

User engagement and support

1 May 2018 | NSF Large Facilities Workshop Forrest J. Masters, PhD, PE

POWERING THE NEW ENGINEER TO TRANSFORM THE FUTURE



Forrest J. Masters, PhD, PE

Professor of Civil and Coastal Engineering Associate Dean for Research and Facilities PhD, University of Florida, 2004

- Wind engineering
- Boundary layer meteorology
- Surface-level tropical cyclone winds and wind-driven rain and their effects on structures
- Stochastic simulation of natural hazard events
- Optimization of civil engineering systems



Oregon State

NSF NHERI Network







© EF SimCenter

@ UC Berkeley

O EF

UC San Diego



Network Coord.
Office @ Purdue

DesignSafe-CI

@ UT Austin

© EF

UT Austin





O EF

Univ. of Florida





O EF



Objectives

- Review results from pre-workshop survey
- Discuss
 - Barriers to recruitment
 - Challenges to engagement
 - Best practices to address both
- Summarize findings
- Prioritize / develop recommendations

14.3

37.5

0.0

14.3

12.5

57.1

14.3

37.5

62.5

62.5

14.3

0.0

25.0

14.3

12.5

37.5

25.0

12.5

25.0

14.3

28.6

12.5

0.0

0.0

28.6

37.5

25.0

14.3

Most

5

28.6

0.0

12.5

42.9

37.5

25.0

14.3

Rank the ways your facility recruits new users	USERS effective eff				
Activity	1	2	3	4	
a. Direct marketing to faculty, e.g., use of a listserv	14.3	14.3	14.3	28 6	

b. Marketing through professional or technical societies

d. Press releases or major news announcements, e.g.

c. Website traffic and general marketing through social media

dissemination of a major scientific finding or discovery or a facility highlight released during a high-profile current event

e. Workshops that focus primarily on facility services and

g. Workshops organized with other facilities/organizations

f. Thematic workshops, e.g., participants give talks on

predefined topics in addition to the standard facility

UF

engagement

overview/tour

h. (Blind) competitions



How can NSF better assist in reaching users?

Activity	%
Provide electronic tools—e.g., customer relationship management systems—to identify (prospective) awardees	62.5
More actively promote facilities in solicitations and other online materials	62.5
Create special opportunities for new PIs to learn about facilities in advance of CAREER, CRII, etc. deadlines	75.0
Share information with chairs, associate deans, and other leaders responsible for the success of faculty research programs	25.0
Increase promotion of reusing data generated by facilities	25.0

Examples: Issues

- Need for greater visibility at NSF (how many PIs know about facilities?)
- Limited PI bandwidth
- Perceived barriers by researchers outside the core disciplines who could be facility users
- No agency customer relationship management (CRM) tool
- Lack of a recurring/standing solicitation to use facilities
- Need for more help from NSF to promote data reuse

Examples: Ideas

- Increase visibility for facilities on main NSF sites, e.g., menu bar item
- Connect '10 Big Ideas' or other NSF strategic priorities to facilities
- Create a voluntary, online collaboratory that enables PIs to share ideas and find colleagues with similar interests
- Create a proposal search tool that helps facilities find prospective users,
 without revealing proposal content or personal information
- Create pre-packaged information for 'new faculty' workshops

Guided discussion

- To help the scribe, please identify whether you will comment on a
 - Issue, barrier, etc.
 - Best practice
 - New idea (in your field)
- Give some context about your facility: New or mature? Single site or distributed network? Fleet? FFRDC?
- We will circle back 5 mins before the close to synthesize comments and produce consensus action items



POWERING THE NEW ENGINEER TO TRANSFORM THE FUTURE