

2008/12 BACCALAUREATE AND BEYOND  
LONGITUDINAL STUDY: (B&B:08/12)

Supporting Statement Part A  
Request for OMB Review  
OMB # 1850-0729 v.8

Submitted by  
National Center for Education Statistics  
U.S. Department of Education

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## **A. Justification**

### **1. Circumstances Making Collection of Information Necessary**

#### **a. Purpose of this Submission**

The National Center for Education Statistics (NCES), within the U.S. Department of Education (ED), is requesting approval to conduct a second follow-up data collection and file matching for the 2008/12 Baccalaureate and Beyond Longitudinal Study (B&B:08/12). This study is being conducted under contract # ED-05-CO-0033 with RTI International<sup>1</sup> and its primary subcontractor, MPR Associates, and consultants Dr. Cynthia Decker and Ms. Andrea Sykes.

We are requesting clearance for data collection materials and procedures for the second follow-up with the B&B:08 cohort, including interviews and file matching. We are also requesting approval to conduct panel maintenance activities to support possible future contacts with the B&B:08 cohort<sup>2</sup>. The proposed data collection follows a field test study conducted in 2011. Because only minimal changes were expected between the field test and full scale studies, a waiver of the 60-day Federal Register Notice was requested in the field test OMB submission. The waiver was approved by OMB on July 1, 2011 (OMB# 1850-0729 v.7). This submission proposes a full-scale experimental design resulting from the field test experiments that explored new approaches to using monetary incentives to address concerns of nonresponse bias. Survey instrument revisions are proposed based on observations from cognitive testing conducted from October 2011 through February 2012.

The Baccalaureate and Beyond Longitudinal Study (B&B) is designed to follow a cohort of baccalaureate recipients and collect information about the education, training, employment, workforce activities, and other life experiences in the years following degree completion. Data from B&B are used to help researchers and policymakers better understand the choices college graduates make regarding employment and education in the years following receipt of the bachelor's degree.

Previous publications related to or based on data from B&B are listed in Appendix A. Appendix B lists the study's Technical Review Panel (TRP). The confidentiality pledge and affidavit of nondisclosure completed by all project staff having access to individually-identifying data are provided in Appendix C. Letters and all contacting materials are found in Appendix D. A description of the security procedures in place for the linkages to administrative data sources is provided in Appendix E. Data security language for vendor contracts is shown in Appendix F. The data collection instrument facsimile is presented in Appendix G. Appendices H and I include results from explorations of the R-indicator in a responsive design, and selected findings from the field test data collection experiments. A report summarizing findings from the cognitive testing conducted in preparation for full-scale instrument development is included in Appendix J.

#### **b. Legislative Authorization**

The B&B longitudinal series is conducted by NCES within the Institute of Education Sciences (IES) in close consultation with other offices and organizations within and outside the U.S. Department of

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<sup>1</sup> RTI International is a trade name of Research Triangle Institute.

<sup>2</sup> At this time, additional follow-up with the B&B:08 field test and full-scale cohorts is planned but not yet contracted or funded.

Education (ED). B&B is authorized by the Education Sciences Reform Act of 2002 (20 U.S.C. § 9543), which requires NCES to:

...collect, report, analyze, and disseminate statistical data related to education in the United States and in other nations, including:

(1) collecting, acquiring, compiling and disseminating full and complete statistics on the condition and progress of education, at the preschool, elementary, secondary, and postsecondary levels in the United States, including data on—

(E) educational access to and opportunity for postsecondary education, including data on financial aid to postsecondary students

Section 183 of the Education Sciences Reform Act of 2002 further states that

...all collection, maintenance, use, and wide dissemination of data by the Institute, including each office, board, committee, and Center of the Institute, shall conform with the requirements of section 552A of title 5, United States Code [which protects the confidentiality rights of individual respondents with regard to the data collected, reported, and published under this title].

### **c. Prior B&B Studies**

The B&B series provides a longitudinal study of the education, work, financial, and personal experiences of individuals who have completed a bachelor's degree at a given point in time. Three B&B cohorts, each sampled almost a decade apart, have allowed researchers to evaluate how baccalaureate degree recipients have fared at differing times in recent history. Students are identified as bachelor's degree recipients through the National Postsecondary Student Aid Study (NPSAS), a nationally representative trend study of postsecondary students designed to determine how students and their families pay for postsecondary education. B&B:08/12 is the second follow-up of a panel of baccalaureate degree recipients identified in the 2007–08 National Postsecondary Student Aid Survey (NPSAS:08) and re-interviewed in 2009 as part of the B&B:08/09 first follow-up.

B&B:08/12 is the third cohort of bachelor's degree recipients selected from a NPSAS base-year sample for longitudinal study by NCES. The first cohort (B&B:93/03), received their bachelor's degrees during the 1992–93 academic year and was re-interviewed in 1994, 1997, and 2003 (one, four, and 10 years after college graduation, respectively). Postsecondary transcripts were also collected for this cohort. The second cohort, who graduated in 1999–2000 (B&B:2000/01), was re-interviewed one year after bachelor's degree completion in 2001. The current cohort contains students who earned their bachelor's degrees in 2007–08. This cohort has completed one follow-up (B&B:08/09), which included a transcript data collection. B&B:08/12 will be the second follow-up of the B&B:08 cohort, and will be conducted 4 years following bachelor's degree completion.

The chronology of the previous administrations of the NPSAS study and its associated longitudinal components is presented in Table 1. Similar to the first B&B series, additional follow-up studies with the B&B:08 cohort may be conducted 10 years after bachelor's degree receipt (contingent upon future contract(s) being awarded). For all studies, full-scale data collection was preceded by a field test data collection one year earlier in order to test methods and procedures planned for the full-scale data collection.

**Table 1. Chronology of NPSAS and its longitudinal components**

| Base year         | First follow-up                  | Second follow-up     | Third follow-up      |
|-------------------|----------------------------------|----------------------|----------------------|
| NPSAS:90          | BPS:90/92                        | BPS:90/94            | —                    |
| <b>NPSAS:93</b>   | <b>B&amp;B:93/94<sup>1</sup></b> | <b>B&amp;B:93/97</b> | <b>B&amp;B:93/03</b> |
| NPSAS:96          | BPS:96/98                        | BPS:96/01            | —                    |
| <b>NPSAS:2000</b> | <b>B&amp;B:2000/01</b>           | —                    | —                    |
| NPSAS:04          | BPS:04/06                        | BPS:04/09            | —                    |
| <b>NPSAS:08</b>   | <b>B&amp;B:08/09<sup>1</sup></b> | <b>B&amp;B:08/12</b> | <b>TBD</b>           |

— Not applicable.

<sup>1</sup> Includes transcript study

NOTE: B&B = Baccalaureate and Beyond; BPS = Beginning Postsecondary Students; NPSAS = National Postsecondary Student Aid Study.

## 2. Purpose and Uses of the Data

### a. The B&B Cohort

The primary purpose of the B&B studies is to describe the postbaccalaureate paths of new college graduates, with a focus on their experiences in the labor market and post-baccalaureate education, their education-related debt, and the experiences of those who have begun careers in K–12 education. Since graduating from college in 2007–08, members of this B&B cohort have been moving into and out of the workforce, enrolling in additional undergraduate and graduate education, forming families, and repaying undergraduate education-related debt. Documenting these choices and pathways, along with individual, institutional, and employment characteristics that may be related to those choices, provides critical information on the costs and benefits of a bachelor’s degree in today’s workforce.

The B&B series of studies is critical to understanding the education paths of *all types* of bachelor’s degree recipients. These studies include both traditional-age and non-traditional-age college graduates, populations whose education options and choices often diverge considerably, and allow study of the undergraduate paths taken by these different graduates, particularly the time they take to complete the bachelor’s degree.

### b. Policy Relevance

The B&B:08/12 data will allow researchers to address a wide variety of policy-relevant topics, including the consequences of undergraduate education debt, the career and continuing education paths of science, technology, engineering, and mathematics (STEM) graduates, the academic preparation and career paths of K–12 teachers, and the impact of the recent recession on graduates’ employment decisions

**Education debt and loan repayment.** First, as the price of college has increased across the country, focus on the amount of education debt students accrue and whether loan repayment is burdensome has also increased. Borrowing for an undergraduate education is predicated on the assumption that future employment will allow the debt to be repaid. B&B:08/12 will provide the latest information on recent college graduates’ debt burden and employment experiences, including their selection of income-based and income-contingent repayment plans, and whether their income is sufficient to repay their loans. The data will also allow an examination of the rates of repayment and default on federal student loans among students who graduated from various types of institutions, and the

relationship between loan debt and post-baccalaureate enrollment and employment, in particular, whether contemporary college graduates make different graduate enrollment and employment decisions than they might otherwise due to their education-related debt.

**Science, technology, engineering, and mathematics.** Second, given the crucial roles that science and technology play in the global economy and solving critical social problems, policymakers and business leaders need information on college graduates' science, technology, engineering, and mathematics (STEM) expertise and use of that expertise in the labor market. The importance that policymakers place on recruiting and retaining people in high-skill STEM occupations was clear in President Obama's State of the Union address in January 2012. Reflecting this concern, the administration's Engage to Excel initiative aims to fill the projected 1 million jobs that will become available in STEM fields between 2008 and 2018 with highly-skilled workers. Analyzing the paths of graduates with STEM majors as well as those who work in STEM occupations will provide information about why and when people move into and out of STEM jobs. The B&B data allow the study of whether college graduates with training in these fields are using that training in the workplace or pursuing graduate education in STEM fields.

**The K-12 teacher pipeline.** Third, K-12 teacher recruitment and retention continue to be important issues for education policymakers, and B&B's focus on those who enter K-12 teaching after college graduation allows in-depth study of teacher experiences, satisfaction, and mobility into and out of the K-12 teaching profession. There is a particular interest in the capacity of K-12 teachers in STEM disciplines to prepare future generations of scientists, engineers, and mathematicians, and the B&B:08/12 data allow close examination of these issues not only because of the oversample of STEM graduates but also because of the Postsecondary Education Transcript Study (PETS) data. As part of PETS, NCES collected B&B:08 graduates' transcripts from the degree-granting institution, permitting study of students' level of preparation and performance in undergraduate mathematics and science courses. B&B's unique contribution to policymakers' understanding of the K-12 teaching workforce is researchers' ability to use these data to compare K-12 teachers with their similarly educated peers on such important topics as career paths, workplace satisfaction, and salaries.

**Employment in an economic downturn.** Finally, the B&B:08 cohort is well-suited for examining recent college graduates' employment and job search experiences in challenging economic conditions, which include higher-than-normal unemployment rates and longer unemployment spells. The data from this study will allow an examination of un- and under-employment, job satisfaction, job search behavior, and the value of the bachelor's degree in finding employment.

Specific questions to be addressed in B&B:08/12 include the following:

#### **Debt and Finances**

- How much do bachelor's degree recipients owe on undergraduate student loans 4 years after college? What proportion of students borrowed further for additional education and training?
- How is the status of graduates' loans associated with their early labor market experiences? If in repayment, what are the monthly payments? Who is having difficulty repaying? Are families helping to repay loans?

## **Graduate Education and STEM**

- What factors are associated with enrollment beyond the bachelor's degree? What factors do college graduates consider when deciding to enroll in additional undergraduate education and/or graduate education?
- What percentage of college graduates enroll in graduate or professional degree programs, and what percentage complete a graduate or professional degree within 4 years of receiving a bachelor's degree?
- What percentage of bachelor's degree recipients who enroll in graduate education do so in STEM fields, and what proportion of those had undergraduate majors in STEM fields? How does this enrollment relate to graduates' career paths?
- What paths do college graduates with bachelor's degrees in STEM fields take after graduation? What percentage obtain employment or enroll in further education in STEM fields? What percentage of graduates who received a non-STEM bachelor's degree are employed in STEM occupations?

## **K–12 Teaching**

- How did the undergraduate experiences of graduates who taught differ from those of graduates who considered teaching, those who prepared to teach, and other graduates?
- What percentage of college graduates were employed as a teacher within 4 years of receiving a bachelor's degree? What percentage taught throughout the period?

## **Labor Market Outcomes**

- What types of careers are college graduates pursuing, and how successful are they in obtaining jobs within 4 years of graduation?
- How do 2007–08 graduates' labor market outcomes 4 years after receiving a bachelor's degree compare to those observed among 1992–93 graduates in 1997?

Answers to these and other questions are vital if policymakers are to respond adequately to changing environments in postsecondary education and the labor market. As appendix A indicates, since B&B's inception, the B&B series of data have been used extensively to explore Postsecondary, Adult, and Career Education (PACE) program issues and have resulted in numerous NCES publications.

### **c. Previous Agency Use of the Data**

#### **1. Education**

In addition to postbaccalaureate experiences, B&B data allow examination of graduates' undergraduate experiences. Between one-third and one-half of bachelor's degree recipients (35 percent among 1992–93 graduates, 39 percent among 1999–2000 graduates, and 44 percent among the B&B:08/12 cohort of 2007–08 graduates) completed the bachelor's degree within 4 years of postsecondary entry, and most (74 percent of 1992–93, 73 percent of 1999–2000, and 76 percent of 2007–08 graduates) completed their degrees within 6 years of entering postsecondary education (Bradburn et al., 2003; Cataldi et al., 2011; McCormick and Horn, 1996). In all three cohorts, 63–65 percent of graduates earned their degrees from public colleges and universities (Bradburn et al., 2003; Cataldi et al., 2011; McCormick and Horn, 1996).

Once they complete a bachelor's degree, many graduates continue formal education at various postsecondary levels. In 1994, about one-quarter (27 percent) of 1992–93 graduates had enrolled for

further education, including 17 percent who were enrolled at the graduate level (McCormick and Horn, 1996). By 1997, 30 percent had enrolled in graduate education, and 12 percent had earned graduate or first-professional degrees. By 2003, some 40 percent of 1992–93 bachelor’s degree recipients had enrolled in a master’s, first-professional, or doctoral degree program, including 25 percent who had completed such a degree, 6 percent who were currently enrolled, and 9 percent who had enrolled in a graduate program but left before completion (Bradburn, Nevill, and Cataldi, 2006).

On average, most graduates waited 2 to 3 years to enroll in a graduate degree program, and among those who enrolled between 1993 and 2003, about 62 percent had earned at least one graduate degree by 2003 (Nevill and Chen, 2007). Master’s degree students took an average of 3 years to complete their degree, first-professional students took about 4 years, and doctoral students took more than 5 years. Rates of persistence and completion were higher among students who entered graduate school immediately after earning a bachelor’s degree, who attended full time and enrolled continuously, and who enrolled in multiple graduate degree programs (Nevill and Chen, 2007).

## **2. Employment, Career Paths, and Teaching**

In the year after graduation, 87 percent of both 1992–93 and 1999–2000 bachelor’s degree recipients were employed, most (73–77 percent) full time (Bradburn et al., 2003; McCormick and Horn, 1996). Among employed graduates, about 70 percent in each cohort believed their job had career potential or was the start of a career, and about three-quarters were in jobs related to their undergraduate major. In 1997, some 89 percent of 1992–93 graduates were employed, 81 percent full time (McCormick et al., 1999). Four-fifths of graduates employed in 1997 believed their jobs had career potential, and 73 percent believed their jobs were related to their undergraduate major.

About 5 percent of each cohort were unemployed 1 year out, with an additional 1 percent of 1999–2000 graduates laid off or waiting to report to work in 2001 (Bradburn et al., 2003; McCormick and Horn, 1996). At the 4-year mark, 3 percent of 1992–93 graduates were unemployed. Among the most recent cohort of graduates from 2007–08, 84 percent were employed—57 percent in one full-time job—and 9 percent were unemployed one year after graduation in 2009 (Cataldi et al., 2011).

The first follow-up data also laid the groundwork for studying graduates’ experiences teaching at the elementary and secondary levels. The proportion of graduates who had taught within 1 year of receiving a bachelor’s degree increased slightly, from 10 percent to 12 percent, between the 1992–93 and 1999–2000 cohorts, respectively, while 8 percent of the 2007–08 cohort had taught within one year. An additional 5 percent of 1992–93 and 2007–08 graduates and 3 percent of 1999–2000 graduates had prepared or been certified to teach, but had not taught within the year following graduation.

Later follow-ups of the 1992–93 cohort allowed further study of the teacher pipeline. Thirteen percent of graduates had taught by 1997 (Henke, Chen, and Geis, 2000), although 21 percent of those who had taught since graduation were not teaching in 1997. By 2003, one-fifth (20 percent) of 1992–93 bachelor’s degree recipients had taught in an elementary or secondary school. Approximately 11 percent of these graduates were teaching when interviewed in 2003, and another 9 percent had taught at some point but were not teaching at the time of the interview.

### 3. Student loan debt and debt burden

Choy and Li (2006) compared graduates' student loan repayment status and resulting debt burdens (monthly loan payments as a percentage of monthly salary income) 1 year after graduation between the first two cohorts. Members of the earlier cohort finished their undergraduate borrowing before the changes in the Stafford loan program were implemented, whereas most members of the later cohort had done their undergraduate borrowing under the new rules. Although both the percentage of graduates who had borrowed for their undergraduate education and the average total amount borrowed (adjusting for inflation) increased, the median debt burden 1 year after graduating was about the same for both cohorts.

By 2003, three-quarters of 1993–94 graduates with no additional degree enrollment had repaid all of their undergraduate loans. Of the 26 percent who were still repaying their loans in 2003, the median debt burden was 3.3 percent. Among Stafford loan borrowers, 5 percent had a deferment, 12 percent had a period of forbearance, and 10 percent defaulted at some point. Students did not tend to have immediate repayment problems; the average length of time between graduation and the first deferment, forbearance, or default was from 4 to 5 years. For many, the problems were temporary, with 45 percent of defaulters entering repayment later. In addition, most of those who deferred or had periods of forbearance were able to recover financially and did not default.

### 3. Use of Information Technology

To improve the efficiency of student data collection, B&B:08/12 will use web-based student interviewing. The modes of data collection will be web-based self-administered surveys and computer-assisted telephone interviewing (CATI).

Recent collections have demonstrated that about 80 percent of interview completions have been web interviews. Table 2 shows the distribution by mode of interview completions for the NPSAS:08 and B&B cohort.

**Table 2. Distribution of interview mode for NPSAS:08 and B&B:08 cohort field test and full-scale studies**

| Study                | Distribution by mode of interview |           |       |
|----------------------|-----------------------------------|-----------|-------|
|                      | Web                               | Telephone | Field |
| NPSAS:08 field test  | 73.4                              | 26.6      | †     |
| NPSAS:08 full-scale  | 69.1                              | 30.9      | †     |
| B&B:08/09 field test | 72.9                              | 23.7      | 3.3   |
| B&B:08/09 full-scale | 81.0                              | 16.0      | 3.0   |
| B&B:08/12 field test | 93.0                              | 7.0       | †     |

† Not applicable.

NOTE: B&B:08/09 = 2008/09 Baccalaureate and Beyond Longitudinal Study; NPSAS:08 = 2007–08 National Postsecondary Student Aid Study.

### 4. Efforts to Identify Duplication

In the planning and conduct of the B&B study series, NCES has consulted with university researchers, other federal and nonfederal experts, and relevant groups and associations to improve the focus of the B&B study series and to ensure that B&B avoids duplication of effort with similar studies. NCES routinely consults with staff in ED's Office of Postsecondary Education, the National Science Foundation, the American Council on Education, the Career College Association, the National Association of

Independent Colleges and Universities, the Institute for Higher Education Policy, and the National Council for the Accreditation of Teacher Education to confirm that the data to be collected for the B&B study are not available from any other sources. Further, these consultations provide methodological insights from the results of other longitudinal postsecondary student studies conducted by NCES and other federal agencies and nonfederal sources, and the consultations assure that the data collected through B&B will meet the needs of the federal government and other relevant organizations.

## **5. Method Used to Minimize Burden on Small Businesses**

B&B does not impose any burden on small businesses or other small entities.

## **6. Frequency of Data Collection**

A new B&B cohort has been created about every eight years since the first set of studies was initiated with NPSAS:93. B&B:93 and B&B:08 were the two cohorts in which college transcript data were collected. The current B&B study, B&B:08/12, will be conducted 4 years after the base-year NPSAS:08 data collection. Though not currently contracted, at least one additional follow-up study of the B&B:08 cohort is anticipated in 2018.

The NPSAS and its longitudinal spin-off studies, BPS and B&B, are conducted to reflect the large-scale and rapid changes in federal policy concerning postsecondary student aid—eligibility restrictions change, sizes of grant and loan amounts fluctuate, and the balance between various aid options can change dramatically. A recurring study is essential to help predict future costs for financial aid because loan programs create continued obligations for the federal government as long as the loans are being repaid. Second, repeated surveys can capture the changing nature of the postsecondary environment. With the longitudinal design of the NPSAS survey and B&B follow-ups, representative national samples of degree-receiving postsecondary students with similar base-year characteristics may be compared over time to determine the effects of changes in federal policy and programs.

## **7. Special Circumstances of Data Collection**

No special circumstances of data collection are anticipated.

## **8. Consultants Outside the Agency**

The 60-day Federal Register notice was published on February 11, 2011 (76 FR, No. 29, p. 7827). No public comments were received in response to this notice. The OMB approval of the field test portion indicated that NCES does not have to conduct a 60 day comment period prior to submitting its plans for the full scale study, since they are already specified in the field test submission, except for the decisions resulting from the experiments embedded in the field test.

Recognizing the significance of the B&B:08/12 data collection, several strategies have been incorporated into the project work plan that allow for the critical review and acquisition of comments relating to project activities, interim and final products, and projected and actual outcomes. These strategies include consultations with persons and organizations both internal and external to NCES, ED, and the federal government.

Previous B&B implementations have benefited from a standing federal review panel comprising staff from many federal offices, including ED's Office of Postsecondary Education, OMB, and the Congressional Budget Office. Some members of this panel also belong to the TRP for NPSAS. The membership of the TRP (see appendix B) represents a broad spectrum of the postsecondary community. The nonfederal members serve as expert reviewers on the technical aspects of the study design, data collection procedures, and instrument design, especially item content and format. The TRP reviewed the proposed study design and data domains during its meeting in November 2011.

## 9. Provision of Payments or Gifts to Respondents

The use of incentives is proposed for three purposes:

1. *To encourage sample members to update their contact information prior to the start of data collection.* All cases will be offered an incentive of \$10 to update their contact information via the study website prior to the start of data collection (approximately 3-4 weeks before the 2012 data collection begins).
2. *To encourage early response using the self-administered web survey.* Once data collection begins, all cases will be offered an initial incentive of \$20, \$35, or \$55, based on their predicted response propensity<sup>3</sup>.
3. *To minimize nonresponse bias through a responsive design approach that will be tested experimentally (see Part B, section 3.c).* After about 3 months of data collection, the first step of the responsive design approach will be implemented. As an experimental treatment, cases among the remaining nonrespondents that have been identified as the most likely to contribute to nonresponse bias will be offered an additional \$15 incentive.

The Tests of Procedures and Methods section, Supporting Statement Part B section 8 of this submission, discusses in detail specialized plans for reducing nonresponse bias through a responsive data collection design that will identify and provide special treatment for nonresponding cases predicted to contribute most to nonresponse bias. The use of incentives is an integral part of the overall data collection plan that includes multiple strategies to minimize bias-inducing nonresponse (e.g. intensive tracing, the use of specially trained interviewers and abbreviated interviews.)

The Education Longitudinal Study of 2002 Third Follow-Up field test project conducted an incentive experiment during the panel contact information update phase. Half of the field test student sample was randomly assigned to the treatment group (offered a \$10 incentive) and the remaining half to the control group (offered no incentive). Sample members assigned to the treatment group were offered a \$10 incentive for confirming or updating their contact information. Overall, the \$10 treatment group had a higher participation rate (25 percent) than the control group (20 percent,  $t = 1.90$ ,  $p < .05$ ). Further evaluation of the overall data from the panel maintenance effort illustrates that the contact information provided by those who responded largely included new information not already in the study database. For 82 percent of the responding cases, at least one new address, phone number, or email address was provided for the student, parent, or both. This indicated that participation was not limited to the easiest-to-

<sup>3</sup> Response propensity scores were calculated for the B&B:08/12 full-scale sample as part of a field test experiment. See the field test package (1850-0729 v.7, approved 7/1/2011) for a description of how propensity scores were calculated. NCES presented the field test experiment results to OMB in a meeting held on November 20, 2011 (the slides from this meeting are attached as appendix I). Full-scale incentive offers were determined based on the field test results.

locate cases whose information was already current in the database. Being able to make direct contact with the sample student during data collection saves time and costs, and is likely to increase interview participation. Given the results of this experiment, we recommend the implementation of this incentive procedure for B&B.

By maximizing our locating rates and encouraging nonresponding sample members to participate in the study, we expect to reduce nonresponse bias. Additionally, the use of incentives provides significant advantages to the government in terms of timely data collection and decreased data collection costs: it is likely that the large majority of interviews for which the incentives are paid will be conducted on the Web before more costly, labor intensive CATI outbound calling efforts commence.

## **10. Assurance of Confidentiality**

NCES assures participating individuals and institutions that all identifiable information collected under B&B and related programs may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose except as required by law [Education Sciences Reform Act of 2002 (ESRA 2002), 20 U.S.C. § 9573].

B&B:08/12 data security and confidentiality protection procedures are in place to ensure that RTI and its subcontractors comply with all privacy requirements, including the following:

- Statement of Work of this contract;
- Privacy Act of 1974 U.S.C. § 552(a) (2009);
- U.S. Department of Education Incident Handling Procedures (February 2009);
- U.S. Department of Education General Handbook for Information Technology Security General Support Systems and Major Applications Inventory Procedures (March 2005);
- U.S. Department of Education, ACS Directive OM:5-101, Contractor Employee Personnel Security Screenings;
- Family Educational and Privacy Act of 1974, 20 U.S.C. § 1232g (2009);
- ESRA, 20 U.S.C. § 9573 (2009); and
- All new legislation, which impacts the data collection through this contract.

To ensure that confidentiality is appropriately maintained at all times, RTI requires that vendors who assist in locating and tracing sample members follow procedures to appropriately safeguard personally identifying information. RTI's vendor contracts outline requirements for information security policies and assessments, security awareness training, physical and environmental security, monitoring, and access control. They also specify the means by which information may be transmitted between RTI and the contractor. Appendix F documents the data security language contained in vendor contracts.

RTI will also comply with ED's IT security policy requirements, as set forth in the Handbook for Information Assurance Security Policy and related procedures and guidance as well as IT security requirements in the Federal Information Security Management Act, OMB Circulars, and the National Institute of Standards and Technology standards and guidance.

RTI will adhere to NCES Statistical Standards, as described at [http://nces.ed.gov/statprog/2002/std4\\_2.asp](http://nces.ed.gov/statprog/2002/std4_2.asp).

B&B:08/12 data security procedures require that notarized nondisclosure affidavits be obtained from all personnel who will have access to individual identifiers (copies of the agreement and affidavit are provided in appendix F). Also implemented are personnel training regarding the meaning of confidentiality; controlled and protected access to computer files; built-in safeguards concerning status monitoring and receipt control systems; and a secure, staffed, in-house computing facility. The procedures for securing sensitive project data will include the following: physical/environment protections, building access controls, system access controls, system login restrictions, user identification and authorization procedures, encryption, and project file storage/archiving/destruction.

There are several security measures in place to protect data during file matching procedures. NCES has a secure data transfer system, which uses Secure Sockets Layer technology, allowing the transfer of encrypted data over the Internet. The NCES secure server will be used for all administrative data sources, with the exception of the National Student Clearinghouse (NSC), which has its own secure File Transfer Protocol site. All data transfers will be encrypted using Federal Information Processing Standards 140-2 validated encryption tools.

Furthermore, ED has established a policy regarding the personnel security screening requirements for all contractor employees and their subcontractors to secure the confidentiality of B&B respondents. The contractor must comply with these personnel security screening requirements throughout the life of the contract. The ED directive that contractors must comply with is OM: 5-101, which was last updated on January 29, 2008. There are several requirements that the contractor must meet for each employee working on the contract for 30 days or more. Among these requirements are that each person working on the contract must be assigned a position risk level. The risk levels are high, moderate, and low, based on the level of harm that a person in the position can cause to ED's interests. Each person working on the contract must complete the requirements for a "Contractor Security Screening." Depending on the risk level assigned to each person's position, a follow-up background investigation by ED will occur.

Study notification materials sent to institutions will describe the voluntary nature of the B&B:08/12 interview and convey the extent to which study member identifiers and responses will be kept confidential. Similarly, the scripts to be read by telephone staff will be very specific in the assurances made to sample members and contacts. Contacting materials are presented in appendix D. The following confidentiality language is provided in the study brochure that is supplied to all sample members:

The 2012 Baccalaureate and Beyond Longitudinal Study (B&B:08/12) is conducted under the authority of the Education Sciences Reform Act (ESRA) of 2002 (20 U.S.C. § 9512) which authorize NCES to collect and disseminate information about education in the United States. Collection is most often done through surveys.

NCES is required to follow strict procedures to protect the confidentiality of persons in the collection, reporting, and publication of data. All individually identifiable information supplied by individuals or institutions to NCES may be used only for statistical purposes and may not be disclosed or used in identifiable form for any other purpose, except as required by law (20 U.S.C. § 9573).

## 11. Sensitive Questions

The B&B:08/12 interview contains items about earnings, assets and debts, and marital and family status. Federal regulations governing the administration of these questions, which might be viewed as sensitive due to personal or private information, require (a) clear documentation of the need for such information as it relates to the primary purpose of the study, (b) provisions to respondents that clearly inform them of the voluntary nature of participation in the study, and (c) assurances that responses may be used only for statistical purposes, except as required by law (20 U.S.C. § 9573). Several procedures have been implemented to provide these assurances to respondents. They are outlined in the confidentiality agreements shown in appendix C.

The collection of data related to income, earnings, assets, indebtedness, and long-range employment outcomes is central to understanding key policy issues driving this study. Financial assets and obligations can play an important role in the pursuit of education beyond the bachelor’s degree. In addition, information about income, earnings, and assets provides vital labor force variables and important indicators of the rate of return of educational experiences to the respondent.

The collection of information about marital and family status also facilitates the exploration of key policy issues. Social and economic support provided by spouses can play an important role in promoting additional postsecondary education and the development of successful careers. Financial and family-related obligations also influence decisions about employment and education beyond the bachelor’s degree, so it is important to collect information about marital status and dependents.

## 12. Estimates of Response Burden

B&B:08/12 will involve the collection of respondent interview data by self-administered web, telephone, or field interview.

The burden estimates—including number of sample members, expected response rates, and estimated time per respondent—are shown in table 3. Table 3 also provides cost estimates to respondents for participation in data collection activity.

**Table 3. Estimated burden and costs to B&B:08/12 future respondents**

| Data collection   | Date   | Sample size | Expected eligible | Expected response rate | Yield  | Average burden (minutes) | Total burden (hours) | Rate per hour (\$) | Total cost (\$) |
|-------------------|--------|-------------|-------------------|------------------------|--------|--------------------------|----------------------|--------------------|-----------------|
| B&B:12 Full-scale |        |             |                   |                        |        |                          |                      |                    |                 |
| Panel maintenance | 12-Jun | 17,614      | 17,614            | 15                     | 2,642  | 5                        | 220                  | \$10               | \$2,202         |
| Interview         | 12-Jul | 17,614      | 17,058            | 82                     | 13,822 | 35                       | 8,063                | \$10               | \$80,628        |
| <b>Total</b>      |        |             |                   |                        |        |                          | <b>8,283</b>         | <b>\$10</b>        | <b>\$82,830</b> |

NOTE: B&B:08/12 = 2008/12 Baccalaureate and Beyond Longitudinal Study.

## 13. Estimates of Cost to Respondents

Respondents will incur no costs for equipment, printing, postage or any other costs associated with participation in this study.

#### 14. Costs to the Federal Government

A summary of the estimated costs to the federal government for B&B:08/12 is shown in Table 4. Included in the contract estimates are all staff time, reproduction, postage, and telephone costs associated with the management, data collection, analysis, and reporting for which clearance is requested. A more detailed breakdown of contract costs is provided in table 5.

**Table 4. Individual and total costs to the National Center for Education Statistics for the B&B:08/12 full-scale implementation**

| Costs to NCES              | Amount (\$) |
|----------------------------|-------------|
| B&B:08/12 Full-scale Study |             |
| Salaries and expenses      | 300,000     |
| Contract costs             | 6,070,419   |
| Total                      | 6,370,419   |

NOTE: B&B:08/12 = 2008/12 Baccalaureate and Beyond Longitudinal Study.

#### 15. Response Burden and Costs

Projected estimates for response burden and costs for the B&B:08/12 full scale study are based on experiences from the recent field test as well as other recent studies such as B&B:93/03, NPSAS:08 and B&B:08/09. Estimated response burden for students is based on extensive timing analysis conducted in previous B&B interviews.

The respondent burden is increasing because the last OMB approval was for a smaller, field test sample, while this is a request for approval for a full scale data collection.

**Table 5. Contract costs for B&B:08/12**

| Study area and task management  |   | Budgeted amount (\$) |
|---------------------------------|---|----------------------|
| Total                           |   | \$ 8,452,370         |
| 110                             | Post-award conference                                 | 25,929               |
| 120                             | Schedules   | 53,310               |
| 130                             | Monthly reports                                       | 277,054              |
| 140                             | Integrated monitoring system                          | 514,241              |
| 150                             | Technical review panels                               | 406,852              |
| Field test (FT)                 |   |                      |
| 210                             | Sampling  | 51,838               |
| 220                             | FT RIMG/OMB forms clearance                           | 42,850               |
| 231                             | Instrumentation                                       | 687,399              |
| 232                             | Tracing   | 110,429              |
| 234                             | Training for help desk/CATI/CAPI data collection      | 166,054              |
| 236                             | Web/telephone/field data collection                   | 310,044              |
| 237                             | Data processing                                       | 230,565              |
| 240                             | Methodology report                                    | 144,079              |
| Full-scale (FS) data collection |   |                      |
| 313                             | FS student sample design and selection                | 40,527               |
| 320                             | FS RIMG/OMB forms clearance                           | 39,164               |
| 331                             | Instrumentation                                       | 563,809              |
| 332                             | Tracing   | 774,823              |
| 334                             | Training for help desk/CATI data collection           | 334,372              |
| 336                             | Web/telephone/field data collection                   | 2,222,289            |
| 337                             | Data processing                                       | 351,664              |
| 338                             | Weighting, imputations, and nonresponse bias analysis | 208,903              |
| 339                             | Data disclosure planning and prevention               | 41,855               |
| 340                             | Methodology report                                    | 170,217              |
| Descriptive reporting           |   |                      |
| 410                             | ED tabulations  | 210,268              |
| 420                             | Data analysis system                                  | 134,048              |
| 430                             | Additional special tabulations                        | 87,005               |
| 440                             | Descriptive reports                                   | 210,037              |
| 450                             | Respond to information requests                       | 28,920               |
| 460                             | Final technical memo                                  | 13,825               |

NOTE: Costs presented here do not include base or award fee. B&B:08/12 = 2008/12 Baccalaureate and Beyond Longitudinal Study; CAPI = computer-assisted personal interviewing; CATI = computer-assisted telephone interviewing; ED = Department of Education; OMB = Office of Management and Budget; RIMG = Regulatory Information Management Group.

## 16. Publication Plans and Time Schedule

The formal contract for B&B:08/12 requires the following reports, publications, or other public information releases:

- A First Look, Statistics-In-Brief, and Web Tables for online dissemination to a broad audience;
- Detailed methodological report describing all aspects of the full-scale study design and data collection procedures (a working paper detailing the methodological findings from the field test will also be produced);
- Complete data files and documentation for research data users in the form of both a restricted-use electronic codebook and public-use data tools (i.e., QuickStats, PowerStats); and

- Special tabulations of issues of interest to the higher education community, as determined by NCES.

The operational schedule for the B&B:08/12 full-scale study is shown in table 6.

**Table 6. Operational schedule for B&B:08/12**

| Activity   | Start date | End date  |
|--|------------|-----------|
| Full-scale   |            |           |
| Modify/deliver sample specifications                       | 4/30/2012  | 5/11/2012 |
| Conduct locating, tracing and panel maintenance activities | 6/15/12    | 6/26/12   |
| Conduct telephone and field training                       | 7/9/2012   | 8/9/2012  |
| Data collection  |            |           |
| Self-administered web interviews                           | 7/12/2012  | 3/11/2013 |
| Conduct telephone interviews of students                   | 8/10/2012  | 3/11/2013 |
| Process data, construct data files                         | 7/12/2012  | 4/15/2013 |
| Prepare submit reports                                     | 8/15/2012  | 4/14/2014 |

NOTE: B&B:08/12 = 2008/12 Baccalaureate and Beyond Longitudinal Study

### **17. Approval to Not Display Expiration Date for OMB Approval**

N/A: no special exception is requested.

### **18. Exceptions to Certification for Paperwork Reduction Act Submissions**

N/A: There are no exceptions to the certification statement identified in the Certification for Paperwork Reduction Act Submissions of OMB Form 8.