

Planetary Science R&A Process and Status

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Planetary Science Subcommittee

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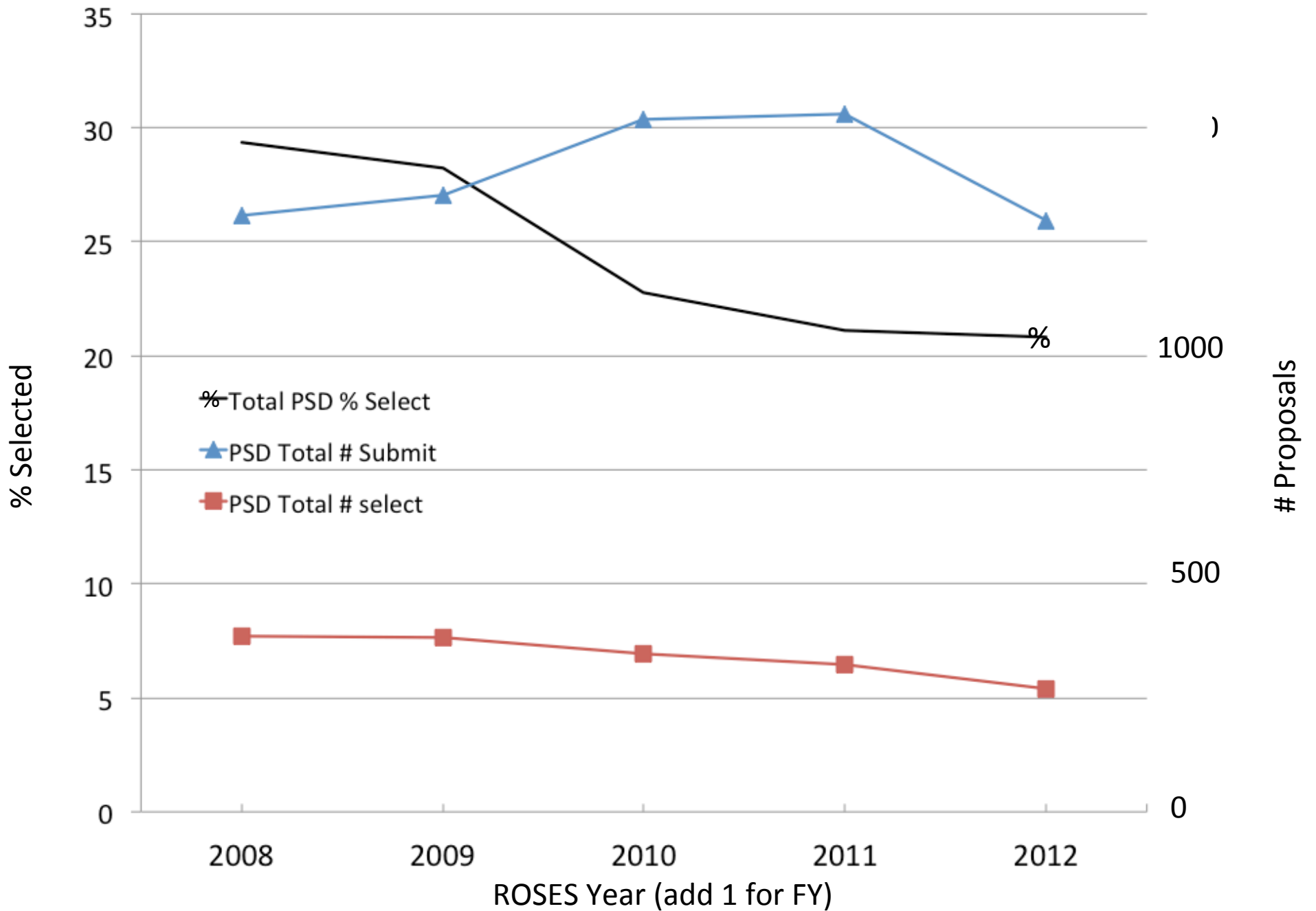
Introduction

- R&A programs
 - Step-2s: EW, SSW, SSO, EXO, XRP, and LARS
 - Step-1s: All except Habitable Worlds
- This is a good time to look at the status and progress of the Core programs

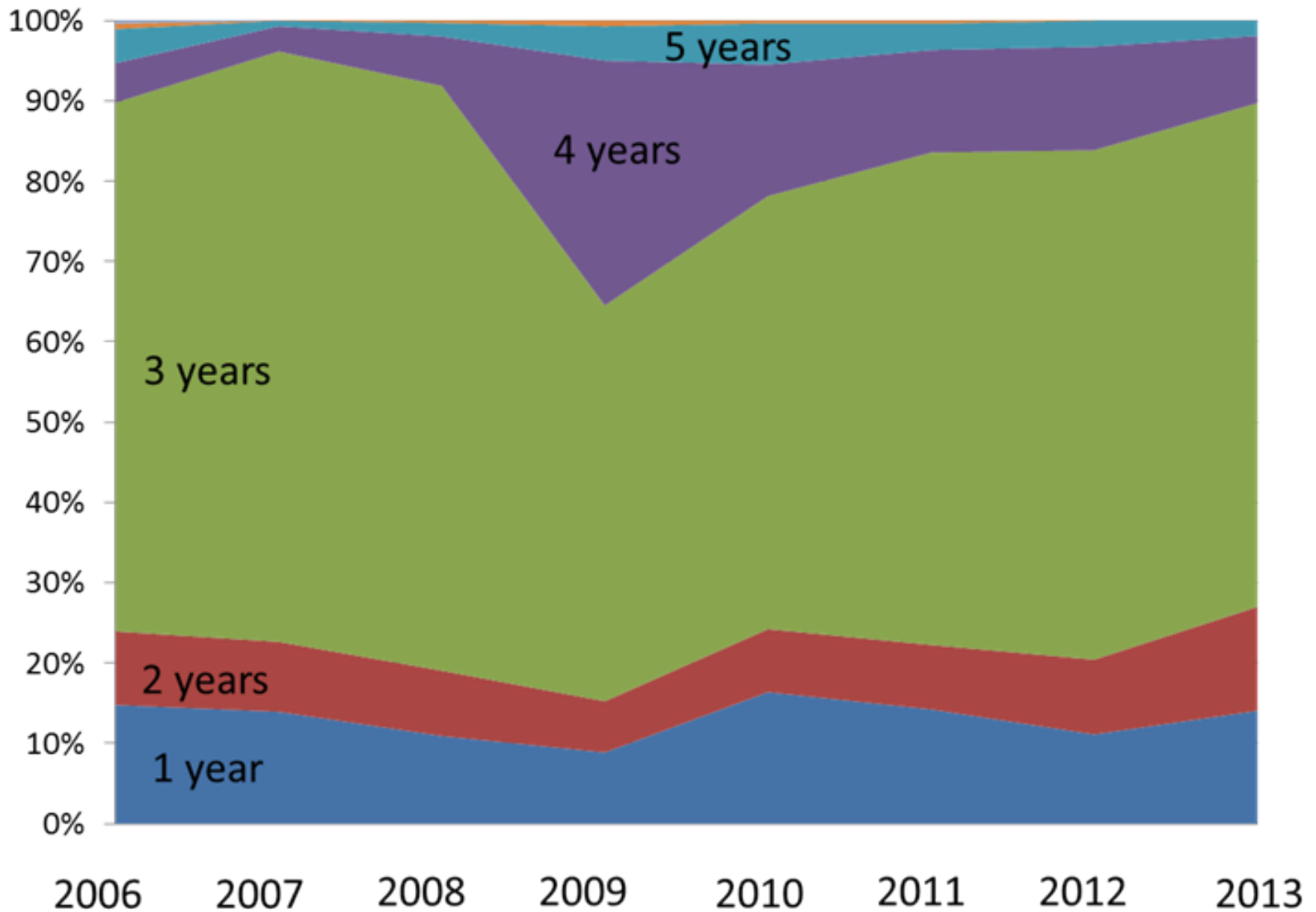
Division-Level Information

Proposals and Selections
in Previous Years

PSD ROSES Submitted, Selected by # and %



Effects of longer grants



Division-Level Information

Proposal and Review Process

PSD R&A Program List

Program Name	Step-1 Due Date	Step-2 Due Date
Emerging Worlds	03/31/2014	06/04/2014
Solar System Workings	05/23/2014	07/25/2014
Habitable Worlds	11/24/2014	01/23/2014
Exobiology	04/14/2014	06/03/2014
Solar System Obs.	04/14/2014	06/06/2014
PDART	07/17/2014	09/17/2014
Lunar Data Analysis	08/29/2014	10/24/2014
Mars Data Analysis	08/04/2014	10/03/2014
Cassini Data Analysis	07/28/2014	09/26/2014
Discovery Data Analysis	07/21/2014	09/19/2014
LARS	04/28/2014	06/27/2014
Exoplanets	03/31/2014	05/23/2014

****Add PSTAR****

Due date has passed

Division-Level Information

Proposal Information
and Statistics

Step-1 Proposal Decisions

- The time-to-notify after the Step-1 deadline is consistent across the Core programs
- The dominant factor is not the number of proposals, but this year's discussion between program caucuses

Program Name	Submissions	Days to Step-1 Notifications
Emerging Worlds	217	23
Solar System Wkgs.	505	21
Exobiology	189	22
Solar System Obs.	99	23
PDART	140	39
CDAPS	101	10
DDAP	31	7
LARS	29	3
Exoplanets	168	16
MDAP	137	18
LDAP	80	--
PSTAR	69	12

Time-to-notification is given as calendar days between the Step-1 deadline and when the majority of the NSPIRES notifications were sent.

Step-1 Proposal Decisions

Program Name	Submissions	Encouraged	Discouraged (w/ redirect)	Discouraged (w/o redirect)
Emerging Worlds	217	195	19	4
Solar System Workings	505	470	35	0
Exobiology	189	177	9	3
Solar System Obs.	99	86	0	13
PDART	140	126	14	0
CDAPS	101	100	0	1
DDAP	31	30	0	1
LARS	29	29	0	0
Exoplanets	168	162	2	4
PSTAR	69	55	14	0
	1685	1563	96	26

- EW redirects were primarily to SSW and XRP
- SSW redirects were to PDART (45%), EW, and the DAPs

Step-2 Proposal Submissions

Program	Encouraged		Redirected		Discouraged	
	Step-2	No Step-2	Step-2	No Step-2	Step-2	No Step-2
EW	153	38	1	18	1	3
SSW	371	103	7	24	0	0
SSO	69	17	0	0	2	13
EXO	144	33	0	9	0	3
XRP	133	29	1	1	0	4
LARS	24	5	0	0	0	0
All (#)	894	225	9	52	3	23
All (%)	74.1%	18.7%	0.75%	4.31%	0.25%	1.91%

- “Redirected” is Discouraged with a SMD redirect suggestion
- “Discouraged” has no redirect suggestion

Step-2 Proposal Team Changes

- PIs could add funded team members by emailing the program lead more than two weeks before the Step-2 due date

Program Name	Increased Proposal Teams	Decreased Proposal Teams
Emerging Worlds	8.3%	7.6%
Solar System Wkgs.	7.9%	7.7%
Exobiology	12%	2.8%
Solar System Obs.	13%	11%
Exoplanets	6.0%	7.4%

- Nearly as many PIs removed Co-Is as added them (except for in Exobiology)
- NO PI requests to add funded team-members were rejected

Program-Level Information

Solar System Workings

Step-2 Proposal Submissions

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	Step-2	No Step-2	Step-2	No Step-2	Step-2	No Step-2
EW	153	38	1	18	1	3
SSW	371	103	7	24	0	0
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Step-2 Proposal Submissions - SSW

Number of Proposals per PI	Number of Step-1 PIs	Number of Step-2 PIs	2008-2013 Average
8	--	--	< 1%
7	--	--	< 1%
6	--	--	< 1%
5	--	--	< 1%
4	0.8%	0.3%	1.4%
3	5.0%	2.5%	5.7%
2	16%	14%	20%
1	78%	83%	72%

- 2008-2013 programs: LASER, MFRP, OPR, PATM, PGG
- Percentages may not sum to 100% due to rounding

Step-2 Proposal Submissions - SSW

Number of Proposals	Number of Step-1 Institutions	Number of Step-2 Institutions	2008-2013 Average
46+	0	0	< 1%
41-45	1.0%	0	< 1%
36-40	0	0	< 1%
31-35	1.9%	0	1.2%
26-30	0	1.9%	1.5%
21-25	0	1.0%	1.4%
16-20	2.9%	1.9%	1.7%
11-15	4.8%	5.8%	5.0%
6-10	12%	11%	12%
5 or fewer	77%	79%	76%

Step-2 Proposal Submissions

Proposal Budgets	Number of Step-1 Proposals	Number of Step-2 Proposals	2008-2013 Proposals
> \$900k	--	1.9%	< 1%
< \$900k	--	--	< 1%
< \$800k	--	0.8%	1.8%
< \$700k	--	2.4%	2.9%
< \$600k	--	12%	7.4%
< \$500k	--	21%	19%
< \$400k	--	37%	31%
< \$300k	--	18%	22%
< \$200k	--	7.3%	11%
< \$100k	--	1.9%	2.8%

Step-2 Proposal Submissions

- We observe no significant deviation between the SSW proposal loads and historical levels for either PIs or their institutions
- The budget requests in SSW are slightly higher than the 2008-2013 trend, but we have not accounted for inflation or civil servant proposals in these calculations

Program-Level Information

Planetary Data Archiving,
Restoration, and Tools
(PDART)

PDART Overview

- PDART is a new program intended to fill the programmatic gap for those PIs that want to restore, create, or consolidate data, data products, and tools without doing a full, targeted science investigation (or not being able to describe both in the page limit)
- PDART received 140 Step-1 proposals, which is three times what PMDAP had historically received and equal to or greater than the DAPs in previous years
- This is a level of support that demonstrates the community's interest in a data product and resource development program
 - Only 14 Step-1s were redirected from SSW
 - Clarification to the call means that more people will recognize the reference-information creation aspect next year

PDART Step-1 Proposals

- The numbers-by-activity sum to greater than 140 due to proposals citing more than one activity type
- The creation and archiving of Reference Databases was one of the tasks that PDART was intended to encourage
 - 28% of the Step-1s included that task

Activity Type	Submitted
Archiving	69
Data Recalibration	29
Data Product Generation	90
Data Set Restoration	24
Reference Databases	39
Data Digitization	16
Software Tools	60
Total	140

Post Panel Survey
Reviewing the R&A Restructuring

Initial Results from the PSD Panel Operations Survey

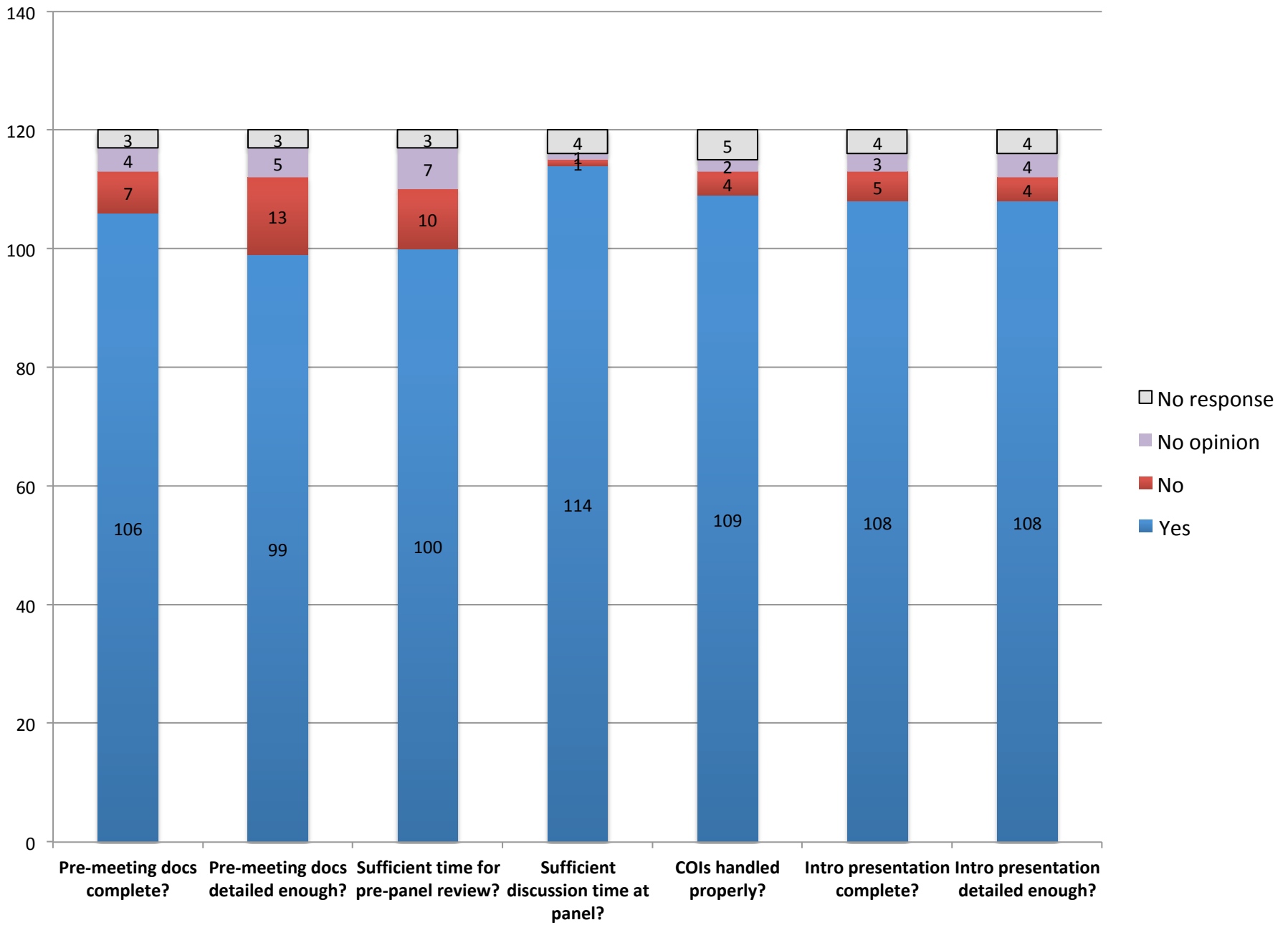
02 September 2014

Background

- Created a survey to ask review panelists their opinion of how things were working in the restructured programs.
- Completely anonymous
- This is a snapshot based on the responses from three panels: XRP, EW, and SSO.
- Survey contains 16 questions.
- Response rate >65%

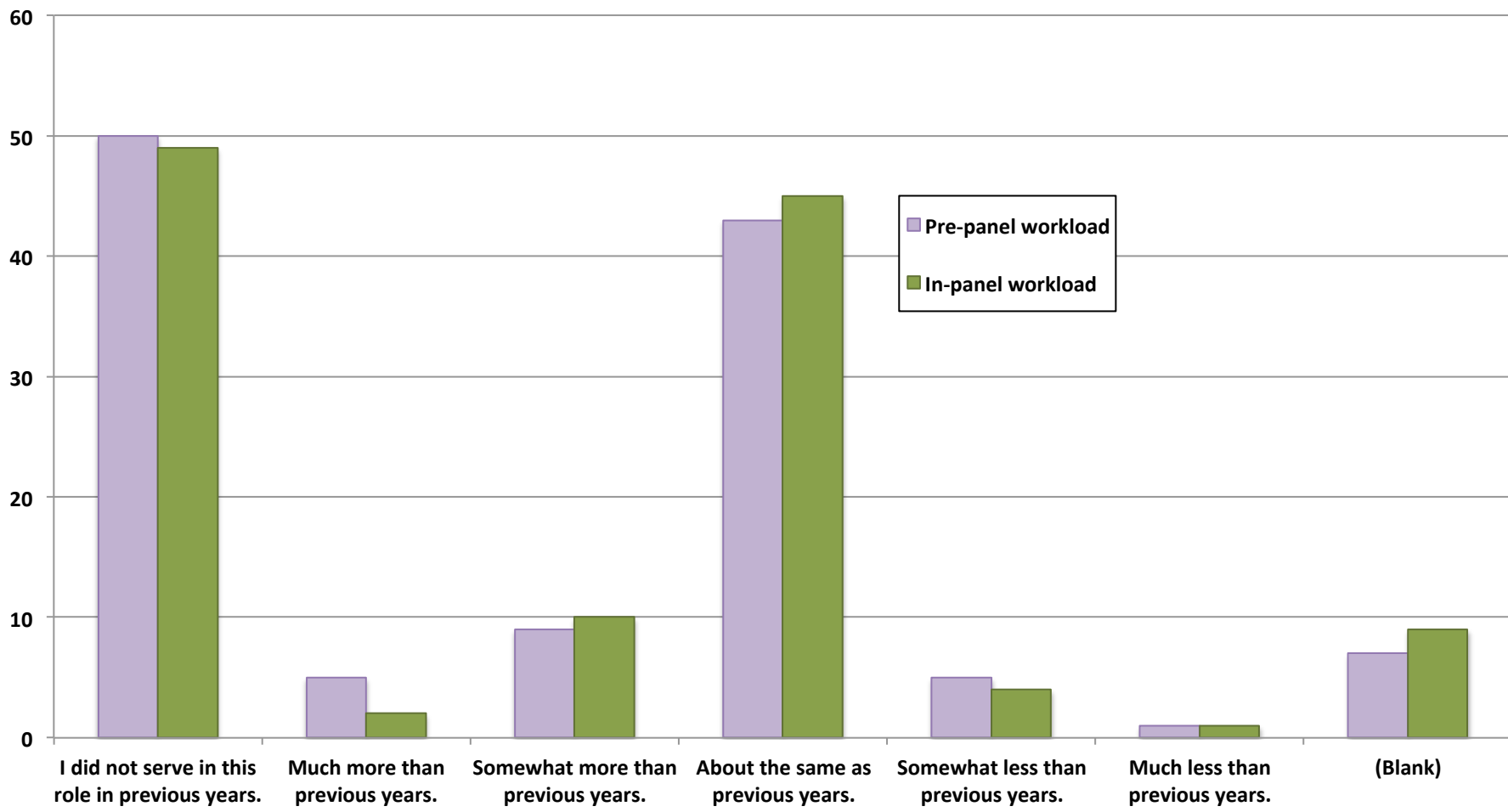
Documentation, Instructions, and COIs

- Did the pre-meeting documentation provide all information needed for an efficient review (e.g., instructions on writing and submitting reviews, declaring conflicts of interest) that you feel should have been described?
- Did the pre-meeting documentation provide sufficient detail regarding your review duties and the review process?
- 90% of reviewers in your panel were assigned their proposals 30 days before the panel review met. Do you feel that you were given sufficient time to read the proposals and write your reviews before coming to the panel review?
- During the review week, was each proposal given sufficient time to be adequately reviewed?
- In your opinion, were conflicts of interest and cases of potential bias handled properly within the panel?
- Did the opening plenary presentation provide all information needed for an efficient review (e.g., instructions on writing and submitting reviews, declaring conflicts of interest) that you feel should have been described?
- Did the opening plenary provide sufficient detail regarding your review duties and the review process?



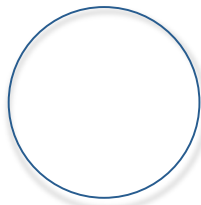
Workload

- If you have served in the same role on review panels in previous ROSES years, what was the amount of time you spent working before this panel relative to previous years?
- If you have served in the same role on review panels in previous ROSES years, what was the amount of time you spent working at this panel relative to previous years?

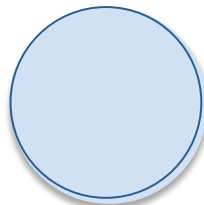


Panel and Panelist Expertise

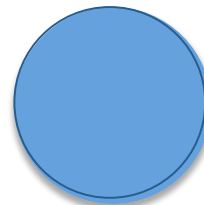
- What fraction of proposals assigned to your panel did you feel covered subject matter that the individuals on the panel had sufficient level and breadth of expertise to review?
- For those proposals that you felt that the panel did not have sufficient expertise to review competently, what fraction did you feel had externals that had that expertise?
- Were the proposals in your panel assigned reviewers with appropriate expertise?



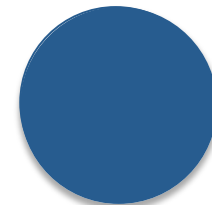
None



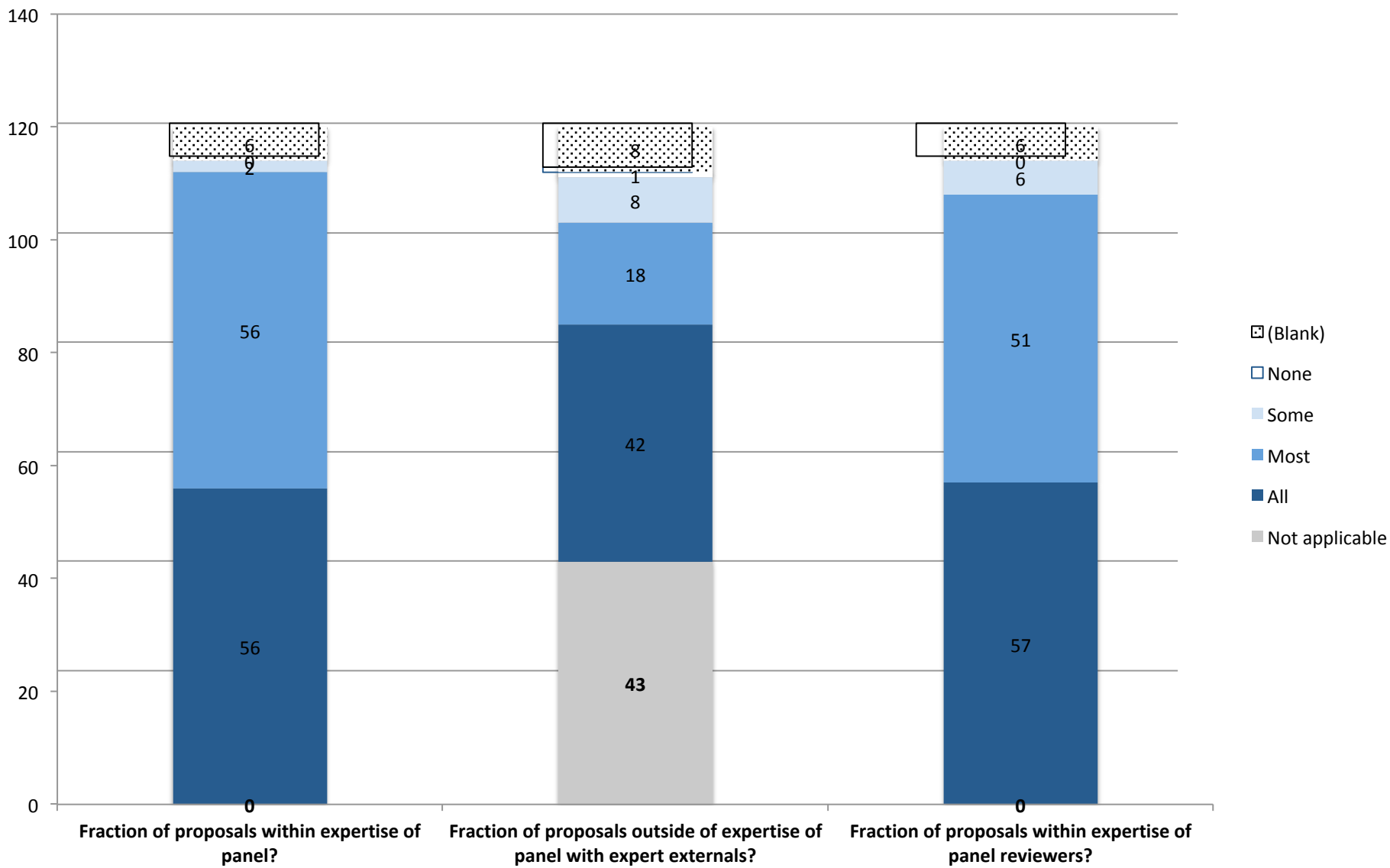
Some



Most

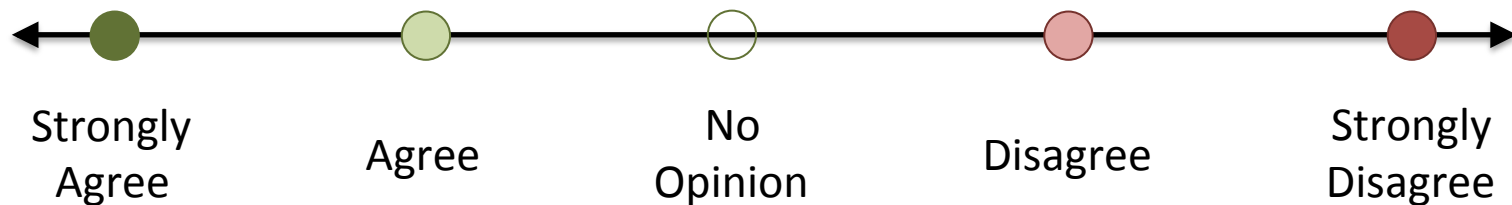


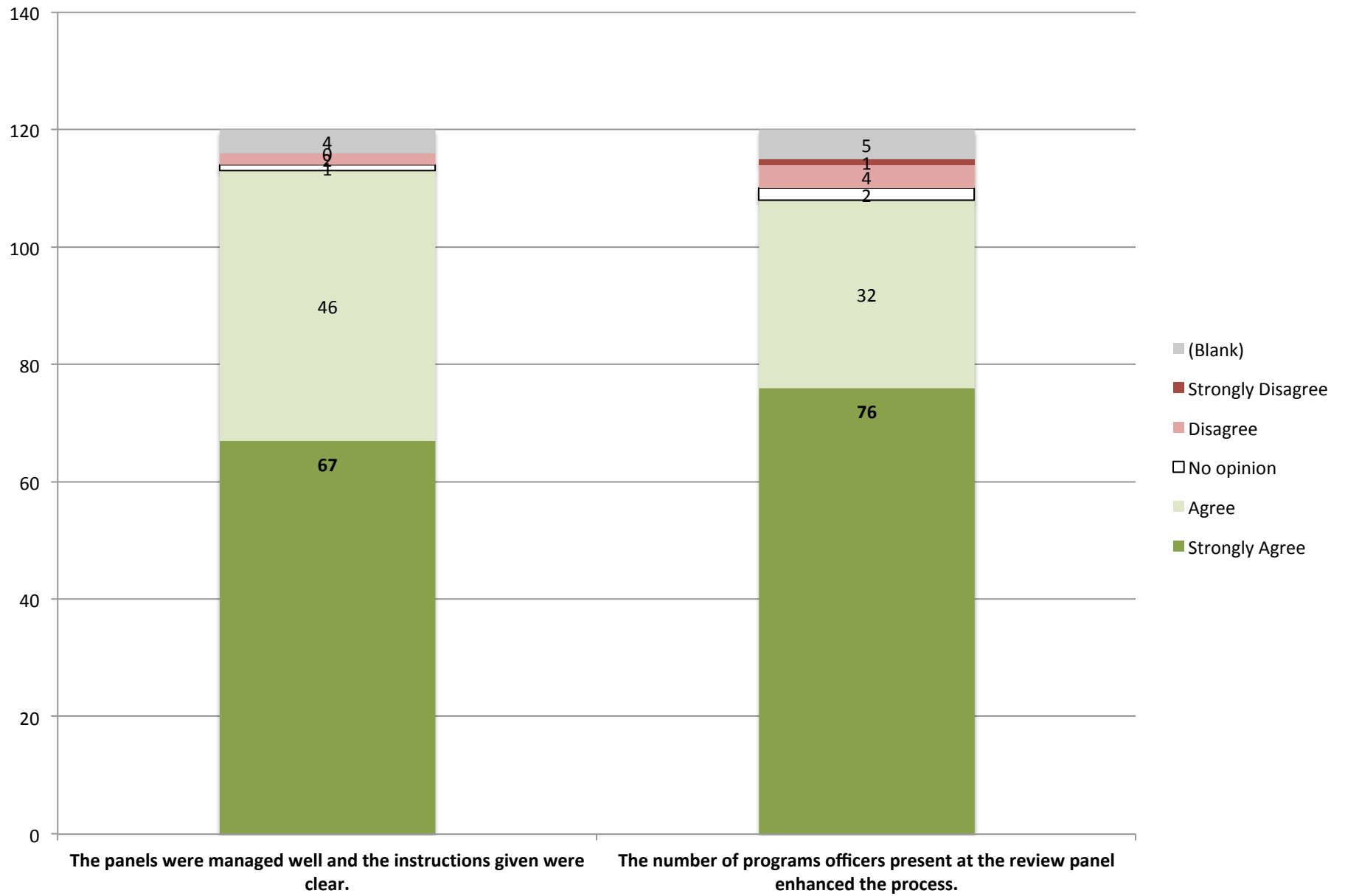
All



Operational Odds and Ends

- The panels were managed well and the instructions given were clear.
- The number of programs officers present at the review panel enhanced the process.





The End

Questions?

Back Up

Two-Step Review Process

- All reorganized PSD R&A programs use the Two-Step process this year
- To ensure that all proposals this year get reviewed
 - A proposal submitted too late to be reviewed in the appropriate program will be reviewed elsewhere on its behalf, but the appropriate program will consider the proposal for funding
 - A proposal that appeared responsive and was Encouraged to submit to Program A in Step-1 but was deemed responsive to Program B in Step-2 will be reviewed by Program A and Program B will consider it for funding

Two-Step Review Process

- What goes into a Step-1 proposal?
 - Science objectives: What do I want to do and why?
 - Methodology: What combination of data analysis, lab work, theory, etc. will I use?
 - Relevance: Justitfication (not just an assertion) that the work is responsive to this program's solicitation and not to another's
- The Step-1 proposal is for an evaluation of relevance, **not** scientific merit or impact

Two-Step Review Process

- Program caucus reads and reviews Step-1 proposals, and identifies the proposals that appear to fall outside of program scope and the programs for which they may be appropriate
- Program caucus discusses potential redirects with other caucuses, this discussion will lead to one of the following:
 - Encourage to the first program
 - Discourage with redirect to a second program, or
 - Discourage with no redirect recommendation (for those Step-1 proposals that are not responsive to any PSD program)
- Program caucus sends decision notifications

Two-Step Review Process

- A given proposal cannot be relevant to both a Core and a Data Analysis Program
- If it seems that the same proposal has been submitted more than once and the PI does not demonstrate how the proposals are not the same, then...
 - The PI may be asked to withdraw one of the proposals, or
 - The caucuses may decide to review the proposal only once
- This year, every proposal will be reviewed, but no given proposal will have multiple funding opportunities

Step-2 Review: Conflict of Interest

- To assemble panels, PSD is using the established conflict of interest policy
 - This policy focuses upon blocking a funded team member's ability to influence the outcome of their own proposal or those proposals in direct competition with it; it does not disqualify a funded team member from participating in a review with a blanket statement
- PIs and Co-Is have panel-level conflicts and will not be in the room while any proposal in direct competition with theirs is being discussed
 - Further, we will not have PIs at the venue when any proposal in direct competition with theirs is being discussed and will avoid that situation for Co-Is
 - This is not a problem for Collaborators as there could not be a financial gain, but they do retain a proposal-level conflict

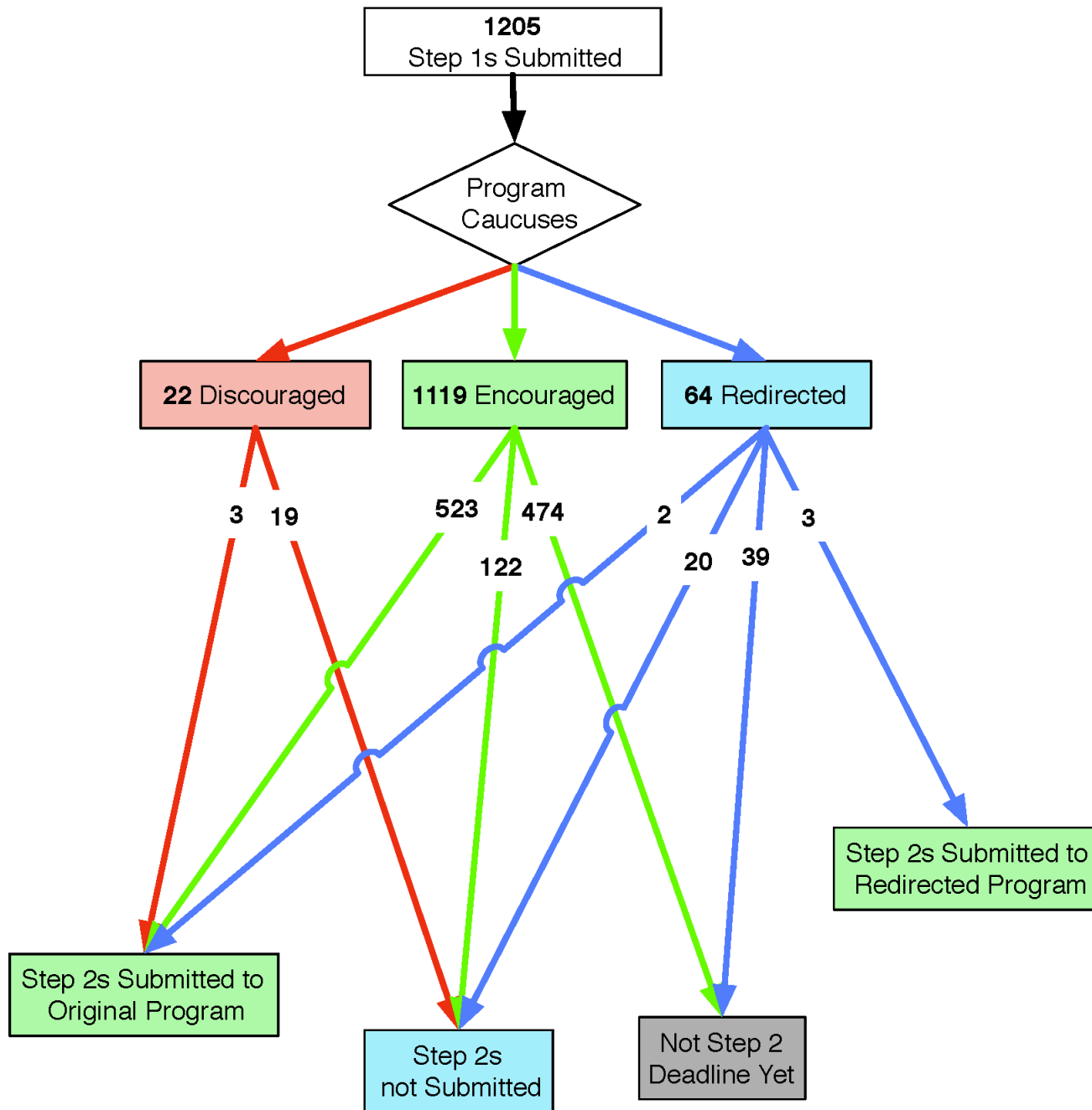
Step-2 Review: Conflict of Interest

- When a program's Step-2 review takes place over multiple weeks, funded team members may serve on the weeks when their proposal is not being reviewed
 - There is then no ability to influence the evaluation of their proposal or of those in direct competition
 - We are still avoiding using PIs as panelists
- We can and do use funded team members as external reviewers by noting their panel-level conflict of interest and explicitly telling proposers to note the conflict and that they are free to accept all, some, or none of the review

Step-2 Review: Panel Organization

- Proposals are generally divided into panels based on science themes and investigations, not specific targets
 - No: Mars geology, giant planet atmospheres
 - Yes: volcanism, climate change
- Large programs, as has been done in previous years, are split between multiple review weeks
 - Panels will be assigned to weeks so as to enable the occasional “panel hopping” that always happens

XRP, EW, SSO, EXO, LARS, SSW



Step-2 Proposal Submissions

Average Proposals per PI	Number of Step-1 Institutions	Number of Step-2 Institutions	2008-2013 Trend
8	--	--	--
7	--	--	--
6	--	--	--
5	--	--	< 1%
4	--	--	< 1%
3	3.7%	--	2.7%
2	8.4%	7.5%	12%
< 2	88%	92%	85%

****Move to Back-Up****