- 1) Clarify whether Hatch Act funding should be included. Our reading of the Hatch Act information on the Dept. of Agriculture site indicates that the department provides R&D funding that would be included on the HERD survey. That is, you would only include the component of R&D conducted by your university, since by its nature, the funding is for cooperative research. The next response covers similar territory, so that explanation will apply to the Hatch Act as well.
- 2) Clarify whether cooperative extension service expenditures are included (agricultural experimental stations are included currently, but CES costs are not mentioned). Cooperative extension service expenditures are not excluded from the survey. Expenditures from the CES can be included IF the funding for the CES flows through the university accounting system, expenditures are for research or development (i.e., not education, training, or community outreach) and expenditures are accounted for in the financial systems as R&D. That's going to be true of Hatch Act funding as well.
- 3) Clarify whether institutional expenditures should include calculated indirect costs. No. Survey instructions for unrecovered indirect cost say, "Calculate this amount as follows for your externally funded R&D only".
- 4) It would be easier (for me at least), if the detail needed for the IDC under recovery was in a separate question and it didn't need to be added in questions 4, 5, 6 and 11. Yes, other schools have noted that adding these cost elements to med schools, clinical trials, and the fields of research is often difficult. But, they are integral cost components. And since we collect data for these sub-areas, they must be included.
- 5) Clarify the breakout of institutional funds as this data is only released in total without the breakout of institutional funds, cost sharing and under-recovery. During the redesign process before the FY 2010 survey, we asked a large number of institutions about their willingness to share the unrecovered indirect costs total publicly. The majority said that while they would be in favor of seeing their peers' information, the potential political repercussions of showing the total amount of underrecovery at their own institution outweighed any benefits. We will reassess the climate as part of our work on future survey changes. In the meantime, we can prepare tables showing unrecovered indirect costs by Carnegie Code, and by broad expenditure groupings.
- 6) Clarify basic, applied, and development. We updated the definitions of basic research, applied research, and experimental development in 2016 to reflect the revised Frascati Manual wording, but the meaning remains consistent with prior surveys. These revisions are only intended to add clarity to the definitions.

The challenging part is applying these definitions to your R&D. We've provided some examples on the survey. Obviously, you might have more difficult cases.

<u>Basic research</u> is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, **without any particular application or use in view.**

<u>Applied research</u> is original investigation undertaken in order to acquire new knowledge. It is directed primarily towards a specific, practical aim or objective.

Experimental development is systematic work, drawing on knowledge gained from research and practical experience and producing additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.

7) What does NSF do with the field of science information? Is this because the NSF wants to know where the funding is going? The definitions are very detailed. The research field data is essential to various types of data users: universities use it for benchmarking peers in fields of relevance for them; policy makers and funders use it to gauge, understand, and influence the direction of funding in specific fields. Overall it provides the data use community with field specific trends, which are very important.

The detailed examples provided come from the Department of Education Classification of Instructional Programs (CIP) codes. This helps consistency across NCSES surveys and other federal statistical surveys (like those at NCES).

- 8) As universities continue to do so much interdepartmental/interdisciplinary research we are curious how the survey will evolve. Several of the survey questions are organized by field of science and so it is not straightforward/structured to report this type of activity unless we split it and allocate it. However, we could only really do that if we knew all the of the units involved and what proportion of the research project relates to each one. I am not sure there is currently an easy way to track this. Right now, certain projects we have are simply reported into the field of science that closely relates to the department id that houses the activity since that is the chart field we use as a base to organize much of the survey data. This is a long-running challenge for the data community and for NSF, in particular. We've been exploring ways to more accurately collect these data and have raised it in site visit interviews we conduct each year. In fact, it was on the agenda of our most recent monthly survey meeting with the key HERD contract staff and NSF staff. So, we recognize the need to collect this better and we're attempting to develop solutions. But, we haven't found an implementable solution yet.
- 9) NSF gives us the direction that all awards from NSF be considered R&D for purposes of categorizing in the Schedule of Expenditures of Federal Awards (SEFA). Does that mean that all NSF awards should be categorized as R&D for the HERD? We understand that institutions have been told by the policy offices of the National Institutes of Health (NIH) and NSF that, for annual reporting purposes such as the Schedule of Expenditures of Federal Awards, all grants received from NIH and NSF can be considered "research." However, these policies do not apply to the HERD Survey and its definitions. The NSF grants policy office is completely separate from NCSES and does not set the reporting procedures for this survey.

The focus of the HERD Survey is funds spent on R&D, not the classification of all federal awards, so you should use the survey's current definition of R&D, which excludes public service grants or outreach programs and non-research training grants. This definition is consistent with other NCSES surveys and the measurement of R&D in other countries.

10) The institution codes some items such as "fee-for-service" work as public service or "other" for campus purpose description, because it's routine work done to support our communities as part

of outreach and engagement. The work isn't about publication and building knowledge at our institution but may be done to support an external company's research, e.g., 10 tests to determine the vitamins in a food product. Would it be acceptable to have a different purpose identified for HERD than for F&A proposal? Yes. As we discussed, the goals of NCSES and the HERD guidelines are slightly different from those of the funding agencies, including NSF.

11)

Under "reporting units", we ask that you . . .

Do not include:

• Federally Funded R&D Centers (FFRDCs). This information is collected separately. See the list

of FFRDCs: <u>http://www.nsf.gov/statistics/ffrdc/</u>.

- Other organizations or institutions, such as teaching hospitals or research institutes, with which your institution has an affiliation or relationship, but which are not components of your institution.
- Other campuses headed by their own president, chancellor, or equivalent within your university system. Each campus is asked to respond separately.

PROPOSED ADDITION

A combined response for multiple campuses, each headed by a president, chancellor, or equivalent, is allowable if all of the following criteria are met:

- The institution has appointed a senior executive to administer the research enterprise at all of the campuses,
- That senior executive's office is the sole office responsible for administering all research awards at the campuses, and
- There is no prime/sub relationship between the campuses on research awards.

Regarding the proposed change to survey:

- How do the members see this impacting their reporting?
- Do they have concerns on impacts to the rankings?
- Do they think this will impact many (or not many) universities now or in the future?