# **SECTION B. Description of Statistical Methodology**

### **B.1.** Respondent Universe

The primary universe of interest for IPEDS consists of approximately 7,300 institutions (according to our most recent count) that are eligible to participate in Title IV student financial aid programs. By law, these schools are required to respond to IPEDS. (Section 490 of the Higher Education Amendments of 1992 (P.L. 102-325). IPEDS allows other (non-title IV) institutions to participate on a voluntary basis. About 200 elect to respond. Title IV schools are shown by highest level of offering (4-year award or above, 2-year award, less than 2-year award) and by control (public, private not-for-profit, private for-profit):

Table 33. Title IV Institutions in the IPEDS Universe Estimated Counts for 2014-15 Collection

	<u>Total</u>	<u>Public</u>	Private <u>not-for-profit</u>	Private <u>for-profit</u>
Total	7,500	2,000	1,900	3,600
4-year	3,100	700	1,600	800
2-year	2,300	1,050	200	1,050
Less than 2-yr	2,100	250	100	1,750

### **B.2.** Statistical Methodology

There is no sampling done for any of the IPEDS survey components.

Because of the institutional compliance requirements outlined in sections A.1 and A.2, in Part A of this submission, sampling is not an option. This has been discussed at length at meetings of our Technical Review Panel, with other areas of the Department of Education, including the Office for Civil Rights, the Office of Postsecondary Education, the office of Federal Student Aid, and the Office of Vocational and Adult Education, and with other Federal Agencies such as Census, BEA and EEOC.

#### **B.3.** Methods to Maximize Response Rates

IPEDS response rates for institutions receiving federal financial aid are consistently 99.8% and higher. IPEDS targets the Title IV institutions (others may respond, but no follow-up is done) and the web-based survey system incorporates an automated e-mail module that automatically generates follow-up e-mail to "keyholders" (individuals appointed by the CEOs as responsible for IPEDS data submission). As shown in section A.16, Table 32, frequent communications occur with the institution over the course of the data collection to ensure compliance with this statutorily mandated collection. Follow-up e-mails are generated if the institution does not attempt to enter data or if, at two weeks and one week before closeout, the components are not locked. The CEOs of non-responding institutions are also contacted by standard mail and with follow up phone calls if, two weeks prior to closeout, the school has not entered any data. New institutions and institutions with new keyholders receive additional telephone and email prompts. This has proven to be very successful in past years. In

addition, the names of institutions that do not respond to the IPEDS surveys, and a history of all regular contact with these institutions, is provided to the Federal Student Aid office for appropriate action.

#### **B.4.** Tests of Procedures and Methods

The data collection procedures and data items described in this submission have been tested in a number of ways. Most of the data elements requested have already been collected in previous IPEDS surveys and prior to that, similar data elements had been collected for over 20 years in HEGIS.

However, data quality is an overriding concern that NCES must continue to assess and evaluate. One approach is to assess relevant data from different IPEDS components and from different survey years to evaluate the consistency and reliability of reported data. These interrelationships among surveys and relationships over time were used to develop the automated tests used to edit each IPEDS data submission. Edit checks currently help to identify potential problems and provide opportunities to correct them early in the data collection. As the number of institutions that automate their responses to IPEDS increases, it becomes increasingly difficult to fully validate their responses. However, by implementing a web-based data collection effort that requires error resolution and correction *prior to* data submission, NCES has been gathering cleaner data in a more timely fashion. The web-based system still accommodates intermediate reporting units such as community college boards, state university systems offices, and corporate offices.

The web-based data collection method was tested in a successful pilot collection of Institutional Price and Student Financial Aid information in August 1999, and has been in full-scale implementation since the Fall of 2000. Throughout the implementation of the web-based system, as a result of discussions with data providers and associations that use the data, NCES has revised the data collection items, definitions, and instructions based on the recommendations of our constituents, and following appropriate public comment periods.

## **B.5.** Reviewing Individuals

Listed below are individuals who have reviewed, in whole or in part, the IPEDS surveys, and/or participated in Technical Review Panel meetings charged with revising and refining the surveys and data items collected.

Representatives from the National Center for Education Statistics

Samuel Barbett, Mathematical Statistician
Allison Bell, Associate Research Scientist
Sarah Crissey, Research Scientist
Archie Cubarrubia, IPEDS Survey Director, Student Financial Aid
Tracy Hunt-White, Statistician
Tara Lawley, Associate Research Scientist/Specialist
Colleen Lenihan, Associate Research Scientist
Andrew Mary, Statistician
Elise Miller, Program Director, IPEDS
Isaiah O'Rear, Associate Research Scientist
Jeffrey Owings, Associate Commissioner
Tai Phan, Mathematical Statistician

Jan Plotczyk, Education Statistician

Sabrina Ratchford, Education Statistician

Jessica Shedd, Program Director, IPEDS

Matthew Soldner, Senior Technical Advisor

Thomas Weko, Associate Commissioner, Postsecondary, Adult, and Career Education Division

## Representatives from Associations, Postsecondary Institutions/Systems, and Other Federal Offices

Gary Andeen, Oregon Independent Colleges Association

Thomas Bailey, Teachers College, Columbia University

Julia Blixrud, Association of Research Libraries

Eileen Brennan, Oakland Community College

Chris Brewer, Post Secondary Consultants

Keith Brown, North Carolina Community College System

Robert Burke, Association of Independent Colleges and Universities of Ohio

Susan Campbell, College Center for Library Automation

Julie Carpenter-Hubin, Ohio State University

Stephanie Cellini, George Washington University

Janice Childress, Indiana University-Purdue University Indianapolis

Melodie Christal, Washburn University

Margaret Cohen, George Washington University

Valerie Conley, Ohio University

Bryan Cook, American Council on Education

Mary Ann Coughlin, Springfield Colleg

Kristina Cragg, Bridgepoint Education

Alisa Cunningham, Institute for Higher Education Policy

Michael Dakduk, Student Veterans of America (SVA)

Dawn Dawson, DeVry Inc.

Jill DeAtley, Career Education Corporation

Faith DesLauriers, Embry-Riddle Aeronautical University

Cassandria Dortch, Congressional Research Service (CRS)

Ray Emry, Capella University

Christy England-Siegerdt, Washington Student Achievement Council

Thomas Erickson, Veterans Benefits Administration

Gayle Fink, Bowie State University

Michael Frola, Office of Federal Student Aid (FSA), U.S. Department of Education

Bernard Fryshman, Association of Advanced Rabbinical and Talmudic Schools

Carol Fuller, Independent Consultant

Ryan Gallucci, Veterans of Foreign Wars (VFW)

Carlos Gonzalez, EDMC

Kerry Grosse, Marquette University

Tammy Halligan, Association of Private Sector Colleges and Universities

Laura Hardesty, U.S. Census Bureau

Kimberly Harvey, Louisiana Board of Regents

Stephen Haworth, DeVry Inc.

Billy Helton, University of North Carolina-Chapel Hill

Cherron Hoppes, Golden Gate University

Braden Hosch, Connecticut Board of Regents for Higher Education

Myrna Huffman, California Community Colleges Chancellors Office

Gigi Jones, National Association of Student Financial Aid Administrators (NASFAA)

Laura Keck, American Association of Community Colleges

Jeffrey Keith, Sterling Partners

Christine Keller, Association of Public and Land-grant Universities (APLU)

Jonathan Keller, Massachusetts Department of Higher Education

Kit Keller, American Library Association

Marsha Kelman, University of Texas System

Sandra Kinney, Technical College System of Georgia

Martha Kyrillidou, Association of Research Libraries

Albertha Lawson, Baton Rouge Community College

Erez Lenchner, CUNY LaGuardia Community College

Fred Lillibridge, Doña Ana Community College

Marc LoGrasso, Bryant & Stratton College

Hans L'Orange, State Higher Education Executive Officers

Mary Goodhue Lynch, Massasoit Community College

Shelly Martinez, Office of Management and Budget (OMB)

Tod Massa, State Council of Higher Education for Virginia

Lesley McBain, American Association of State Colleges and Universities

Mari McCarty, WI Association of Independent Colleges and Universities (WAICU)

Frank McCluskey, American Public University System (APUS)

Susan Menditto, National Association of College and University Business Officers

Soon Merz, Austin Community College

Gary Nigh, NJ Commission on Higher Education

Jon O'Bergh, Office of the Under Secretary, US Department of Education

Emily Parker, American Association of State Colleges and Universities (AASCU)

Ginger Pauley, University of Phoenix

Kimberly Pearce, Capella Universit

Mary Jane Petrowski, Association of College and Research Libraries

Kent Phillippe, American Association of Community College

Lu Wayne Phillips, Lorain County Community College

John Porter, State University of New York-SUNY System Administration

Brian Prescott, Western Interstate Commission for Higher Education

Pat Profeta, Indian River State College, Miley Library

Chris Rasmussen, Midwestern Higher Education Compact

Kenneth Redd, National Association of College and University Business Officers

George Rezendes, Three Rivers Community College

Gary Rice, University of Alaska Anchorage

Stephanie Rikard, Utah College of Applied Technology

Terrence Russell, Association for Institutional Research

Rebecca Sanders, Apollo Accounting

Mary Sapp, University of Miami

Jim Selbe, University of Maryland University College

Rajat Shah, Lincoln College

Cindy Sheckells, U.S. Census Bureau

Donna Silber, Maricopa Community College District

Randy Swing, Association for Institutional Research

Dawit Teklu, Strayer University

Judith Thompson, Florida Department of Education

Kimberly Thompson, Pearson eCollege

Wendy Weiler, National Association of Independent Colleges and Universities (NAICU)

Judith Wheaton, Austin College

Christina Whitfield, Kentucky Community and Technical College System

Rachel Zinn, Office of Management and Budget (OMB)