

## **Network Independent Advisory Committee (NIAC) Year 2 Report Natural Hazards Engineering Research Infrastructure**

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**To: Julio Ramirez / NCO**

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At the June 2018 meeting in San Antonio, TX, the Network Independent Advisory Committee (NAIC) met with the NHERI Users Forum for one hour, and then separately with Julio Ramirez, Cheryl Ann Blaine, and JoAnn Browning. Joy Pauschke from NSF participated remotely as a special guest of the meeting. Overall, the feedback from users of the sites and DesignSafe CI has been positive. The following summarizes the meetings and the NIAC recommendations based on these meetings and any documents provided.

The NCO reported on overall usage of the physical sites and noted that the Rapid site was not yet available to users, but was fully staffed and procuring equipment, including training for use of the equipment. No metrics for the SimCenter were given but its analyses sequences utilize the computational structure of DesignSafe CI. The NIAC recommends that the NCO identify and implement separate mechanisms to track both SimCenter and Rapid site/facility use. This would provide benefit by providing a clearer basis for planning the use of and overall management of those sites/entities. The NIAC also recommends that the NCO consider providing more detail on all facility usage through additional metrics for issues of interest (e.g. early career faculty usage, simultaneous or repeat usage, etc).

As mentioned above the NIAC had the opportunity to meet with the NHERI Users Forum. There was some discussion of methods and approaches to ensure that the larger community of earthquake and wind engineers, beyond just users, is aware of the network, its availability, and capabilities. The broader engineering community has low awareness of what is available to them. Groups developing codes and standards are possible user groups. The NIAC recommended advertising in magazines such as *Civil Engineering*, or writing articles in basic semi-technical journals and newsletters such as the magazine *STRUCTURE* published by the Structures Institute of ASCE and *GEOSTRATA* published by the Geo-Institute of ASCE. Another avenue is to publicize the activities of NHERI with functional leads of ASCE7 and other code and guidance writing groups.

The Technology Transfer Committee (TTC) was explained to the NIAC. The TTC is a committee to facilitate moving research results into engineering (or other) practice which is historically a challenge. While this seems like an excellent concept, it may be advantageous to engage the committee at an earlier stage in the research, i.e. prior to the testing. This would help ensure that the data being collected serves to enable technology transfer and does not just benefit an academic or specific project, i.e. generalization for research and also implementation. The NIAC recognizes the challenge this might pose for ensuring intellectual property is maintained for all parties involved, but suggests having this targeted discussion to see if it is possible. Several suggestions for additional members for the technology transfer committee are Jim Harris (Structures), Jack Moehle (Structures), Marty Hudson (Geotechnical). It is also recommended to tie the technology transfer committee back to professional organizations such as ASCE, EERI, AAWE, etc. In order to understand the TTC and any issues they are dealing with and for the NIAC to be effective, the NIAC would be interested in participating on a conference call with the TTC members, if they feel it would be helpful.

The NIAC has the opinion that the NCO and the components within NHERI, in general, are making good progress and that there is no need for any major changes in approach. We submit the above recommendations for the NCO's consideration. With regard to the NIAC itself, at this time the makeup of the NIAC was felt to be appropriate and no changes are planned/requested for the coming year other than a rotation of the chair from John van de Lindt to Bill Hansmire. Finally, the suggestion is made to change the format and schedule for the annual in-person NIAC meeting: conduct a full day meeting which would consist of a series of 30 minute meetings with key personnel within the NHERI in the morning, followed by an afternoon meeting similar to the current meeting, and then close with a two-hour closed-door session where the NIAC annual report can be written as a team.

Should you have any questions on this report, do not hesitate to contact us.