NHERI User Satisfaction Survey of Known NHERI Site Users Results 2019

Maggie Chamberlain, M.A., and Liesel Ritchie, Ph.D. Oklahoma State University Center for the Study of Disasters and Extreme Events

and

Department of Sociology

Funded by the National Science Foundation, CMMI-1612144.

October 31st, 2019

NHERI USER SATISFACTION RESEARCH	3
YEAR THREE USER SATISFACTION SURVEY	4
OVERALL FINDINGS SUMMARY	4
ITEM-LEVEL DATA	5
Q3-WHICH OF THE FOLLOWING BEST DESCRIBES YOUR CURRENT POSITION IN T	ГНЕ
PROPOSAL PROCESS FOR NHERI FACILITIES AND RESOURCES (N=17)	5
Q4-HOW MANY PROPOSALS HAVE YOU PREPARED THAT USED NHERI FACILITIE	ES AND
RESOURCES? (N=16)	6
Q5-HOW MANY FACILITIES ARE YOU USING/HAVE YOU USED? (N=16)	7
Q6-HOW MANY FACILITIES ARE YOU WRITING PROPOSALS FOR? (N=15)	
Q7-WHICH OF THE FOLLOWING BEST DESCRIBES HOW YOU INTEND TO UTILIZE	, NHERI
FACILITIES AND RESOURCES? (N=17)	8
Q8A-INFORMATION ABOUT NHERI FACILITIES AND RESOURCES IS READILY	
ACCESSIBLE (N=16)	9
Q8B- INFORMATION ABOUT NHERI FACILITIES AND RESOURCES IS COMPREHEN	JSIVE
(N=16) Q11-NHERI EXPERIMENTAL FACILITY STAFF HAS PROVIDED USEFUL FEEDBACK	9
Q11-NHERI EXPERIMENTAL FACILITY STAFF HAS PROVIDED USEFUL FEEDBACK	K ON
PROPOSED/ONGOING/COMPLETED TESTS. (N=16)	
Q12-THE PROCESS OF SCHEDULING FACILITIES MATCHES MY EXPECTATIONS. (
Q13-THE AVAILABLE TRAINING FOR THE FACILITY'S EQUIPMENT MEETS MY NI	
(N=15)	
Q14-TECHNICAL SUPPORT FOR THE FACILITY'S EQUIPMENT MEETS MY NEEDS.	· /
	13
Q15-DO YOU HAVE ANY ADDITIONAL COMMENTS ABOUT NHERI FACILITIES' AND FOLLOWING AND FOLLOWING	
RESOURCES' STAFF, SCHEDULING, AND EQUIPMENT?	
Q17-HAVE YOU PARTICIPATED IN ANY OF THE PROPOSAL WRITING WORKSHOP	
AND/OR SEMINARS, OR UTILIZED NHERI SUPPORT RESOURCES? (N=15) Q18-HAVE YOU REQUESTED ASSISTANCE FROM NHERI AS YOU WRITE YOUR	15
PROPOSAL? (N=15)	16
Q19-HAS THE ASSISTANCE YOU RECEIVED BEEN HELPFUL? (N=6)	
Q20-HOW MANY TIMES A MONTH, ON AVERAGE, DO YOU USE DESIGNSAFE AND	
OTHER NHERI ONLINE RESOURCES AND TOOLS? (N=13)	
Q22A-THE PROCESS OF UPLOADING MY DATA IS EASY TO COMPLETE. (N=13)	
Q22B-THE PROCESS OF ADDING METADATA MATCHES MY EXPECTATIONS. (N=1	
23-REGARDING NHERI DATA: (N=15)	
Q24-DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING NHERI DATA? (N	
Q26A-THE TRAINING AVAILABLE FOR ONLINE RESOURCES AND TOOLS MEETS 1	
NEEDS. (N=15)	
Q26B-THE TECHNICAL SUPPORT FOR ONLINE RESOURCES AND TOOLS MEETS M	ſY
NEEDS. (N=15) Q27-WHAT IS THE IMPORTANT CHANGE TO NHERI'S SERVICES, TOOLS, AND	
RESOURCES THAT WOULD IMPROVE YOUR EXPERIENCE WITH THEM? (N=3)	
Q28-WHAT SERVICE, TOOL, OR RESOURCE NOT CURRENTLY IN NHERI SHOULD	BE
ADDED? WHAT NEED IS THIS GOING TO MEET?	25
Q30-OF THE FOLLOWING WHICH WOULD YOU BE MOST INTERESTED IN	
PARTICIPATING IN OR USING (PLEASE CLICK AND DRAG TO RANK FROM MOST	
INTERESTED [1] TO LEAST INTERESTED [5]). (N=11)	
Q31-INFORMATION REGARDING NHERI IS DISTRIBUTED AT A USEFUL RATE ANI	
QUANTITY. (N=15)	
Q32-THE INFORMATION REGARDING NHERI IN DESIGNSAFE IS USEFUL. (N=15)	

Q33-HAVE YOU BEEN MADE AWARE OF THE NHERI SCIENCE PLAN? (N=15)	31
Q34 - PLEASE INDICATE ALL OF THE WAYS IN WHICH YOU HAVE USED THE NHERI	
SCIENCE PLAN (SELECT ALL THAT APPLY). (N=15)	31
Q35-DO YOU HAVE ANY ADDITIONAL COMMENTS REGARDING NHERI SERVICES AN	١D
INFORMATION? (N=2)	32
Q36 - DO YOU HAVE ANY FINAL COMMENTS REGARDING NHERI FACILITIES AND	
RESOURCES? (N=2)	32
APPENDIX A-SURVEY INSTRUMENT	33
APPENDIX B – COMPREHENSIVE QUALITATIVE RESPONSE DATA BY QUESTION	39

NHERI User Satisfaction Research

The National Science Foundation (NSF) requires the Natural Hazards Engineering Research Infrastructure (NHERI) to conduct user satisfaction research yearly for the first five years of the NHERI program. This survey was conducted by the User Forum committee to fulfill this requirement for the third year of the program.

Year Three User Satisfaction Survey

The 2019 survey instrument was identical to the 2018 version. Questions featured mixed response options which yielded both qualitative and quantitative data. Building on feedback from the 2018 survey, the committee opted to send the 2019 survey to two targeted populations. The first population included known NHERI facility users. The second population included a broader group of NHERI users identified through NHERI and related contact lists. Separating these groups allowed for comparative analysis and gave room for more substantive feedback from known NHERI users. This report discusses results particular to the known facility users group. Using the online survey software, Qualtrics, the committee collected data from May 10th, 2019 to July 14th, 2019. Five messages were sent by the NHERI leadership to NHERI users inviting participation and as reminders to complete the survey. Invitations were sent to 108 known NHERI site users whose information was shared with the committee by NHERI facility PIs. Twenty-nine users began the survey, and all agreed to participate, yielding a response rate of 26.85%. Of those 29 who agreed to participate, all went on to answer questions.

Overall Findings Summary

The 2019 survey was constructed to yield both quantitative and qualitative data. Feedback based upon Quantitative data suggest respondents had positive experiences with NHERI facilities and resources. Regarding interaction with and utilization of NHERI facilities and resources, 11.76% reported no plans to draft a proposal, while 88.23% reported being at various stages in the proposal and research process. Additionally, 70.59% of respondents reported wanting to both access and use data and produce and upload original data, and only 5.88% reported intending to exclusively utilize pre-existing data.

In the areas of information about NHERI facilities and resources, NHERI staff, scheduling, equipment, support resources, data utilization and interface, and online resources and tools, respondent feedback was generally more positive than in 2018. A number of questions from the 2017 and 2018 user satisfaction surveys were repeated in 2019; at basic levels, respondent feedback in 2019 on those questions was more positive than it was in previous years.

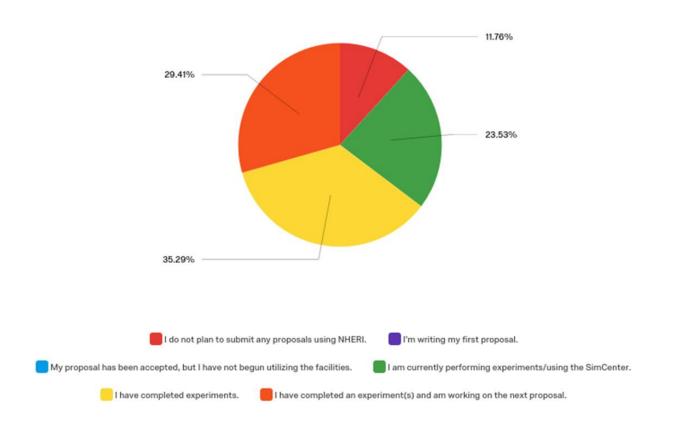
Qualitative data yielded overwhelmingly positive commentary on NHERI facilities, staff, and resources. Given the low survey response rate and the limited number of respondents, care should be given to putting too much emphasis on both qualitative and quantitative findings presented here. Rather, these results should be used to consider ways to improve NHERI's offerings.

The findings are discussed in more depth in the following sections, which provide detailed itemlevel data. Copies of the survey instrument and comprehensive qualitative data are attached to this report as Appendices A and B.

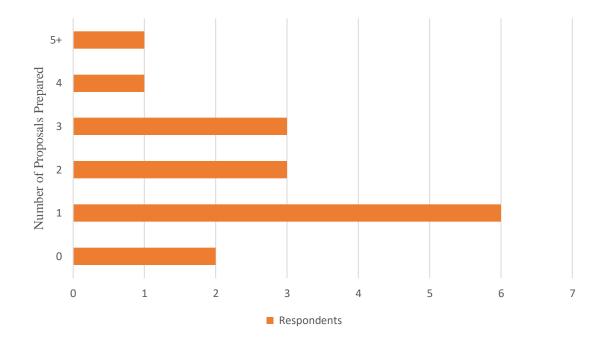
Item-Level Data

This section provides detailed, question-level data. Questions one and two in the survey dealt with informed consent and agreement to participate, and have been excluded from this section.

Q3-Which of the following best describes your current position in the proposal process for NHERI Facilities and Resources (N=17)

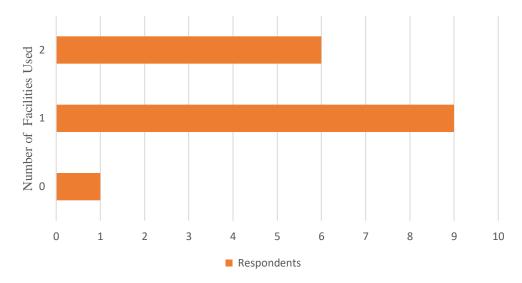


This question was added to the user satisfaction survey in 2018 in order to provide more details about the NHERI user group's interaction with NHERI. Of the respondents, 11.76% did not plan to submit a proposal through NHERI, zero were writing their first proposal, and the remaining 88.23% respondents report being at various stages in the experiment and proposal process.



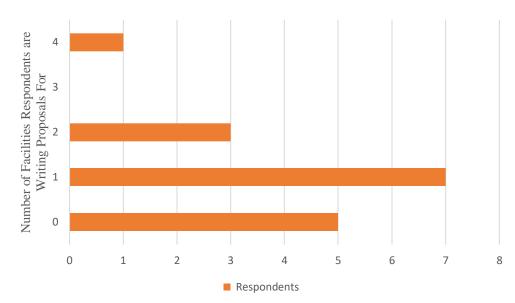
Q4-How many proposals have you prepared that used NHERI Facilities and Resources? (N=16)

In 2019, more than half (87.5%) of respondents had prepared at least one proposal using NHERI facilities and resources. Six respondents prepared a single proposal, three respondents prepared two proposals, three respondents prepared three proposals, and one respondent prepared four proposals. One respondent prepared 12 proposals and two respondents reported preparing zero proposals.



Q5-How many facilities are you using/have you used? (N=16)

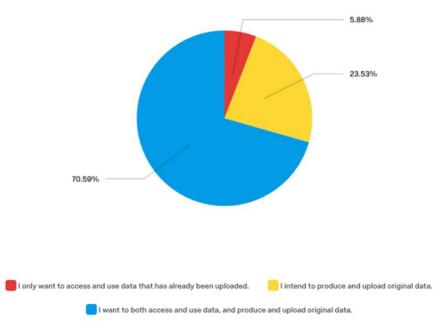
Out of 16 respondents, nine respondents reported using a single facility, six respondents reported using two facilities, and only one respondent reported using no facilities.



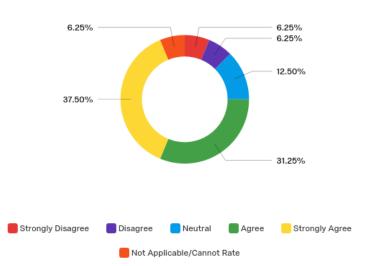
Q6-How many facilities are you writing proposals for? (N=15)

Five respondents reported writing a proposal for no facilities, seven respondents reported writing a proposal for one facility, three respondents reported writing a proposal for two facilities, and a single respondent reported writing a proposal for four facilities.

Q7-Which of the following best describes how you intend to utilize NHERI Facilities and Resources? (N=17)



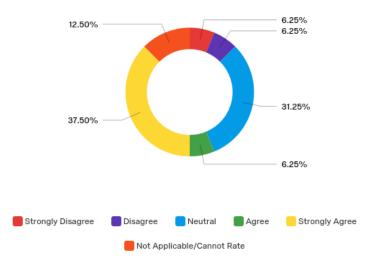
Most respondents (70.59%) reported wanting to both access and use data and produce and upload original data. A smaller percentage of respondents (25.53%) reported intending to produce and upload original data, while the smallest percentage of respondents (5.88%) reported only wanting to access and use data that has already been uploaded.



Q8A-Information about NHERI Facilities and Resources is Readily Accessible (N=16)

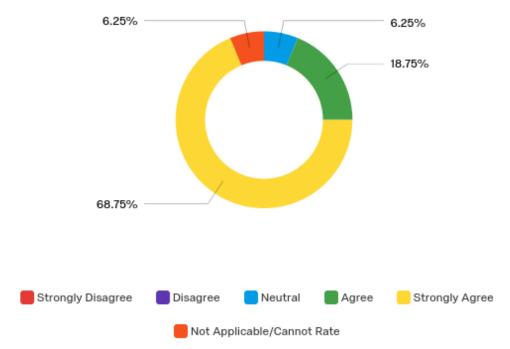
A majority of respondents indicated that they Agreed (31.25%) or Strongly Agreed (37.50%) that NHERI Facilities and Resources are Readily Accessible. A smaller proportion of responses were Neutral (12.50%) or Cannot Rate (6.25%) this statement, while a similar proportion of respondents Disagreed (6.25%) or Strongly Disagreed (6.25%) with this statement.

Q8B- Information about NHERI Facilities and Resources is Comprehensive (N=16)



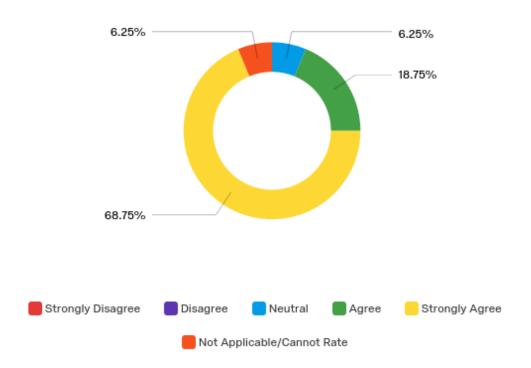
A majority of respondents indicate they Strongly Agreed (37.50%) or Agreed (6.25%) with the statement that Information about NHERI Facilities and Resources is Comprehensive. A smaller but similar proportion of respondents was Neutral (31.25%) to or Cannot Rate (12.50%) this statement, and the smallest proportion of respondents Disagreed (6.25%) or Strongly Disagreed (6.25%) with this statement.

Q11-NHERI experimental facility staff has provided useful feedback on proposed/ongoing/completed tests. (N=16)

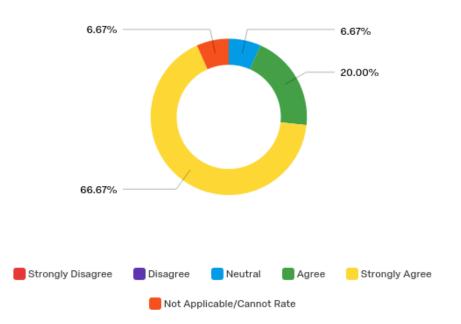


Most respondents Strongly Agreed (68.75%) or Agreed (18.75%) that NHERI experimental staff provided useful feedback, with a smaller proportion of respondents indicating they could not rate (6.25%). No respondents Disagreed or Strongly Disagreed with this statement.

Q12-The process of scheduling facilities matches my expectations. (N=16)

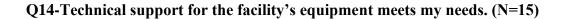


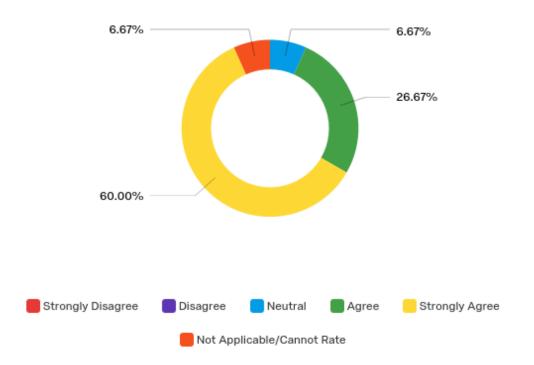
This question was featured on the 2017 and 2018 surveys. A majority of known facilities users Strongly Agreed (68.75%) or Agreed (78.75%) that the process of scheduling facilities matched their expectations. A smaller percentage of respondents could not rate (6.25%) or are Neutral (6.25%) to this statement.



Q13-The available training for the facility's equipment meets my needs. (N=15)

This question was also featured on the 2017 and 2018 surveys. Among known NHERI facilities users, a majority Strongly Agreed (66.67%) or Agreed (20%) that the available training for the facility's equipment meets their needs. Remaining respondents either could not rate (6.67%) or were Neutral (6.67%) to this statement. No respondents Disagreed or Strongly Disagreed with this statement.





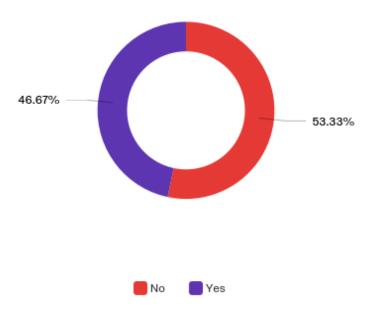
This question was also featured on previous surveys. A majority of respondents Strongly Agreed (60%) or Agreed (26.67%) that technical support for the facility's equipment meets their needs. The remaining respondents could not rate (6.67%) or were Neutral (6.67%) to this statement. No respondents Disagreed or Strongly Disagreed with this statement.

Q15-Do you have any additional comments about NHERI Facilities' and Resources' staff, scheduling, and equipment?

Respondents were again asked to provide additional feedback – this time regarding staff, scheduling, and equipment in an open-ended manner. Those who provided substantive feedback had mostly positive comments regarding NHERI staff, noting that the staff were "extremely helpful," "unbelievably good" and that they provided "fantastic customer service."

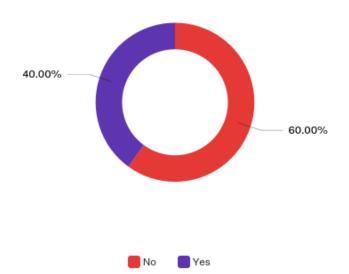
Only two respondents described negative experiences associated with scheduling "during experiment and pilot experiment." Additional challenges were reported with DesignSafe, with one respondent noting that it is "slow to load." In sum, comments received regarding NHERI Facilities' and Resources' staff, scheduling and equipment were largely positive among known NHERI facility users.

Q17-Have you participated in any of the proposal writing workshops and/or seminars, or utilized NHERI support resources? (N=15)



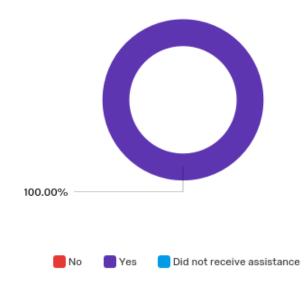
Just under half of respondents (46.67%) reported participating in writing workshops, seminars, or utilizing NHERI support resources. Conversely, just over half of respondents (53.33%) reported not participating in writing workshops, seminars, or utilizing NHERI support resources.

Q18-Have you requested assistance from NHERI as you write your proposal? (N=15)

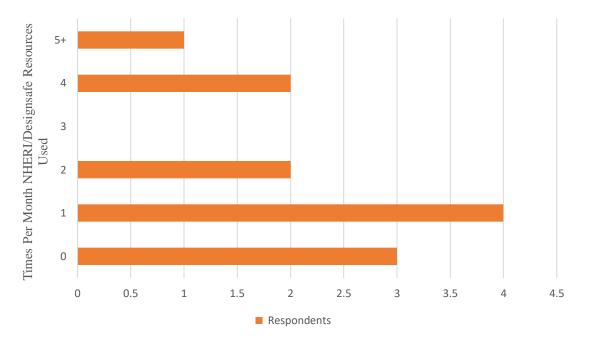


Forty percent of respondents reported requesting assistance from NHERI during the proposal writing process, and the remaining 60% of respondents did not request assistance. Respondents who indicated they requested assistance were asked a follow up question, discussed below.

Q19-Has the assistance you received been helpful? (N=6)

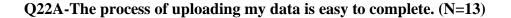


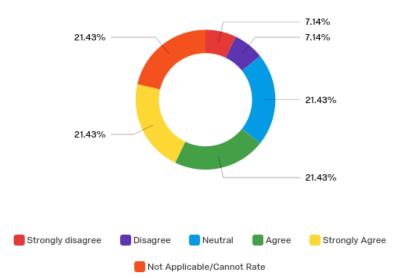
This question was available only to respondents who indicated they had requested assistance from NHERI during the proposal writing process. Of the six respondents who requested assistance, 100% of them received assistance and found the assistance they received helpful.



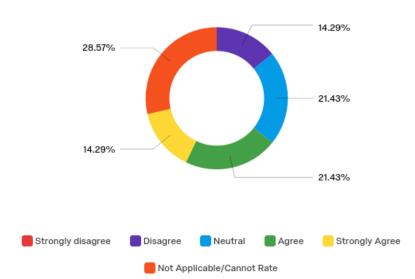
Q20-How many times a month, on average, do you use DesignSafe and other NHERI online resources and tools? (N=13)

Respondents reported using DesignSafe and other NHERI online resources and tools on average two times a month, with responses ranging from zero to ten.





Approximately 42.86% of respondents Agreed (21.43%) or Strongly Agreed (21.43%) that uploading their data is easy to complete. Similarly, 42.86% of respondents were Neutral (21.43%) or could not rate (21.43%) their experience uploading data. A smaller proportion of respondents Disagreed (7.14%) and Strongly Disagree (7.14%) with the statement.



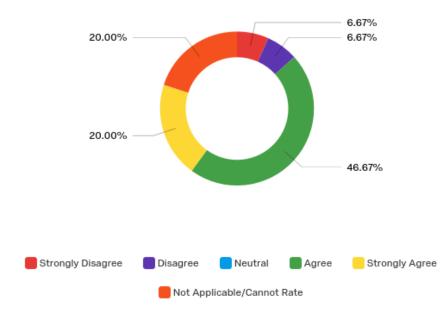
Q22B-The process of adding metadata matches my expectations. (N=13).

Most respondents could not rate (28.57%) or were Neutral (21.43%) with regard to the process of adding metadata meeting their expectations. Approximately 35.72% of respondents Agreed (21.43%) or Strongly Agreed (14.29%) that the process of uploading metadata met their expectations. Only 14.29% of respondents Disagreed that the process of uploading metadata met their their expectations, and no respondents Strongly Disagreed with this statement.

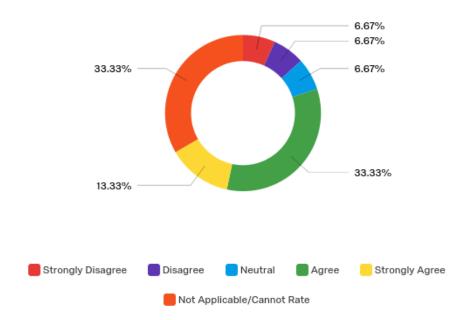
23-Regarding NHERI Data: (N=15)

Findings here are generally consistent with responses to corresponding questions from the 2017 and 2018 survey. In each category respondents were more agreeable with each statement than disagreeable.

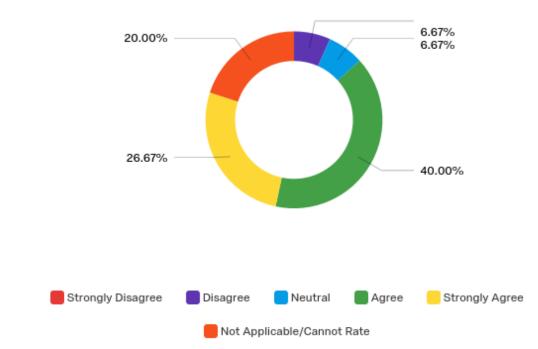
It's easy to locate the data that I want from my previous tests



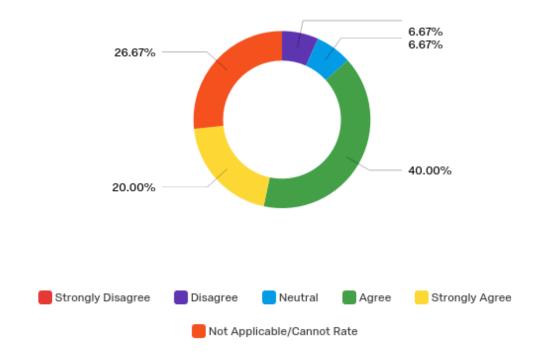
It's easy to locate the data that I want from others' tests



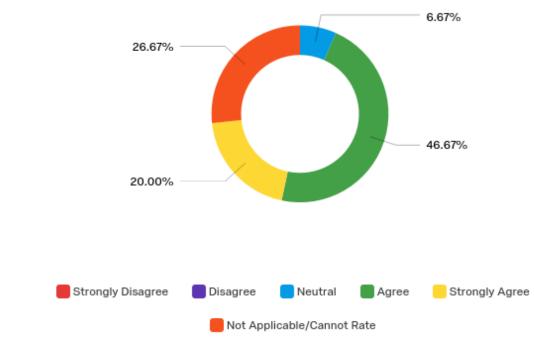
The required format of the archived data is reasonable/logical



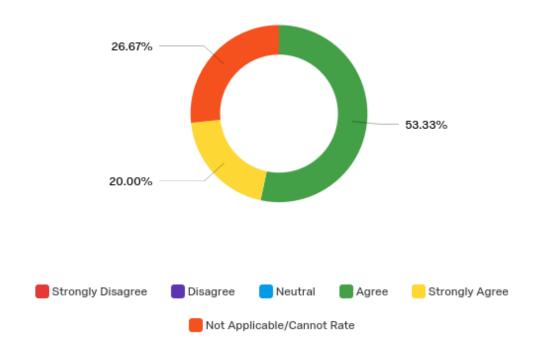
The metadata quality for archived experimental data is sufficient/logical



The metadata comprehensiveness of the experimental data is sufficient



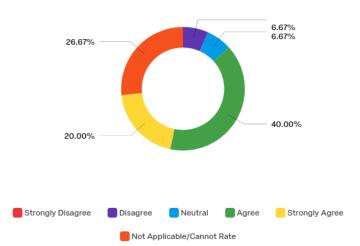
Data is available for download in useful formats



Q24-Do you have any additional comments regarding NHERI data? (N=4)

Participants were also asked to provide comments regarding data. Respondents described difficulty accessing data, describing the process as "too cumbersome" when trying to access data during the experiment. Another respondent commented on the organization of NEES data, describing it as "totally disorganized" and that there is a lack of "verification of completeness."

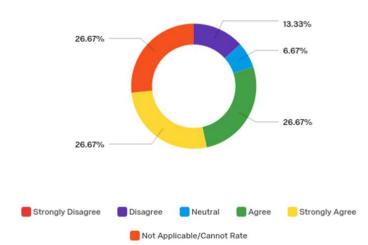
On the other hand, one respondent commented on the role NHERI data plays to their research, commenting, "NHERI data is very critical to the success of [their] research." These comments should be taken into consideration alongside the mostly positive comments regarding NHERI data accessibility and usability reported on previous questions.



Q26A-The training available for online resources and tools meets my needs. (N=15)

This question was featured on the 2017 and 2018 surveys. Sixty percent of respondents Agreed or Strongly Agreed with this statement, in line with responses to this statement on the 2018 survey which had similar rates of respondents agreeing or strongly agreeing with this statement (58%). Only 6.67% of respondents Disagreed with this statement and no respondents Strongly Disagreed with this statement, compared to 14% in 2018. Of the respondents, 6.67% were Neutral to this statement, compared to 18% in 2018. Finally, 26.67% of respondents could not rate this statement, up from 10% in 2018.

Q26B-The technical support for online resources and tools meets my needs. (N=15)



This question was also featured on the 2017 and 2018 survey. Just over half (53.34%) of respondents Agreed or Strongly Agreed that the technical support for NHERI's online resources and tools meets their needs, compared to 32% in 2018. Of the respondents, 13.33% Disagreed with this statement, compared to 8% in 2018. No respondents Strongly Disagreed with this statement, but 26.67% could not rate and 6.67% were Neutral.

Q27-What is the important change to NHERI's services, tools, and resources that would improve your experience with them? (N=3)

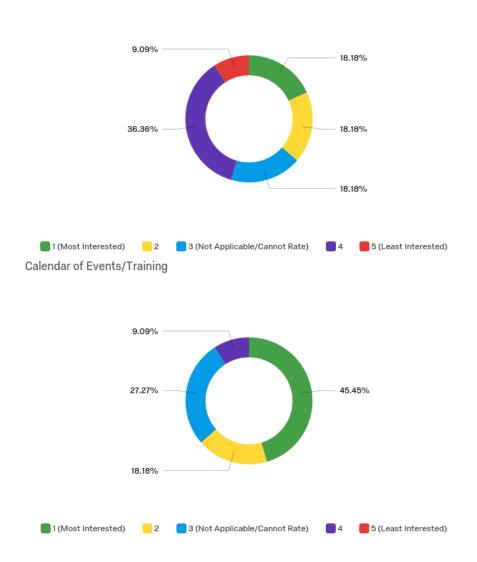
This open-ended question was designed to illicit qualitative responses that allow respondents to provide open-ended feedback regarding NHERI services, tools, and resources. Respondents commented on the timeliness and clarity of NHERI sites responding to questions, noting that questions are not addressed "very clearly or quickly." Other respondents suggested increasing the speed with which data are available suggesting NHERI provide "instant (or near instant) access to data" and experimental conditions.

Q28-What service, tool, or resource not currently in NHERI should be added? What need is this going to meet?

As with Question 27, this open-ended question was designed to illicit qualitative responses that allowed respondents to comment on what service, tools, or resources NHERI should add. One respondent took advantage of this opportunity and indicated that MATLAB "is very hard to use," going on to say that it is a "critical tool for most researchers." It is unclear whether this comment was specifically referencing MatLab being hard to use through DesignSafe or if they were commenting on MatLab being difficult to use generally.

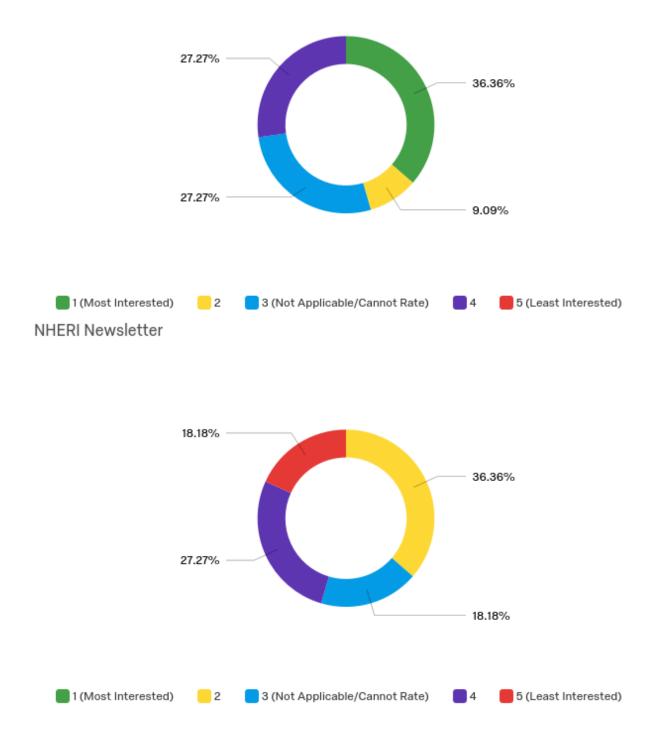
Q30-Of the following which would you be most interested in participating in or using (please click and drag to rank from most interested [1] to least interested [5]). (N=11)

Respondents were asked to rank each of these from most interested [1] to least interested [5]; responses shown are proportions of sums of respondent rankings of one and two (i.e., reported the most interest in). As seen in 2018, respondents were most interested in a calendar of events and video footage of experiments, followed closely by a newsletter summarizing NHERI related information, and then an annual workshop meeting for NHERI researchers. Very few participants expressed interest in a social media group featuring NHERI-related information and news. Specific findings reported below should be considered in light of what resources and tools have been made available for NHERI users since this question was originally drafted. Particularly with regard to a newsletter, calendar of events/training, and social media group.

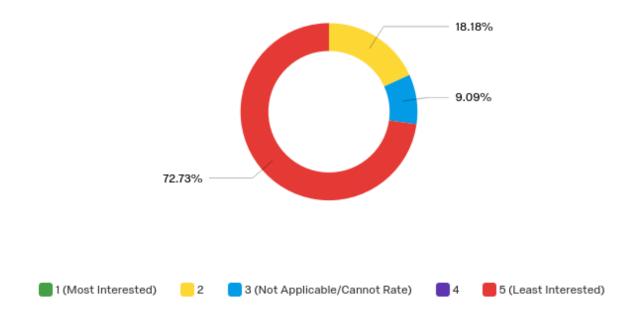


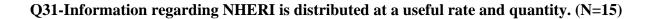
Annual Workshop for NHERI Researchers

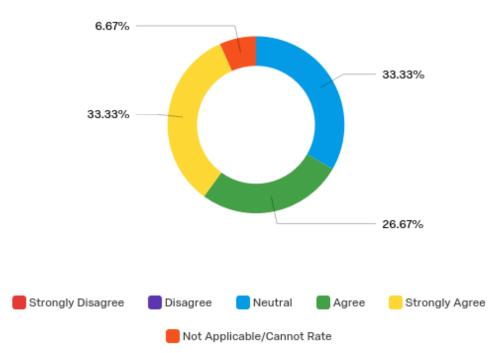
Video Footage of Experiments



NHERI Social Media Group

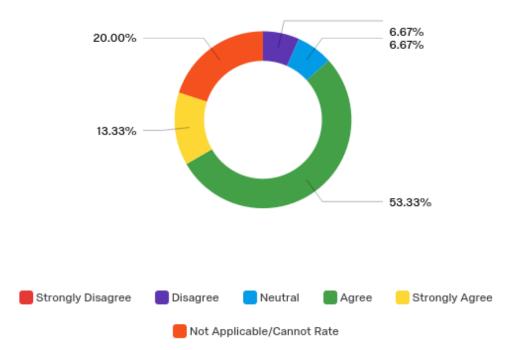






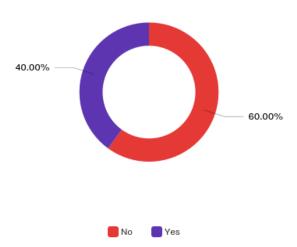
A Majority of respondents Strongly Agreed (33.33%) or Agreed (26.67%) that the information regarding NHERI is distributed at a useful rate and quantity. The remaining participant responses were Neutral (33.33%) or cannot rate (6.67%). No respondents Disagreed or Strongly Disagreed with this statement, down from 2017.

Q32-The information regarding NHERI in DesignSafe is useful. (N=15)



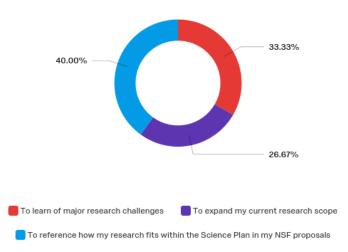
A majority of respondents Strongly Agreed (13.33%) or Agreed (53.33%) that information regarding NHERI in DesignSafe is useful, while a smaller percentage Disagreed (6.67%) with this statement. The remaining respondents indicated they could not rate this statement. No respondents Strongly Disagreed with this statement.

Q33-Have you been made aware of the NHERI Science Plan? (N=15)



A majority of respondents indicated they were not aware of the NHERI Science Plan (60%).

Q34 - Please indicate all of the ways in which you have used the NHERI Science Plan (select all that apply). (N=15)



Respondents indicated they use the NHERI science plan to reference how their research fits within the Science plan in their NSF proposals (40.00%), to learn of major research challenges (33.33%), and then to expand their current research scope (26.67%). This set of responses is interesting, when considered in tandem with responses to Q33.

Q35-Do you have any additional comments regarding NHERI services and information? (N=2)

Respondents who opted to answer this open-ended question had only positive comments, indicating that "NHERI is the best" and that NHERI has "Good newsletters, interesting stories, and useful info."

Q36 - Do you have any final comments regarding NHERI Facilities and Resources? (N=2)

Respondents who opted to answer this open-ended question had only positive comments, echoing previous responses to similar questions (Q34), and further commenting on the facilities doing a "nice job."

APPENDIX A-Survey Instrument

Q1. Greetings! You have been invited to participate in a user satisfaction survey for the Natural Hazards Engineering Research Infrastructure (NHERI). We greatly appreciate any feedback or comments you may have so that services and user experiences with NHERI may be improved. You will be asked about your experiences using NHERI and related programs, and asked to provide additional feedback should you deem it necessary. Completion of the survey should take approximately 10-15 minutes.

No personal information will be associated with your responses. Your participation is voluntary, and you may withdraw consent and/or discontinue participation at any time. You may skip questions you prefer not to answer.

Would you like to participate?

a. Yes, I would like to participate in the survey.

b. No, I would not like to participate in the survey.

Q2. Thank you for your participation. First, we would like to ask you questions regarding how you intend to utilize NHERI Facilities and Resources (i.e., experimental facilities, DesignSafe, and SimCenter; referred to as "Facilities and Resources" for the remainder of the survey).

Q3. Which of the following best describes your current position in the proposal process for NHERI Facilities and Resources?

a. I'm writing my first proposal.

b. My proposal has been accepted, but I have not begun utilizing the facilities.

c. I am currently performing experiments/using the SimCenter.

d. I have completed experiments.

e. I have completed an experiment(s) and am working on the next proposal.

Q4. How many proposals have you prepared that used NHERI Facilities and Resources? - Numeric response

Q5. (IF Q2 = b, c, d, e) How many facilities are you using/have you used? - Numeric response

Q6. (IF Q2 = a) How many facilities are you writing proposals for? - Numeric response

Q7. Which of the following best describes how you intend to utilize NHERI Experimental Facilities and/or the SimCenter?

a. I want to access and use data that has already been uploaded.

b. I intend to produce and upload original data.

c. I want to access and use data and produce and upload original data (a and b).

Please respond to the following statements about NHERI experimental facilities.

Q8a. Information about NHERI experimental facilities is readily accessible:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q8b. Information about NHERI experimental facilities is comprehensive:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q9. Do you have any additional comments regarding information about NHERI Facilities and Resources?

- Open ended

We would like to ask you questions about NHERI Facilities' and Resources' staff, scheduling, and equipment.

Q11. NHERI experimental facility staff has provided useful feedback on proposed/ongoing/completed tests:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q12. The process for scheduling facilities matches my expectations (hide if 1):

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q13. The available training for the facility's equipment meets my needs:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q14. Technical support for the facility's equipment meets my needs:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q15. Do you have any additional comments about NHERI Facilities' and Resources' staff, scheduling, and equipment?

- Open ended

We have some questions regarding NHERI Facilities' and Resources' support resources.

Q17. Have you participated in any of the proposal writing workshops and/or seminars, or utilized NHERI support resources?

1. No

2. Yes

Q18. Have you requested assistance from NHERI as you write your proposal?

- 1. No
- 2. Yes

- (IF Q18 = 2) Has the assistance you received been helpful?

- 1. No
- 2. Yes

3. Did not receive assistance

Q20. How many times a month, on average, do you use DesignSafe and other NHERI online resources and tools?

- Numeric response

Next, we would like to ask a few questions about data and data management with NHERI Facilities and Resources.

Q22a. The process of uploading my data is easy to complete:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q22b. The process of adding metadata matches my expectations:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral

4. Agree

- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Please respond to the following statements related to data.

Q23a. It's easy to locate the data that I want from my previous tests:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q23b. It's easy to locate the data that I want from others' tests:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q23c. The required format of the archived data is reasonable/logical:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q23d. The metadata quality for the archived experimental data is sufficient/logical:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q23e. The metadata comprehensiveness of the experimental data is sufficient:

- 1. Strongly agree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly agree
- 6. Not Applicable/ Cannot Rate

Q23f. Data is available for download in useful formats:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q24. Do you have any additional comments regarding NHERI data?

- Open ended

Now we have a few questions regarding NHERI online resources and tools.

Q26a. The training available for NHERI's online resources and tools meets my needs:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q26b. The technical support for NHERI's online resources and tools meets my needs:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/ Cannot Rate

Q27. What is the most important change to NHERI's services, tools, and resources that would improve your experience with them?

- Open ended

Q28. What service, tool, or resource not currently in NHERI should be added? What need is this going to meet?

- Open ended

Q30. Of the following which would you be most interested in participating in or using (please rank from most interested [1] to least interested [5]):

a. A calendar of events and/or training.

- b. An annual workshop meeting for NHERI researchers.
- c. Video footage of experiments.

d. A newsletter summarizing NHERI related information (e.g., calls for proposals, tests,

seminars, training, etc.).

e. A social media group featuring NHERI related information and news.

f. Comments/Other suggestions:

Please respond to the following statements:

Q31. Information regarding NHERI is distributed at a useful rate and quantity:

- 1. Strongly disagree
- 2. Disagree
- 3. Neutral`
- 4. Agree
- 5. Strongly agree
- 6. Not Applicable/ Cannot Rate

Q32. The information regarding NHERI in DesignSafe is useful:

- 1. Strongly Disagree
- 2. Disagree
- 3. Neutral
- 4. Agree
- 5. Strongly Agree
- 6. Not Applicable/Cannot Rate

Q33. Have you been made aware of the NHERI Science Plan?

1. No

2. Yes

- (If Q33 = 2) Please indicate all of the ways in which you have used the NHERI Science Plan (select all that apply).

- a. To learn of major research challenges
- b. To expand my current research scope

c. To reference how my research fits within the Science Plan in my NSF proposals

Q35. Do you have any final comments regarding NHERI services and information? - Open ended

Q36. Do you have any final comments regarding NHERI Facilities and Resources? - Open ended

APPENDIX B – Comprehensive Qualitative Response Data by Question

Q9-Do you have any additional comments regarding information about NHERI Facilities and Resources?

- Excellent facilities and management skills
- The question above is bad because you are lumping them all together. My experience with the EF was good. My experience with DesignSafe was not good
- No.
- Great facilities on a global scale

Q15-Do you have any additional comments about NHERI Facilities' and Resources' staff, scheduling, and equipment?

- The staff at the UF NHERI EF is unbelievably good specifically Steven Schein, Shelby Brothers, Kevin Stultz, Eric Agostinelli, and Scott Powell.
- Staff is extremely helpful.
- DesignSafe data is slow to load
- No
- Schedule issues during experiment and pilot experiment.
- No.
- no
- Maybe remind respondents here that answer can include comments about the SimCenter.
- Excellent staff and fantastic customer service

Q24-Do you have any additional comments regarding NHERI data?

- The NEES data is totally disorganized and was never invested properly into this system. It is very hard to find anything from those important experiments. I'm not sure the data from recent projects is complete. There is no verification of completeness.
- NHERI data is very critical to the success of my research.
- Accessing the data during the experiment is too cumbersome. I used to be able to access the data after every trial (almost immediately) via the HWRL. Guess access is no longer allowed which means Pedro has to copy and upload all data to DesignSafe before I can access this. Pedro is very busy which means accessing the data sometimes took weeks. My experience with the HWRL facility and staff has been wonderful with this strong exception.
- no

Q35-Do you have any additional comments regarding NHERI services and information?

- Good newsletters, interesting stories, and useful info.
- NHERI is the best.

Q36-Do you have any final comments regarding NHERI Facilities and Resources?

- Solid. The facilities are doing a nice job of keeping these up.
- NHERI Facilities and Resources are the best.