

Notes on AAAC meeting (T. Hoeksema)

In attendance (subject to correction):

Committee: Prisca, Angela, Todd, James L, Brad, Keivan

Agency: Dan, Jim W., Hashima, Kathy, Maria

Our focus is to have an initial draft of parts of the report in time for the March AAAC meeting.

There will be a summary with an Appendix holding as much as we can get done.

Following the agenda, we first reviewed the Draft Outline, and More Detailed Draft from the wiki agenda page at

<https://zzz.physics.umn.edu/lowrad/aaac/jan14>

Outline:

- I. Open with mission statement.
- II. Broad definition of problem
Summarize agency/division by agency/division
- III. Impacts – writers, reviewers, agencies
Maybe add a section on community/field?
- IV. Drill down
- V. Possible Responses
- VI. Future Plans

ACTION ITEM: Beyond existing list of impacts, there are impacts on general community. A section should be added probably to III Impacts. For example, success rate affects different demographics in different ways – e.g. people entering the field, people retiring, and the ability to support larger groups. Often only ‘safe’ science proposals get written.

We reviewed the assignments in the ‘More Detailed Draft’.

Problem section

Names assigned already for ‘problem’ definition and all agreed to work on it.

Todd noted staff turnover in NSF AGS may make it hard to get info there.

Impacts section

1. Effects on proposal writers: need author for intro. Our own anecdotal opinions. I.e. what could/does happen? After discussion we agreed that we are not quite sure what to write at this point. Maybe leave this section for now until we know more about the results of the rest of the document

Some sources of the problem are fairly well understood, e.g. in NASA astrophysics the primary driver is the increased number of proposals. It was noted that this is different for different groups (e.g. heliophysics has had a flat budget for a decade). Even so, there is still some uncertainty about causes and specifics of who is proposing – why are there more proposals in NASA astrophysics and who is writing them?

Success rates can be projected out into the future. In NSF astrophysics the \$ amount requested increases by 2% per year pretty reliably. Given the expected out-year budgets one can expect a success rate of 15% in FY 15 to decline to 9.9% by FY 2019 if there is no facility divestment. With divestment the rate will remain at a still unfortunate rate of 15%.

AAS Survey? Joel P is willing to help draft a survey with AIP. A realistic time scale for that is months. The purpose of the survey is to try to flesh out numbers that agencies do not or cannot provide. E.g. why do proposers decide to do what they do. This is still uncertain because we don’t really know what questions to ask. We agreed to focus on this after our March 2015 report to AAAC. Need to come up with an initial list of questions. Todd & James and others?

2. Effect of Reviewers: As community members we already have a list of likely issues for reviewers. What additional data do we need? Have anecdotes and several were mentioned. For example, panel reviewers are frustrated by spending significant time ranking a large group of proposals if just 2 or 3 out of 20 proposals can be selected.

3. Effect on Agencies: Need some more quantitative estimates of impacts on agency staff. How does it influence time

spent, efficiency in finding reviewers, follow-through of mail-in reviewers, etc.[Note that NASA Astrophysics doesn't use many mail-ins] How many reviewer candidates say yes/no? It was reported that about 33% of reviewers accepts invitations to serve as NSF panelists, and this number has not changed significantly over the last 4 years. With more proposals, managing conflicts of interest can be more difficult. Restricts pool of COI-free reviewers with more proposals. **Ask agency reps to write a paragraph?** A relatively quick response, not necessarily exhaustive, would be helpful – two weeks?

ACTION ITEM: Prisca will send questions specifically to agency reps to ask for their paragraph.

3. *Drill down* Section

What about demographic information? Hard to get for a variety of reasons – legal, staff needs, etc. Keivan offered to take a look at what can be done starting with NSF Astronomy slides (from Dan).

What Constitutes a 'good' proposal?

Are proposals now better or worse than before? Basically no, there are about as many Excellent proposals now as before, but fewer can be selected. NASA Astrophysics data basically bears this out. Hard to get the same hard data from other groups/agencies, but this is the consensus of the program managers that overall quality is no different.

It was noted that comparing absolute 'quality' metrics aren't so useful (at least for NSF) because of panel-to-panel and year-to-year ratings are not calibrated and can be affected by perception of external drivers, panel composition, etc. Seems to be interest in how grades are determined and calibrated,, though it is unclear how whether there is a way to determine whether proposals are better or worse. This may be discussed anecdotally rather than statistically.

Action: Prisca will ask for words from each agency rep.

Next AAAC on 28 January. We will try to get draft of the '*Problem*' section completed by then and as much more as we can.

Prisca will create a doodle poll for February (9-13).