# Supporting Statement Survey of State Research and Development

#### B. <u>Collection of Information Employing Statistical Methods</u>

## 1. <u>Description of Universe and Respondent Selection</u>

The State R&D survey will be used to collect data from each of the 50 states, Puerto Rico, and the District of Columbia. Each of these elements will be considered a population unit and will be surveyed with certainty. A unit will have responded when the state coordinator submits the data reported by the state agencies and departments. Data will be reported at unit (state) level.

#### 2. Procedures for Collection of Information

A Web-based survey instrument will be available to each agency and department within the population unit. The state coordinator, who will be identified prior to launching the survey, will be asked to assist with identifying those agencies and departments within the state that support or fund R&D activities. Since the survey is expected to launch in October 2006, follow-up on state agencies and departments that have not submitted data will begin with state coordinators in November 2006.

#### 3. Methods to Maximize Response and Account for Nonresponse

Maximizing response: The key to maximizing response will be to obtain high-level approval and oversight for the data collection effort within each state. The initial communication with each state will be via a letter to governors requesting that they appoint a central coordinator for collection of data. The central coordinator, most likely a state budget or finance official, will assist Census Bureau staff in the collection of data at the department/agency level.

The state coordinators will be responsible for communicating with respondents to encourage and monitor participation in the survey. Compiled responses from each department/agency will be reviewed and officially submitted by the central state coordinator. Survey staff will also monitor responses, but will only intervene at the department/agency level, if necessary.

Accounting for Nonresponse: Missing data are possible in four instances: (1) state does not respond to the survey, (2) state does not respond to particular items in the survey, (3) agencies or departments within a state

do not respond to the survey and, (4) agencies or departments within a state do not respond to particular items on the survey.

Efforts will be made to minimize both unit and item nonresponse. Depending upon the nature and extent of any nonresponse at the end of the data collection period, appropriate nonresponse adjustments may be applied to the data to produce final estimates. These techniques include but are not limited to weighting adjustments, regression or ratio imputation techniques and the use of prior period data. Any imputed items in the micro-data will be appropriately flagged and all final techniques will be thoroughly evaluated and documented.

#### 4. Tests of Procedures or Methods

Project staff consulted with budget or finance officials in five state governments to test the collection methodology. Usability tests will be conducted upon completion of the survey Website.

## 5. <u>Contacts for Statistical Aspects and Data Collection</u>

Statistical staff at both the Census Bureau and the National Science Foundation will be consulted on statistical aspects of the survey and on data collection issues.

Person responsible for data collection:

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Person responsible for analysis of the statistics and publication:

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# **List of Attachments**

- A. Survey Web Design State Coordinator
  B. Survey Web Design State Department/Agency
  C. Letter to States
- D. List of Consultations
- E. Letter of endorsement from Bureau of Economic Analysis