

## Collection of Graduate Student Data in NCES Sample Surveys: Goals for the Technical Review Panel



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**Associate Project Officer**  
**National Postsecondary Student Aid Study**

### Agenda

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- Background
  - National Postsecondary Education Cooperative
  - What does NCES collect now?
  - What does NSF (NCSES) collect now?
  - What else is available on Graduate Students?
- NCES plans for future studies
- Technical Review Panel charge

## Background

### TECHNICAL REVIEW PANEL ON GRADUATE STUDENTS

- National Postsecondary Student Aid Study (NPSAS) is the next opportunity to collect information on Graduate Students, but this panel's feedback will be used to inform:
  - Baccalaureate and Beyond Longitudinal Study
  - High School Longitudinal Study (and its predecessors)
  - NCES initiatives on career and adult education
  - Household Studies

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## Background

### NATIONAL POSTSECONDARY EDUCATION COOPERATIVE

- NPEC is an advisory body of state representatives and researchers to advise NCES on data collections.
  - NPEC-S convened a meeting in March to evaluate a white paper on a longitudinal study on doctoral students.
  - NPEC-S provided broader recommendations/guidance about NCES's future studies on Graduate students.

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## Background

### WHAT DOES NCES COLLECT NOW?

- Institution information
  - Enrollment by level
  - Completions/credentials by level and major/program
  - Institutional financing
  - Aggregate demographic characteristics



Integrated Postsecondary  
Education Data System



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## Background

### WHAT DOES NCES COLLECT NOW?

Name	Source	Type	Level of Analysis	Frequency
IPEDS	Federal (NCES)	Cross-Sectional	Institution	Yearly

- IPEDS provides data on the completion of Graduate student credentials each year.
  - Unit of analysis is Title IV institutions.
  - Race/ethnicity and gender of completers known, but nothing is known about entrants, so production function is obscured.



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## Background

### WHAT DOES NCES COLLECT NOW?

- Information on how Graduate students pay for college
  - Price of college (including net price)
  - Financial aid by source and type
  - Demographic characteristics



National Postsecondary  
Student Aid Study



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## Background

### WHAT DOES NCES COLLECT NOW?

Name	Source	Type	Level of Analysis	Frequency
NPSAS	Federal (NCES)	Cross-Sectional	Student	Every 4 years

- National Postsecondary Student Aid Study
  - Quadrennial, nationally-representative view of postsecondary education.
  - Unit of analysis is student, including student interview and administrative record data.
  - Graduate interview is least robust feature; known shortcomings in questions related to graduate financing beyond Title IV aid.
  - Nothing is estimable by field.



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## Background

### WHAT DOES NCES COLLECT NOW?

- Early graduate school experiences
  - Academic program information and experiences
  - Focus on teachers and STEM students
  - Federal financial aid by source and type
  - Student loan debt accumulation



Baccalaureate and Beyond  
Longitudinal Study



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## Background

### WHAT DOES NCES COLLECT NOW?

Name	Source	Type	Level of Analysis	Frequency
B&B	Federal (NCES)	Longitudinal	Student	Every 8 years

- Baccalaureate and Beyond Longitudinal Study
  - Sample of baccalaureate recipients and follows them for up to 10 years following graduation.
  - Examines workforce outcomes and education following graduation, including early graduate school.
  - The data on graduate student experiences is limited due to the number of students and the short period of time to follow students.



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## Background

### WHAT DOES NCES COLLECT NOW?

- Elementary/Secondary studies with students that transition into postsecondary education



Education Longitudinal  
Study of 2002



High School Longitudinal  
Study of 2009



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## Background

### WHAT DOES NSF (NCSES) COLLECT NOW?

- The National Science Foundation (NSF) via the National Center of Science and Engineering Statistics (NCSES) is another provider of Federal statistics on Graduate students.



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## Background

### WHAT DOES NSF (NCSES) COLLECT NOW?

Name	Source	Type	Level of Analysis	Frequency
GSS	Federal (NSF)	Cross-Sectional	Institution / Academic Unit	Yearly

- Survey of Graduate Students and Postdoctorates in Science & Engineering (GSS)
  - Administered yearly by NSF's NCSES
  - Unit of analysis is an academic unit in the sciences, engineering, and selected health disciplines.
  - Gathers program-level counts of enrollment by field, and the "largest mechanism of financial support" mapped back to federal funding agency (e.g., DOD, NIH, NSF, USDA, NASA)

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## Background

### WHAT DOES NSF (NCSES) COLLECT NOW?

Name	Source	Type	Level of Analysis	Frequency
SED	Federal (NSF)	Cross-Sectional	Student	Yearly

- Survey of Earned Doctorates (SED)
  - Administered yearly by NSF's NCSES
  - Survey is administered to Doctoral recipients across all disciplines.
  - Includes demographic information such as gender, race/ethnicity, citizenship, residency, parents highest educational level, marital status, disability, and discipline and has a 94 year history.

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## Background

### WHAT DOES NSF (NCSES) COLLECT NOW?

Name	Source	Type	Level of Analysis	Frequency
SDR	Federal (NSF)	Longitudinal Panel	Student	Every 2 to 3 years

- Survey of Doctorate Recipients (SDR)
  - Administered every 2 to 3 years by NSF's NCSES
  - The survey is a longitudinal study of individuals who receive a doctoral degree in a science, engineering, or health.
  - The survey examines outcomes after the Doctoral degree including educational and occupational achievements and career movement.

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## Background

### WHAT ELSE IS AVAILABLE ON GRADUATE STUDENTS?

- Other non-federal surveys
  - Council on Graduate Schools (CGS).
    - PhD Completion Project
    - Graduate Enrollment and Degrees
  - NRC – Assessing Research-Doctoral Programs.
  - AAUDE PhD time to completion initiatives / defining types of Graduate students.
  - Peterson's Annual Survey of Graduate and Professional Institutions (and similar surveys related to publications).

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## Background

Name	Source	Type	Level of Analysis	Frequency
IPEDS	Federal (NCES)	Cross-Sectional	Institution	Yearly
NPSAS	Federal (NCES)	Cross-Sectional	Student	Every 4 years
B&B	Federal (NCES)	Longitudinal	Student	Every 8 years
GSS	Federal (NSF)	Cross-Sectional	Institution / Academic Unit	Yearly
SED	Federal (NSF)	Cross-Sectional	Student	Yearly
SDR	Federal (NSF)	Longitudinal Panel	Student	Every 2 to 3 years
PhD Comp Project	Non-Fed (CGS)	Cross-sectional	Institution/Program	As funding allows
Graduate Enrollment & Degrees	Non-Fed (CGS)	Cross-sectional	Institution	Yearly

## Background

### SUMMARY: DATA GAPS

- Lack of basic descriptive information on Masters students
- National estimates on:
  - Time to degree
  - Program/discipline specific information
  - Graduate persistence and outcomes
  - Workforce transition and experiences

## NCES plans for future studies

### CHALLENGES TO CLOSING THE GAP

- NCES budget is currently supporting current efforts; no additional data collections will be added.
- Priority for new funding will be directed to an administrative financial aid data collection.
- NCES must prioritize its efforts to address the most important information to collect on Graduate students.

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## NCES plans for future studies

### UPCOMING COLLECTIONS

- NPSAS:16  
National Postsecondary Student Aid Study  
Full scale: 2015-16      Field Test: 2014-15
- B&B:16/17  
Baccalaureate and Beyond Longitudinal Study  
Full scale: 2016-17      Field Test: 2015-16
- A new graduate longitudinal study is unlikely, but interest exists.

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## Technical Review Panel Charge

### NPEC RECOMMENDATIONS

- Focus on Master's Students
  - A lot of data are already available on Doctoral students, focus on Master's students.
- Collect information on non-STEM fields
  - STEM is adequately covered in other studies, so NCES should consider focusing its efforts on other disciplines.
- Be parsimonious
  - NCES should have a narrow and unique focus based on what is not already being collected in other studies.
- Capitalize on what NCES does well
  - NCES should focus on improving and enhancing what it does best: Student Financial Aid.

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## Technical Review Panel Charge

### NPEC RECOMMENDATIONS

- Do not try to collect nationally representative discipline-based samples if the sample size is too small
  - Instead, consider categorizing disciplines into broader groups (example: based on how they develop their financial aid packages for students).

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## Technical Review Panel Charge

### NPEC RECOMMENDATIONS

- Additional items that NPEC members on the TRP wish to share...

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## Technical Review Panel Charge

- Priorities:
  1. Graduate student financing of and experience in college
    - Enrollment and education experiences
    - Financial aid
    - Income and expenses
    - Background
  2. Develop alternatives to discipline-based measures.
  3. Enhance NPSAS interview with new items based on gaps in existing research (see white paper).

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## Technical Review Panel Charge


- Lower priority:

1. Creating or designing a longitudinal study for Master's students.

Though ideas/recommendations will be accepted.  
We are also open to exploring retrospective questions on cross-sectional surveys (NPSAS) for student subgroups.


**NPSAS:12 Technical Review Panel Meeting**  
June 17-18, 2014

RTI International



## NCES Studies and Study Methodologies on Graduate Education

Jennifer Wine  
Peter Siegel



RTI International is a trade name of Research Triangle Institute.


[www.rti.org](http://www.rti.org)

RTI International

### Presentation Overview

- Introduce NCES study data sources and methodologies for two studies
  1. National Postsecondary Student Aid Study
  2. Baccalaureate and Beyond Longitudinal Study
- Provide overview of sampling methods employed

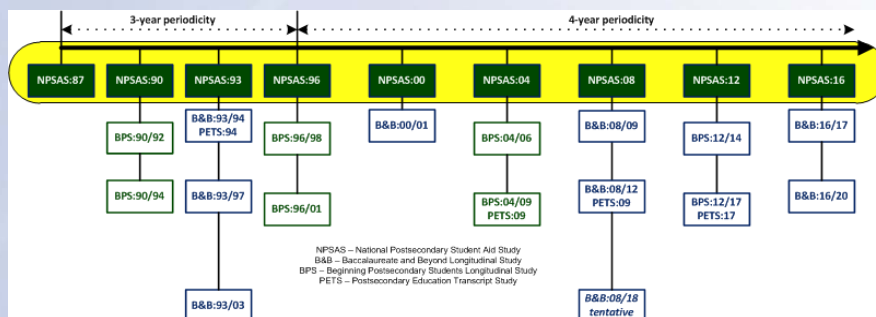
2 | NPSAS TRP - June 2014



## National Postsecondary Student Aid Study

- Nationally-representative, cross-sectional study of students enrolled in postsecondary education, at all levels, for a specific academic year (July 1 to June 30)
- Provides data on
  - Current costs of postsecondary education
  - Resources used by students to meet those costs, including financial aid received, employment, and family support
  - Enrollment status
  - Student characteristics
- Authorized by the Higher Education Opportunity Act of 2008, 20 U.S.C. § 1015(d) which charges NCES with collecting information from aid recipients in the United States

## Periodicity of NPSAS



- First NPSAS conducted in 1987, focusing on the 1986–87 academic year
- Conducted every 3 years until 1996; every 4 years since 1996
- Alternating cycles of NPSAS spin off either a B&B or a BPS
- Next NPSAS with a B&B cohort will be conducted in 2016, with a field test in 2015 to test procedures and instruments

## Main Sources of Data for NPSAS

- Integrated Postsecondary Education Data System (IPEDS)
- Student records
- Student interviews
- Administrative records
  - Central Processing System
  - National Student Loan Data System (NSLDS)
  - SAT/ACT file matching
  - National Student Clearinghouse



The screenshot shows the IPEDS website homepage. At the top is the IPEDS logo and the text 'INTEGRATED POSTSECONDARY EDUCATION DATA SYSTEM'. Below this is a navigation bar with links: Home, About, Newsroom, Training & Outreach, IPEDS: IPEDS R&D, Publications, Glossary, Data Provider Center, Staff, Help. The main content area includes a 'Welcome to IPEDS' section, a 'This Week in IPEDS' section dated October 6, 2009, an 'ANNOUNCEMENTS & ALERTS' section, and sections for 'COLLEGE Navigator', 'IPEDS DATA CENTER', 'IPEDS TABLES LIBRARY', and 'IPEDS RESOURCES'.

## IPEDS as Data Source

IPEDS provides institution-level data on, including

- Institution characteristics
- Enrollment counts (some by CIP)
- Completion rates
- Degrees conferred, by CIP
- Tuition and fees
- Distance education offered
- Faculty/staff counts, including graduate students on the payroll

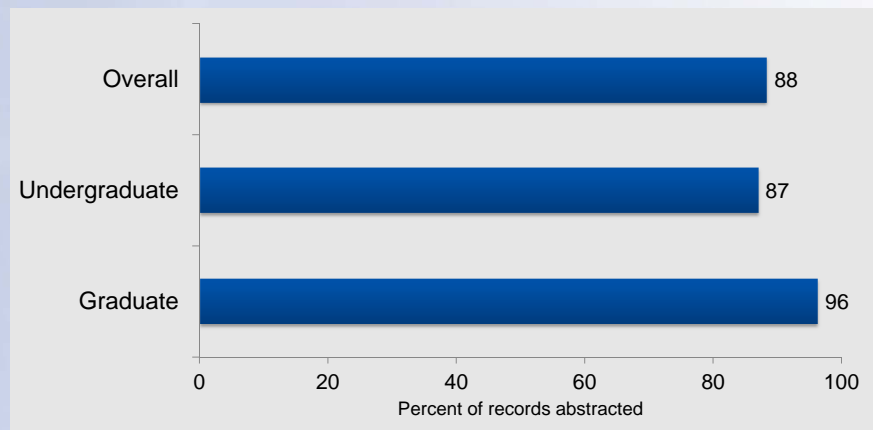


## NPSAS Student Record Data

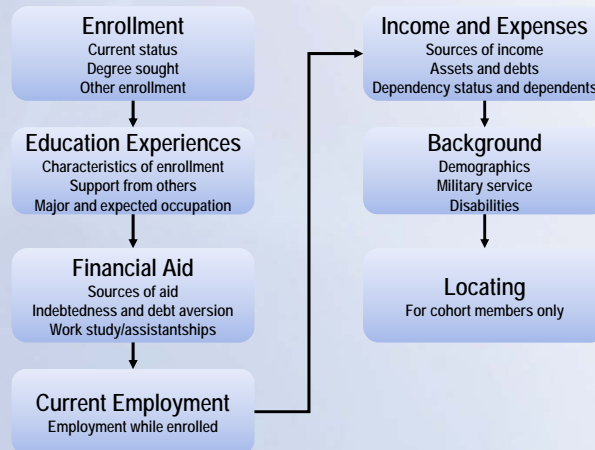
### Student-level data on

- Demographics and contacting information
- Enrollment detail
  - Degree program and progress
  - Term
  - Tuition
- Placement and admissions test data
- Tuition and budget, including need analysis
- Aid awarded, including nonfederal aid (state, institution, and private aid)

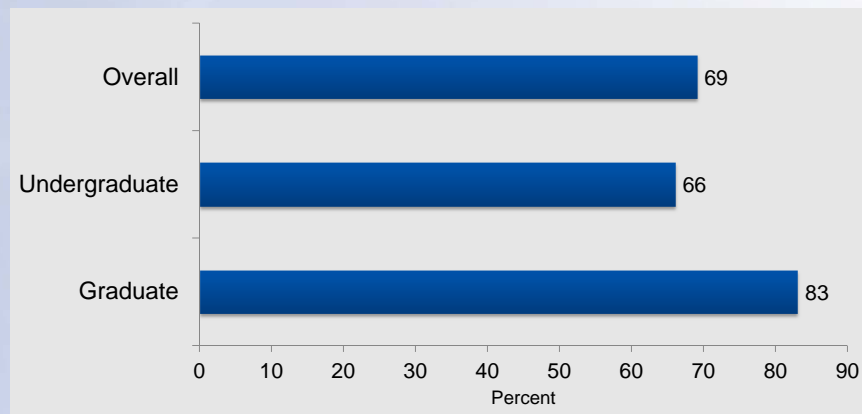
## Completeness of NPSAS:12 Student Records, by Student Level



## NPSAS Student Interview



## NPSAS:12 Student Interview Completion, by Student Level



## Administrative Record Matching

- Central Processing System (CPS), US Department of Education
- Federal aid application (FAFSA) data
- Match rates
  - Overall – 77.4%
  - Undergraduate – 81.5%
  - Graduate – 52.0%
- National Student Loan Data System, US Department of Education – Pell File
- Pell Grant history file
- Match rates
  - Overall – 59.4%
  - Undergraduate – 64.5%
  - Graduate – 30.7%

## Administrative Record Matching (continued)

- National Student Loan Data System, US Department of Education – Loan File
  - Federal loan history file
  - Match rates
    - Overall – 64.8%
    - Undergraduate – 64.4%
    - Graduate – 67.3%
- National Student Clearinghouse
  - Postsecondary enrollment, degree, and certificate records
  - Match rates

	Overall	Undergraduate	Graduate
Any institution	79.3%	78.0%	86.4%
NPSAS institution	71.5%	69.5%	82.8%

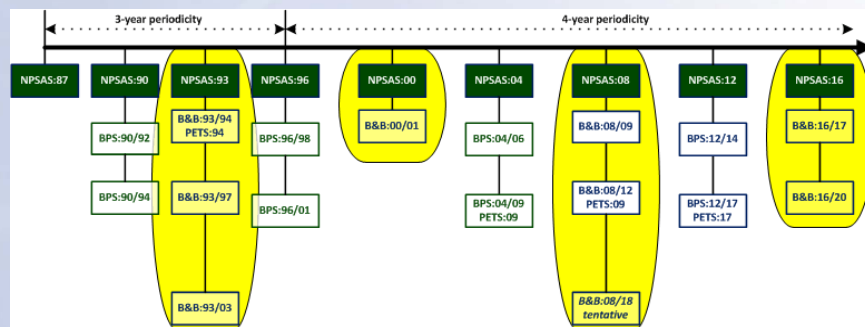
## Administrative Record Matching (continued)

- SAT or ACT
  - Survey data for high school graduates 2006-2011
  - Match rates
  - Overall – 31.5%
    - Undergraduate – 36.1%
    - Graduate – 5.8%

## Baccalaureate and Beyond Longitudinal Study

- Follows a cohort of bachelor's degree recipients identified during their degree award year as part of NPSAS, then 1, 4 years, and sometimes 10 years later
- Collects information about graduates' postsecondary education, employment, and other life experiences since leaving college
- Also collects information on the pathways and experiences of new elementary and secondary school teachers
- Authorized by federal law under the Higher Education Act of 1965, as amended by the Higher Education Opportunity Act of 2008, 20 U.S.C. § 1015(a) (2012)

## Periodicity of the B&B Studies



- First B&B conducted with NPSAS:93 with follow-ups in 1994, 1997, and 2003
- Conducted every other NPSAS – cohorts in 1993, 2000, and 2008
- Next B&B to be conducted as a 1-year follow-up to NPSAS:16, with a field test to be conducted in 2016

## Main Sources of Data for B&B

- Same as NPSAS for the last undergraduate year
- Some of the same sources as NPSAS for new enrollments since BA completion, including
  - Integrated Postsecondary Education Data System (IPEDS)
  - Student interviews
  - Administrative record matching
    - Central Processing System
    - National Student Loan Data System (NSLDS)
    - National Student Clearinghouse
- Postsecondary transcripts

## B&B Study Designs

Cohort	1-year follow-up	4-year follow-up	10-year follow-up	Transcript collection
1993	✓	✓	✓	✓
2000	✓	—	—	—
2008	✓	✓	Option	✓
2016	✓	✓	---	Option

## B&B Follow-Up Survey Topics

- Continuing education
- Entry into graduate school
- Employment training, certification, and licensure
- Education-related debt
- Transition to labor force
- Employment and career development
- Teacher pipeline
- Experiences of new teachers
- Assets and income
- Other debt
- Marital status and family formation
- Civic involvement
- Updated background characteristics

## Postsecondary Education Transcript Study (PETS)

- Transcript collection for all postsecondary studies
- PETS:09 collected transcripts for both B&B and BPS
- For the B&B:08 cohort
  - Collected transcripts for about 92 percent of the 25,000 BA completers at 1,300 institutions
  - Transcripts were hand-keyed into an electronic data system using course catalogs for reference
  - Majors and courses were coded using an updated College Course Map (CCM), based on the NCES Classification of Instructional Programs (CIP)

## For More Information

- <http://nces.ed.gov/surveys/npsas/>
- <http://nces.ed.gov/surveys/b&b/>
- <http://nces.ed.gov/ipeds/>

## NPSAS General Design Specifications

- NPSAS:12: 1,670 institutions; 128,100 students
- NPSAS:16 (preliminary): 2,000 institutions; 126,300 students
- No state representative samples in '12 and '16

## NPSAS-Eligible Institutions

- Located in the 50 states, District of Columbia, and Puerto Rico (except in '12)
- Participate in Title IV student aid programs
- Offer educational programs
  - designed for students beyond high school, and
  - academically, occupationally, or vocationally oriented
- Make programs available to the public



## Institution Sampling Frame

### IPEDS

- Institution characteristics
- Enrollment
- Completions

## Institution Sampling Strata

### 10 institution strata

1. Public less-than-2-year
2. Public 2-year
3. Public 4-year non-doctorate-granting
4. Public 4-year doctorate-granting
5. Private nonprofit less-than-4-year
6. Private nonprofit 4-year non-doctorate-granting
7. Private nonprofit 4-year doctorate-granting
8. Private for-profit less-than-2-year
9. Private for-profit 2-year
10. Private for-profit 4-year

## Sampling Methodology

- Institutions selected with probability proportional to a measure of size (pps)
- Some institutions selected with certainty, i.e., probability of 1
- Sorting within strata with pps sampling forms implicit strata and ensures representation by
  - HBCU and HSI
  - Carnegie
  - Region
  - Large state systems

## 4-year Institution Sample Sizes

Institution stratum	NPSAS:12	NPSAS:16 (preliminary)
Total	1,100	1,400
Public 4-year non-doctorate-granting	130	180
Public 4-year doctorate-granting	230	340
Private nonprofit 4-year non-doctorate-granting	260	330
Private nonprofit 4-year doctorate-granting	220	270
For-profit 4-year	260	280

## NPSAS-Eligible Students

- Enrolled in *either*
  - (a) an academic program;
  - (b) at least one course for credit that could be applied toward fulfilling the requirements for an academic degree;
  - (c) exclusively non-credit remedial coursework but who the institution has determined are eligible for Title IV aid; or
  - (d) an occupational or vocational program that requires at least 3 months or 300 clock hours of instruction to receive a degree, certificate, or other formal award
- Not concurrently enrolled in high school
- Not enrolled *solely* in a GED or other high school completion program



## Student Lists

### Student lists may include

- |  |                                 |
|--|---------------------------------|
| • Name   | • Class level of undergraduates |
| • Social Security number (SSN)                                       | • Date of birth                 |
| • Student ID number  | • Major or CIP code             |
| • Student level  | • Contact information           |
| • Potential baccalaureate recipient or first-time beginner indicator | • GPA                           |
| • Undergraduate degree program                                       | • Number of credits accumulated |
| • Date of first enrollment   | • Account status                |
| • Veteran status   | • Race/ethnicity                |
| • First-time graduate student indicator                              | • Gender                        |



## Student Oversampling

### Oversample (in '16)

- Potential baccalaureate recipients
- Baccalaureate teacher majors
- Baccalaureate STEM majors
- Undergraduate students in for-profit institutions
- Graduate students in certain disciplines (?)

## Student Sampling Strata

### NPSAS:12

- First-time beginners in sub-baccalaureate programs
- Other first-time beginners
- Other undergraduate students
- Masters students in STEM programs
- Masters students in education and business programs
- Masters students in other programs
- Doctoral-research/scholarship/other students in STEM programs
- Doctoral-research/scholarship/other students in education and business programs
- Doctoral-research/scholarship/other students in other programs
- Doctoral-professional practice students
- Other graduate students

## Student Sampling Strata (continued)

### NPSAS:16 (preliminary)

- Baccalaureate teacher majors
- Baccalaureate STEM majors
- Baccalaureate business majors
- Other baccalaureate recipients
- Other undergraduate students
- Masters students in targeted disciplines
- Other masters students
- Doctoral-research/scholarship/other students
- Doctoral-professional practice students
- Other graduate students

## Graduate Student Sample Size

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ NPSAS:12               <ul style="list-style-type: none"> <li>– 17,300 graduate students</li> <li>– Masters degree program – 7,100                   <ul style="list-style-type: none"> <li>▪ Business administration (MBA) - 700</li> <li>▪ Education - 900</li> <li>▪ STEM – 1,700</li> <li>▪ Other – 3,800</li> </ul> </li> <li>– Doctoral degree program – 9,500                   <ul style="list-style-type: none"> <li>▪ PhD Education – 1,500</li> <li>▪ PhD STEM – 2,100</li> <li>▪ Other PhD – 3,900</li> <li>▪ Professional practice – 2,000</li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>▪ NPSAS:16 (preliminary)               <ul style="list-style-type: none"> <li>– 21,100 graduate students</li> </ul> </li> </ul> |
|---|--|

## Graduate Sample

- Need sufficient sample size in strata for analytic power
- By adjusting sampling rates, standard errors can be reduced
- Relative standard errors (RSEs)—range from 0% to >30% at the masters and doctoral levels in NPSAS:12
- Stabilize RSEs by slightly undersampling disciplines with too large sample sizes and slightly oversampling important disciplines with too small sample sizes

## Constraints

*Can only change student sampling strategies using variables we can reliably collect via enrollment lists or administrative records*

*Since sampling takes place on a flow basis, sampling rates that will allow over- or under-sampling have to be determined a priori. To accomplish that, we need to have actual counts of the characteristic from the sampling frame (IPEDS).*

## NPSAS Study Member

Any sample member who is determined to be eligible for the NPSAS study and, minimally, has valid data from any source for the following

1. Student type (undergraduate or graduate)
2. Date of birth or age
3. Gender

**And** at least 8 of the following 15 variables

- |                            |  |
|----------------------------|--|
| 1. dependency status       | 9. marital status                      |
| 2. months enrolled         | 10. any dependents                     |
| 3. tuition                 | 11. income                             |
| 4. received federal aid    | 12. expected family contribution (EFC) |
| 5. received nonfederal aid | 13. degree program                     |
| 6. student budget          | 14. class level                        |
| 7. race                    | 15. baccalaureate or FTB status        |
| 8. parent education        |  |

## B&B:08/09 Eligibility

- Completed requirements for bachelor's degree during 2007–08 academic year
- Eligibility based on transcript
- If no transcript, eligibility based on NPSAS interview
- If no transcript or interview, eligibility based on other data sources, e.g., student records, enrollment list, CPS, and Clearinghouse
- 31% sampled in NPSAS:08 as baccalaureate recipients were not eligible based on transcript and interview
- 1,060 confirmed in NPSAS interview as B&B-eligible were not eligible based on transcript

## B&B:08/09 Sample

- Sampled **all** 15,050 students confirmed eligible by the transcripts and with a completed NPSAS:08 interview
- Sampled **all** 1,890 students without a transcript, but who were confirmed B&B eligible in the NPSAS:08 interview
- Subsampled 500 students who did not complete a NPSAS:08 interview, but who were potential baccalaureate recipients

## B&B:08/09 Sample (continued)

- Increased sample size from previous studies - better able to support analysis needs
- Large number of teachers
- Oversample of STEM majors



## B&B:16 Cohort

- ~ 23,000 baccalaureate recipients
- Oversample of teachers and STEM majors

**NPSAS:12 Technical Review Panel Meeting**  
June 17-18, 2014

RTI International

**RTI  
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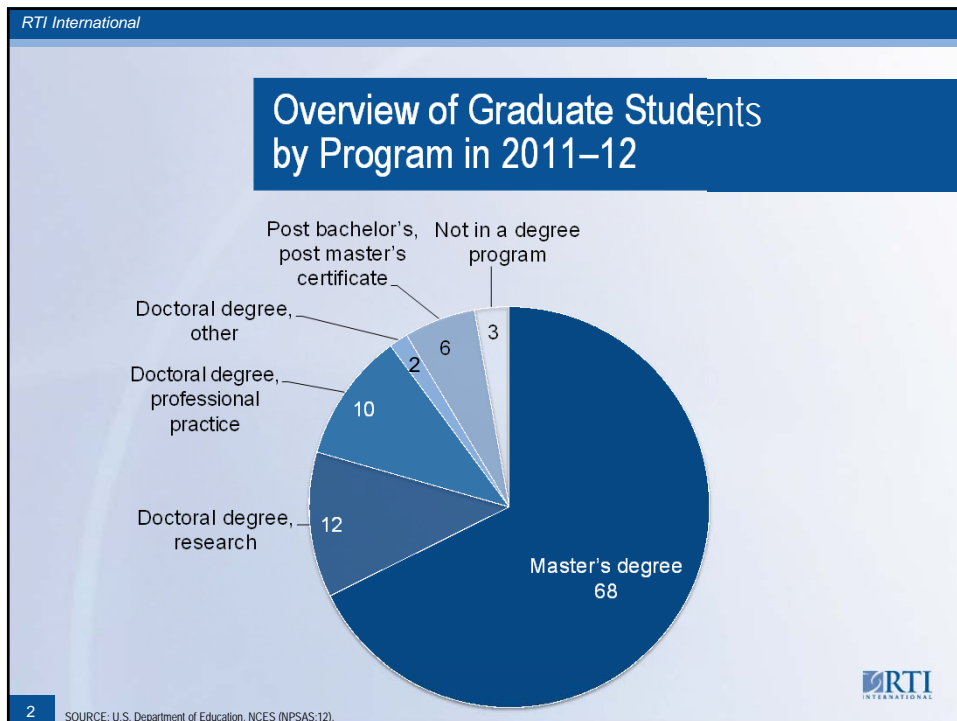
## Graduate Student Profile: Selected Findings from NPSAS

Jennie Woo

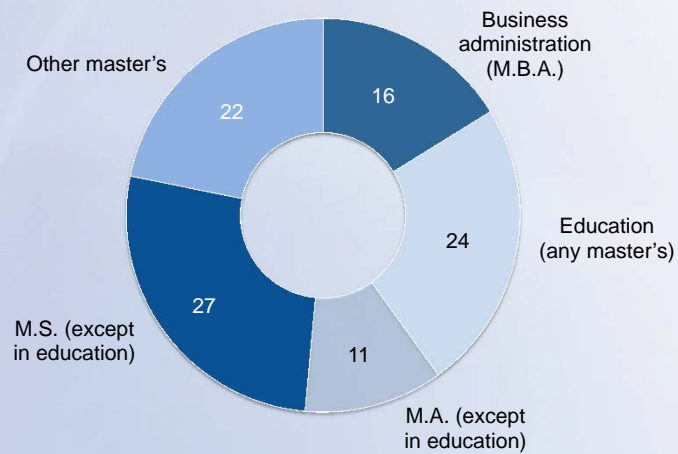
NPSAS:12 Technical Review Panel Meeting  
Washington, DC  
June 17–18, 2014

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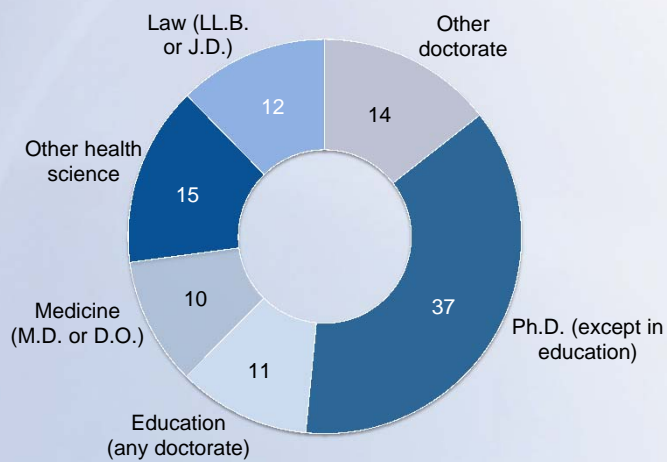
## Distribution of Master's Students by Program in 2011–12



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SOURCE: U.S. Department of Education, NCES (NPSAS:12).

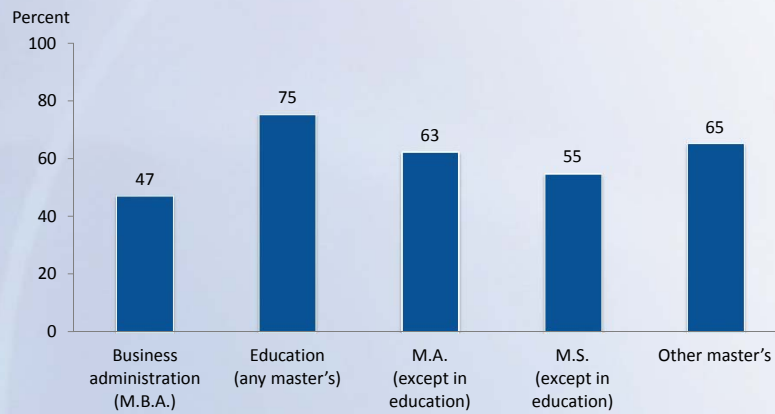
## Distribution of Doctoral Students by Program in 2011–12



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SOURCE: U.S. Department of Education, NCES (NPSAS:12).

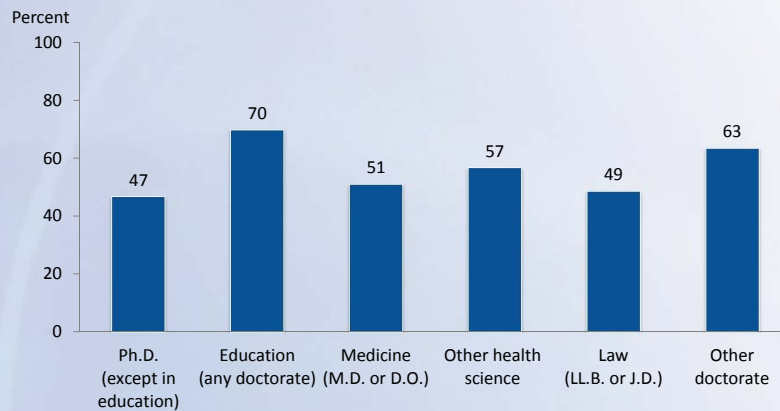
## Female Master's Students by Program in 2011–12



5

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

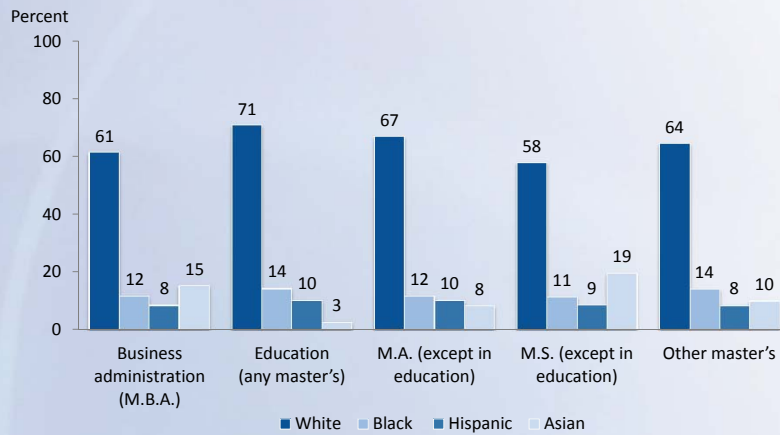
## Female Doctoral Students by Program in 2011–12



6

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

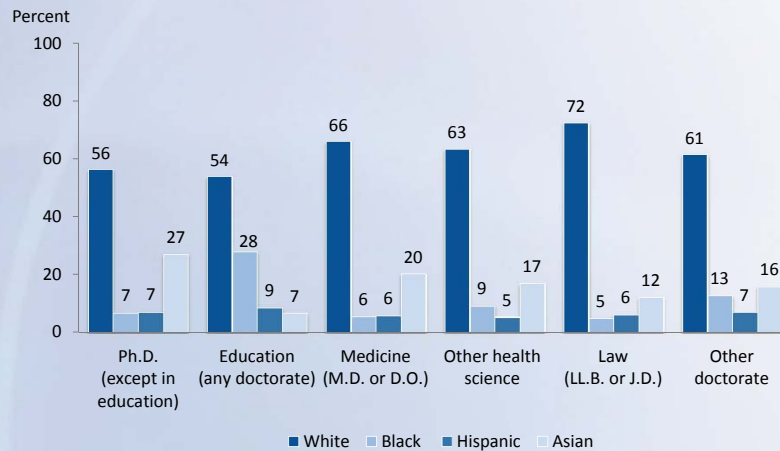
## Race/Ethnicity of Master's Students by Program in 2011–12



7

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

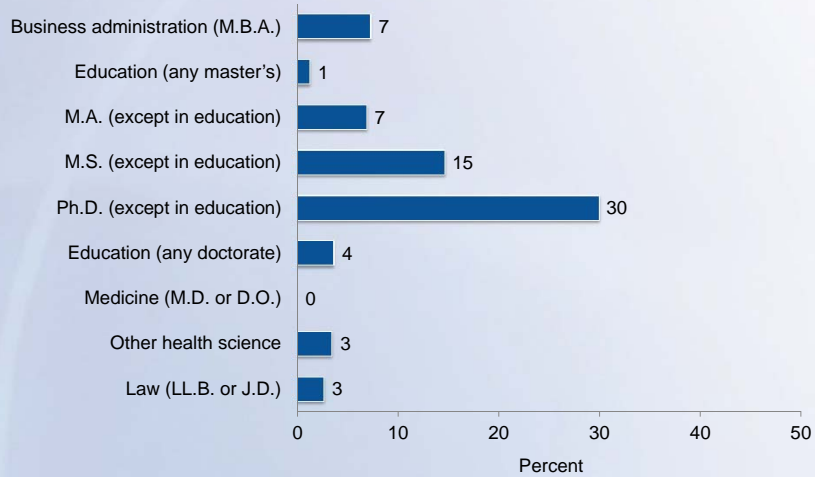
## Race/Ethnicity of Doctoral Students by Program in 2011–12



8

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

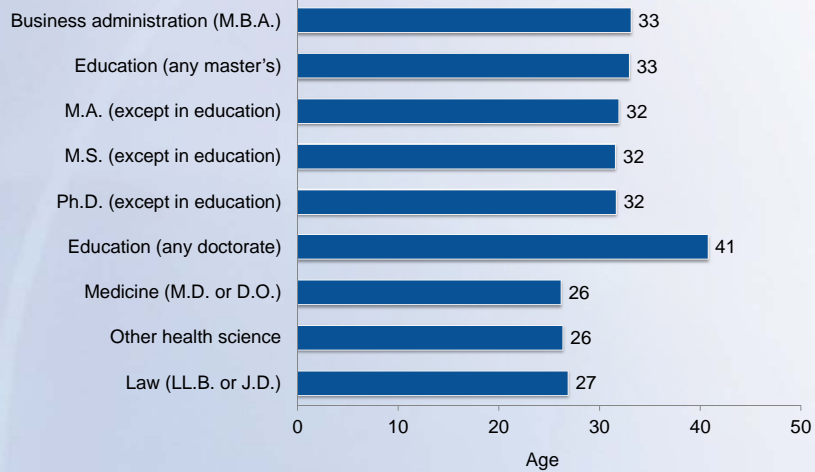
## Foreign Students by Program in 2011–12



9

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

## Average Age by Program in 2011–12



10

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

## Average Cost of Attendance by Type of Institution Within Degree Program: 2011–12

### Master's degree

Public	\$20,100
Private nonprofit	26,800
For-profit	21,100

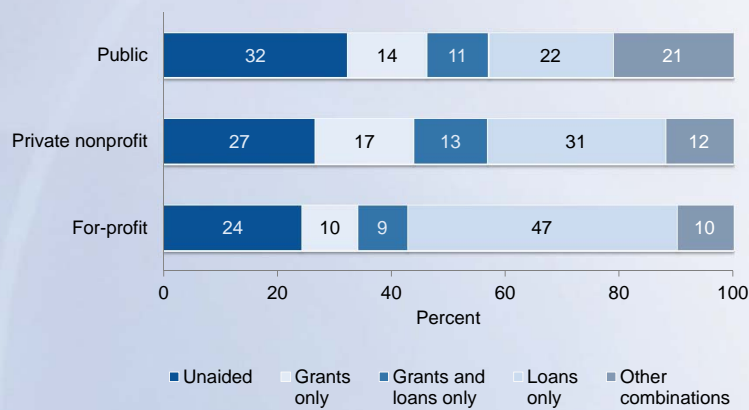
### Doctor's degree – research/scholarship

Public	32,700
Private nonprofit	50,100
For-profit	30,300

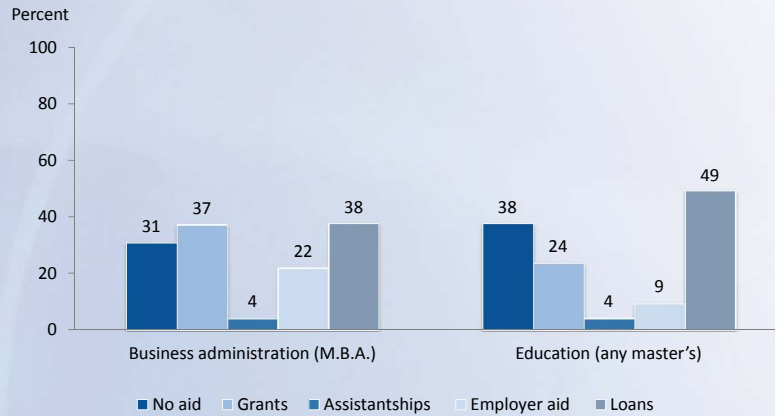
### Doctor's degree – professional practice

Public	41,200
Private nonprofit	54,000
For-profit	44,700

## Percentage Distribution of Graduate Students' Aid Packages by Type of Institution: 2011–12



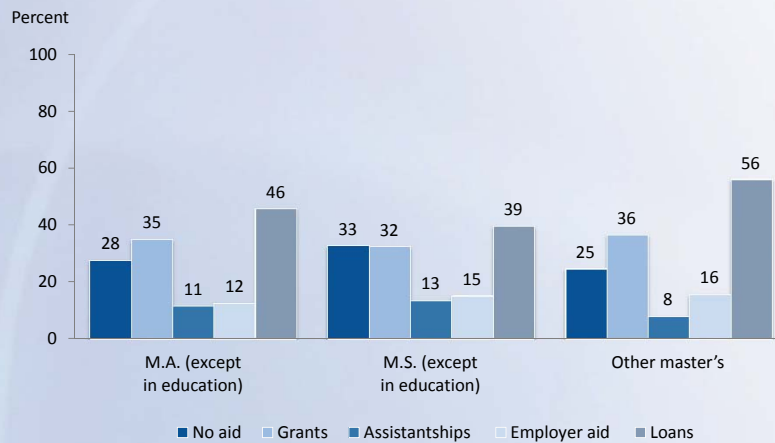
## Financing of Master's Students by Program in 2011–12



13

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

## Financing of Master's Students by Program in 2011–12 (cont.)

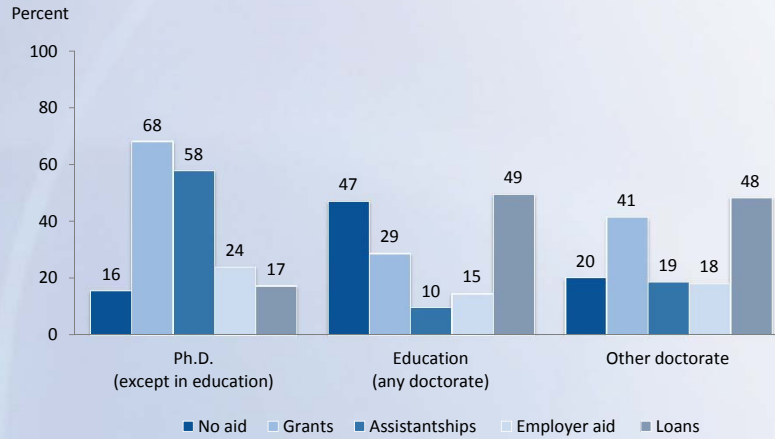


14

SOURCE: U.S. Department of Education, NCES (NPSAS:12).



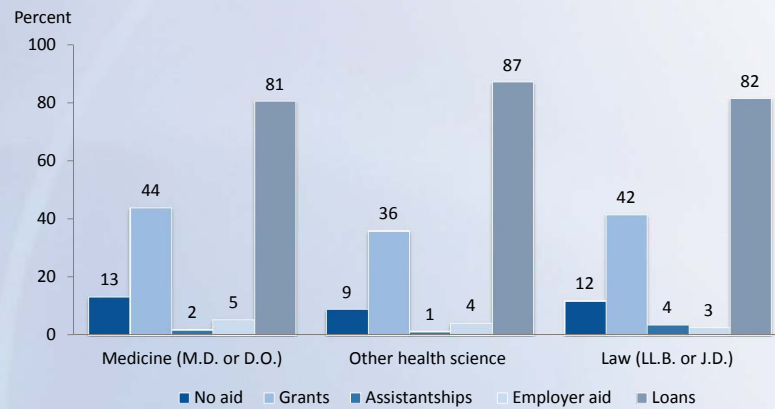
## Financing of Research Doctoral Students by Program in 2011–12



15

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

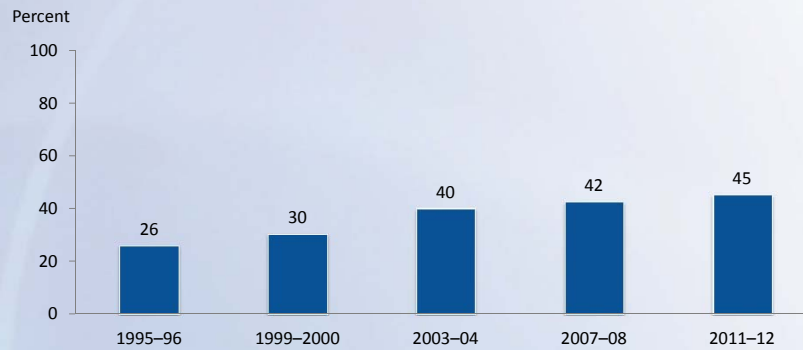
## Financing of Professional Doctoral Students by Program in 2011–12



16

SOURCE: U.S. Department of Education, NCES (NPSAS:12).

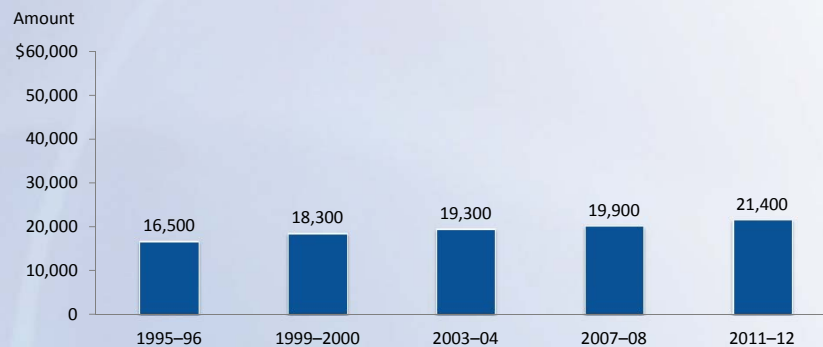
## Percent of Graduate Students with Annual Loans: 1995-96 to 2011-12



17

SOURCE: U.S. Department of Education, NCES (NPSAS-96, NPSAS-2000, NPSAS-04, NPSAS-08, and NPSAS-12).

## Average Amount Annually Borrowed by Graduate Students with Loans: 1995-96 to 2011-12

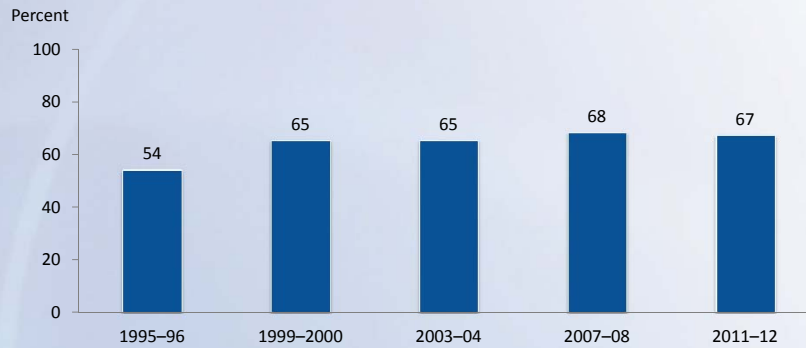


18

NOTE: In constant 2011-12 dollars.

SOURCE: U.S. Department of Education, NCES (NPSAS-96, NPSAS-2000, NPSAS-04, NPSAS-08, and NPSAS-12).

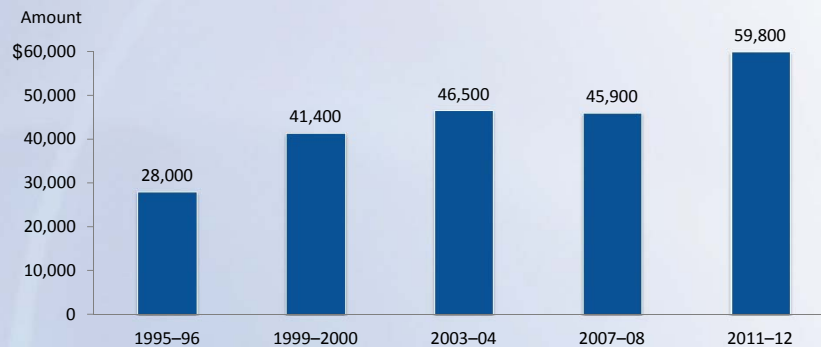
### Percent of Graduate Students Who Ever Borrowed for Education: 1995-96 to 2011-12



19

SOURCE: U.S. Department of Education, NCES (NPSAS-96, NPSAS-2000, NPSAS-04, NPSAS-08, and NPSAS-12).

### Average Amount Borrowed Cumulatively for Education by Graduate Students with Loans: 1995-96 to 2011-12




20

NOTE: In constant 2011-12 dollars.  
SOURCE: U.S. Department of Education, NCES (NPSAS-96, NPSAS-2000, NPSAS-04, NPSAS-08, and NPSAS-12).

# NPSAS:12 Technical Review Panel Meeting

June 17-18, 2014

RTI International



## Graduate Student Profile: Selected Findings from B&B

Emily Forrest Cataldi

NPSAS:12 Technical Review Panel Meeting  
Washington, DC  
June 17–18, 2014

RTI International is a trade name of Research Triangle Institute.


[www.rti.org](http://www.rti.org)

RTI International

### Access to Data

- Public access through QuickStats, PowerStats, and TrendStats (coming soon)
  - Web-based applications
  - Generates tables, linear regression, logistic regression
- Restricted access through data sets provided to NCES licensees
- Tables library and publications

2



## Findings

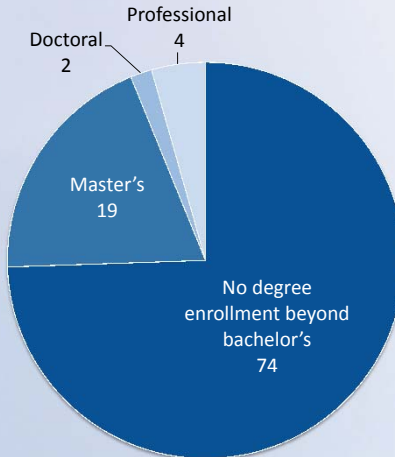
- Enrollment in graduate education
- Demographics among graduate enrollees
- Graduate education experiences
- Degree completion among graduate students

3

## Enrollment in graduate education among college graduates

4

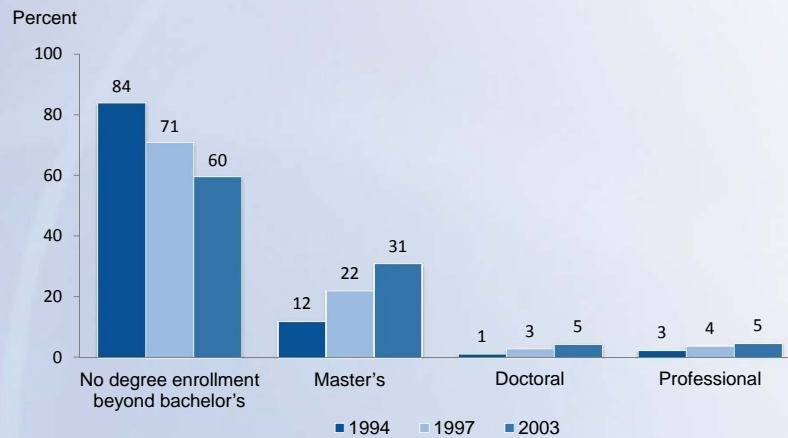
## Highest graduate enrollment among 2007–08 graduates by 2009



5

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Study (B&amp;B 08/09).

## Highest graduate enrollment among 1992–93 graduates by 1994, 1997, and 2003



6

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Study (B&amp;B 93/03).

## Demographic characteristics of college graduates who enrolled in graduate degree programs

7

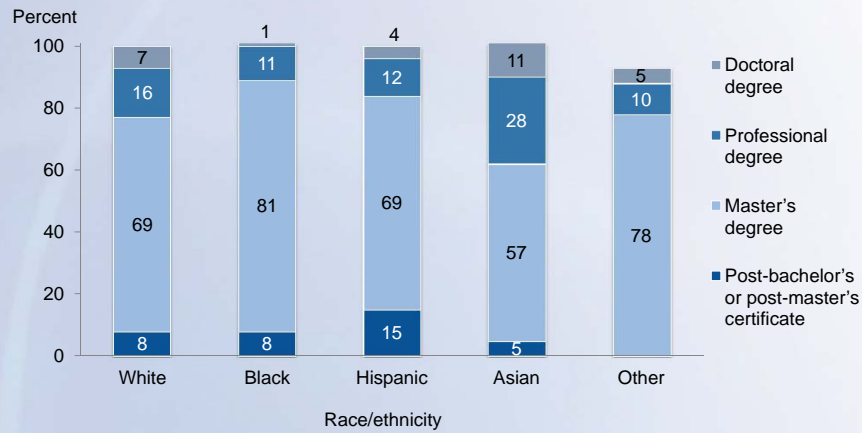
## Sex of 2007–08 college graduates enrolled in graduate school by 2009



8

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Study (B&amp;B 08/09).

## Race/ethnicity of 2007–08 college graduates enrolled in graduate school by 2009



9

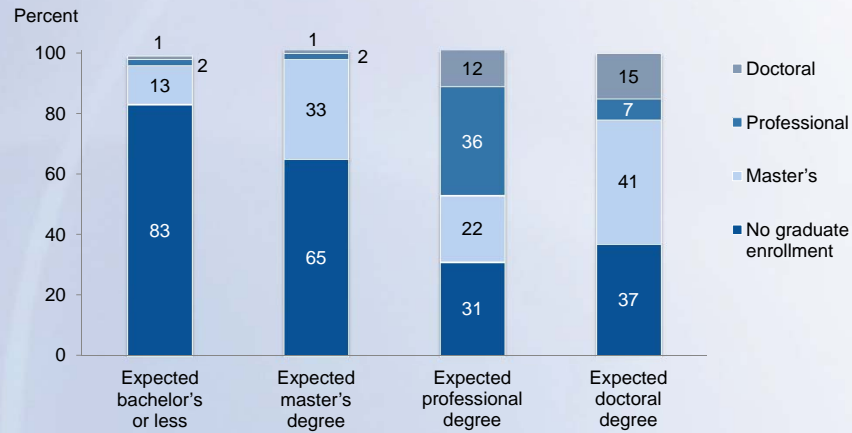
SOURCE: U.S. Department of Education, National Center for Education Statistics, 2008/09 Baccalaureate and Beyond Study (B&amp;B 08/09).

## Graduate education experiences among college graduates

10



## Educational expectations at bachelor's degree completion by highest graduate enrollment as of 2003



11

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Study (B&amp;B-93/03).

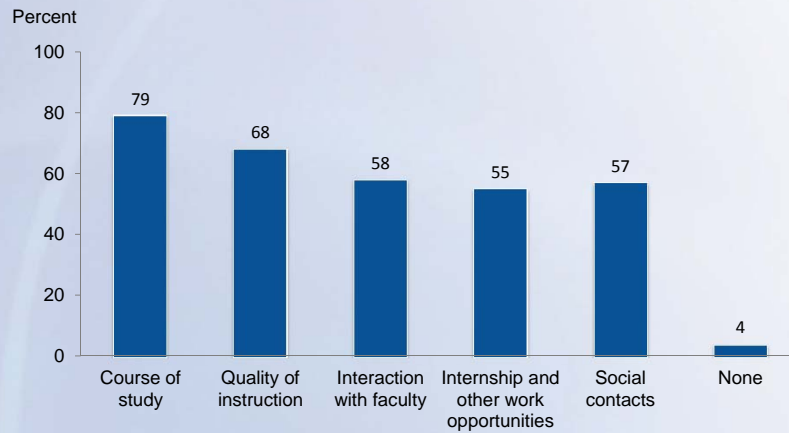
## Timing of entry into graduate school among 1992-93 graduates after 10 years

Highest graduate degree program	Average number of years after bachelor's	Percentage distribution			
		1 year or less	More than 1 to 3 years	More than 3 to 5 years	More than 5 years
MBA	4	24	25	21	29
MEd or post-master's certificate in education	3	28	31	19	21
Other master's	3	33	29	17	21
Professional	2	49	31	10	10
Doctoral	1	65	22	7	5

12

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Study (B&amp;B-93/03).

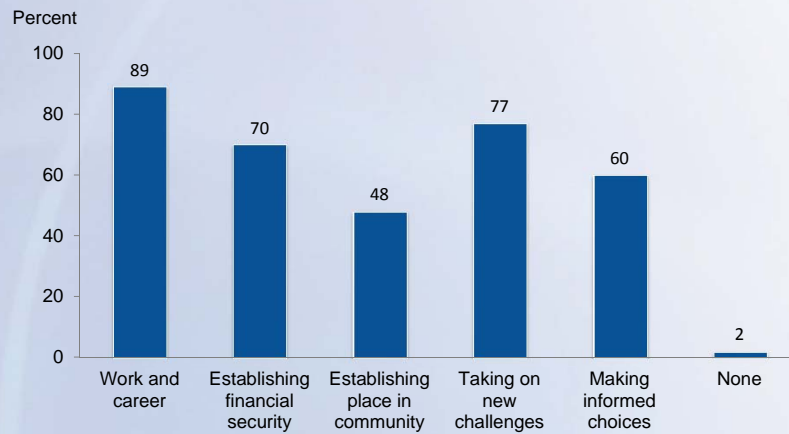
Percentage of graduate degree earners who reported these aspects of their graduate education were very important to their lives in 2003



13

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Study (B&amp;B 93/03).

Percentage of graduate degree earners who reported their graduate education was very important preparation for their lives in 2003

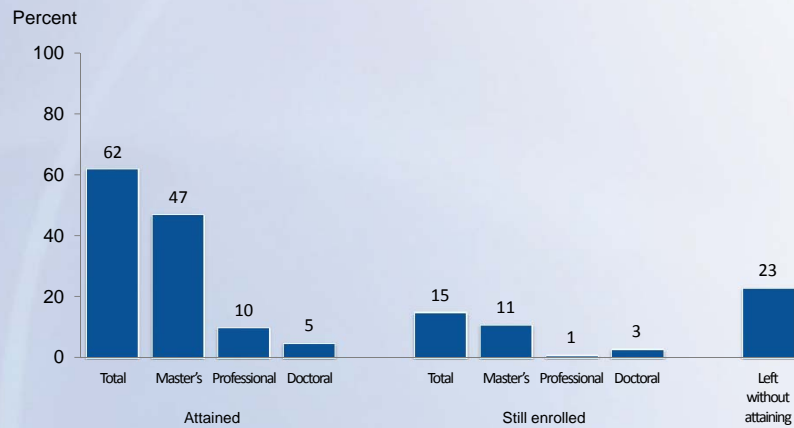


14

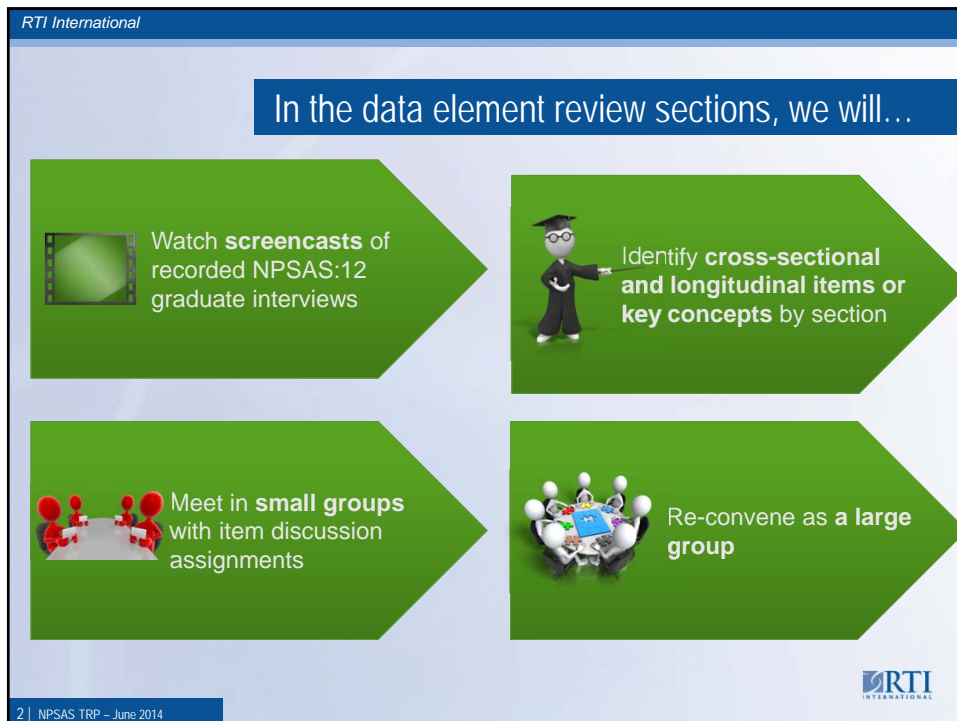
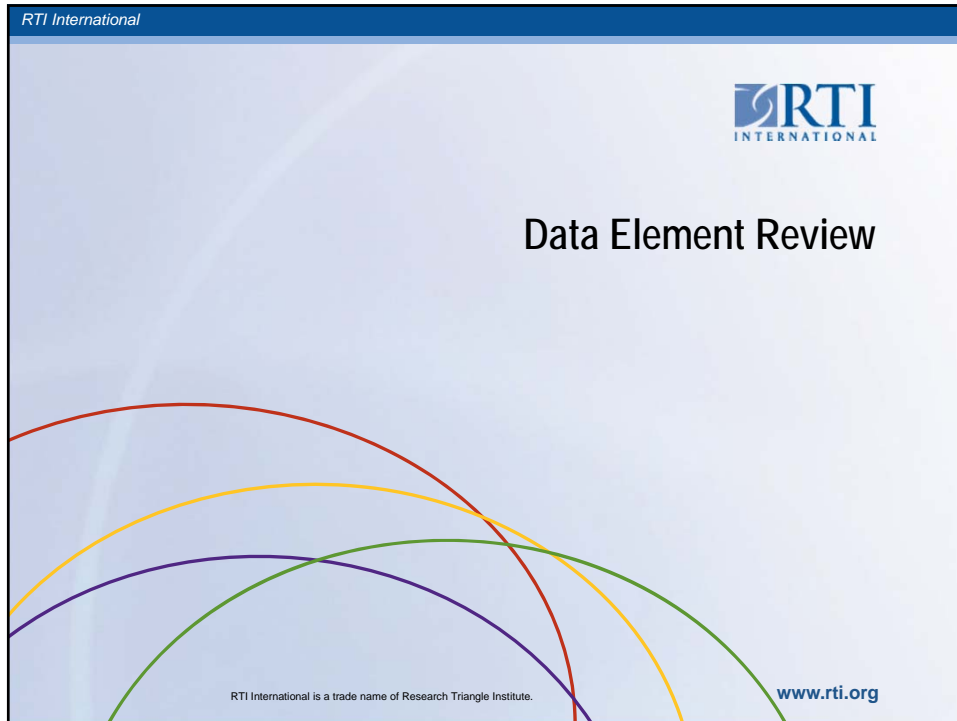
SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993/03 Baccalaureate and Beyond Study (B&amp;B 93/03).

## Degree completion among college graduates who enrolled in graduate programs

## Degree completion or enrollment status among 1993–94 college graduates who enrolled in graduate education by 2003



**NPSAS:12 Technical Review Panel Meeting**  
June 17-18, 2014



## Sections Presented by Topic

**Today**

- Enrollment and education experiences
- Financial aid

**Tomorrow**

- Background
- Income and expenses

## Identification of Items and Key Concepts



The cross-sectional survey



The longitudinal follow-up survey



## Item Lists

Graduate interview items are provided by section in a summary list

- Item name/label
- Corresponding reference page numbers to facsimile document



## For Additional Reference: Facsimile

- Graduate interview items are provided by section in detail in facsimile
  - Item names
  - Format of questions
    - radio button (only one response option can be chosen)
    - check all (multiple response options can be chosen)
    - textbox entry (data entry...e.g., number of dependents)
  - Question wording/response option wording
  - Who item applies to (e.g., married respondents)
  - Source
    - Cross-sectional (NPSAS)
    - Longitudinal (B&B)



## Small Group Work

- Pick a *Recorder* and *Reporter* in your group
- Review your item list (and facsimile as needed) for both the cross-sectional and longitudinal surveys
- In 30 minutes, decide which graduate topics could be
  - Added to surveys
  - Removed from surveys



## Large Group Discussion

- At 30 minute mark, group *Recorder* to visit flipcharts with post-it notes and arrange notes by topic area
  - Horizontally: same/similar item as another group
  - Vertically: distinct item from other groups
- [Facilitator] to ask each group *Reporter* to spend 5 minutes describing decision points
- Overall group discussion of items/topic areas

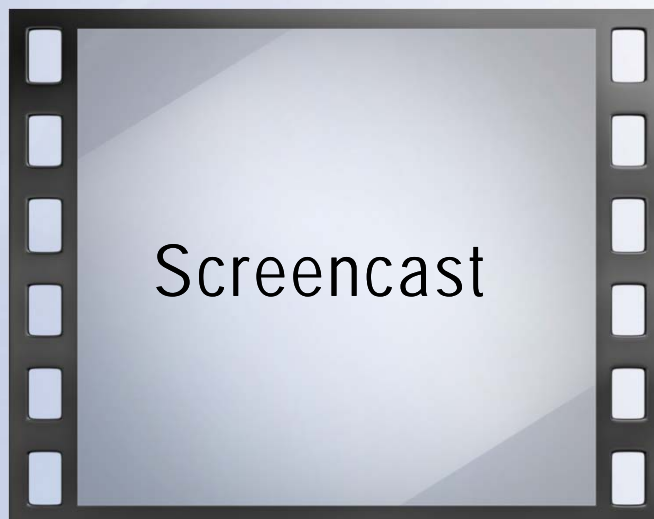


## Section Review Enrollment

»» Natasha Janson



## Enrollment/Education Experiences



## What we mean by “enrollment” and “education experiences”

### Enrollment

Detailed information about matriculation in graduate degree programs (e.g., degree program type, months and intensity of enrollment, field of study, GPA)

### Education Experiences

Experiences with degree programs such as satisfaction with and reasons for enrolling in graduate (and undergraduate) degree programs

## Surveys Enrollment and Education Experiences



### The cross-sectional survey

Collects graduate enrollment information at the NPSAS institution in the NPSAS academic year

- degree type
- enrollment intensity
- field of study
- GPA



### The longitudinal follow-up survey

- Asks postbaccalaureate students whether they've applied to graduate school
- Asks students with graduate degrees, reasons pursued and satisfaction with degree(s)

## Item Summary Enrollment and Education Experiences

Data element	Item numbers
Applying to graduate school	1–5
Details of graduate school program	6–40
Graduate program satisfaction and expectations	41–52
Professional certifications and licensure	53–59
Classes for personal enrichment	60–62
Satisfaction with undergraduate program	63–68
High school information	69–71

## Key Items for Group Discussion Enrollment and Education Experiences




- Items to add?
- Items to remove?

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## Section Review Financial Aid

»» Jennie Woo

1 | NPSAS TRP – June 2014



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## Financial Aid

# Screencast

2 | NPSAS TRP – June 2014



## What we mean by "financial aid"

### Financial Aid

- Money that students receive to finance their graduate education
- Can be in the form of
  - loans (federal, private, institution)
  - grants/scholarships
  - tuition waivers
  - graduate employment (assistantships)
  - aid from family or friends (covered in the income and expenses section)

## Surveys Financial Aid



### The cross-sectional survey

Collects financial aid information for the academic year



### The longitudinal follow-up survey

Collects cumulative debt and loan repayment information

## Sources of Graduate Financial Aid Data



### The cross-sectional survey

- Student interview
- Student records
- National Student Loan Data Systems (NSLDS)



### The longitudinal follow-up survey

- Student interview(s)
- National Student Loan Data Systems (NSLDS)

## Primary Graduate Financial Aid Data Sources

Data Element	National Student Loan Data System (NSLDS)	Student records (from institutions)	Student interviews (NPSAS & B&B)
Federal aid (Pell Grants, Direct Loans, etc.)	✓		
State and institution aid		✓	
Private loans		✓	✓
Other grants (veteran's benefits, employer aid, etc.)		✓	✓
Education expenses (student budget and tuition)		✓	
Student characteristics (enrollment intensity, class level)		✓	✓

## Item Summary Financial Aid

Data element	Item numbers
Student records	1–20
Administrative data sources	21–35
Benefits, grants, scholarships in academic year	36–43
Total graduate student loans borrowed in academic year	44–53
Graduate assistantships in academic year	54–64
Graduate institution charges and refunds	65–68
Cumulative student loan debt and repayment	69–85

## Key Items for Group Discussion Financial Aid



- Items to add?
- Items to remove?


**NPSAS:12 Technical Review Panel Meeting**  
June 17-18, 2014

RTI International

## Section Review Income and Expenses

» Emily Forrest Cataldi

1 | NPSAS TRP – June 2014




RTI International

## Income and Expenses

# Screencast

2 | NPSAS TRP – June 2014





## What we mean by "income and expenses"

### Income

Money flowing INTO the household, including employment wages, income from all sources, and any untaxed benefits

### Expenses

Money flowing OUT of the household including monthly bills and support of dependents

*Does not provide a total household accounting of income and expenses*

## Surveys Income and Expenses



### The cross-sectional survey

Collects employment while enrolled in graduate school, and income and expenses for the academic year



### The longitudinal follow-up survey

Collects employment information before, during, and after graduate enrollment

Also includes questions related to household financial assets/stressors and savings

## Item Summary Income and Expenses

Data element	Item numbers
Employment while enrolled in graduate school	1–11
Postbaccalaureate employment	12–30
Income	31–38
Expenses--household	39–52
Expenses--dependents	53–67
Expenses--credit cards	68–72
Checking/savings/retirement accounts	73–77

## Key Items for Group Discussion Income and Expenses



- Items to add?
- Items to remove?


**NPSAS:12 Technical Review Panel Meeting**  
June 17-18, 2014

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## Section Review Background

» Sandra Staklis

1 | NPSAS TRP – June 2014




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## Background

# Screencast

2 | NPSAS TRP – June 2014



## What we mean by "background"

### Background

Demographic and other individual background characteristics, such as date of birth, race/ethnicity, citizenship, and marital and family status

## Surveys Background



### The cross-sectional survey

Collects basic, non-changing, demographic information (date of birth, race, family background)



### The longitudinal follow-up survey

Collects evolving individual characteristics such as changes in

- marital status,
- family formation,
- community service, and
- voting

## Item Summary Background

Data element	Item numbers
Basic demographics	1-8
Marital status	9-12
Residence, citizenship, and immigration	13-19
Languages	20-27
Family background	28-32
Military and community service	33-38
Voting and political activities	39-42

## Key Items for Group Discussion Background



- Items to add?
- Items to remove?