



July 27-28, 2010

**FY2011  
Nuclear Energy  
University Programs Workshop  
Survey's and Lessons Learned  
G.A. Bala**

Rockville, Maryland



# Improvement and change

**The NEUP Integration Office continues to seek improvements. Several techniques are used including informal and formal feedback**

- This data details the results of the surveys released in 2010
- The purpose of the surveys was to understand the customer satisfaction with the proposal processes in an effort to make continued improvements

# Survey Mechanics

- 1,111 total surveys administered electronically via Zoomerang (382 sent in 2009)
  - Timing and delivery sensitivities may exist
  - Used the same timeframe of delivery as used in 2009
- Reminders were sent one week after initial release
  - For one atypically low response area, reminder phone calls were made
- Additionally, an explanatory note was sent to those individuals who would be receiving more than one survey

# Survey Structure

- Most of the survey requested respondents to provide their level of agreement with 7 point Likert-scaled statements
  - The surveys were vetted with Human Factors professionals for structure and content
  - Responses range from 1 (Disagree) to 7 (Agree)
- Other questions were Yes / No, rate or rank, and open for text input

# 2010 Survey Strategy

## Seven surveys sent

- Scholarship and Fellowship Recipient (2009, 2010)
  - University Administrator Offices of S&F Recipients
  - Infrastructure Participants (2009, 2010)
  - General Infrastructure (all R&D + Infrastructure)
  - Research and Development (consistent with 2009)
  - Principal Investigators
  - Technical Points of Contact
- PI and TPOC survey results will be delivered to the PI's and TPOCs separately

# Survey Rate of Return

Survey	Surveys Sent	Surveys Returned	Percent Returned
Scholarship and Fellowship Recipient	89	52	58.4%
Administrative Offices of S&F Recipients	28	2	7.1%
Infrastructure Participants (2009, 2010)	99	14	14.1%
General Infrastructure (R&D + Infrastructure)	432	93	21.5%
Research and Development	352	101	28.7%
Principal Investigators	70	65	92.9%
Technical Points of Contact	41	25	61.0%
Total	1111	352	31.7%
<b>Totals <i>excluding</i> S&amp;F Admin, PI, and TPOC</b>	<b>998</b>	<b>260</b>	<b>26.1%</b>

# Survey Detail: Scholarship & Fellowship

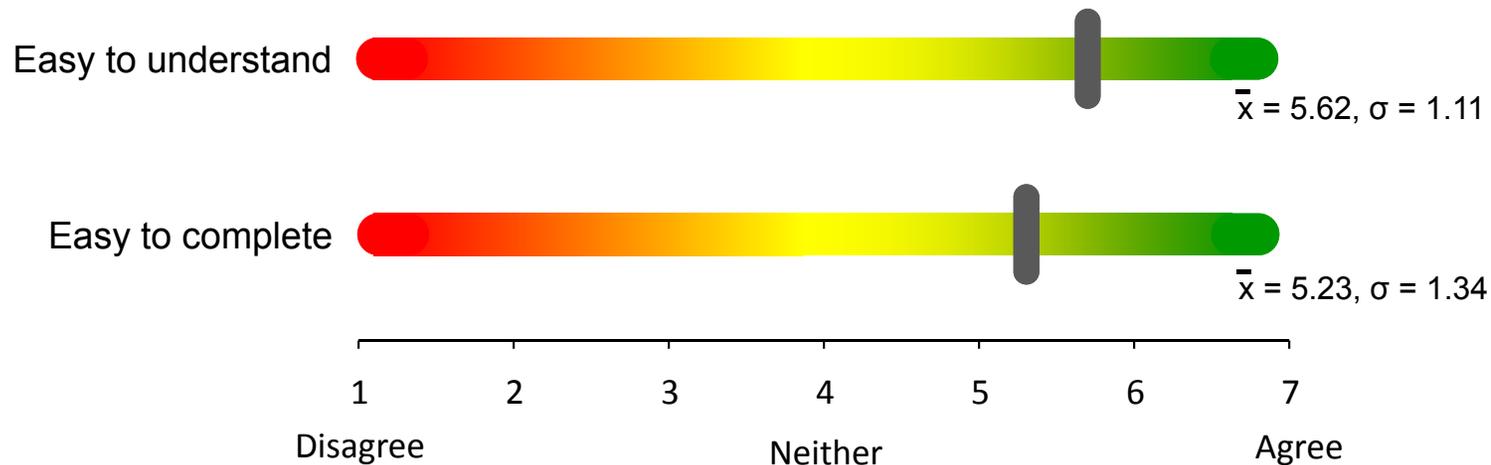
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## Scholarship and Fellowship

- New survey
- Sent to 2009 recipients, and 2010 participants
- Return rate of 58.4% (89 sent, 52 returned)
- Data were averaged

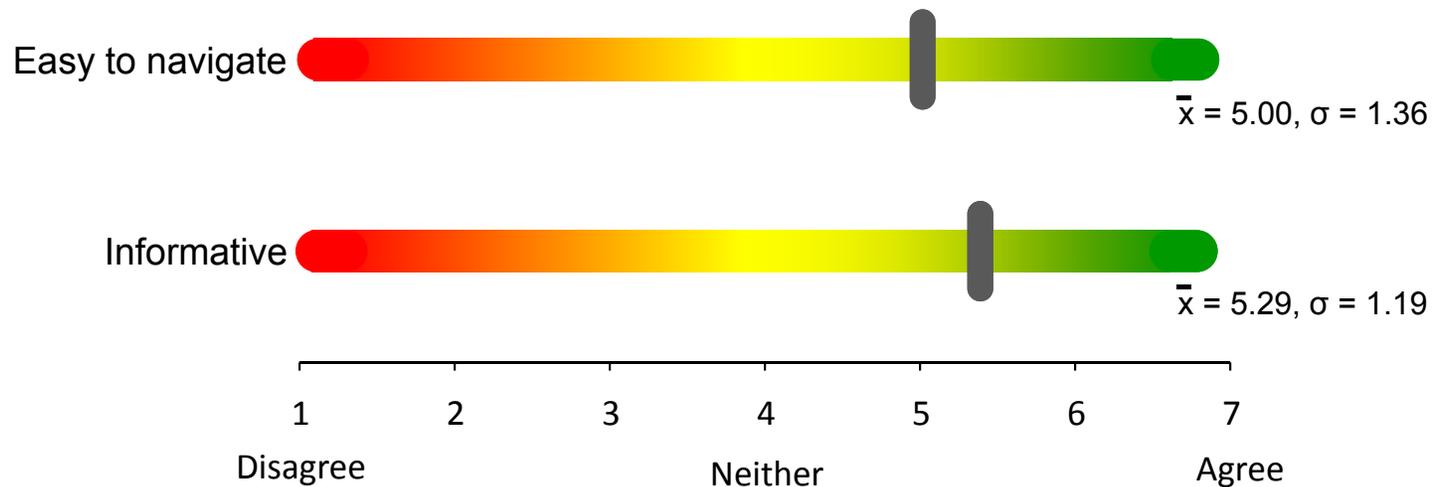
# Survey Results: S&F

**Requested participants to disagree or agree that in comparison to other scholarship or fellowship application processes, the NEUP process was:**



# Survey Results: S&F

Requested participants to disagree or agree that the NEUP website is:



# S&F Comment

## What other scholarships or fellowships have you applied for?

- Several: ANS, NSF, DOE Office of Science, NRC, ASME
- Many: university merit scholarships, university department scholarships
- Few: Nuclear Power Engineering Education Program, Society of Women Engineers, industry and private sponsored scholarships

# S&F Comment

## What were the positives and negative aspects of the application process?

- Negatives
  - Navigating website, vague instructions, had to use pdf's
  - Late in year, notification came in summer, had to write essays
  - No opportunity to detail accomplishments except in essays
- Positives
  - Very simple, very well orchestrated, quick, short, easy, clear objectives, no negatives, simple website, easiest of any
  - I appreciated that it was online and easy to save so I could come back later, "*made me think about my goals*"
  - Similar to other applications "I did not have to completely overhaul my essays, just adapt them...."

# S&F Comment

## How did you find out about the NEUP Scholarship and Fellowship program?

- Department, school, and academic advisors
- Professor
- Internet search
- Other students
- From and INL technical recruiter who contacted me on LinkedIn
- INL internship
- E-mail announcement from last year

# S&F Comment

## How could NEUP improve the submission process?

- Have only one set of instructions – on the application
- Do not require repeat applicants to submit all documents
- If possible, do not require high school transcripts
- Advertise early in the school year
- Some of the essay prompts could be clearer
- Improve the mechanism for uploading materials
- Allow more time between the RFA and submission
- Submission was great, the trouble is accessing the award

# S&F Comment

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## How did you use your funds?

- Housing, tuition, gas and food, books, fees, health insurance, travel

**“A ridiculous number of overpriced text books”**

**“Tuition, there is a lot of cost in tuition”**

# Survey Details: Administrators

## **Administrators at schools receiving NEUP funds.**

- New survey
- Sent to all schools receiving funds
- Return rate of 7.1% (28 sent, 2 returned)
- No data reduction due to low response
- Those that did respond, responded favorably
  1. The administrative effort to participate in the program was reasonable and about the same as other S&F programs
  2. The S&F program was a benefit to their college/university

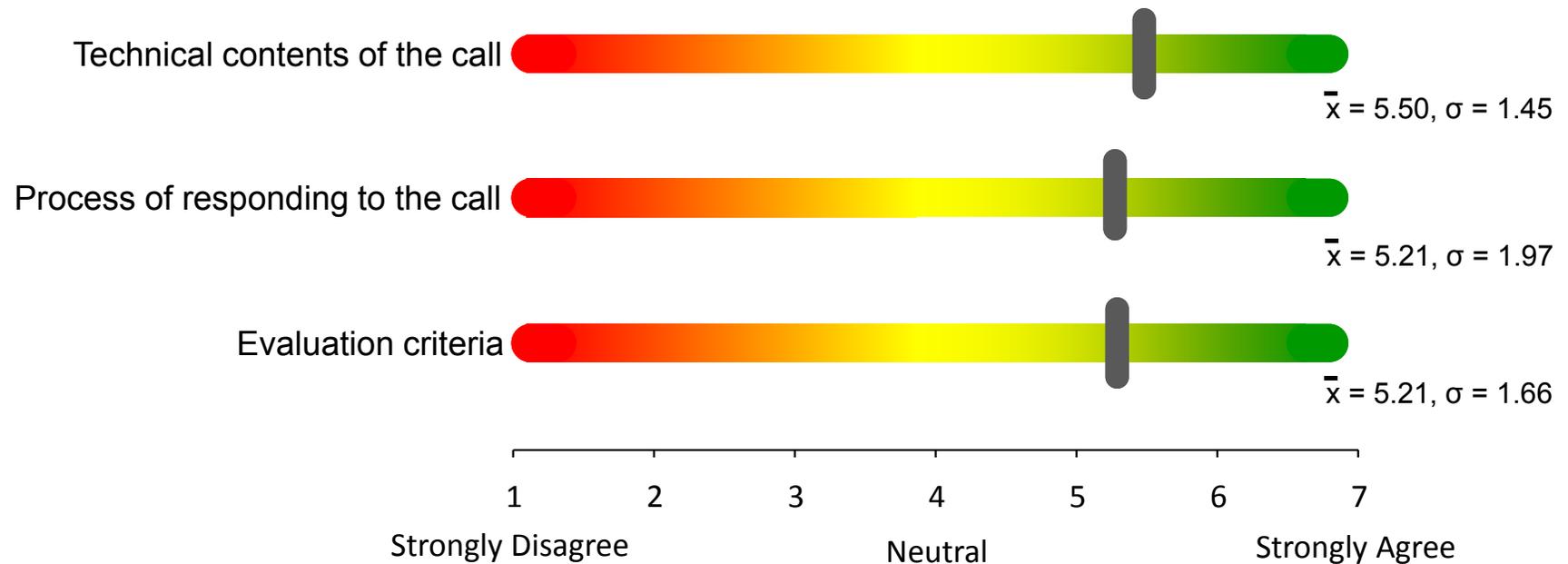
# Survey Detail: Infrastructure

## Infrastructure Participant

- New survey, sent to 2009 & 2010 infrastructure participants
- Focused specifically on the infrastructure call
  - A separate survey was conducted for current and proposed program areas
- Return rate of 14.1% (99 sent, 14 returned)
- 64% were awarded Infrastructure Funding in 2009
- 79% participated in the 2010 infrastructure call

# Survey Results: Infrastructure

Requested participants to disagree or agree that the following elements were clearly stated. Data are averages.



# Infrastructure Comments

## **If there was one thing you could change about the process, what would it be?**

- We would welcome recommendations for future NE infrastructure from a site visit
- Entering information into the system is difficult
- Centrally locate all of the forms
- Budget submission was confusing, difficult to integrate subcontracts

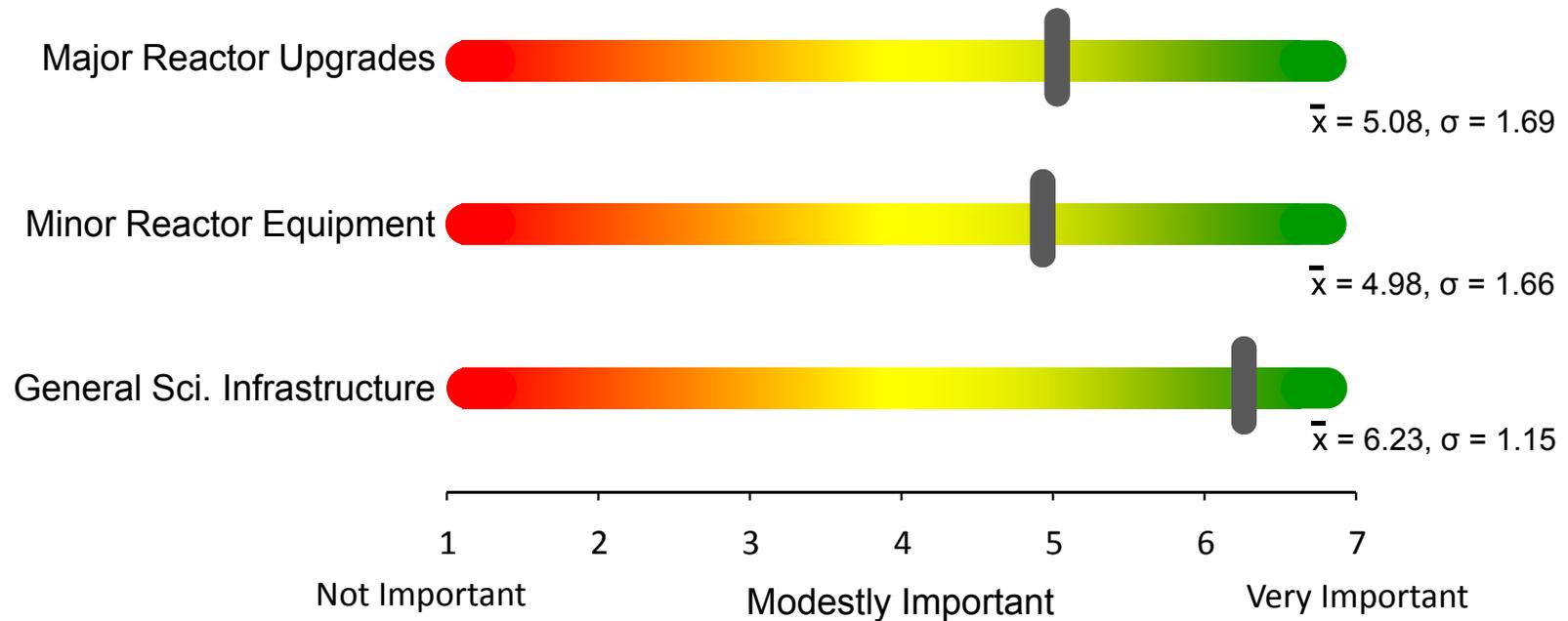
# Survey Details: General Infrastructure

## General Infrastructure

- New survey, sent to R&D and infrastructure participants
- Survey was specific to current and proposed program elements
  - A separate survey was conducted for the Infrastructure call
- Return rate of 21.5% ( 432 sent, 93 returned)
- 67% had submitted a proposal to either the 2009 or 2010 infrastructure call

# Survey Results: General Infrastructure

**Requested participants to rate the importance of the current NEUP program elements. Data are averages.**



# Survey Results: General Infrastructure

**Requested a forced ranking (1-9 where 1 = most important) of the following areas**

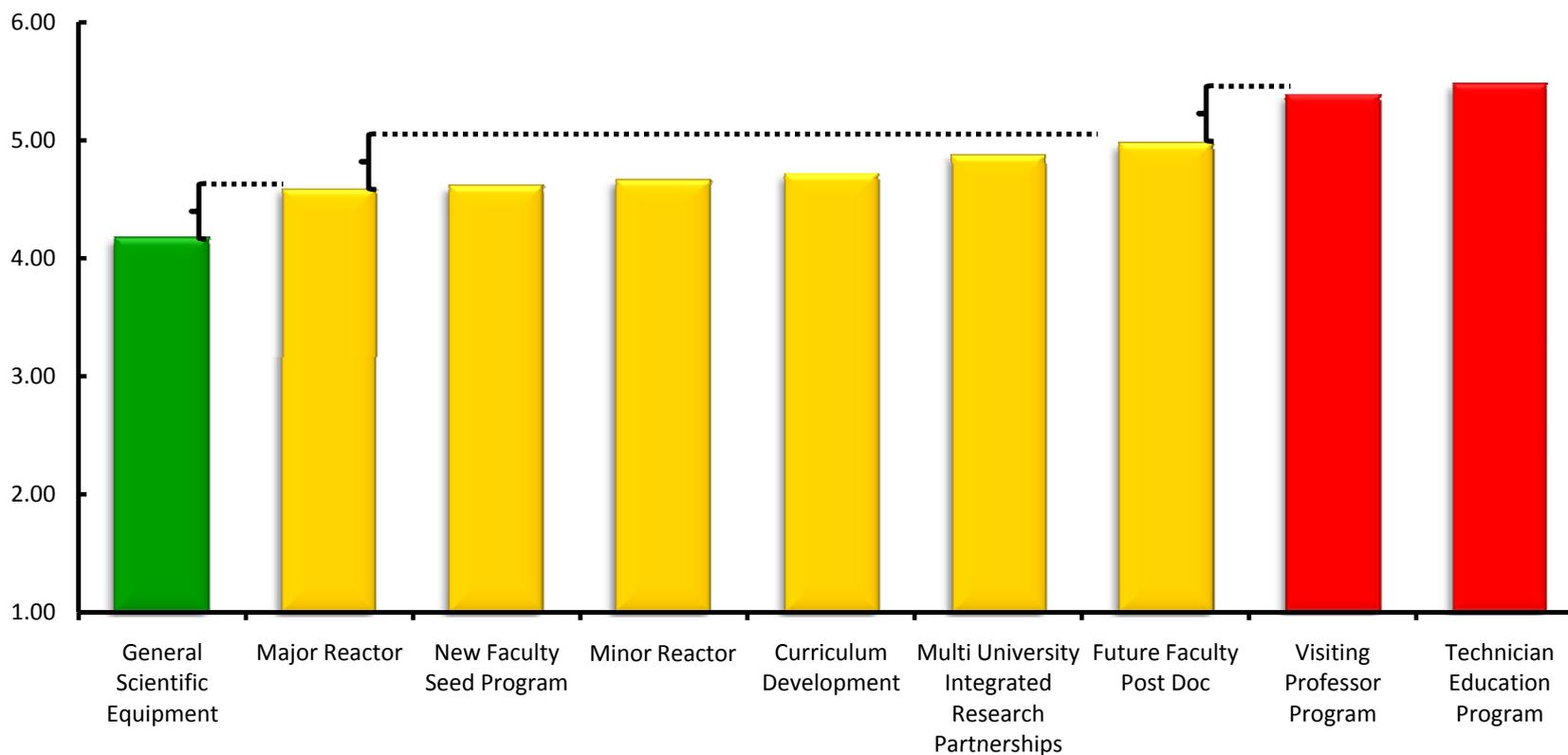
- Curriculum Development
- Future Faculty Post Doc
- General Scientific Infrastructure Support
- Major Reactor Upgrades
- Minor Reactor Equipment
- Multi University Integrated Research Partnerships
- New Faculty Seed Program
- Technician Education Program
- Visiting Professor Program

# General Infrastructure Data Reduction

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- Data was reduced by weighted average, resulting in three distinct groups (by popularity)
- Each group is separated by at least the difference of the most popular to the second most popular

# Three Distinct Categories by Vote



Each group is separated by at least the difference of the most popular to the second most popular

# Other Elements

## What other elements or areas do you think would be important for a future infrastructure call?

- NRC relicensing
- Integrate research and education, student support
- Reactor sharing
- Support for people (fellowships, visiting professor program, research partnership)
- Developing computation capabilities
- Develop synergies between R&D and Infrastructure
- Civil infrastructure (modular construction, base isolation)
- Support infrastructure only
- Emphasize larger investment in high performance research reactor centers at MIT-R, MURR, and NIST

# Survey Detail: Research & Development

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## Research and Development

- Consistent question set to 2009 so that comparisons could be made
- Sent to 2010 R&D participants
- Return rate of 28.8% (351 sent, 101 returned)

# The Workshop and You: 2010

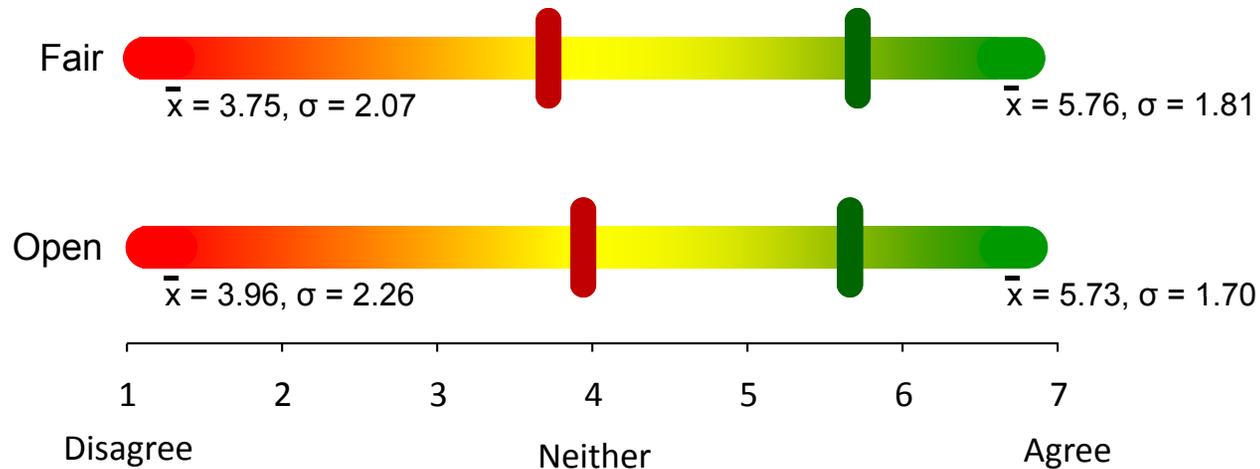
- 26% of survey participants attended the 2009 workshop
- 56% of survey participants were asked to submit a full proposal
- 29.7% of survey participants won funding

## **BUT, if the survey respondent attended a workshop....**

- 53% of participants who attended the workshop and were requested to submit a full proposal were funded

# Survey Results: R&D

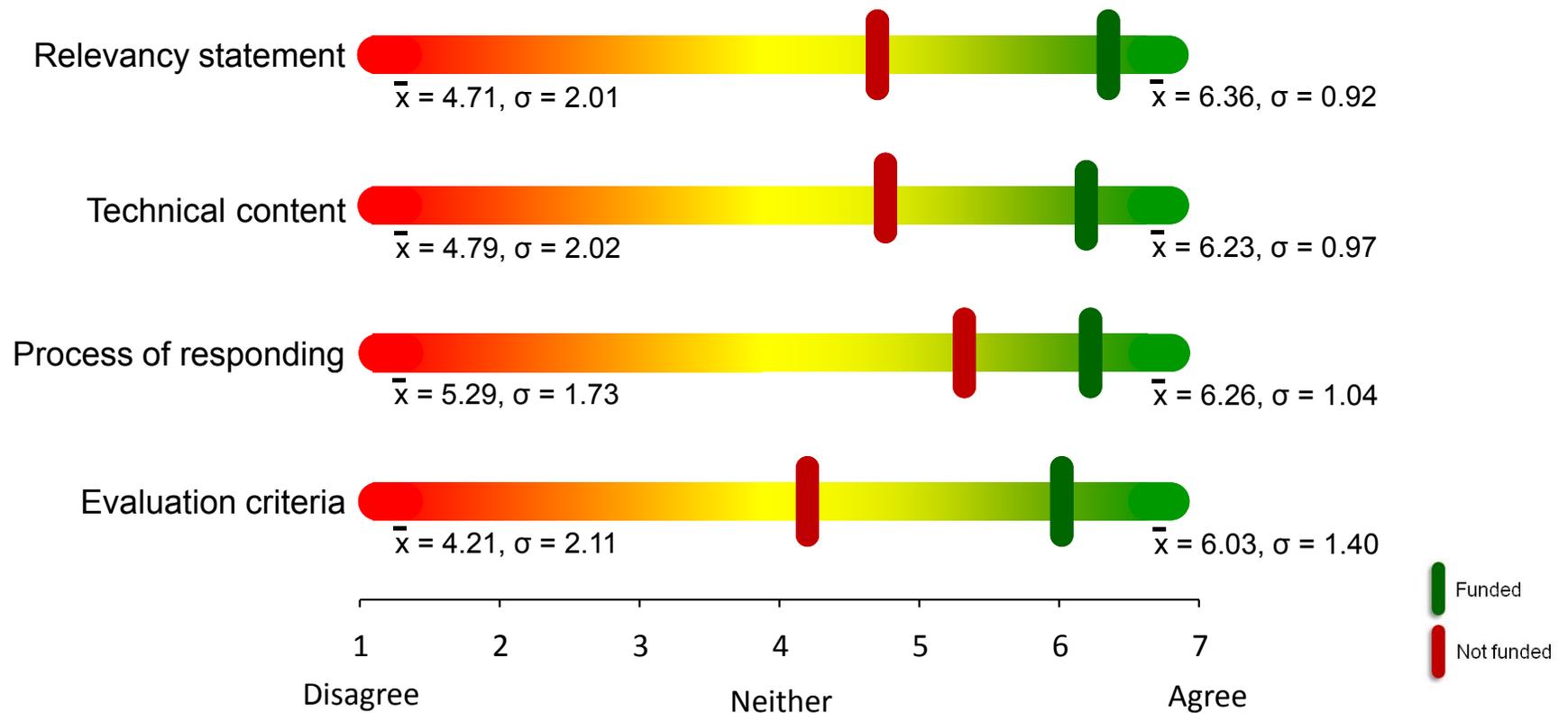
Requested participants to disagree or agree that the NEUP pre-application process was:



Funded  
Not funded

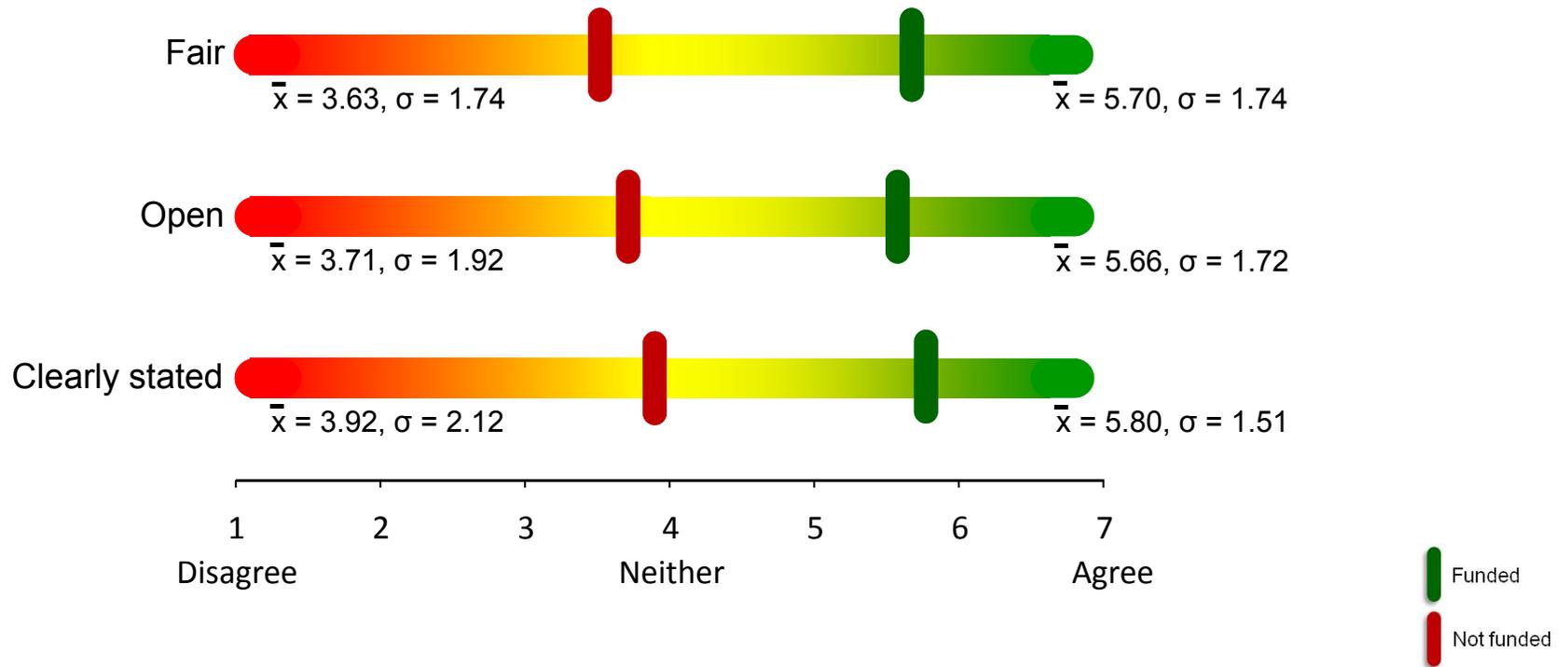
# Survey Results: R&D

Asked participants if the following elements of the pre-proposal process were clearly stated:



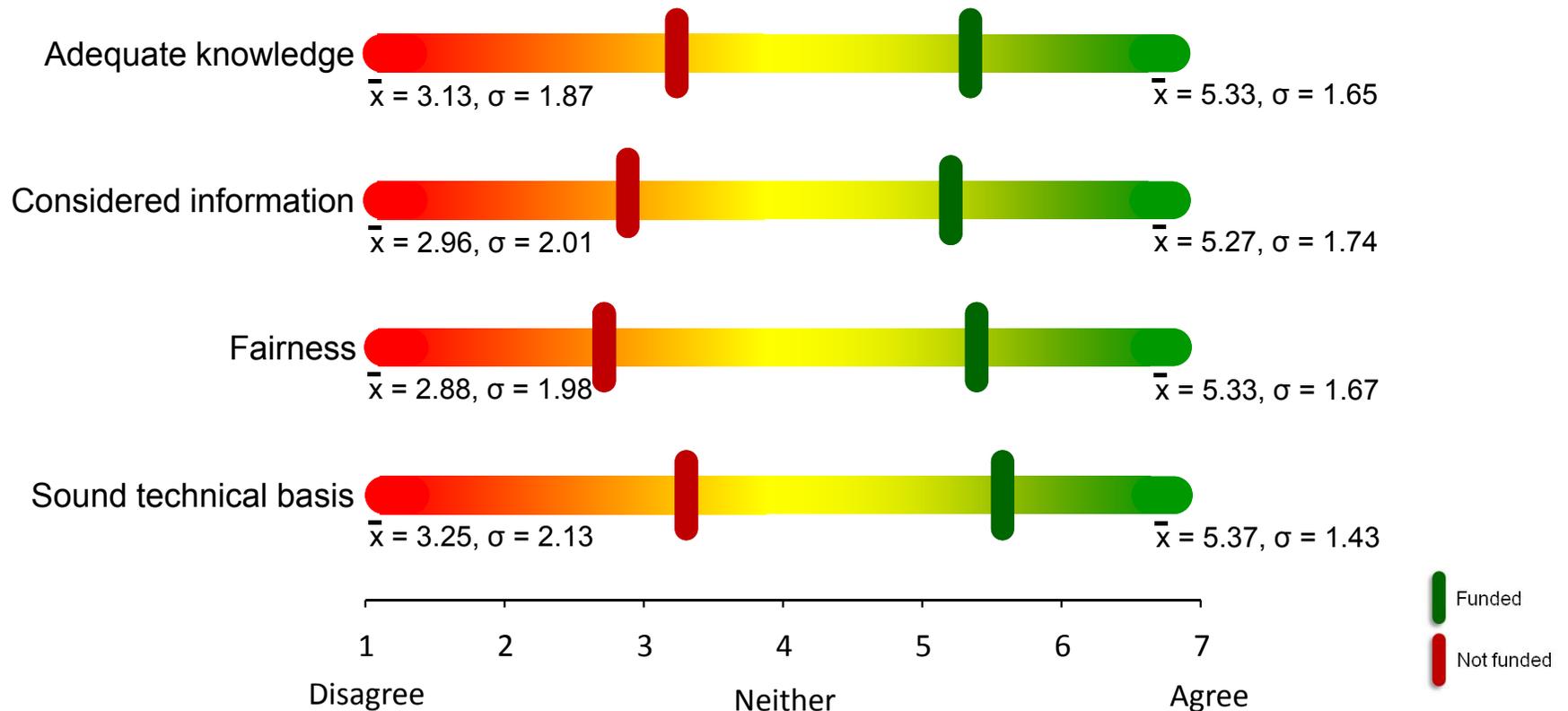
# Survey Results: R&D

Requested participants to disagree or agree that the NEUP full proposal process was:



# Survey Results: R&D

## Asked participants if reviewer's text comments suggested or showed:



# Survey Results: 2009 Compared to 2010

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## **Trends were fully conserved for those receiving or not receiving funding**

- Those who did not receive funding scored the questions lower than those who did receive funding
- Scores in 2010 were slightly lower than those in 2009, difference is within the standard deviation of the data
- We hear your voice.....

# Conclusions and Lessons Learned

## **Pre-Proposals (highest frequency in order)**

- Improve review process / reviewers
- Process is fine / straightforward / easy
- Give back more thorough reviews at this phase

## **Conflicting input**

- Reduce selection ratio to increase those allowed to submit full proposals
- Increase selection ratio to allow more full proposals to be successful

# Conclusions and Lessons Learned

## Proposals

- From 2009: Would like the option of using NEUP funding to purchase equipment needed for research: 65% positive
  - Implemented in 2011
- Reviews were inconsistent
  - In peer review of full proposals, the scores were within 10%. Reconciled inconsistencies with panel review
- Forms and instructions improved from 2009 to 2010, but continued improvement is justified

# Conclusions and Lessons Learned

## Proposals (continued)

- Mixed response for the blind process
- Would like to have some type of appeals process
  - Potentially possible at the full proposal stage
  - Simply did not have the time in 2010

## Reviewers

- In 2009 and 2010, several participants indicated a need to “improve” the reviewer pool (selection, perceived conflict, validation)

# Conclusions and Lessons Learned

## Reviews

- Many indicated a sense of frustration with the reviewers and the ambiguity or inconsistencies of comments received on their proposals

## Website

- In 2009, the website received significant negative response
  - In 2010, the most frequent response was “just right,” however a “main menu” is desired
- Forms and instructions improved from 2009 to 2010, but continued improvement is justified

# Conclusions and Lessons Learned

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## Process / Overall

- Requesting clarification on budget distribution between work scopes
- “Don’t ask for pre-proposals in areas that won’t be funded”
  - DOE reserves the right on all funding decisions, which are based on several factors

# Summary

- 1111 surveys distributed to collect opinions
  - 998 surveys detailed here
- Program is perceived as favorable, although those not receiving funding rated the program lower than those receiving funding
  - Even the low scores, on balance, are neutral
  - The lowest rated elements are reviewers text comments
- Your input allows us to understand satisfaction as well as areas for improvement