# High School and Beyond 2020 (HS&B:20) Base-Year Full-Scale Study Recruitment and Field Test Update

OMB# 1850-0944 v.3

Supporting Statement Part A

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

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\*\*The contents of this document were approved in June 2019 (OMB #1850-0944 v.2). The only changes made are in section A.1.a to reflect what is being requested in this submission and in A.9 to remove reference to the promised change memo in August 2019 (this submission).\*\*

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## A. Justification

## A.1 Circumstances Making Collection of Information Necessary

## A.1.a Purpose of this Submission

The High School and Beyond 2020 study (HS&B:20) will be the sixth in a series of longitudinal studies at the high school level conducted by the National Center for Education Statistics (NCES), within the Institute of Education Sciences (IES) of the U.S. Department of Education. HS&B:20 will follow a nationally representative sample of ninth grade students from the start of high school in the fall of 2020 to the spring of 2024 when most will be in twelfth grade. A field test will be conducted one year prior to the full-scale study. The study sample will be freshened in 2024 to create a nationally representative sample of twelfth-grade students. A high school transcript collection and additional follow-up data collections beyond high school are also planned.

In preparation for the HS&B:20 Base-Year Full-Scale study (BYFS), scheduled to take place in the fall of 2020, in June 2019, the Office of Management and Budget (OMB) approved (OMB# 1850-0944 v.1-2) a request to conduct the HS&B:20 Base-Year Field Test (BYFT) and the BYFS sampling and state, school district, school, and parent recruitment activities, both scheduled to begin in the fall of 2019. These activities include collecting student rosters and selecting the BYFS sample. Approval for the BYFS study data collection will be requested in a separate submission in early 2020.

This request is to: (1) add instruction to the BYFT student roster template; (2) add response options to BYFT school administrator questionnaire; (3) revise existing and add new BYFT recruitment materials; and (4) finalize the BYFS student session length.

Part A of this submission presents information on the basic design of HS&B:20. Part B discusses the statistical methods employed. Part C presents justification for the questionnaire content. Appendix A provides the communication materials to be used during state, school district, school, and parent BYFS recruitment activities plus all of the communication materials to be used in the field test. Appendix B provides the final versions of the field test data collection instruments. The primary contractor to NCES for this study is RTI International (Contract # 919900-18-R0018).

## A.1.b Legislative Authorization

HS&B:20 is the next in the series of high school longitudinal studies conducted by NCES in close consultation with other U.S. Department of Education offices, other federal agencies, and organizations. NCES is authorized to conduct this study by the Education Sciences Reform Act of 2002 (ESRA 2002, 20 U.S.C. \$9543).

#### A.1.c Prior and Related Studies

NCES's secondary longitudinal studies program has produced some of the most prominent studies of high school education in the United States. The series of studies inaugurated with the National Longitudinal Study of 1972 (NLS-72) and was followed by the High School and Beyond 1980 (HS&B:80), the National Education Longitudinal Study of 1988 (NELS:88), the Education Longitudinal Study of 2002 (ELS:2002), and the High School Longitudinal Study of 2009 (HSLS:09). These studies examine high school students and their long-term trajectories. High School and Beyond 2020 (HS&B:20) continues this series of longitudinal studies.

The NCES secondary longitudinal studies examine issues such as students' readiness for high school; the risk factors associated with dropping out of high school; high school completion; the transition into postsecondary education and access/choice of institution; the shift from school to work; and the pipeline into science, technology, engineering, and mathematics (STEM). They have informed education policy by tracking long-term trends and elucidating relationships among student, family, and school characteristics and experiences. They have also helped establish new methodologies, designs, and measures that have influenced the practice of education research. HS&B:20 will follow the Middle Grades Longitudinal Study of 2017/18 (MGLS:2017) which followed the Early Childhood Longitudinal Study, Kindergarten Class of 2010-11 (ECLS-K:2011). This allows for the study of all transitions from elementary school through high school and into higher education and/or the workforce. Understanding what factors propel some students to successful completion of high school and entry into work or postsecondary education while leaving others behind is a critical function of high school longitudinal studies such as HS&B:20. HS&B:20 will include surveys of students, parents, students' math teachers, counselors, and administrators, plus a student assessment in mathematics and reading and a brief hearing and vision test.

### A.2 Purposes and Uses of Data

HS&B:20 will culminate in a general-purpose dataset of nationally representative data related to students' transitions into and out of high school; academic achievement (especially in mathematics and reading); the influence of parents, community involvement, and the high school experience on student achievement and development; education equity; factors associated with dropping out of high school; and changes in education practices over time. By collecting data in the fall of grade 9 and the spring of grade 12, the study data may answer questions on numerous key issues, some of which are summarized here:

- 1. Transition into high school
  - a. Adjustment to high school, fall 9<sup>th</sup> grade experiences, and coursework
  - b. High school characteristics associated with continued achievement for high achievers or improvement for low achievers
- 2. Academic growth over time and student, family, and school correlates
- 3. High school experiences
  - a. Student mobility patterns and their effect on outcomes
  - b. Career and technical education opportunities
  - c. Prevalence and use of technology
  - d. Process of dropping out and student, family, and school characteristics associated with returning to school.
- 4. Transition out of high school
  - a. Students' postsecondary education and/or work plans as they enter high school and how those plans change over time and vary by student, family, and school characteristics.
  - b. Characteristics and experiences of students who plan to work, enter the military, or pursue activities other than postsecondary education.
  - c. Extent of students' knowledge and planning for postsecondary education by student, family, and school characteristics.

In addition to these questions, the National Eye Institute (NEI) and the National Institute on Deafness and Other Communication Disorders (NIDCD), both part of the U.S. National Institutes of Health (NIH), have contributed questions to HS&B:20 field test to be asked of students, parents, and teachers, about each sample student's:

- visual function and use of refractive correction (NEI questions); and
- hearing difficulty and communication disorders (including voice, speech, and language), exposures to
  loud noise (a preventable cause of hearing loss), and use of assistive devices, including hearing aids,
  cochlear implants, and personal sound amplification products (PSAPs) to improve hearing and ameliorate
  communication disorders (NIDCD questions).

Furthermore, NEI plans to provide the equipment, funding, and a painless, 1-2 minute protocol to capture an objective measure of the refractive characteristics of the student's eyes. This protocol involves sample students briefly holding a handheld autorefractor close to their eyes (just like viewing objects through a pair of binoculars). NIDCD, in turn, plans to provide the equipment, funding, and a protocol to capture an objective measure of student's hearing acuity in each ear across the listening frequency range from 500 through 8,000 Hertz. Recent technological developments have made it possible to examine hearing sensitivity in normal quiet rooms instead of from inside large sound-attenuating booths. Boothless audiometry systems can be self-administered using compact hand-held devices (e.g., tablet computers) under the direction of trained technicians. Audiometric thresholds can be captured painlessly using circum-aural (surrounding the ears) headphones as the student listens to pure-tone frequencies generated at varying sound levels. This exam will take 8 to 10 minutes.

Where permitted by the school, students and parents will be provided a copy of the student's eye exam and hearing test results along with an explanation of what the results mean and if any follow-up by a health care professional might be warranted. Additionally, NEI and NIDCD will make available, for interested schools' use, materials on eye health and on healthcare for hearing and other communication disorders for incorporation into health classes, a school assembly, or for general library/media center reference.

Building on NEI's and NIDCD's previous collaboration with ECLS-K:2011 and MGLS:2017, HS&B:20 data collected from 9<sup>th</sup> and 12<sup>th</sup> graders will be critically important to understanding how eyesight and/or mild and worse hearing loss and other communication disorders affect academic performance and subsequent career trajectories

to the workforce, further technical training, or college education.

With regards to hearing, in several states and local communities, the prevalence of hearing impairment in children is much higher than the U.S. national average. Identification and interventions in high school should be a major benefit and boost for these students as they progress through high school and then transition into the workforce or to further educational opportunities beyond high school.

With regards to visual function, adolescence is a time when myopia (difficulty seeing distant objects or seeing them as blurry) manifests itself, and when vision (an important sense required for activities such as seeing the materials presented at the front of the classroom, participating fully in sports, walking safely to school, and learning to drive a vehicle) is essential to normal adolescent development. In many countries around the world, the prevalence of myopia is increasing and reaching epidemic levels. There are no current nationally representative data on the prevalence of myopia among school-aged children in the U.S. An objective measurement using a hand-held device will provide myopia prevalence information, and the survey questions will inform whether and how myopia influences academic performance and subsequent trajectories to various career tracks, depending on whether a student with myopia has the refractive correction (e.g. eyeglasses or contact lenses) they would need to allow them to have normal vision. Furthermore, the combination of autorefractor measurement and survey questions will provide information on whether parents can recognize if their teenage student has difficulty seeing, if the students can recognize changes in their own vision as their bodies mature (a critical developmental time when eyes elongate and vision issues become more symptomatic), and the patterns of eyeglasses/contact lenses use among students who need them.

To address all of the issues listed in this section, data will be collected from high school students and their parents, teachers, school counselors, and school administrators. For the field test, data will be collected simultaneously from students in grades 9 and 12 in the fall of 2019. A follow-up data collection will be conducted with the field test ninth graders in the spring of 2023. BYFS will be conducted with ninth-graders at the start of their high school experience in the fall of 2020 with a follow-up in grade 12 in the spring of 2024, when most of the sample students will be at the end of their high school career.

Students will participate in the following study components:

- The mathematics assessment will measure students' mathematics proficiency at the start of high school.
- The **reading assessment** will provide information on the reading achievement of students in grade 9.
- The **student survey** is designed to provide information about the factors associated with student success. Topics such as student's attitudes, experiences, behaviors, and interactions will be covered to understand their influence on student performance and outcomes.
- The **hearing and vision assessments** will assess hearing and communication skills as well as visual function and use of refractive correction.

Parents will complete a survey about the student's home life and educational experiences. The math teachers of the students will complete a survey about their background, classroom practices, and support at the school. Math teachers will also be asked to provide information on each sampled student that they teach. A counselor at each school will complete a survey about counseling practices at the school. The administrator or principal at each school will complete a survey about policies and practices at the school.

For the base-year field test, twelfth-grade students will complete demographic questions and the mathematics assessment. No adult surveys will be collected for grade 12 base-year field test.

#### A.3 Use of Information Technology

Technology will be used when feasible to reduce burden and improve efficiency and accuracy at all levels of the study. A brief study video, accessible via the Web, will be made available to help introduce the study, describe its importance, and demonstrate what participation will look like in schools. School districts and schools will be able to upload roster information and parent and teacher linkages to sampled students via the secure HS&B:20 website, but will also be able to provide this information in any format convenient for them.

A mobile computer lab will be set up for the student session at each participating school. The student session will be completed on tablet-like Chromebook computers with touchscreen capability and an attached keyboard. The computerized assessment is made possible by connecting the Chromebooks to an independent local area network (LAN) housed on a laptop computer set up at the school by study field staff. All equipment is provided by the

study, and neither the school's internet access nor any internet access in general is required for the computerized administration of the student session. At schools that participate in the study but do not allow in-school data collection, students will be asked to participate in a self-administered web-based data collection outside of school. The website for data collection will reside on NCES' Secure Socket Layer (SSL) encrypted servers. On a nightly basis, the data collection contractor, RTI, will download interview data, in batches, to its Enhanced Security Network (ESN) via a secure web service. Once in the ESN, data will be cleaned and undergo quality analysis. A computer-based data management system, designed to facilitate tracking efforts, will be used to manage the sample using encrypted data transmission and networking technology to maintain timely information on respondents, including contact, tracking, and case completion data. This system will be particularly important as students move from one school to another over the course of the study.

## A.4 Efforts to Identify Duplication

Since the inception of its secondary education longitudinal studies program in 1970, NCES has consulted with other federal offices to ensure that the data collected in this important series of longitudinal studies do not duplicate the information from any other national data sources within the U.S. Department of Education or other government agencies. In addition, NCES staff have regularly consulted with nonfederal associations such as the College Board, American Educational Research Association, the American Association of Community Colleges, and other groups to confirm that the data to be collected through this study series are not available from any other sources. These consultations and the HS&B:20 Technical Review Panel (TRP) also provide methodological insights from the results of other studies of secondary and postsecondary students and labor force members, and they ensure that the data collected through HS&B:20 will meet the needs of the federal government and other interested agencies and organizations. Other longitudinal studies of secondary and postsecondary students (i.e., NLS:72, HS&B, NELS:88, ELS:2002, HSLS:09) have been conducted by NCES in the past and, in addition to providing contemporary data, HS&B:20 builds on and extends these studies rather than duplicating them.

The only other dataset that offers so large an opportunity to understand the key transitions into postsecondary institutions or the world of work are the National Longitudinal Survey of Youth 1979 and 1997 cohorts (NLSY79, NLSY97) conducted by the Department of Labor (Bureau of Labor Statistics). However, the NLSY youth cohorts represent temporally earlier cohorts than HS&B:20. There are also important design differences between NLSY79 / NLSY97 and HS&B:20 that render them more complementary than duplicative. NLSY is a household-based longitudinal survey, while HS&B:20 is school based. For both NLSY cohorts, Base Armed Service Vocational Aptitude Battery (ASVAB) test data are available, but there are no longitudinal high school achievement measures. Although NLSY97 also gathers information from schools (including principal and teacher reports and high school transcripts), it cannot study school processes in the same way as HS&B:20, given its household sampling basis. Any given school contains only one to a handful of NLSY97 sample members, a number that constitutes neither a representative sample of students in the school nor a sufficient number to provide within-school estimates. Thus, although both studies provide important information for understanding the transition from high school to the labor market, HS&B:20 is uniquely able to provide information about education processes and within-school dynamics and how these affect both school achievement and ultimate labor market outcomes.

## A.5 Methods Used to Minimize Burden on Small Businesses

Burden in general will be minimized wherever possible. During district and school recruitment, we will minimize burden by training recruitment staff to make their contacts as straightforward and concise as possible. The recruitment letters and materials (e.g., the study description and FAQs) are designed to be clear, brief, and informative. In addition, during data collection, contractor staff will conduct all in-school student sessions and will assist with parental notification, sampling, and other study tasks as much as possible within each school.

### A.6 Frequency of Data Collection

The NCES high school longitudinal cohort studies have been conducted each decade since 1972. The most recent high school cohort, HSLS:09, consisted of fall 2009 ninth-graders – 11 years prior to the HS&B:20 ninth-grade cohort. HS&B:20 will follow a nationally-representative sample of ninth-grade students from the start of high school in the fall of 2020 to the spring of 2024 when most will be in twelfth grade. The sample will be freshened in 2024 to create a nationally representative sample of twelfth-graders. A high school transcript collection and additional data collection follow-ups beyond high school are also planned. The field test will take place one year prior to the BYFS data collection, with a data collection of students in grades 9 and 12 in the fall of 2019 and following the field test sample ninth-graders in the spring of 2023 when most will be in twelfth grade. No follow-

up will be conducted with twelfth grade students participating in the fall 2019 field test.

## A.7 Special Circumstances of Data Collection

No special circumstances of data collection are anticipated.

## A.8 Consultations Outside the Agency

Content experts have been consulted in the development of the assessments and questionnaires. A TRP meeting was held in August 2018 to inform the HS&B:20 base-year survey design, and the HS&B:20 mathematics content review panel will inform the mathematics assessment. The following are the members of the HS&B:20 TRP:

- 1. Oscar Barbarin University of Maryland, College Park
- 2. Rebecca Callahan University of Texas, Austin
- 3. Adam Gamoran University of Wisconsin-Madison
- 4. Thomas Hoffer National Opinion Research Center
- 5. Vinetta Jones Howard University
- 6. Amy Langenkamp University of Notre Dame
- 7. Wen-Juo Lo University of Arkansas
- 8. Chandra Muller University of Texas at Austin
- 9. Amaury Nora University of Texas at San Antonio
- 10. Brian Rowan University of Michigan
- 11. Russ Rumberger University of California, Santa Barbara
- 12. Ming-Te Wang University of Pittsburgh

## A.9 Provision of Payments or Gifts to Respondents

High levels of school participation are critical to the success of each phase of the study. School administrator, mathematics teacher, guidance counselor, parent, and student data collection activities are contingent on school cooperation. NCES recognizes that the burden level of the study is one of the factors that school administrators will consider when deciding whether to participate. Given the real and perceived burden of participation, NCES will continue to use strategies that have worked successfully in other NCES studies (e.g., HSLS:09, MGLS:2017, and ECLS-K:2011), including offering both monetary and nonmonetary incentives to respondents during recruitment. Recent experience on MGLS:2017 showed that no single incentive speaks to all schools, students, parents, or school staff. A menu of options will be presented to school districts, schools, and sample members to allow each entity to determine the most effective incentive to facilitate participation in the study. Table 1 summarizes the incentive planned for each respondent type and instrument/activity along with their estimated burden times. A brief justification for each incentive amount follows Table 1.

Table 1. HS&B:20 Base-Year Field Test and BYFS Instruments and Incentive Amounts

Instrument/Activity	Burden Time <sup>1</sup>	Field Test Incentives	Full-scale (BYFS) Incentives
Student return of parent consent forms (explicit consent schools only)	10 minutes	Food event at school (e.g., pizza, bagels, etc.) sponsored by the study	Choice of Food event at school (e.g., pizza, bagels, etc.) sponsored by the study or \$3 voucher for school cafeteria
Student Assessments and Survey - In-school administration (Mathematics, Reading, Survey, and a Hearing and Vision assessment)	One class period (45 minutes or 90 minutes)	Approximately \$10 value options such as a gift card, admission to a school athletic or arts event, credit for the school cafeteria or store, item from the school store, donation to the school, movie ticket, portable charger, or ear buds.  Certificate for 2 hours of community service from the U.S. Department of Education	Approximately \$10 value options such as a gift card, admission to a school athletic or arts event, credit for the school cafeteria or store, item from the school store, donation to the school, movie ticket, portable charger, or ear buds.  Certificate for 2 hours of community service from the U.S. Department of Education
Student Assessments and Survey - Out-of-school administration (Mathematics, Reading, & Survey)	90 minutes	\$10 for the assessment plus \$15 for the survey (gift card). Alternatively, the study will offer options with a value commensurate to the completion status (assessment, survey, or both) in the form of admission to a school athletic or arts event, credit for the school cafeteria or store, item from the school store, donation to the school,	\$10 or 15 for the assessment plus \$15 or \$25 for the survey (gift card) with the incentive assignment based on modeling to minimize bias.  Alternatively, the study will offer options with a value commensurate to the completion status (assessment, survey, or both) in the form of admission to a school athletic or arts

Instrument/Activity	Burden Time <sup>1</sup>	Field Test Incentives	Full-scale (BYFS) Incentives			
		movie ticket, portable charger, or ear buds. Certificate for 2 hours of community service from the U.S. Department of Education	event, credit for the school cafeteria or store, item from the school store, donation to the school, movie ticket, portable charger, or ear buds. Certificate for 2 hours of community service from the U.S. Department of Education			
Parent Survey	15 or 30 minutes	\$5 prepaid incentive \$15 in cash (or check) upon survey completion or an equivalent option, such as admission to a school athletic or arts event, donation to the school, college prep course or related materials, movie tickets for the family, donation to a charity, community service certificate (for a total of \$20).	\$5 prepaid incentive \$15 in cash (or check) upon survey completion or an equivalent option, such as admission to a school athletic or arts event, donation to the school, college prep course or related materials, movie tickets for the family, donation to a charity, community service certificate (for a total of \$20). An additional \$15 to cases deemed to be high priority based on models to minimize bias (for a total of \$35)			
Mathematics Teacher - Teacher Survey - Classroom Survey	- 11 or 7 minutes - 5 or 3 minutes (total 16 or 10 minutes)	\$20 or another option such as classroom supplies with equivalent value. Continuing education credits <sup>2</sup>	\$20 or another option such as classroom supplies with equivalent value.  Continuing education credits <sup>2</sup>			
Mathematics Teacher - Teacher Student Report	4 or 3 minutes per student	\$7 per student or another option such as classroom supplies with a value commensurate to the completion status (number of study reports)	\$7 per student or another option such as classroom supplies with a value commensurate to the completion status (number of study reports)			
School Counselor	30 minutes	Continuing education credits <sup>2</sup>	Continuing education credits <sup>2</sup>			
School Administrator	30 minutes	Continuing education credits <sup>2</sup>	Continuing education credits <sup>2</sup>			
School Participation  School Coordinator (logistics, on-site visit, consent forms, administrative records,	6 hours to provide roster from administrative records 2 hours to schedule and assist with assessments 6 hours for consent assistance	\$200 or other options with equivalent value for the school, such as school supplies, materials for the school library, registration for a conference, continuing education credit for staff*, data training or related data support, etc.	\$200 or other options with equivalent value for the school, such as school supplies, materials for the school library, registration for a conference, continuing education credit for staff*, data training or related data support, etc.  Schools that initially refuse will be offered \$400 or cash equivalent.			
etc.)	assistance 2 hours to coordinate session logistics	\$150 for school coordinator (\$50 for providing the roster list and \$100 after data collection is complete)	\$150 for school coordinator (\$50 for providing the roster list and \$100 after data collection is complete)			

<sup>&</sup>lt;sup>1</sup> Please see corresponding text below for an explanation of the time variance for a particular instrument.

#### Students

Field Test. During school recruitment, HS&B:20 staff will discuss with the school which of the following incentives can be offered to students to encourage their participation: a gift card, admission to a school athletic or arts event, credit for the school cafeteria or store, item from the school store, donation to the school, movie ticket, portable charger, or ear buds. Schools are varied in what they may permit for the student incentive. For example, some recommend a monetary or gift card incentive to secure cooperation from students, while others do not allow monetary or gift card incentives. Some schools may be more likely to participate if we offer items that directly benefit the school (e.g., admission to a school event, credit to the school cafeteria or store, or school donation). This will be negotiated with the school at the time of recruitment and only the options the school approves will be offered to students. Each option will have an approximate value of \$10.

Students will participate in a 90 minutes long or a one class period session (e.g., 45 minutes long) in their school (depending into which experimental treatment their school is selected). This session will include the hearing and vision assessments. At the start of the session, if permitted by the school, students will be offered a breakfast bar

<sup>&</sup>lt;sup>2</sup> The mechanism for providing continuing education credits varies by state. NCES is exploring ways to provide continuing education credits to participating school staff in each state.

to ensure that they are not going into the session hungry. Upon completion of the session, students will be offered to select one from all of the incentives listed above (excluding any options not approved by their school). In addition, students will receive a certificate for 2 hours of community service from the U.S. Department of Education. For students at schools where explicit parental permission is required (i.e., return of parental consent form), students who return the form by a set date will be offered a food event sponsored by the study (e.g., pizza, bagels, etc.).

To increase response rates, schools that cannot permit an in-school session will be offered the option of providing student roster information and having the students participate outside of school. In addition, students absent from their in-school session and make up session will be asked to participate outside of school. As was done in HSLS:09, to encourage participation in the study on their own time, students participating outside of school will be offered the option of a gift card for \$10 for completing the assessment plus \$15 for completing the survey, or an option with a value commensurate to the completion status (assessment, survey, or both) in the form of admission to a school athletic or arts event, credit for the school cafeteria or store, item from the school store, donation to the school, movie ticket, portable charger, or ear buds in addition to the 2-hour community service certificate. Students participating outside of school will not participate in the hearing and vision assessments.

Students participating in the 45-minute in-school session, which will consist of demographic questions, the hearing and vision assessment, and the mathematics assessment, will be asked to complete the remainder of the components outside of school, specifically the student survey and reading assessment. These students will be offered \$15 for completing the out-of-school session on their own.

<u>Full-scale</u>. To incentivize return of the parental consent form by students at schools requiring explicit consent, students will be offered a choice of a food event sponsored by the study (e.g., pizza, bagels, etc.) or a \$3 voucher for the school cafeteria. This choice allows the schools an option for those who perceive the food event to be disruptive, allows the voucher to be distributed immediately upon the return of the permission form, and covers the cost of one school lunch<sup>1</sup>.

As in the field test, students who participate in the in-school session will be offered an incentive of \$10, and students for whom schools require out-of-school completion of the survey and assessment will be offered an incentive of \$10 for completion of the assessment and \$15 for completion of the survey. As an alternative, all students will be offered a set of nonmonetary options with an equivalent cash value.

We are also investigating the use of a model-based targeting approach for a subset of cases to be administered the survey and assessment in an out-of-school setting. For a targeted set of cases, a higher incentive offer of \$15 for the assessment and \$25 for the survey may be made, conditioned on their bias-likelihood score. Use of this model-based approach depends largely on evaluation of the usefulness of the limited auxiliary data available and should we determine it to be a desirable option, it will be included in the next, February 2020 clearance request.

#### **Parents**

<u>Field Test.</u> Parent survey response rates have declined over the past decade. The ECLS-K:2011 baseline (fall 2010) parent survey response rate was more than 10 percentage points lower (74 percent)<sup>2</sup> than the parent survey response rate in the corresponding 1998 wave of the ECLS-K (85 percent).<sup>3</sup> The ninth-grade parent survey response rate for the HSLS:09 baseline was even lower (68 percent).<sup>4</sup>

To examine whether the estimated parent survey length provided in study materials may have an impact on

<sup>&</sup>lt;sup>1</sup> Reported by the National School Nutrition Association https://schoolnutrition.org/aboutschoolmeals/schoolmealtrendsstats/

<sup>&</sup>lt;sup>2</sup> Tourangeau, K., Nord, C., Lê, T., Sorongon, A.G., Hagedorn, M.C., Daly, P., and Najarian, M. (2012). *Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011), User's Manual for the ECLS-K:2011 Kindergarten Data File and Electronic Codebook* (NCES 2013-061). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

<sup>&</sup>lt;sup>3</sup> Tourangeau, K., Nord, C., Lê, T., Sorongon, A.G., Hagedorn, M.C., Daly, P., and Najarian, M. (2001). *Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS-K), User's Manual for the ECLS-K Base-year Public-Use Data Files and Electronic Codebook* (NCES 2001-029). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

<sup>&</sup>lt;sup>4</sup> Ingels, S.J., Pratt, D.J., Herget, D.R., Burns, L.J., Dever, J.A., Ottem, R., Rogers, J.E., Jin, Y., and Leinwand, S. (2011). High School Longitudinal Study of 2009 (HSLS:09). Base-year Data File Documentation (NCES 2011-328). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

response rates, parents of 9<sup>th</sup>-graders will be randomly assigned to complete either a 30-minute survey or a 15-minute survey. About 50 parents will be asked to participate in an abbreviated re-interview to analyze reliability of key survey items. Parents will be randomly assigned for the re-interview regardless of the session length of their full survey. So as not to confound the results with this test, a single incentive treatment is planned for all parents. Given that an incentive experiment of parents for MGLS:2017 found that \$20 was more effective than \$0 or \$40 at gaining cooperation from parents, we will offer a total of \$20 incentive to parents of HS&B:20 sample students to encourage their participation (\$5 prepaid and \$15 postpaid). For the \$15 postpaid, we will give parents the option to receive a \$15 in cash (or check) or another option of approximately a \$15 value, such as admission to a school athletic or arts event, donation to the school, college prep course or related materials, movie tickets for the family, donation to a charity, or a community service certificate.

<u>Full-scale</u>. For BYFS, parents will be offered a \$5 prepaid and \$15 promised incentive. We will offer an additional \$15 promised incentive to a subset of cases (doubling the promised incentive), thereby offering these sample members an incentive package of \$35 total. Depending on our evaluation of the usefulness of the limited auxiliary data available, the set of cases to be offered the increased incentive will be determined either initially for a subset of high-bias likelihood cases or after a set period of time has elapsed. The final plan for assigning cases to the increased incentive will be provided in the next, February 2020 clearance request.

#### **Teachers**

<u>Field Test.</u> Teachers will be asked to complete a survey consisting of three components. To examine whether the estimated length of the teacher survey has an impact on teacher participation, mathematics teachers will be offered either the full survey or an abbreviated survey. The teacher component of the survey will ask about the teacher's background and teaching practices and will take either 5 (abbreviated) or 11 (full) minutes; the classroom component will take about 5 minutes per classroom and will ask about the specific classes from which the sampled students are enrolled; and the teacher student report (TSR) component will take either 3 (abbreviated) or 4 (full) minutes per student and will ask questions specific to each student taught by the teacher.

Participating teachers of 9<sup>th</sup>-grade students will be offered a \$20 incentive for completing the teacher and classroom components of the survey. Because there is an added burden associated with gathering information about each student and because the number of students each teacher will be asked to report on may vary widely, teachers will be offered an additional \$7 per TSR. We estimate that on average teachers will be asked to fill out ten TSR's. Teachers will have the option of receiving a check or classroom supplies with a value commensurate to the completed components. These amounts are consistent with the incentives used in other recent NCES studies, such as the MGLS:2017 and the ECLS-K:2011. In addition to the incentive above, NCES is exploring the possibility of offering continuing education credits to participating teachers, similarly to those offered by NAEP.

<u>Full-scale</u>. As in the field test, in BYFS a \$20 incentive will be offered for completing the teacher and classroom survey components plus a \$7 incentive for each completed TSR. In all cases a choice of monetary or nonmonetary, value-equivalent incentive will be offered. Teachers will be offered the full-length survey by default. Depending on the outcome of the teacher survey experiments implemented in the field test, an option to complete the abbreviated survey may be offered as a nonresponse follow-up, in which case the details will be provided in the next, February 2020 clearance request.

#### School Counselors and School Administrators

NCES is exploring the possibility of offering continuing education credits to participating school counselors and school administrators.

#### **Schools**

<u>Field Test.</u> School recruitment is increasingly challenging. Schools, and districts on behalf of schools, often cite burden on students and school staff, lack of direct benefit, over-testing, and loss of instructional time as reasons not to participate in voluntary studies. Given these concerns, all field test schools will be offered \$200 in the form of either a check or school supplies to encourage their participation in HS&B:20. In addition, we will test different student session length options (45 or 90 minutes) to determine the impact of student session length on school participation.

<u>Full-scale.</u> For BYFS, all schools will initially be offered a baseline incentive of \$200 in the form of either a check or a cash equivalent such as school supplies. Schools which initially refuse to participate will be offered an

incentive boost of \$200 for a total promised incentive of \$400. The school-level incentive boost was not offered in the field test due to the small sample size and its potential impact on the experiment to determine the "right" session length to gain school participation. Experience with school-level incentive boosts has proven effective on similar school-based studies such as MGLS:2017 and PIRLS:2016.

#### **School Coordinators**

For both the field test and the BYFS data collections, school coordinators will be offered a \$150 monetary incentive, as has been done in studies such as MGLS:2017 and HSLS:09. School coordinators play an especially important role in the study and are critical to its success. The coordinator in each participating school will spend a total of about 16 hours to coordinate logistics with RTI ( $\sim$ 2 hrs.); compile and supply a roster of eligible students for sampling from administrative records ( $\sim$ 6 hrs.); communicate with teachers, students, and parents about the study to encourage their participation and distribute and collect parental consent forms ( $\sim$ 6 hrs.); and assist the session facilitator in ensuring that the sampled students attend the testing sessions ( $\sim$ 2 hrs.). School coordinators will receive \$50 upon receipt of the student roster and the remaining \$100 after all data collection activities have been completed at the school. We designed this split in the incentive because of the high burden associated with the roster collection. The incentive protocol for school coordinators is expected to be the same for the field test and BYFS.

## A.10 Assurance of Confidentiality

Confidentiality and data security protection procedures have been put in place for HS&B:20 to ensure that the contractor and its subcontractors comply with all privacy requirements, including:

- 1. The Statement of Work of the HS&B:20 contract;
- 2. Family Educational Rights and Privacy Act (FERPA) of 1974 (20 U.S.C. \$1232(g));
- 3. Privacy Act of 1974 (5 U.S.C. \$552a);
- 4. Privacy Act Regulations (34 CFR Part 5b);
- 5. Computer Security Act of 1987;
- 6. *U.S.A. Patriot Act of 2001* (P.L. 107-56);
- 7. Education Sciences Reform Act of 2002 (ESRA 2002, 20 U.S.C. \$9573);
- 8. *Cybersecurity Enhancement Act of 2015* (6 U.S.C. \$151);
- 9. Foundations of Evidence-Based Policymaking Act of 2018, Title III, Part B, Confidential Information Protection:
- 10. The U.S. Department of Education General Handbook for Information Technology Security General Support Systems and Major Applications Inventory Procedures (March 2005);
- 11. The U.S. Department of Education Incident Handling Procedures (February 2009);
- 12. The U.S. Department of Education, ACS Directive OM: 5-101, Contractor Employee Personnel Security Screenings;
- 13. NCES Statistical Standards: and
- 14. All new legislation that impacts the data collected through the contract for this study.

Furthermore, the contractor will comply with the Department of Education'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 (FISMA), Federal Information Processing Standards (FIPS) publications, Office of Management and Budget (OMB) Circulars, and the National Institute of Standards and Technology (NIST) standards and guidance. All data products and publications will also adhere to the revised NCES Statistical Standards, as described at the website: <a href="https://nces.ed.gov/statprog/2012/">https://nces.ed.gov/statprog/2012/</a>.

By law (20 U.S.C. \$9573), a violation of the confidentiality restrictions is a felony, punishable by imprisonment of up to 5 years and/or a fine of up to \$250,000. The HS&B:20 procedures for maintaining confidentiality include notarized nondisclosure affidavits obtained from all personnel who will have access to individual identifiers; 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. HS&B:20 follows detailed guidelines for securing sensitive project data, including, but not

limited to: physical/environment protections, building access controls, system access controls, system login restrictions, user identification and authorization procedures, encryption, and project file storage/archiving/destruction.

Additionally, the contractor will take security measures to protect the web data collection application from unauthorized access. The web server will include an SSL certificate and will be configured to force encrypted data transmission over the Internet. All files uploaded to the website will be stored in a secure project folder that is accessible and visible to authorized project staff only. A number of security procedures are in place for users to access restricted pages containing confidential information:

- 1. When a primary coordinator is assigned to the study, the assignment comes from the Chief Administrative Officer (or his or her agent). Once assigned, HS&B:20 staff will confirm the primary coordinator's employment status through a web search, a public directory, and/or contacting the Human Resources at the institution.
- 2. After user's identity is verified, website users will be required to log in by entering an assigned ID number and password, and using two-factor authentication.
- 3. Through the website, the primary coordinators at the institution will be able to use a "Manage Users" link, available only to them, to add and delete user accounts for other staff at the same institution.
- 4. HS&B:20 staff will verify the employment status of any new user assigned by the primary coordinator prior to creating the new account and allowing access using two-factor authentication.

NCES has a secure data transfer system, which uses SSL technology, allowing the transfer of encrypted data over the Internet. The NCES secure server will be used for all administrative data sources. All data transfers will be encrypted.

The Department has established a policy regarding the personnel security screening requirements for all contractor employees and their subcontractors. The contractor must comply with these personnel security screening requirements throughout the life of the contract including 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 upon the level of harm that a person in the position can cause to the Department'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 the Department will occur.

NCES assures schools and individuals participating in HS&B:20 that all of the data provided by schools, staff, parents, and students 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 and 6 U.S.C. \$151). The laws pertaining to the collection and use of personally identifiable information will be clearly communicated in correspondence with states, districts, schools, teachers, students, and parents. Letters and informational materials will be sent to parents and school administrators describing the study, its voluntary nature, and the extent to which respondents and their responses will be kept confidential. This information will also be included in any research applications required by school districts. A list of ninth-grade students will be requested from school districts and/or schools under the FERPA exception to the general consent requirement that permits disclosures to authorized representatives of the Secretary for the purpose of evaluating Federally supported education programs (34 CFR \$\$99.31(a)(3)(iii) and 99.35). This information will be securely destroyed when no longer needed for the purposes specified in 34 CFR \$99.35.

The following language will be included, as appropriate, in respondent contact materials and on data collection instruments:

NCES is authorized to conduct the High School and Beyond 2020 (HS&B:20) by the Education Sciences Reform Act of 2002 (ESRA 2002, 20 U.S.C. \$9543) and to collect students' education records from education agencies or institutions for the purposes of evaluating federally supported education programs under the Family Educational Rights and Privacy Act (FERPA, 34 CFR \$\$ 99.31(a)(3)(iii) and 99.35). The data are being collected for NCES by RTI International, a U.S.-based nonprofit research organization. All of the information [respondent type] provide 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 and 6 U.S.C. \$151). The collected information will be combined across respondents to produce

statistical reports.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this voluntary information collection is 1850-0944. Approval expires 12/31/2021. The time required to complete this information collection is estimated to average approximately [x] minutes per response, including the time to review instructions, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate, suggestions for improving this information collection, or any comments or concerns regarding the status of your individual submission, please write directly to: The High School and Beyond 2020 (HS&B:20), National Center for Education Statistics, PCP, 550 12th St., SW, 4<sup>th</sup> floor, Washington, DC 20202.

FERPA (34 CFR Part 99) allows the disclosure of personally identifiable information from students' education records without prior consent for the purposes of HS&B:20 according to the following excerpts: 34 CFR \$99.31 asks, "Under what conditions is prior consent not required to disclose information?" and explains in 34 CFR \$99.31(a) that "An educational agency or institution may disclose personally identifiable information from an education record of a student without the consent required by \$99.30 if the disclosure meets one or more" of several conditions. These conditions include, at 34 CFR \$99.31(a)(3):

The disclosure is, subject to the requirements of \$99.35, to authorized representatives of-

- (i) The Comptroller General of the United States;
- (ii) The Attorney General of the United States;
- (iii) The Secretary; or
- (iv) State and local educational authorities.

HS&B:20 is collecting data under the Secretary's authority. Specifically, NCES, as an authorized representative of the Secretary of Education, is collecting this information for the purpose of evaluating a federally supported education program. Any personally identifiable information is collected with adherence to the security protocol detailed in 34 CFR \$99.35:

- (a)(1) Authorized representatives of the officials or agencies headed by officials listed in \$99.31(a)(3) may have access to education records in connection with an audit or evaluation of Federal or State supported education programs, or for the enforcement of or compliance with Federal legal requirements that relate to those programs.
  - (2) The State or local educational authority or agency headed by an official listed in \$99.31(a)(3) is responsible for using reasonable methods to ensure to the greatest extent practicable that any entity or individual designated as its authorized representative—
    - (i) Uses personally identifiable information only to carry out an audit or evaluation of Federal- or State-supported education programs, or for the enforcement of or compliance with Federal legal requirements related to these programs;
    - (ii) Protects the personally identifiable information from further disclosures or other uses, except as authorized in paragraph (b)(1) of this section; and
    - (iii) Destroys the personally identifiable information in accordance with the requirements of paragraphs (b) and (c) of this section.
- (b) Information that is collected under paragraph (a) of this section must—
  - (1) Be protected in a manner that does not permit personal identification of individuals by anyone other than the State or local educational authority or agency headed by an official listed in \$99.31(a)(3) and their authorized representatives, except that the State or local educational authority or agency headed by an official listed in \$99.31(a) (3) may make further disclosures of personally identifiable information from education records on behalf of the educational agency or institution in accordance with the requirements of \$99.33(b); and
  - (2) Be destroyed when no longer needed for the purposes listed in paragraph (a) of this section.
- (c) Paragraph (b) of this section does not apply if:
  - (1) The parent or eligible student has given written consent for the disclosure under \$99.30; or
  - (2) The collection of personally identifiable information is specifically authorized by Federal law.

Additionally, the study qualifies for a 45 CFR Part 46 waiver of consent based on the following factors:

- There is minimal risk to the participants. There is no physical risk and only minimal risk associated with linkage of data to sample members. Data will undergo disclosure avoidance analysis and disclosure treatment steps to further reduce the risk.
- The waiver will not affect the rights and welfare of the subjects. The voluntary nature of the study is

emphasized to sample members. Public-use and restricted-use data are only used for research purposes and lack direct individually-identifying information. The data are further protected through disclosure avoidance procedures approved by the NCES Disclosure Review Board.

- Whenever appropriate, subjects will be provided with additional pertinent information after they have participated. For each round of the study, information about prior rounds and the nature of the study is made available to sample members.
- The study cannot be conducted practicably without the waiver. To obtain written consent from sample members, multiple forms would have to be sent to the sample members with multiple follow-up telephone and in-person visits. This process would add weeks to the data collection process and is not feasible from a time and imposed participant burden standpoint. Additionally, the value of these data would be jeopardized from a nonresponse bias perspective.
- The potential knowledge from the study is important enough to justify the waiver. HS&B:20 will provide invaluable data to researchers and education policy makers about the progress and experiences of high school students, their transitions to postsecondary education and work, their family and school environments, and their high-school and post-high-school outcomes.

## **A.11 Sensitive Questions**

HS&B:20 is a voluntary study in which no person is required to respond, and respondents may decline to answer any item. The voluntary nature of the study is addressed in all contact materials and in the training of all project staff, field staff, and telephone interviewers. Some topics may be deemed sensitive for some respondents.

**Schools.** Schools (or school districts on behalf of schools) will be asked to provide rosters of all students in grades 9 and 12 for the HS&B:20 field test, and for grade 9 in BYFS. Schools may have concerns about providing this information without first obtaining permission from the parents to do so. The disclosure is permitted under FERPA's exception to the general consent requirement that permits disclosures to authorized representatives of the Secretary for purposes of evaluating Federally supported education programs (34 CFR \$\$ 99.31(a)(3)(iii) and 99.35). This information will be securely destroyed when no longer needed for the purposes specified in 34 CFR \$99.35. All district and school personnel facilitating the conduct of HS&B:20 and the development of the student sampling frame will be informed of the privacy and confidentiality protocols required for HS&B:20, including those having to do with the sample lists of schools and students. The collection of these data is necessary for developing the student sample.

**School Administrator and Guidance Counselor.** School administrators and the lead counselor for grade 9 from all base-year field test and BYFS schools will be asked to complete a survey. The items in the School Administrator Questionnaire and the Counselor Questionnaire are not of a sensitive nature and should not pose sensitivity concerns to respondents.

**Math Teacher.** One math teacher of each sampled ninth-grade student in each participating base-year field test and BYFS school will be asked to complete a survey. In the base-year field test, teachers of twelfth-grade students will not be asked to participate. The information collected in the teacher student report could be regarded as sensitive because the teacher is asked to provide information about a student's academic skills, classroom behavior, and peer relationships.

Parent. One parent of each sampled ninth-grade student will be asked to complete a survey in the base-year field test and in BYFS. In the base-year field test, parents of twelfth-grade students will not be asked to participate. To achieve the study's primary goal of describing the development, academic outcomes, and characteristics of ninth-grade students, we will be asking parents some questions that could be viewed as sensitive in nature by some respondents. The parent survey includes questions about parental employment and unemployment, parent level of education, family income, student's receipt of free or reduced priced meals, how much the parent has saved for their teenager's education after high school, whether the parent and student were born in the U.S., whether there is a parent living outside the home and his/her involvement with the ninth-grade student's education, the number of residences the student has lived in, whether the student has ever repeated a grade or dropped out of school, disciplinary actions received by the student, the student's health and disabilities,, and contact information including social security numbers for the parent and his/her teenager. These types of questions have been asked in many large-scale studies of school-age children including the ELS:2002, HSLS:09, and MGLS:2017. They provide important information about the student's home life and educational experiences that may affect long-

term outcomes. The contact information is necessary to allow the sample members to be located for future follow-up. Respondents are informed that they may choose not to answer any question they prefer to skip. A subset of ninth-grade parents will be asked to participate in an abbreviated reinterview to help us analyze reliability of key survey items.

Student. In the base-year field test and BYFS, students in grade 9 will complete a questionnaire which includes a few questions that could be sensitive for some students, such as questions about internalizing attitudes or behaviors, repeating grades in school, and school and class attendance, about how often parents monitor their behavior, whether they and their parents were born in the U.S., parental employment and education, and to self-report their race/ethnicity and sex, which could be sensitive questions for students at this age. Students are also asked for contact information so that they may be located in the future for follow-ups. The questions that are included in the student survey have been asked in other studies of adolescents and the responses to these questions have been found to help explain why some students are more likely to continue their education after high school, attain higher educational credentials, and have better employment outcomes. Students participating in school will also be asked to answer questions about their hearing and vision and take brief hearing and vision assessments. Respondents are informed that they may choose not to answer any question they prefer to skip. In the base-year field test, students in grade 12 will only complete the math assessment and a set of demographic items and will not receive the full survey.

## A.12 Estimates of Response Burden

Burden estimates for all activities associated with BYFS recruitment and field test are shown in Table 2. Because of the limited time to recruit schools for the field test and the need for a sufficient school sample size to provide power for the experiments, we are releasing a large school sample to achieve the desired yield, which results in a low expected school district and school response rate. The number of school districts shown in Table 2 is an estimate for the school sample size based on experiences from previous NCES longitudinal school-based studies such as the MGLS:2017 and HSLS:09. For the base-year field test and BYFS recruitment, the total burden time for participating school districts, estimated at 260 minutes, includes time to have discussions internal to the district and possibly the school board about district participation, as well as conversations with RTI recruitment staff. The total response burden estimate for district IRB approvals (in the special handling districts that require completion of a research application before they will allow schools under their jurisdiction to participate in a study) is based on an estimated 120 minutes for IRB staff review and approval and 120 minutes per panelist for approval by the district's IRB panel, which is estimated to average 5 panelists. The total burden time for participating schools, estimated at 260 minutes, includes time to discuss participation with the RTI recruiter, with staff internally, and with the school district as well as to appoint a coordinator and assist the school coordinator with data collection preparations. The school coordinator total burden time is estimated at 16 hours and includes an estimate 6 hours to prepare the student roster and an estimate 10 hours to coordinate the logistics and distribute and track parent permission forms. In the base-year field test, about 35 students per grade, in grades 9 and 12, will be randomly selected for participation from the school-provided roster, and in BYFS about 28 students in grade 9 will be randomly selected. Parents of sampled students are estimated to spend about 10 minutes to read the study materials that will be provided and, if appropriate, sign the permission form either in hard copy or electronically. The estimated times for completion of surveys, assessments, and other tasks during the base-year field test are listed in Table 2 in the "Average Burden Time per Response" column, in the last, "Base-Year Field Test (BYFT) Data Collection" section of the table.

Table 2. HS&B:20 Base-Year Field Test Recruitment and Data Collection and Base-Year Full-Scale Study Recruitment Burden Estimates<sup>1</sup>

HS&B:20 Activity	Sample Size	Expected Response Rate	Number of Respondents	Number of Responses	Average Burden Time per Response (minutes)	Total Burden (hours)	Estimated Respondent Average Hourly Wage <sup>1</sup>	Estimated Respondent Burden Time Cost
Base-Year Field Test (BYFT) Recruitment								
Nonparticipating districts	154 <sup>2</sup>	70.00%	108	108	20	36	\$46.85	\$1,687
Participating districts	154	30.00%	46	46	260	200	\$46.85	\$9,370
District IRB staff study approval	16	100.00%	16	16	120	32	\$46.85	\$1,500
District IRB panel study approval <sup>3</sup>	80 <sup>3</sup>	100.00%	80	80	120	160	\$46.85	\$7,496
Nonparticipating eligible schools	309	75.75%	234	234	20	78	\$46.85	\$3,655

HS&B:20 Activity	Sample Size	Expected Response Rate	Number of Respondents	Number of Responses	Average Burden Time per Response (minutes)	Total Burden (hours)	Estimated Respondent Average Hourly Wage <sup>1</sup>	Estimated Respondent Burden Time Cost
Participating schools (90 minutes)		9.75%	30	30	260 <sup>4</sup>	130	\$46.85	\$6,091
Participating schools (45 minutes)		13.00%	40	40	260 <sup>4</sup>	174	\$46.85	\$8,152
Participating schools (out of school only)		1.50%	5	5	260 <sup>4</sup>	22	\$46.85	\$1,031
School Coordinators (assistance) <sup>5</sup>	7.5	100%	75	75	600	750	\$30.22	\$22,665
School Coordinators (roster data)	75	100%	75 <sup>6</sup>	75	360	450	\$30.22	\$13,599
Students' parents (9 <sup>th</sup> grade permission)	2,626	80.75%	2,120	2,120	10	354	\$24.34	\$8,617
Students' parents (12 <sup>th</sup> grade permission)	2,485	80.75%	2,007	2,007	10	335	\$24.34	\$8,154
Total	-	-	4,761	4,836	-	2,721	-	\$92,017
	Base	-Year Full-so	ale (BYFS) Re	cruitment				
Nonparticipating districts	791 <sup>2</sup>	70.00%	554	554	20	185	\$46.85	\$8,668
Participating districts	791	30.00%	237	237	260	1,027	\$46.85	\$48,115
District IRB staff study approval	198	100.00%	198	198	120	396	\$46.85	\$18,553
District IRB panel study approval <sup>3</sup>	990³	100.00%	990	990	120	1,980	\$46.85	\$92,763
Nonparticipating eligible schools		33.00%	453	453	20	151	\$46.85	\$7,075
Participating schools (90 minutes)	4.0704	52.00%	714	714	260⁵	3,094	\$46.85	\$144,954
Participating schools (45 minutes)	1,373 <sup>4</sup>	13.00%	179	179	260⁵	776	\$46.85	\$36,356
Participating schools (out of school only)		2.00%	27	27	260⁵	117	\$46.85	\$5,482
School Coordinators (assistance) <sup>6</sup>	000	100%	920	920	600	9,200	\$30.22	\$278,024
School Coordinators (roster data)	920	100%	920 <sup>7</sup>	920	360	5,520	\$30.22	\$166,815
Students' parents (permission)	26,000	95.00%	24,700	24,700	10	4,117	\$24.34	\$100,208
Total Recruitment	ı	-	28,972	29,892	-	26,563	-	\$907,013
	Base-\		st (BYFT) Date		-	-		
		Studen	ts and Parents	5				
Student Survey (9 <sup>th</sup> grade)	2,495 <sup>8</sup>	80.75%	2,014	2,014	25	840	\$7.25	\$6,090
Student Survey (demographics only; 9 <sup>th</sup> grade)	131 <sup>8</sup>	80.75%	106	106	5	9	\$7.25	\$66
Student Survey (demographics only; 12 <sup>th</sup> grade)	2,485 <sup>8</sup>	80.75%	2,007	2,007	5	168	\$7.25	\$1,218
Student Math Assessment (9 <sup>th</sup> and 12 <sup>th</sup> grade)	5,110	80.75%	4,126 <sup>6</sup>	4,126	40	2,751	-	-
Student Reading Assessment (9 <sup>th</sup> grade) <sup>9</sup>	2,495 <sup>9</sup>	80.75%	2,014 <sup>6</sup>	2,014	25	840	-	-
Student Hearing and Vision Assessments	4,855 <sup>10</sup>	80.75%	3,920 <sup>6</sup>	3,920	10	654	\$7.25	\$4,742
Students' parents (9 <sup>th</sup> gr., full version)	1,313	85%	1,116 <sup>6</sup>	1,116	30	558	\$24.34	\$13,582
Students' parents (9 <sup>th</sup> gr., abbreviated version)	1,313	85%	1,116 <sup>6</sup>	1,116	15	279	\$24.34	\$6,791
Students' parents (9 <sup>th</sup> gr., reinterview)	60	83%	50 <sup>6</sup>	50	5	5	\$24.34	\$122
			athematics te	1		-		
Teacher survey (full version)	131	75%	98	98	16	27	\$30.22	\$816
Teacher survey (abbreviated version)	131	75%	98	98	10	17	\$30.22	\$514
Teacher student report (full version)	131	75%	98 <sup>6</sup>	980 <sup>11</sup>	4	66	\$30.22	\$1,995
Teacher student report (abbreviated version)	131	75%	986	980 <sup>11</sup>	3	49	\$30.22	\$1,481
School counselors								
Students' school counselors	75	100%	75	75	30	38	\$28.18	\$1,071
School administrators  Students as head administrators								
Students' school administrators  Total BYFT Data Collection	75	100%	75	75	40	50	\$46.85	\$2,343
	-	-	4,473	18,775	-	6,351	-	\$40,831
Total	-	-	38,206	53,503	-	35,635		\$1,039,861

<sup>&</sup>lt;sup>1</sup> The average hourly earnings of parents derived from May 2017 Bureau of Labor Statistics (BLS) Occupation Employment Statistics is \$24.34, of high school teachers is \$30.22, of education administrators is \$46.85, and of educational guidance counselors is \$28.18. If mean hourly wage was not provided, it was computed assuming 2,080 hours per year. The exception is the student wage, which is based on the federal minimum wage. Source: BLS Occupation Employment Statistics, <a href="http://data.bls.gov/oes/">http://data.bls.gov/oes/</a> datatype: Occupation codes: All employees (00-0000); High school teachers (25-2031); Education Administrators (11-9032); and Educational guidance counselors (21-1012); accessed on July 30, 2018.

<sup>&</sup>lt;sup>2</sup> Number of districts is estimated from our experience on prior school-based studies, such as HSLS:09 and MGLS:2017.

<sup>&</sup>lt;sup>3</sup> Based on the estimate that on average there will five individuals per panel.

<sup>&</sup>lt;sup>4</sup> The BYFS sample size is the initial sample size and does not include the reserve sample (see Part B) which, if needed, will be released after the start of BYFS data collection. Should we expect to need to release any reserve sample schools, we will include our burden estimated in the next submission.

<sup>&</sup>lt;sup>5</sup> Based on the estimate that on average schools will incur the same burden time to review study request, decide whether or not to participate, appoint a coordinator, and assist with the preparations for data collection regardless of the student session length or location.

#### A.13 Estimates of Total Annual Cost Burden

There are no costs to respondents other than the cost associated with response time burden.

#### A.14 Costs to Federal Government

A summary of estimated costs to the federal government for HS&B:20 are shown in Table 3. Cost estimates include staff time, shipments, reproduction, postage, and telephone costs associated with the study management, data collection, analysis, and reporting. The costs shown are for the base-year field test and BYFS data collections. The total cost for the HS&B:20 base-year field test is \$7,533,737 and for BYFS it is \$13,986,427.

Table 3. Costs to NCES for the HS&B:20 base-year field test and BYFS

Base-Year Field Test (BYFT)	
NCES salaries and expenses	\$150,000
Contract costs	\$7,383,737
Instrumentation and materials	\$2,657,661
Data Collection	\$3,104,885
Systems and data processing	\$1,621,191
Total	\$7,533,737
Base-Year Full-Scale (BYFS)	
NCES salaries and expenses	\$187,500
Contract costs	\$13,798,927
Instrumentation and materials	\$1,030,918
Data Collection	\$10,138,147
Systems and data processing	\$2,629,862
Total	\$13,986,427

#### A.15 Reasons for Program Changes or Adjustments

The apparent increase in respondent burden is due to the fact that the last clearance was only for state, school district, school, and parent recruitment activities in preparation for the HS&B:20 base-year field test, while this request is for all base-year field test activities, including data collection, plus also for the state, school district, school, and parent recruitment activities in preparation for BYFS.

#### A.16 Publication Plans and Time Schedule

The operational schedule for the HS&B:20 field test and BYFS is shown in Table 4. The contract for HS&B:20 requires multiple reports, publications, and other public information releases. Results of the field test will be published as a report and appended to the full-scale data file documentation. In addition, the following will be produced from the full-scale data:

- Descriptive summaries of significant findings for dissemination to a broad audience (including First Look reports);
- Detailed data file documentation describing all aspects of the full-scale study design and data collection procedures, including an appendix summarizing the methodological findings from the field test;
- A comprehensive psychometric report describing the development and implementation of the assessments; and
- Complete data files and documentation for research data users in the form of both a restricted-use data (RUD) file and public-use file; QuickStats a public-use data analysis system in which users create their own tables and charts using pre-defined categories from a subset of variables; and PowerStats, which

<sup>&</sup>lt;sup>6</sup> Based on the estimate that on average it will take about 10 hours to distribute and collect parental permission forms, and schedule and coordinate data collection logistics.

 $<sup>^{7}\,\</sup>mathrm{A}$  duplicate count of respondents, not included in the Total Number of Respondents.

<sup>&</sup>lt;sup>8</sup> We will ask 95 percent of ninth-graders to complete the full student survey. All twelfth-graders and five percent of ninth-graders will be asked to complete only the demographic items to allow time to test more assessment items.

 $<sup>^{9}</sup>$  We will ask 95 percent of ninth-graders to complete the reading assessment.

<sup>10</sup> Based on the estimate that all students participating in school (95 percent) will complete the hearing and vision assessments.

 $<sup>^{11}</sup>$  In the field test, teachers are estimated to complete on average ten teacher student reports.

allows users to create their own tables and charts using all of the variables, in addition to conducting regression analyses.

Table 4. Operational schedule for HS&B:20 base-year study

Activity	Start date	End date
Base-year field test		_
Select school sample	August 2018	November 2019
Recruitment of schools and districts	January 2019	November 2019
Recruitment of students and parents through requesting parent consent	August 2019	February 2020
Data collection	August 2019	February 2020
Prepare field test report	March 2020	September 2020
Base-year full-scale study (BYFS)		
Select school sample	January 2019	May 2019
Recruitment of schools and districts	August 2019	November 2020
Recruitment of students and parents through requesting parent consent	August 2020	February 2021
Data collection	August 2020	February 2021
Process data, construct data files	September 2020	February 2022
Prepare/update reports	February 2021	February 2022

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

The expiration date for OMB approval of the information collection *will be displayed* on data collection instruments and materials. No special exception is being requested.

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

There are no exceptions to the certification statement identified in the Certification for Paperwork Reduction Act Submissions of OMB Form 83-I.