SUPPORTING STATEMENT U.S. Department of Commerce U.S. Census Bureau Survey of State Research and Development OMB Control Number 0607-0933

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

1. Description of Universe and Respondent Selection

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

2. <u>Procedures for Collection of Information</u>

A Web-based survey instrument is made available to each agency and department within the population unit. The state coordinator, who has been identified prior to launching the survey, is 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 April 2010, follow-up on state agencies and departments that have not submitted data will begin with state coordinators in July 2010.

3. <u>Methods to Maximize Response and Account for Nonresponse</u>

Maximizing response: The key to maximizing response is by obtaining high-level approval and oversight for the data collection effort within each state. The initial communication with each state is via a letter to the 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 are responsible for communicating with respondents to encourage and monitor participation in the survey. Compiled responses from each department/agency are reviewed and officially submitted by the central state coordinator. Survey staff also monitors 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 that do not respond to particular items on the survey.

Efforts are 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.

For the fiscal year 2007 survey, there was a response rate of 100% at the state level, and 98% at the agency level. Response rates are expected to remain at similar levels for future iterations of the survey.

4. <u>Tests of Procedures or Methods</u>

Project staff consulted with employees from multiple state governments who hold roles primarily in the budget and finance offices, to test the collection methodology prior to the FY2007 survey kickoff. Usability tests were also conducted upon completion of the survey Website prior to the FY2007 survey kickoff. Respondent debriefings were conducted after the FY2007 survey cycle to insure that the survey definitions were clear, the survey instrument was functional, and that the survey was not overly burdensome for state coordinators or state agency respondents. Respondent debriefings are scheduled to take place in late 2009 for continued follow up after the FY2007 cycle. For all follow up contact, we created protocol with the survey methodologists at both the Census Bureau and NSF to be certain we would thoroughly discuss all important discussion points with our respondents.

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

Statistical staffs at both the Census Bureau and the National Science Foundation have been consulted on statistical aspects of the survey and on data collection issues.

Person responsible for data collection:

Kenneth Herrell, Survey Statistician Governments Division U.S. Census Bureau (301) 763-5158 (301) 763-6235 (fax) <u>kenneth.herrell@census.gov</u>

Person responsible for analysis of the statistics and publication:

Michael Yamaner, Analyst Research and Development Statistics Program Division of Science Resources Statistics National Science Foundation (703) 292-7815 (703) 292-9091 (FAX) myamaner@nsf.gov

List of Attachments

- A. Blank Survey (State Coordinator)
- B. Blank Survey (Agency Respondent)
- C. Introductory Letter to States (Sample from Fiscal Year 2007 Survey)
- D. List of Consultations
- E. Letter from the Bureau of Economic Analysis in Support of Data Collection
- F. Thank You Letter to States (Sample from Fiscal Year 2007 Survey)