISE —HURRICANE RESEARCH ADVISORY COMMITTEE MAY 18, 2021

PROCESS FOR REVIEWING RESEARCH PROJECTS:

- There are no research project proposals required for support of the implementation and enforcement of the 2020 FBC and/or development of the 2023 FBC.
There are four projects that have provided proposals including a scope of work, principle investigator from a state of Florida university, and a budget as required for funding consideration.
- PIs will have 5 minutes total to review their proposal with the HRAC.
- Once the four research project proposals 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 8, 2021 Plenary Session.

PROPOSED RESEARCH PROJECT FUNDING ANALYSIS

- There is ~\$250,000 available for FY 2021 - 2021 funding.
- There are no research projects required for 2020 Code support or 2023 Code Development.
- There is a request for \$431,361 in funding for the four proposed research projects.
- Once prioritized and approved by the Commission, staff will fund the research projects in priority order for FY 2021 - 2022 based on the funding available.

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.

PROJECT DESCRIPTION; (STATE OF FLORIDA UNIVERSITY: PI/RESEARCHER); [PROJECT COST]

- | |
|--|
| A.) Development of Wind-Driven Rain Climatology and Coincidental Wind Speed Return Period Maps for Florida and Surrounding Coastal Areas; (UF: Forrest Masters/Art DeGaetano/Jay Crandell); [\$110,000 - \$120,000] |
| B.) “Self-Organizing” Maps for Estimating Wind Speed Triggers for Debris Generation; (UNF: Cigdem Akan/William Dally/Patrick Kreidl); [\$150,000] |
| C.) Evaluation of Concrete Pile Foundation During Hurricane Michael; (UNF: Raphael Crowley/Ryan Shamet); [\$76,361] |
| D.) Wind-Induced Loads on Roof Overhangs – Phase II; (FIU: Ioannis Zisis); [\$85,000] |

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

PROPOSED RESEARCH PROJECT	RANK	10	9	8	7	6	5	4	3	2	1	RAW SCORE
A.) Development of Wind-Driven Rain Climatology and Coincidental Wind Speed Return Period Maps for Florida and Surrounding Coastal Areas; (UF: Forrest Masters/Art DeGaetano/Jay Crandell); [\$110,000 - \$120,000]												
B.) “Self-Organizing” Maps for Estimating Wind Speed Triggers for Debris Generation; (UNF: Cigdem Akan/William Dally/Patrick Kreidl); [\$150,000]												
C.) Evaluation of Concrete Pile Foundation During Hurricane Michael; (UNF: Raphael Crowley/Ryan Shamet); [\$76,361]												
D.) Wind-Induced Loads on Roof Overhangs – Phase II; (FIU: Ioannis Zisis); [\$85,000]												

*There are no research projects needed for support of the 2020 Code or development of the 2023 Code for this funding cycle.