SUPPORTING STATEMENT
Bureau of Economic Analysis
2008 Biomedical Research and Development Price Index Expenditure Survey

(OMB CONTROL NO. 0608-0069)

B. Collection of Information Employing Statistical Methods

1. Describe (including a numerical statement) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

Survey respondents will be selected based on award levels, which determine the contributing weight of the respondent in the biomedical research and development price index.

BEA proposes to survey 150 organizations that receive NIH biomedical research awards. The top 100 organizations with the highest award levels will be selected with certainty to participate in the survey, and another 50 organizations will be selected randomly. The probability of an organization being selected for this group of 50 will be equal to the organization's share of total awards among all of the non-top-100 organizations that receive NIH awards.

The potential respondent universe of organizations receiving biomedical research and development funds from NIH was 3,419 in FY 2005. Out of this potential number of NIH award recipients, a sample of 150 will be selected to participate in the proposed survey. The 150 organizations will include the top 100 that account for $16,678 million in total awards, or 71.24 percent of the $23,410 million in total awards for the entire population of 3,419 organizations receiving NIH awards in FY 2005.

The remaining 3,319 organizations were divided into 673 organizations that receive research and development contracts (RDCO's) and 2,646 non-R&D contract organizations (NRDCO's). RDCO's tend to be nonacademic organizations, while NRDCO's tend to be academic institutions. Furthermore, the R&D contracts usually involve a large amount of funds dispersed across a small number individual awards. In contrast, the awards in other categories tend to involve much smaller funding levels, and many organizations receive several awards. Given these differences, and also the difference in the character of the work itself between academic research and nonacademic research and development, these organizations will be separated into two groups: RDCO's and NRDCO's.

Under the assumption that 150 organizations will be in the sample survey, the remaining 50 observations will be divided among the two non-top 100 groups, because the top-100 group will be sampled with certainty. Because the (non-top 100) NRDCO's account for a much larger proportion of total awards than the RDCO's (23.91 percent versus 4.84 percent, respectively), it follows that a larger proportion of the remaining 50 observations should be devoted to the former. Consequently, a random sample of 40 observations will be selected from the 2,646 NRDCO's, and another random sample of 10 observations will be selected from the RDCO's. The probability of an organization being selected will be proportional to its share of total award money received in its group within the non-top-100 organizations. The table below presents a summary of the proposed sampling strategy.

Table 2 Proposed Sampling Strategy

Sector of the Population	Estimated Percent of Award Amounts Accounted for by that Sector	Number of Observations in the Subsample of that Sector	Estimate Percent of the Population Covered by the Subsample
Top 100 organizations in total award	71.25	100	**71.25**
2,646 organizations (not in the top 100) receiving awards that are not primarily in the "R&D contracts" category	23.91	40	**1.5**
673 organization (not in the top 100) receiving awards that are primarily in the "R&D contracts" category	4.84	10	**0.21**
Total	100	150	72.96

It is expected that the survey will have a weighted response rate of 80 percent. The weight of each response is measured by the award received by the respondent divided by the award total for the 150 institutions selected for the survey. For the three years BEA has conducted the survey, the weighted response rate has increased from 43 in the first year to 78 percent in the third year. Response rates have increased as respondents have become more familiar with the survey, a trend that BEA expects will continue in the future.

NIH has stated that current response rates are high enough to generate data of sufficient accuracy for their intended purposes. Their statement is attached below.

NIH Statement:

The National Institutes of Health (NIH) is satisfied with the survey conducted by the Bureau of Economic Analysis, Department of Commerce of institutions that receive awards from the NIH. We hope that OMB will clear the survey under the Paperwork Reduction Act for another three years.

The survey provides timely, essential data on the cost structure of award recipients used to estimate expenditures weights for the Biomedical Research and

Development Price Index (BRDPI). It currently has sufficient response rates and coverage to provide data of satisfactory quality for our purposes. NIH would be adversely affected if the expenditure survey were to be interrupted.

The BRDPI measures changes in the weighted-average of the prices of all the inputs (e.g., personnel services, various supplies, and equipment) purchased with the NIH budget to support research. The weights (including those derived from the survey or extramural institutions) are used to construct the index to reflect the actual pattern (or the proportion) of total NIH expenditures on each of the types of inputs purchased.

The BRDPI supports analysis of trends in NIH expenditures and the development of future budgets. It informs such policy decisions as by how much to adjust the budgets for intramural labs and the average size of extramural awards to compensate for inflation.

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

See answer to number B.1 above.

Collecting data at a less than annual frequency would be more difficult, as the data to be collected are mostly available on an annual basis. In addition, for purposes of the BRDPI, only aggregated annual data will be requested from the respondents.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

To maximize response rates, respondents are given two methods of submitting the completed survey form or their responses: on a paper form by postal mail and over the Internet, i.e., completing or accessing the survey form on the BEA's web page for BRDPI. With the assistance of NIH, non-respondents are contacted through follow-up calls, electronic mail or mail to encourage response. Response rates have not differed substantially across strata and have been trending upward.

To ensure accuracy and completeness, all reports are carefully examined for errors and omissions.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

In 2004, nine organizations were contacted to obtain their feedback on the survey form. Seven of these organizations responded and expressed their willingness to participate in the survey.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor, grantee, or other person who will actually collect and/or analyze the information for the agency.

The proposed survey is designed and will be conducted by the Chief of Research, Government Division, National Economic Accounts Directorate, Bureau of Economic Analysis (BEA).

For further information, contact:

Charlotte Anne Bond
Government Fixed Assets
Government Division, NEA
BEA, Department of Commerce
Phone: (202) 606-5581
E-mail: CharlotteAnne.Bond@bea.gov