# Overview of Administrative Data Matching to Postsecondary Studies at the National Center for Education Statistics

Sean Simone, Ph.D.

Tracy Hunt-White, Ph.D.

Longitudinal Studies Branch

National Center for Education Statistics

**Institute of Education Sciences** 

U.S. Department of Education



The views expressed do not necessarily reflect the position of the U.S. Department of Education.

# Agenda

- Introduction to postsecondary sample surveys:
  - National Postsecondary Student Aid Study (NPSAS)
  - Baccalaureate and Beyond Study (B&B)
  - Beginning Postsecondary Students Longitudinal Study (BPS)
- Current use of Administrative Data
- Potential use of Administrative Data



# Introduction to Postsecondary Sample Survey Data



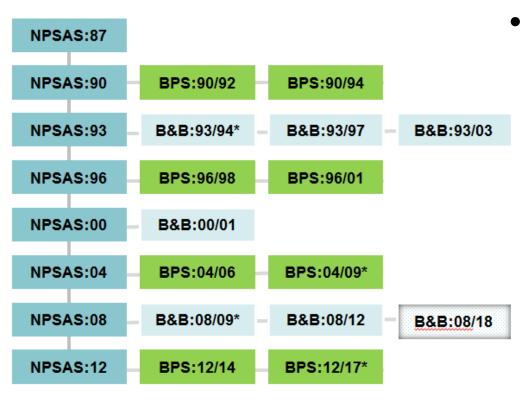
- Generating a nationally representative descriptive portrait of students enrolled in postsecondary education
  - Who are these students?
  - Where are they enrolling?
  - How are they paying for college?
    - >Student, institutional, and federal financing
  - What are they experiencing in the postsecondary "environment?"



- Generating a nationally representative descriptive portrait of students enrolled in postsecondary education
  - What outcomes are they attaining?
    - > Educational awards
    - ➤ Labor market outcomes
    - Further education and training



Study	Periodicity	Target Population	Main Purpose
National Postsecondary Student Aid Study (NPSAS)	Cross-sectional; Conducted every 3-4 years	All students enrolled in Title IV participating institutions in a given academic year	Examine student financing of their college education
Beginning Postsecondary Students Longitudinal Study (BPS)	Follows a cohort up to 6 years after entering college	First-time beginning college students	Examine persistence and degree attainment
Baccalaureate and Beyond Longitudinal Study (B&B)	Follows a cohort up to 10 years	Students graduating with a bachelor's degree	Examine labor market outcomes, graduate education, and life after college



<sup>\*</sup> Postsecondary education transcripts (PETS) collected.

- NPSAS serves as the base year for two longitudinal studies
  - Beginning
     Postsecondary
     Students
     Longitudinal Study
     (BPS)
  - Baccalaureate and Beyond Longitudinal Study (B&B)



### **Overview**

National Postsecondary Student Aid Study	Beginning Postsecondary Students Longitudinal Study	Baccalaureate and Beyond Longitudinal Study
Study of student financial aid and demographics	Study of persistence and attainment	Study of workforce outcomes, family formation, and graduate school



### **Overview**

National Postsecondary Student Aid Study	Beginning Postsecondary Students Longitudinal Study	Baccalaureate and Beyond Longitudinal Study
Study of student financial aid and demographics	Study of persistence and attainment	Study of workforce outcomes, family formation, and graduate school



#### **NPSAS Overview**

- Legislatively mandated data collection to study the federal government's \$180B per year investment in financing students' postsecondary educations
- Heavily used by policymakers, analysts, and researchers to understand programs like the Pell Grant and the Stafford Loan



#### **Purpose of the Study**

U.S. DEPARTMENT OF EDUCATION

• Legislatively mandated data collection to make sense of the federal government's such such sense of the federal government's such sense su

# National Postsecondary Student Aid Study

 Heavily used by policymakers, analysts, and researchers to understand programs like the Pell Grant and the Stafford Loan



#### **NPSAS Overview**

- Purpose: To examine how students and their families pay for college
  - For NPSAS:12, it is a nationally representative sample of undergraduate and graduate students attending postsecondary institutions in the 2011-12 academic year
- Secondarily: To examine the characteristics of students enrolled in all levels of postsecondary education



#### **NPSAS Overview**

- Two-Stage Sampling Design
  - Stage 1 Institution sample
    - Stratify all Title IV institutions by institution type, select institutional sample with probabilities proportional to a measure of size
  - Stage 2- Student sample
    - Stratify enrollment lists that are gathered from the sampled institutions by student type; then select student sample

### **Overview**

National Postsecondary Student Aid Study	Beginning Postsecondary Students Longitudinal Study	Baccalaureate and Beyond Longitudinal Study
Study of student financial aid and demographics	Study of persistence and attainment	Study of workforce outcomes, family formation, and graduate school



- To generate two key indicators of student progress:
  - The proportion of students who complete a course of study at their first institution within 150% of normal time to degree (NTD); and
  - The proportion of students who complete *anywhere* within 150% NTD.
- To unpack the persistence phenomenon



- Subsample NPSAS respondents who are identified as "first-time beginning" students
  - Cohort of first beginners, not based on age or transition from high school
  - Representative of postsecondary students, so higher proportion of "non-traditional" students
  - About 16,500 respondents



Base Year NPSAS:04	First Follow-up BPS:04/06	Second Follow-up BPS:04/09	Pos
Student demographic characteristics	Degrees or certificates earned	Degrees or certificates earned	stsecondary Transcript
Pre-college characteristics	Social and academic integration	Early workforce outcomes (if applicable)	ary Education ript Study
Enrollment histories	Enrollment histories	Enrollment histories	cati ly
College financing (all sources)	College financing (federal only)	College financing (federal only)	ion



- Institutional characteristics
- Detailed information on college financing for the first year
- Collegiate experiences
- As of BPS:04/06/09, academic transcripts



### **Overview**

National Postsecondary Student Aid Study	Beginning Postsecondary Students Longitudinal Study	Baccalaureate and Beyond Longitudinal Study
Study of student financial aid and demographics	Study of persistence and attainment	Study of workforce outcomes, family formation, and graduate school



- To better understand the early labor market and graduate school experiences of students graduating with a baccalaureate degree
- Secondarily, to better understand the early career experiences of teachers



- Subsample NPSAS respondents who are identified as graduating seniors
  - Some practical overlap with NCES's elementary/secondary longitudinal studies, but:
    - Different population and longer follow-up
  - Some practical overlap with NSF's Recent College Graduates survey, but:
    - Longitudinal and includes non-STEM graduates
  - About 15,000 respondents



Base Year NPSAS:08		First Follow-up B&B:08/09	Second Follow- up B&B:08/12	Third Follow-up B&B:08/18
Student demographic characteristics	Postsecondary Transcript	Degrees or certificates earned / graduate enrollment	Graduate enrollment	Graduate enrollment
Anticipated employment	dary Educatior cript Study	Employment history, compensation & working conditions	Employment history, compensation & working conditions	Employment history, compensation & working conditions
Family formation	ation	Family formation	Family formation	Family formation
College financing (All sources)		College financing & cumulative debt	College financing & cumulative debt	College financing & cumulative debt

- An explicit focus on teachers
- Comparison of STEM graduates to other graduates
- Choices to take further education
- Academic transcripts



### **Administrative Data Sources**



### **Data Sources**

Source	NPSAS	BPS	В&В
Student Interview	Х	Х	Х
Institutional Records			
Institution Enrollment Lists	Х		
Institution Student Records	Х		
Undergraduate Transcripts		Х	Х
Department of Education Administrative Records			
Central Processing System (FAFSA)	Х	Х	Х
National Student Loan Data System (NSLDS)	Х	Х	Х
Integrated Postsecondary Education Data System (IPEDS)	Х	Х	Х
Common Core of Data/Private School Survey		Х	Х



### **Data Sources**

Source	NPSAS	BPS	B&B
External Administrative Records			
National Student Clearinghouse	Х	Х	X
American College Testing (ACT)	Х	Х	
College Board	Х	Х	Х



#### **New Data Elements**

- Initiatives that are underway
  - Veterans
  - Employment and Earnings
  - Tax Credits



#### **Potential Sources of Data**

- Potential sources of data for matching:
  - Social Security Administration (Pilot in progress)
  - Internal Revenue Service
  - New York Federal Reserve Bank Consumer Credit Panel/Equifax
  - U.S. Department of Health and Human Services National Directory of New Hires



### **Potential Sources of Data**

- Potential sources of data for matching:
  - Assessment Data/Test Data from developers (Education Testing Service, Prometric, College Board, etc.)
  - Department of Labor Unemployment Insurance Records and/or wage records (WRIS & WRIS2)



#### **Potential Sources of Data**

- Potential sources of data for matching:
  - State data:
    - ➤ Individual State Unemployment Insurance Records and/or
    - ➤ Student Longitudinal Data Systems



# Challenges

- Confidentiality laws have been narrowly construed and prohibit matching by statistical agencies and researchers
- Many agencies/entities do not have the staff to support requests for data matching
- Legal and executive staff may be needed to review such requests



#### **Considerations**

- Coverage
- Quality
- Data elements
- Timeliness
- Costs
- Benefit to data provider



# Postsecondary Sample Data



- QuickStats for simple table generation
  - nces.ed.gov/datalab
- PowerStats for table generation
  - nces.ed.gov/datalab
- Restricted-use micro-level data file
  - nces.ed.gov/statprog/instruct.asp

# Postsecondary Sample Data

http://nces.ed.gov/datalab



Quick & easy to use to generate percentages, averages tables, and simple graphs using frequently used variables. (Limited to 1 column and 1 row variable.)

### **PowerStats**

Complex averages, percentages, medians, and centiles tables. Linear and logistic regressions. Choose from complete lists thousands of variables.



Averages, medians, and percentages tables over time. Choose from variables that are repeated in certain studies.



### NewsFlash

### http://ies.ed.gov/newsflash



#### **News Flash**

An e-mail-based alert service designed to inform you about all new content posted to the IES website including news from its four Centers and programs within Centers such as the Regional Educational Laboratory Program.

Simply enter your e-mail address to receive alerts in the areas of interest you select.

Note: IES, its Centers, and its programs, will use the information

E-Mail:	Subscribe	Login	
Select areas of interest by checking all appropriate boxes			
Institute of Education Sciences (IES) Check AI   Unch	eck All		
⊕ General IES News and Information Check All   UnChec	ok All (for IES)		
National Center for Education Evaluation (NCEE) Check All   UnCheck All (for NCEE)			
National Center for Education Research (NCER) Cher	ok All   <u>UnCheck All</u> (fo	or NCER)	
National Center for Education Statistics (NCES) Chec	<u>k Al</u>   <u>UnCheck All</u> (fo	r NCES)	
National Center for Special Ed Research (NCSER) C	neck All   Un Check All I	(for NCSER)	

