## SRS Response to Bureau of Economic Analysis Letter of Support, February 24, 2009 October 6, 2010

Dr. Dennis Fixler, the Chief Statistician of BEA, submitted a letter of support for the survey (see Attachment) during the clearance process for the FY 2009 academic R&D survey. This letter stated that the collected survey data are crucial to key components of BEA's economic statistics and requested some additional data elements be collected in future years. Some of these elements are planned to be collected on the FY 2010 survey instrument. The letter also requested that BEA be kept informed about modifications to the survey instrument. Below is our response to each of BEA's data requests.

1. R&D expenditures that are not separately budgeted by academic institutions

We asked universities about departmental research expenditures during the initial record-keeping interviews of the survey redesign. We found that these are still extremely difficult to track separately and would be infeasible to ask for on a large-scale survey such as the HERD. It is still our goal to pursue an alternate means of obtaining estimates for departmental research, and we will keep BEA informed of our efforts.

2. Cost detail for: compensation, materials and supplies, depreciation on R&D capital used to perform R&D, overhead costs (other), patent costs

We have included most of these cost details in Question 14 of the FY 2010 HERD and FFRDC surveys. We have not included depreciation on R&D capital. Because the survey tracks expenditures rather than expenses, the full purchase price of equipment is reported on the survey rather than the depreciation. Depreciation on non-federally funded R&D capital is included in the Facilities and Administrative (F&A) costs that the survey captures via the recovered and unrecovered indirect costs, but it is not broken out separately.

Early in the redesign process we considered changing the survey to report expenses rather than expenditures. However, after talking with several higher education accounting experts, we concluded that doing so would result in greater complexity and reporting burden and less accuracy.

We have also not collected patent costs as a separate cost category on the HERD survey. It is our understanding that patent activities are funded by the university's technology transfer office and not within the R&D accounts. We are working on developing an Intellectual Property and Commercialization survey in order to obtain more detailed information on technology transfer activities within institutions. Patent costs could be measured through this survey, although they would not be tied to R&D expenditures.

3. Expenditures on R&D capital (structures, equipment, software)

We have included capital software and equipment expenditures on the HERD and FFRDC surveys, but we have excluded capital expenditures for construction or renovation of research facilities. NSF's S&E Research Facilities Survey requests data on construction and renovation costs.

4. Prices for R&D capital (structures, equipment, software)

We have not included construction costs for the reasons stated above in #3. Estimated completion costs can be obtained from NSF's S&E Research Facilities Survey. We also have not requested the total price for equipment and software because we feel this level of detail is too burdensome for universities.

5. Detail on purchases and receipts from R&D contracts, grants, and pass-throughs, separately reported for transactions with foreign and domestic entities

Upon further consultation with BEA, we added a question to the FY 2010 HERD survey asking for total R&D expenditures by contracts versus grants. We found during the pilot test that the amount of foreign funding to universities is very low, so we did not wish to add burden to the question by requesting a split between foreign and domestic sources. We did not add a similar question to the FFRDC survey, but we are currently investigating whether that addition would be useful as well. We will keep BEA informed regarding any survey amendments.

6. Expenditures of R&D used to create software

BEA mentioned that this should be added as a separate line to Item 2 of the previous Academic R&D survey, total and federal R&D by research field. Please note that we did not update the fields of research as part of the survey redesign, since SRS has been working on a large-scale project to harmonize the fields across all of the surveys. However, based on our interviews with institutions, it does not seem feasible to collect this level of detail, since most code the field of research based on the academic department origin, and do not separately track expenses for software creation.

7. Expenditures of R&D used to <u>purchase</u> software

This is included on the FY 2010 HERD and FFRDC surveys. See answer to #3 above.

8. Receipts universities receive from the sale of R&D

As mentioned above in #2, we are still working to develop an Intellectual Property and Commercialization survey in order to obtain more detailed information on technology transfer activities within academic institutions. This survey would include receipts from the sale of R&D.