

## **Network Independent Advisory Committee (NIAC) Year 6 Report Natural Hazards Engineering Research Infrastructure (NHERI)**

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To: Julio Ramirez / NCO

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**Item 1:** The NIAC held two meetings during the reporting period with the latest being August 15, 2022. At that meeting it was decided to hold an in-person meeting at one of the sites and UCSD was selected since there is an active test going on there over the next year. Testing was anticipated by the research team for the Tallwood project to be in December, 2022, but has been pushed back to early 2023 due to some construction delays.

**Recommendation 1:** The NIAC should reschedule the in-person meeting to accommodate this change in schedule and requests the NCO's assistance in rescheduling.

**Item 2:** A major accomplishment during this [reporting period] was the successful conduct of the Researcher's Summit October 6 and 7, 2022. Over 250 researchers met in Washington, DC at the Academy's Kavli auditorium, and the Crystal City Marriott, Arlington, VA. This event served to reunite in person the many NSF researchers after over two years of Covid-19 protocols preventing such contact. This permitted the efficient exchanging of ideas in a multidisciplinary environment not previously achievable that should provide future value to NSF in the form of greater communication on ideas and research relevance among researchers for the programs in progress and the planning for future research. Several members of the Network Independent Advisory Committee (NAIC) (Hansmire and van de Lindt) attended the NHERI Research Summit in Washington D.C. Specifically, this event pulled together an informative program and the overall impression of the NIAC members that attended is that attendees were satisfied with the brainstorming sessions on both day one and two and there appears to be community support for NHERI.

**Recommendation 2:** The NCO should consider proposing the Summit as a biannual event and maintain the first day as all-plenary. NIAC members Hansmire and van de Lindt, who attended the Summit, feel the plenary provided a good opportunity to bring the community back together in-person following several years of virtual meetings for many participants.

**Item 3:** The members of the NIAC read the update to the NHERI Science Plan and are providing high level feedback only, not detailed feedback herein. The plan provides a good overview of NHERI activities including the NHERI RAPID, Convergence thinking through the CONVERGE site, then moves to what are considered the three Grand Challenges. Five research questions are posed and then opportunities for disruptive and transformative research are discussed. The NHERI Science Plan provides a concise overview of the activities of NHERI; essentially each component within the network aligning with one or more of the research questions. Some examples are provided in an Appendix of the report.

**Recommendation 3:** The NHERI Science Plan represent a strong effort to bring together the problem-solution of natural hazards and the approach to mitigate their effects on the built and social environment. It is mentioned that the Science Plan is a living document, but it is noted that it is already more than a year in publication, so it is recommended to update the Science Plan and publish prior to each Research Summit. This need not be a comprehensive update but could serve as interim updates similar to software releases to ensure that several years don't pass and the document is seen as obsolete.