Strategies for Enhancing Ethnic Diversity at Congressional Research Service

This report was prepared at the request of the Congressional Research Service (CRS), which requested assistance in (1) obtaining information about pools of job candidates from historically under-represented groups in certain disciplines and (2) identifying effective mechanisms for recruiting and retaining candidates.

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Introduction

Purpose

This report was prepared for the Congressional Research Service (CRS). CRS requested assistance in (1) obtaining information about pools of job candidates from historically under-represented groups in certain disciplines and (2) identifying effective mechanisms for recruiting and retaining candidates. The report addresses each objective.

Part 1 contains detailed analyses of the number of persons from historically under-represented groups who have earned graduate degrees in specific disciplines of interest to CRS. Trends and characteristics of these potential applicant pools are analyzed. The report identifies schools that have graduated the largest numbers of candidates from historically under-represented groups in specific disciplines. Part 1 also presents information about mid-careerists, although data about this cohort are more limited than for new graduates.

Part 2 presents a literature review concerning practices used by public and private entities to create and maintain a more diverse workforce by recruiting and retaining persons from historically under-represented groups. The report summarizes and evaluates research regarding the relative effectiveness of such practices. The report summarizes successful recruitment and retention strategies based on theoretical and practical frameworks used by government agencies, non-profit organizations and the private sector.

Part 1
Pools of Potential Job Candidates from Historically Under-represented Groups in Certain Disciplines of Interest to CRS

Subsection A
Recent Graduates

Analysis of Recent Degree Recipients

Method

Disciplines and Level of Degree

This report focuses on disciplines and level of degrees of interest to CRS because of projected recruitment needs for the CRS analytic workforce. Most often, CRS recruits persons with doctoral degrees for such positions. In certain fields, CRS may also recruit persons holding master's degrees.

For doctoral degrees, the report analyzes the number of graduates for the following disciplines:
- Agricultural Science
- Anthropology
- Biological Science
- Business Administration
- Chemistry
- Economics
- Engineering
- Geosciences
- History
- Physical Sciences
- Physics
- Political Science and Public Administration
    - International Relation/Area Studies
    - Political Science and Government
    - Public Policy Analysis
    - Public Administration
- Psychology
- Sociology
- Other Social Sciences
    - Criminology
    - Urban Affairs
    - Geography
    - Statistics

CRS employs individuals with certain master's degrees in its analytic work force. For master's degrees, the report analyzes the number of graduates for the following disciplines:

- Business Administration
- International Relations/Area Studies
- Political Science/Government
- Public Administration
- Public Policy

Time Frame for Data Analyses

The reported analyses focus on the most recent ten-year period for which data are available. This period differs for doctoral and master's degrees. For doctoral degrees, data from the years 1997 to 2006 are available. In addition, supplemental analyses were conducted for data from the years 2007 and 2008, as discussed below. For master's degrees, the ten most recent years of available data cover the span 1997 to 2007. Data for 1999 are not available.

Overview of Analyses

To the extent the data permitted, every field or sub-field for both doctoral and master's degrees were analyzed in the same manner. Slight variations were sometimes necessary given the constraints of the data. Typically these variations occurred between the analyses of doctoral degrees and master's degrees.

Citizenship status of degree recipients. For doctoral degrees, in the period 1997 to 2006 the analyses compare for each discipline the number of degree recipients who are U.S. citizens with the number of non-U.S. citizens receiving degrees. For the years 2007 and 2008, the database combines counts of U.S. citizens with those of permanent residents. These categories are combined because the National Science Foundation, sponsor of the database (the Survey of Earned Doctorates, SED, described in greater detail below), decided that this reporting method is necessary to protect the privacy of individual degree recipients (Fiegner, 2010; Jaschik, 2008; Mervis, 2009; U.S. National Science Foundation, 2009)

For master's degrees, counts of U.S. citizens and permanent residents are combined within the relevant database (the Integrated Postsecondary Educational Data System, IPEDS, described in greater detail below). For each discipline, the analyses in this report compare the number of master's degree recipients who are U.S. citizens and permanent residents with the number of degree recipients who are temporary residents.

Number and percentage of degrees, by race and ethnicity. For doctoral degrees, the report analyzes the number and percentage of degrees awarded to U.S. citizens, by race and ethnicity for each discipline. The following categories from the SED database are used for the analyses of doctoral degrees.

African American—A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).
Native American—A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition; includes *Alaska Natives*.
Asian American—A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent. *Native Hawaiians* or *Other Pacific Islanders* were included in this category.
Hispanic American—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
Caucasian & Other—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin). *Other* includes those who did not indicate a racial group and those who chose more than one race.

For master's degrees, the report analyzes for each discipline the number and percentage of degrees awarded to U.S. citizens and permanent residents, by race and ethnicity. The following categories from the IPEDS database are used in the analyses of master's degrees:

African American—A person having origins in any of the black racial groups of Africa (except those of Hispanic origin).
Native American—A person having origins in any of the original peoples of North America and who maintains cultural identification through tribal affiliation or community recognition; includes *Alaska Natives*.
Asian American— A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. These areas include, for example, China, Japan, Korea, the Philippine Islands, and Samoa.
Hispanic American—A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
Caucasian & Other—A person having origins in any of the original peoples of Europe, North Africa, or the Middle East (except those of Hispanic origin). *Other* includes those who did not indicate a racial group, and those who chose more than one race.

Changes in percentage of degrees awarded to historically underrepresented groups, by race and ethnicity. For each discipline, the report presents the number of degrees awarded to members of historically under-represented groups at the beginning and end of the most recent ten year period for which complete data are available. For doctorate degrees, the relevant time period is 1997 to 2006; the analysis of master's degree data covers the period 1997 to 2007, with 1999 omitted. Analyses of doctorate degrees are restricted to U.S. citizens who are members of historically under-represented groups, whereas for master's degrees, the available data combine U.S. citizens with permanent residents.

Top universities for degrees awarded to members of historically under-represented groups. For each discipline, the report presents a series of tables depicting the top universities in terms of number of doctorate degrees awarded to members of historically under-represented groups. The analyses report results for each under-represented group, for all such groups combined, and for all U.S. citizens. The report presents similar analyses for master's degrees, but the count of U.S. citizens is combined with that for permanent residents.

Databases Used in the Analyses

This project used two authoritative databases in conducting the analyses included in this report.

Survey of Earned Doctorates (SED)[1]

For doctorate degrees, the Survey of Earned Doctorates (SED) was used in analyses of doctorate degrees. The Integrated Postsecondary Educational Data System (IPEDS) was used in analyses of master's degrees.

The SED is an annual survey dating back to 1957. Six federal agencies sponsor the SED survey and data collection effort. These six agencies include the National Science Foundation (NSF), National Institutes of Health (NIH), U.S. Department of Education (USED), U.S. Department of Agriculture (USDA), National Endowment for the Humanities (NEH), and the National Aeronautics and Space Administration (NASA). The SED is conducted by the National Opinion Research Center (NORC) under contract to NSF.

The SED is a census that gathers information annually from approximately 45,000 new research doctorate graduates with degrees from U.S. universities. Recipients of professional doctorates, such as those earning an MD, JD, PsyD, or DDS, are not included in the SED. About 95% of new doctoral recipients complete the SED questionnaire. Commencement programs and institutional sources provide the basic data for the 5% of new doctorates who fail to complete the survey.

The SED questionnaire is completed by graduates at the time that they complete all requirements for their doctorate. Included in the questionnaire is information detailing demographic characteristics such as race and ethnicity, educational history, degree characteristics such as field and time-to-degree, financial support for graduate, and employment or postdoctoral study plans. Further detailed information about the purpose, history, design, and methodology for the SED is available from both NSF (National Science Foundation, 2010) and NORC (National Opinion Research Center, 2010)

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[1] The SED project officer at NSF is Mark Fiegener who can be contacted by email at mfiegene@nsf.gov or by phone at 703-292-4622. [1] The NORC project contact is Mary Ann Latter who can be contacted by email at latter-maryann@norc.org or by phone at 312-759-4216.

Both the SED and IPEDS data provide annual data on new doctorate recipients. Furthermore, the data from these two sources are largely equivalent.[2] This project used SED data for analyzing doctorate degrees and IPEDS data to analyze master's degree recipients. For analyses involving doctorate degrees, the SED data possessed three compelling advantages over IPEDS data.

First, the SED census is restricted to research doctorates or doctorates that require original research, whereas IPEDS collects data for both non-research and research doctorates. Because CRS is interested in employing persons with strong research backgrounds for its analytic workforce the SED data addresses a more relevant pool of potential employees. Second, for all years before 2007, SED database distinguished U.S. citizens from all other groups. The IPEDS database combines counts of U.S. citizens with those of permanent residents. By law, CRS can employ U.S. citizens; the SED database is therefore more appropriate in this key respect.[3] Finally, SED data is obtained from the degree recipients themselves, who classify their degrees as pre-defined categories, or so-called "fine fields" of study (see Appendix 1). In IPEDS, data are supplied by the degree-granting institutions which categorize degree recipients according to the Classification of Instructional Programs (CIP) code (National Center for Education Statistics, 2010) of their degree program. To illustrate the difference, in the SED data, a Ph.D. recipient in sociology who specialized in criminology is likely to classify his or her field of study as criminology, whereas the institution would classify the degree as sociology. In the judgment of the project team, the SED data were more appropriate for the intended purposes of the study.

Integrated Postsecondary Education Data System (IPEDS)

The Integrated Postsecondary Educational Data System (IPEDS) was used in this study to analyze the population of master's degree recipients for the time period 1997 to 2007. IPEDS is conducted annually by the Department of Education's National Center for Education Statistics (NCES). IPEDS data are available from the year 1977 to 2007 with no released data for the year 1999.

IPEDS is a comprehensive set of surveys of all colleges and universities in the United States. It provides basic data that can be utilized to describe trends in postsecondary education in the U.S. in terms of enrollment numbers, employment numbers, expenditures, and earned degrees. The information about students and graduates is reported by the degree-granting institutions based on the Classification of Instructional Programs (CIP) codes.

IPEDS is the only database offering complete information on masters degrees earned in the United States. In all analyses using IPEDS data, however, U.S. citizens and permanent residents cannot be separated, and there are no data for the year 1999.

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[2] For further discussion of differences and similarities between SED and IPEDS survey data, see http://www.nsf.gov/statistics/nsf06319/appc.cfm and http://www.nsf.gov/statistics/nsf10300/content.cfm?pub_id=3786&id=3

[3] Because of privacy and confidentiality concerns, NSF and NORC changed their policies such that the data for the years 2007 and 2008 and all years thereafter combine U.S. citizens and permanent residents.

Accredited Colleges and Universities and Accredited Schools or Programs

The accreditation of colleges and universities in the United States is a largely decentralized process that relies primarily on self-regulation. Post-secondary educational institutions are accredited by an accrediting agency or state approval agency which has been recognized by the U.S. Secretary of Education as a reliable authorities as to the quality of postsecondary education, within the meaning of the Higher Education Act of 1965, as amended (U.S. Department of Education, 2010). Typically, colleges and universities are accredited by one of six regional accrediting organizations:

- Middle States Association of Colleges and Schools
- New England Association of Schools and Colleges Commission on Institutions of Higher Education
- North Central Association of Colleges and Schools
- Northwest Commission on Colleges and Universities
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges Accrediting Commission for Community and Junior Colleges.

These regional accrediting bodies are in turn recognized by the Council for Higher Education Accreditation (CHEA), which affirms that the standards and processes of the accrediting organizations are consistent with certain academic quality, improvement and accountability expectations.

The SED database is restricted to accredited institutions (Council for Higher Education Accreditation, 2010). The IPEDS database includes information from both accredited and non-accredited institutions (National Science Foundation, 2010). For purposes of the present report, this means that the SED data base used for analyses of doctorate degrees is restricted solely to accredited colleges and universities. For analyses of master's degrees, which relied on the IPEDS data, the research team has verified that all institutions listed in any of the tables appearing in this report are presently accredited by an appropriate accrediting organization.

The nature of U.S. higher education -- including much of graduate education through the master's level -- has been strongly influenced by two trends. The first of these is the role of for-profit colleges and universities in higher education. According to the Chronicle of Higher Education, for-profit universities now educate about 7 percent of the nation's roughly 19 million students who enroll at degree-granting institutions each fall; the proportion rises to about 10 percent when counting students who enroll year round (Wilson, Robin 2010). The University of Phoenix is now the second largest system of higher education in the country, enrolling almost half-a-million students this year. Other prominent for-profit institutions offering graduate education include, among others, Argosy University, Capella University, DeVry University, Kaplan University, National University, Strayer University, and Walden University.

The second growing trend is reliance on distance education methods to deliver higher education including graduate education. These methods include wholly on-line courses, mixed modality courses (e.g., courses involving a combination of on-line and face-to-face instruction), and multiple campus locations. At this point, the vast majority of colleges and universities offer some or all of their coursework through such non-traditional approaches. Most of the non-profit

institutions listed above make extensive, sometimes exclusive use of on-line and other distance education methods. Likewise, many private non-profit institutions (e.g, Nova Southeast, Park University, Western Governors University) and public institutions (e.g., Pennsylvania State University World Campus, Troy University, the University of Maryland University College) do the same.

Because the universities discussed in this report are all fully accredited, the project team concluded that there was no justifiable basis for drawing distinctions based on whether or not they were for-profit or relied extensively on on-line instruction. The results section of the report, therefore, does not identify universities on the basis of for-profit or distance learning status.

For some fields of study addressed in this report, additional levels of accreditation are available beyond the institutional one. The Association to Advance Colleges of Schools and Business (AACSB) accredits bachelor, master, and doctoral degrees in business and accounting. Similarly, through its Commission on Peer Review and Accreditation, the National Association of Schools of Public Affairs and Administration (NASPAA) recognizes professional master's degree programs in public affairs, policy and administration.   The report identifies the accreditation status of schools awarding masters degrees in business and public and doctorates in business administration.

Earned Doctorates for all U.S. Citizens

The following table identifies the top 20 institutions in the U.S. for Ph.D.'s awarded to U.S. citizens during the most recent 10 year period for which data are available (1997-2006).

Table 1 Top 20 institutions for Ph.D's awarded to U.S. citizens during the most recent 10 year period

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	5621
University of Texas at Austin	Austin, Texas	4529
University of Wisconsin-Madison	Madison, Wisconsin	4443
University of Michigan at Ann Arbor	Ann Arbor, Michigan	4157
Nova Southeastern University	Davie, Florida	4084
University of Minnesota - Twin Cities	Minneapolis-St. Paul, Minnesota	4022
University of California-Los Angeles	Los Angeles, California	4013
Harvard University	Cambridge, Massachusetts	3691
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	3535
Stanford University	Palo Alto, California	3466
Pennsylvania State University, Main Campus	University Park, Pennsylvania	3440
Ohio State University, Main Campus	Columbus, Ohio	3391
University of Washington - Seattle	Seattle, Washington	3372
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	3206
University of Pennsylvania	Philadelphia, Pennsylvania	2904
University of Maryland at College Park	College Park, Maryland	2833
Indiana University at Bloomington	Bloomington, Indiana	2786
Texas A&M University Main Campus	College Station, Texas	2776
University of Florida	Gainesville, Florida	2775
University of Virginia, Main Campus	Charlottesville, Virginia	2762

Earned Doctorates for all U.S. Citizens from Under-Represented Minorities

The following tables identify the top 20 institutions in the U.S. for Ph.D.'s awarded to U.S. citizens from under-represented minorities during the most-recent 10 year period for which data are available (1997-2006).

Table 2 Top 20 institutions for Ph.D's awarded to U.S. citizens from Under-represented minorities

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	1269
University of California-Los Angeles	Los Angeles, California	1205
Nova Southeastern University	Davie, Florida	948
Stanford University	Stanford, California	802
Harvard University	Cambridge, Massachusetts	795
University of Michigan at Ann Arbor	Ann Arbor, Michigan	782
University of Texas at Austin	Austin, Texas	762
University of Southern California	Los Angeles, California	629
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	569
Howard University	Washington, D.C.	557
University of Pennsylvania	Philadelphia, Pennsylvania	495
University of Maryland at College Park	College Park, Maryland	493
University of California-Davis	Davis, California	483
New York University	New York, New York	465
Massachusetts Institute of Technology	Cambridge, Massachusetts	462
University of PR Rio Piedras Campus	San Juan, Puerto Rico	449
University of Washington - Seattle	Seattle, Washington	444
Ohio State University, Main Campus	Columbus, Ohio	436
Texas A&M University Main Campus	College Station, Texas	436
Columbia University in the City of New York	New York, New York	432

Table 3 Top 20 institutions for Ph.D's awarded to African Americans

Institution	City, State	# of Graduates
Nova Southeastern University	Davie, Florida	671
Howard University	Washington, D.C.	528
University of Michigan at Ann Arbor	Ann Arbor, Michigan	294
University of Maryland at College Park	College Park, Maryland	240
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	228
Ohio State University, Main Campus	Columbus, Ohio	213
Wayne State University	Detroit, Michigan	210
Temple University	Philadelphia, Pennsylvania	203
Walden University	Minneapolis, Minnesota	203
Loyola University of Chicago	Chicago, Illinois	196
Teachers College, Columbia University	New York, New York	196
Florida State University	Tallahassee, Florida	192
Harvard University	Cambridge, Massachusetts	190
Virginia Polytechnic Institute and State University	Blacksburg, Virginia	189
University of Texas at Austin	Austin, Texas	186
North Carolina State University at Raleigh	Raleigh, North Carolina	185
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	180
Clark Atlanta University	Atlanta, Georgia	176
Michigan State University	East Lasing, Michigan	175

Table 4 Top 20 institutions for Ph.D's awarded to Asian Americans

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	746
University of California-Los Angeles	Los Angeles, California	736
Stanford University	Stanford, California	463
Harvard University	Cambridge, Massachusetts	385
Massachusetts Institute of Technology	Cambridge, Massachusetts	326
University of Southern California	Los Angeles, California	297
University of Michigan at Ann Arbor	Ann Arbor, Michigan	284
University of California-Davis	Davis, California	253
Columbia University in the City of New York	New York, New York	251
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	241
University of Pennsylvania	Philadelphia, Pennsylvania	233
University of Washington - Seattle	Seattle, Washington	232
Johns Hopkins University	Baltimore, Maryland	216
University of California-San Diego	San Diego, California	213
University of California-Irvine	Irvine, California	205
New York University	New York, New York	193
Northwestern University	Chicago, Illinois	184
University of Texas at Austin	Austin, Texas	175
University of Wisconsin-Madison	Madison, Wisconsin	170

Table 5 Top 20 institutions for Ph.D's awarded to Hispanic Americans

Institution	City, State	# of Graduates
University of PR Rio Piedras Campus	San Juan, Puerto Rico	449
University of Texas at Austin	Austin, Texas	374
University of California-Berkeley	Berkeley, California	336
University of California-Los Angeles	Los Angeles, California	289
Caribbean Center for Advanced Studies	San Juan, Puerto Rico	220
Texas A&M University Main Campus	College Station, Texas	215
Harvard University	Cambridge, Massachusetts	206
Stanford University	Stanford, California	196
University of Arizona	Tucson, Arizona	193
University of Southern California	Los Angeles, California	187
University of Michigan at Ann Arbor	Ann Arbor, Michigan	182
Nova Southeastern University	Davie, Florida	171
Arizona State University Main	Phoenix, Arizona	169
University of California-Davis	Davis, California	162
University of Wisconsin-Madison	Madison, Wisconsin	162
University of New Mexico, All Campuses	Albuquerque, New Mexico	160
University of Florida	Gainesville, Florida	157
CUNY Graduate School and University Center	New York, New York	145
University of California-Santa Barbara	Santa Barbara, California	141

Table 6 Top 20 institutions for Ph.D's awarded to Native American

Institution	City, State	# of Graduates
Oklahoma State University, All Campuses	Stillwater, Oklahoma	62
University of Oklahoma, Norman Campus	Norman, Oklahoma	37
Arizona State University Main	Tucson, Arizona	28
Nova Southeastern University	Davie, Florida	28
University of North Dakota, All Campuses	Grand Forks, North Dakota	28
University of New Mexico, All Campuses	Albuquerque, New Mexico	27
University of Texas at Austin	Austin, Texas	27
University of California-Berkeley	Berkeley, California	24
University of Minnesota - Twin Cities	Minneapolis & Saint Paul, Minnesota	24
University of Washington - Seattle	Seattle, Washington	24
Stanford University	Stanford, California	23
University of Michigan at Ann Arbor	Ann Arbor, Michigan	22
University of Arkansas, Main Campus	Fayetteville, Arkansas	21
University of Arizona	Tucson, Arizona	20
University of California-Los Angeles	Los Angeles, California	20
Fielding Institute	Santa Barbara, California	19
Pennsylvania State U, Main Campus	University Park, Pennsylvania	17
University of Wisconsin-Madison	Madison, Wisconsin	17
Texas A&M University Main Campus	College Station, Texas	16

Natural Sciences

The following tables identify the top 20 institutions for each historically under-represented group in terms of the numbers of Ph.D.'s in Natural Sciences awarded to U.S. citizens for the most recent 10 year period for which data are available (1997-2006). Disciplines included within this category are: Agricultural Sciences, Biological Sciences, Chemistry, Engineering, Geosciences, and Physics.

Table 7 Top 20 institutions for Ph.D's in Natural Sciences awarded to US Citizens

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	1671
Stanford University	Palo Alto, California	1412
Massachusetts Institute of Technology	Cambridge, Massachusetts	1389
University of Michigan at Ann Arbor	Ann Arbor, Michigan	1149
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	1119
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	1057
University of Texas at Austin	Austin, Texas	1049
Pennsylvania State University, Main Campus		921
University of Wisconsin-Madison	Madison, Wisconsin	908
Purdue University, Main Campus		843
University of Washington - Seattle	Seattle, Washington	831
University of Colorado at Boulder	Boulder, Colorado	812
University of Minnesota - Twin Cities	Minneapolis-St. Paul, Minnesota	732
University of California-Los Angeles	Los Angeles, California	712
University of Florida	Gainesville, Florida	709
Cornell University, All Campuses		697
Northwestern University	Chicago, Illinois	694
California Institute of Technology	Pasadena, California	657
University of Arizona		646
University of California-Davis	Davis, California	646

Table 8 Top 20 institutions for all historically under-represented minorities Ph.D's in Natural Sciences

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	388
Stanford University	Palo Alto, California	306
Massachusetts Institute of Technology	Cambridge, Massachusetts	300
University of California-Los Angeles	Los Angeles, California	249
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	224
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	188
University of Michigan at Ann Arbor	Ann Arbor, Michigan	169
University of Texas at Austin	Austin, Texas	148
Purdue University, Main Campus	West Lafayette, Indiana	146
University of California-Davis	Davis, California	142
Northwestern University	Chicago, Illinois	127
University of Florida	Gainesville, Florida	112
University of Washington - Seattle	Seattle, Washington	111
California Institute of Technology	Pasadena, California	108
University of California-San Diego	San Diego, California	107
University of California-Irvine	Irvine, California	103
University of California-Santa Barbara	Santa Barbara, California	98
Texas A&M University Main Campus	College Station, Texas	96
North Carolina State University at Raleigh	Raleigh, North Carolina	72
University of Puerto Rico Rio Piedras Campus	San Juan, Puerto Rico	60

Table 9 Top 10 institutions for African American Ph.D's in Natural Sciences

Institution	City, State	# of Graduates
Louisiana State University & Agricultural & Mechanical College	Baton Rouge, Louisiana	31
Howard University	Washington D.C.	24
University of Michigan at Ann Arbor	Ann Arbor, Michigan	19
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	18
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	16
University of Florida	Gainesville, Florida	14
Purdue University, Main Campus	West Lafayette, Indiana	13
Hampton University	Hampton, Virginia	11
Georgia State University	Atlanta, Georgia	9
Virginia Polytechnic Institute and State University	Blacksburg, Virginia	9

Table 10 Top 10 institutions for Asian American Ph.D's in Natural Sciences

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	89
University of California-Los Angeles	Los Angeles, California	79
California Institute of Technology	Pasadena, California	46
Harvard University	Cambridge, Massachusetts	46
University of Illinois at Urbana-Champaign	Champaign, Illinois	44
Stanford University	Stanford, California	40
University of California-Davis	Davis, California	36
University of California-Irvine	Irvine, California	32
University of California-Santa Barbara	Santa Barbara, California	32
Massachusetts Institute of Technology	Cambridge, Massachusetts	31

Table 11 Top 10 institutions for Caucasian & Other American Ph.D's in Natural Sciences

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	603
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	432
University of Wisconsin-Madison	Madison, Wisconsin	427
University of Michigan at Ann Arbor	Ann Arbor, Michigan	333
University of Texas at Austin	Austin, Texas	329
Stanford University	Stanford, California	320
California Institute of Technology	Pasadena, California	314
Pennsylvania State University, Main Campus	University Park, Pennsylvania	314
University of Colorado at Boulder	Boulder, Colorado	308
Harvard University	Cambridge, Massachusetts	307

Table 12 Top 10 institutions for Hispanic American Ph.D's in Natural Sciences

Institution	City, State	# of Graduates
University of Puerto Rico- Rio Piedras Campus	San Juan, Puerto Rico	45
University of California-Berkeley	Berkeley, California	33
Purdue University, Main Campus	West Lafayette, Indiana	21
University of Texas at Austin	Austin, Texas	19
Harvard University	Cambridge, Massachusetts	18
Massachusetts Institute of Technology	Cambridge, Massachusetts	16
University of Florida	Gainesville, Florida	16
Texas A&M University Main Campus	College Station, Texas	13
University of Arizona	Tucson, Arizona	13
Stanford University	Stanford, California	12

Table 13 Top 10 institutions for Native American Ph.D's in Natural Sciences

Institutions	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	4
Texas A&M University Main Campus	College Station, Texas	3
University of California-Los Angeles	Los Angeles, California	3
University of Washington - Seattle	Seattle, Washington	3
Alabama Agricultural and Mechanical University	Normal, Alabama	2
Massachusetts Institute of Technology	Cambridge, Massachusetts	2
Oklahoma State University, All Campuses	Stillwater, Oklahoma	2
University of Arizona	Tucson, Arizona	2
University of Colorado at Boulder	Boulder, Colorado	2
University of Maryland at College Park	College Park, Maryland	2

Doctorates in Agricultural Sciences

Earned Doctorate Degrees in Agricultural Sciences[4]

During the 10 most recent years for which data are available (1997 through 2006) a total of 10,439 doctorates were awarded in Agricultural Sciences. Of these, 5,091 or 48.8% were awarded to U.S. citizens and 5,348 or 51.2% were awarded to non-U.S. citizens.
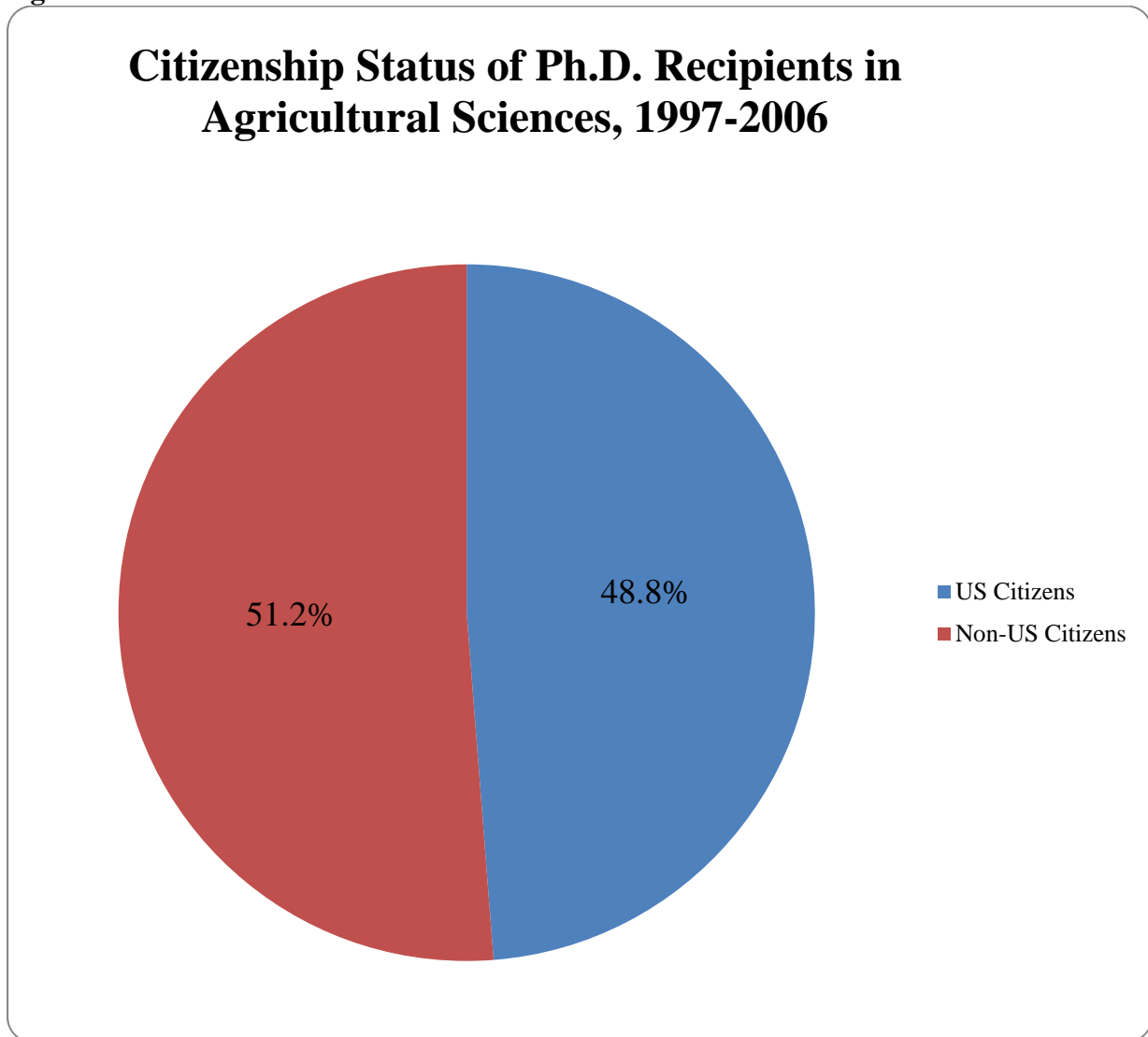
Figure 1

Citizenship Status of Ph.D. Recipients in Agricultural Sciences, 1997-2006

- 51.2%
- 48.8%
- US Citizens
- Non-US Citizens

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[4] For a complete listing of sub-fields included within Agricultural Sciences please refer to the appendix 1 entitled "Fine Field of Study" under Agricultural Science and Natural Resource.

Out of the 5,091 doctorates awarded to U.S. citizens during the 1997-2006 period, 14 or 2.8% were earned by African Americans, 14 or 2.8% were earned by Asian Americans, 459 or 90.1% were earned by Caucasian or Other ethnicities, 18 or 3.6% were earned by Hispanic Americans, and 4 or 0.7 % were earned by Native Americans.
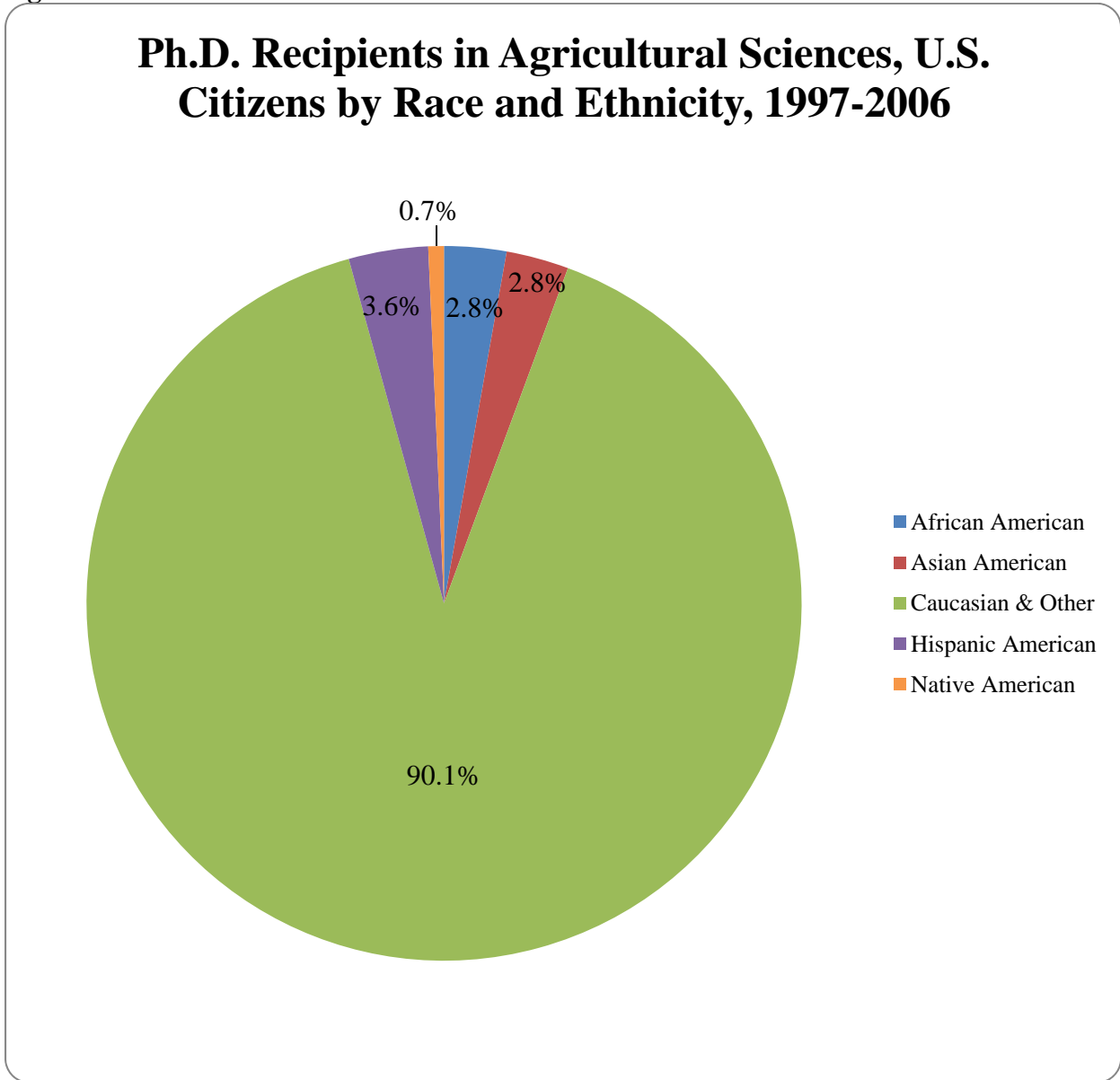
Figure 2

Ph.D. Recipients in Agricultural Sciences, U.S. Citizens by Race and Ethnicity, 1997-2006

- African American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

0.7%
3.6%
2.8%
2.8%
90.1%

The number of doctorates in Agricultural Sciences awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 3. The number of members of historically under-represented groups receiving a doctorate in the Agricultural Sciences field has fluctuated over the past 10 years and has never exceeded 60.

Figure 3

Ph.D.'s in Agricultural Sciences awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
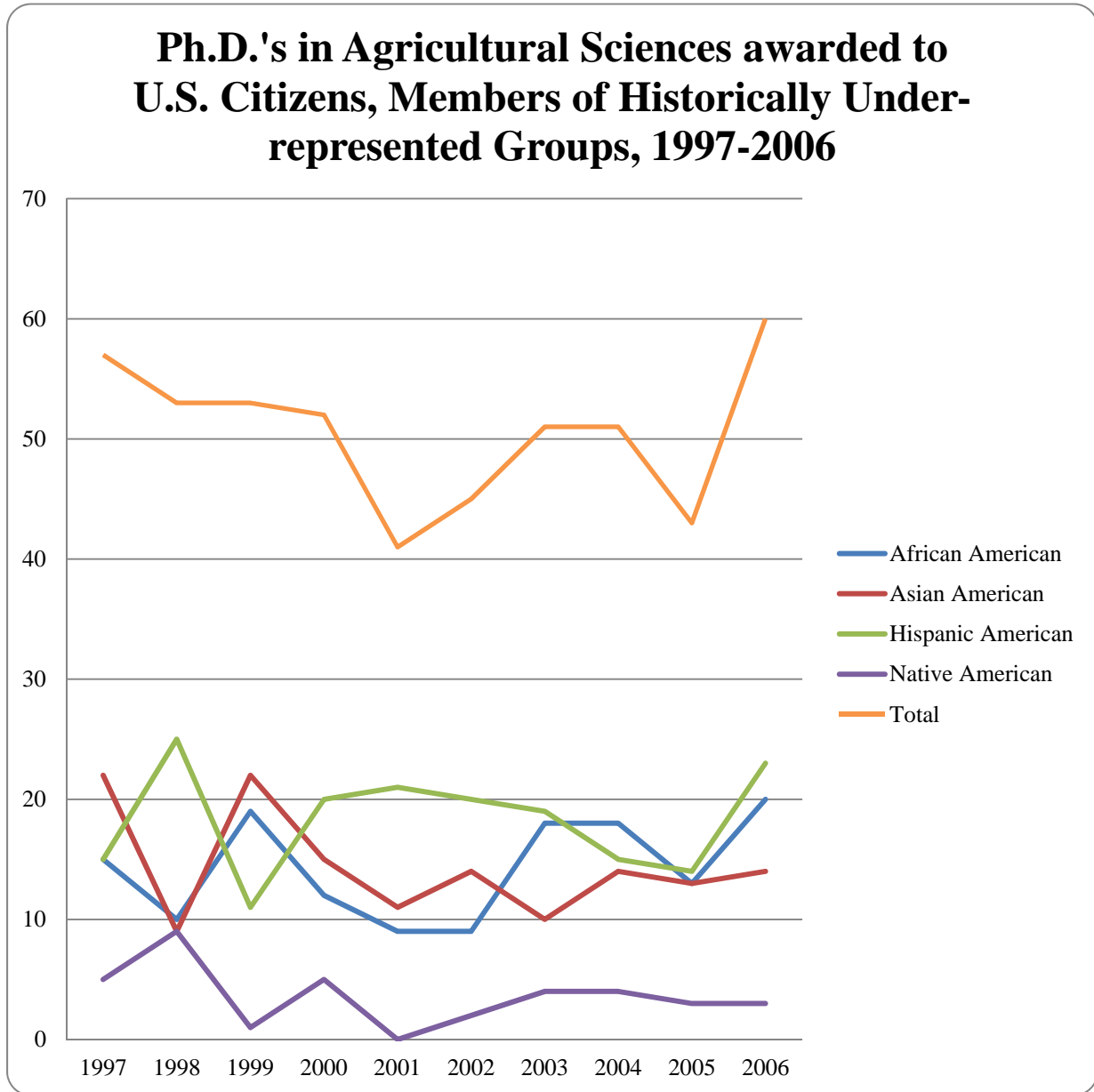
Figure 4 shows the percentage of Ph.D.'s in Agricultural Sciences for U.S. citizens awarded to members of historically under-represented groups, comparing 1997 with 2006. The percentage did not change substantially between 1997 (10.7%) and 2006 (11.0%). During these 10 years, African Americans increased by 0.9%, Asian Americans decreased by 1.5%, Hispanic Americans increased by 1.4%, and Native Americans decreased by 0.4%.

Figure 4

Trend in Ph.D.'s in Agricultural Sciences awarded to U.S. Citizens, Members of Historically Under-represented Groups
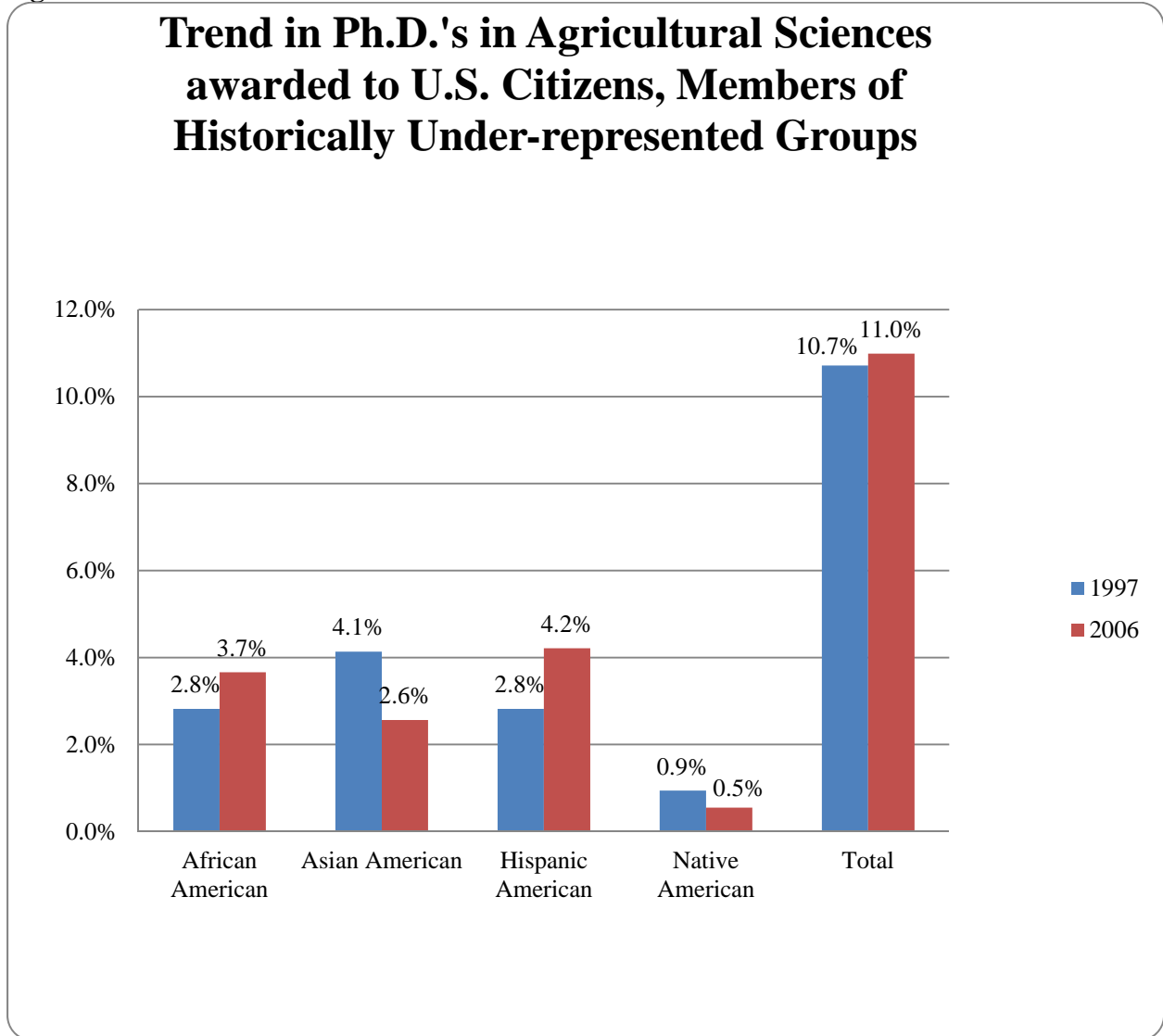
The following tables identify the top 10 institutions for each historically under-represented minority group in terms of the numbers of Agricultural Sciences Ph.D.'s awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 14 Top 10 institutions for African American Ph.D's in Agricultural Sciences

Institution	City, State	# of Graduates
Michigan State University	East Lansing, Michigan	17
Alabama Agricultural and Mechanical University	Normal, Alabama	11
Jackson State University	Jackson, Mississippi	9
North Carolina State University at Raleigh	Raleigh, North Carolina	7
Auburn University, Main Campus	Auburn, Alabama	5
University of Maryland at College Park	College Park, Maryland	5
Mississippi State University	Starkville, Mississippi	4
Texas Southern University	Houston, Texas	4
University of Nebraska at Lincoln	Lincoln, Nebraska	4
Virginia Polytechnic Institute and State University	Blacksburg, Virginia	4

Table 15 Top 10 institutions for Asian American Ph.D's in Agricultural Sciences

Institution	City, State	# of Graduates
Cornell University, All Campuses	Ithaca & New York City, New York	13
Rutgers the State University of New Jersey New Brunswick	New Brunswick, New Jersey	8
University of California-Berkeley	Berkeley, California	7
Kansas State University	Manhattan, Kansas	6
Michigan State University	East Lasing, Michigan	6
Mississippi State University	Starkville, Mississippi	6
Oregon State University	Corvallis, Oregon	6
North Carolina State University at Raleigh	Raleigh, North Carolina	5
Purdue University, Main Campus	West Lafayette, Indiana	5
Ohio State University, Main Campus	Columbus, Ohio	4

Table 16 Top 10 institutions for Hispanic American Ph.D's in Agricultural Sciences

Institution	City, State	# of Graduates
Texas A&M University Main Campus	College Station, Texas	16
University of Florida	Gainesville, Florida	15
University of Arizona	Tucson, Arizona	8
University of Wisconsin-Madison	Madison, Wisconsin	8
Kansas State University	Manhattan, Kansas	7
Oregon State University	Corvallis, Oregon	7
Michigan State University	East Lasing, Michigan	6
New Mexico State University, All Campuses	Las Cruces, New Mexico	5
North Carolina State University at Raleigh	Raleigh, North Carolina	5
Virginia Polytechnic Institute and State University	Blacksburg, Virginia	5

Table 17 Top 10 institutions for Native American Ph.D's in Agricultural Sciences

Institution	City, State	# of Graduates
Oklahoma State University, All Campuses	Stillwater, Oklahoma	5
North Carolina State University at Raleigh	Raleigh, North Carolina	3
Kansas State University	Manhattan, Kansas	2
University of Arkansas, Main Campus	Fayetteville, Arkansas	2
University of Washington - Seattle	Seattle, Washington	2
University of Wyoming	Laramie, Wyoming	2
Alabama Agricultural and Mechanical University	Normal, Alabama	1
Auburn University, Main Campus	Auburn, Alabama	1
Colorado State University	Fort Collins, Colorado	1
Cornell University, All Campuses	Ithaca & New York City, New York (Qatar Campus)	1

The following table identifies the top 20 institutions in terms of the number of Agricultural Sciences Ph.D.'s awarded to U.S. citizens for the most recent 10-year period for which data are available.

Table 18 Top 20 institutions in terms of number of Ph.D.'s in Agricultural Sciences for all U.S. citizens

Institution	City, State	All U.S. Citizens
Texas A&M University Main Campus	College Station, Texas	232
North Carolina State University at Raleigh	Raleigh, North Carolina	201
Michigan State University	East Lasing, Michigan	185
Cornell University, All Campuses	Ithaca & New York City, New York (Qatar Campus)	183
University of Florida	Gainesville, Florida	175
University of Wisconsin-Madison	Madison, Wisconsin	175
University of Minnesota - Twin Cities	Minneapolis/St. Paul, Minnesota	164
Oregon State University	Corvallis, Oregon	156
University of Illinois at Urbana-Champaign	Urbana & Champaign, Illinois	146
Colorado State University	Fort Collins, Colorado	125
Iowa State University	Ames, Iowa	121
Purdue University, Main Campus	West Lafayette, Indiana	121
Kansas State University	Manhattan, Kansas	117
Virginia Polytechnic Institute and State University	Blacksburg, Virginia	114
Ohio State University, Main Campus	Columbus, Ohio	112
University of Nebraska at Lincoln	Lincoln, Nebraska	98
Louisiana State University & Agriculture & Mechanical College	Baton Rouge, Louisiana	97
University of Arizona	Tucson, Arizona	97
University of Washington - Seattle	Seattle, Washington	97
University of California-Davis	Davis, California	96

The following table identifies the top 20 institutions in terms of the number of Agricultural Sciences Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 19 Top 20 institutions in terms of number of Ph.D.'s in Agricultural Sciences awarded to citizens from historically under-represented groups

Institution	City, State	U.S. Citizens from Under-Represented Groups
Michigan State University	East Lasing, Michigan	30
University of Florida	Gainesville, Florida	22
Cornell University, All Campuses	Ithaca & New York City, New York (Qatar Campus)	20
North Carolina State University at Raleigh	Raleigh, North Carolina	20
Texas A&M University Main Campus	College Station, Texas	20
Alabama Agricultural and Mechanical University	Normal, Alabama	17
Oregon State University	Corvallis, Oregon	17
Kansas State University	Manhattan, Kansas	15
Oklahoma State University, All Campuses	Stillwater, Oklahoma	13
Mississippi State University	Starkville, Mississippi	12
University of Wisconsin-Madison	Madison, Wisconsin	12
Ohio State University, Main Campus	Columbus, Ohio	11
Purdue University, Main Campus	West Lafayette, Indiana	11
University of Arizona	Tucson, Arizona	11
University of California-Berkeley	Berkeley, California	11
University of Illinois at Urbana-Champaign	Urbana & Champaign, Illinois	11
Jackson State University	Jackson, Mississippi	10
Rutgers the State University of New Jersey New Brunswick	New Brunswick, New Jersey	10
University of Arkansas, Main Campus	Fayetteville, Arkansas	10
University of California-Davis	Davis, California	10

Table 20 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Agricultural Sciences

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	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
Degree Received: Doctorate in Agricultural Sciences												
Year	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen		
2006	20	3.7%	14	2.6%	485	89.0%	23	4.2%	3	0.6%	545	1,031
2005	13	2.5%	13	2.5%	484	91.8%	14	2.7%	3	0.6%	527	1,036
2004	18	3.4%	14	2.6%	476	90.4%	15	2.8%	4	0.8%	527	1,041
2003	18	3.5%	10	1.9%	470	90.2%	19	3.7%	4	0.8%	521	1,058
2002	9	2.0%	14	3.0%	415	90.2%	20	4.4%	2	0.4%	460	1,009
2001	9	1.9%	11	2.4%	428	91.3%	21	4.5%	0	0.0%	469	975
2000	12	2.4%	15	3.0%	446	89.6%	20	4.0%	5	1.0%	498	1,037
1999	19	3.8%	22	4.4%	453	89.5%	11	2.2%	1	0.2%	506	1,065
1998	10	2.0%	9	1.8%	453	89.5%	25	4.9%	9	1.8%	506	1,109
1997	15	2.8%	22	4.1%	475	89.3%	15	2.8%	5	0.9%	532	1,078
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created (month/ year): January/2010												

Table 21 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Agricultural Sciences.

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents with U.S. Citizens.

Degree Received: Doctorates in Agricultural Sciences												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen		
2008	31	4.8%	41	6.3%	544	84.1%	26	4.0%	5	0.8%	647	1,201
2007	22	3.2%	24	3.5%	600	87.8%	28	4.1%	9	1.3%	683	1,320

Doctorates in Biological Sciences

Earned Doctorate Degrees in Biological Sciences[5]
During the 10 most recent years for which data are available (1997 through 2006) a total of 59,093 doctorates were awarded in Biological Sciences. Of these, 38,784 or 65.6% were awarded to U.S. citizens and 20,309 or 34.4% were awarded to non-U.S. citizens.

Figure 5

Citizenship Status of Ph.D. Recipients in Biological Sciences, 1997-2006

- 34.4%
- 65.6%
- ■ U.S. Citizens
- ■ Non-U.S. Citizens

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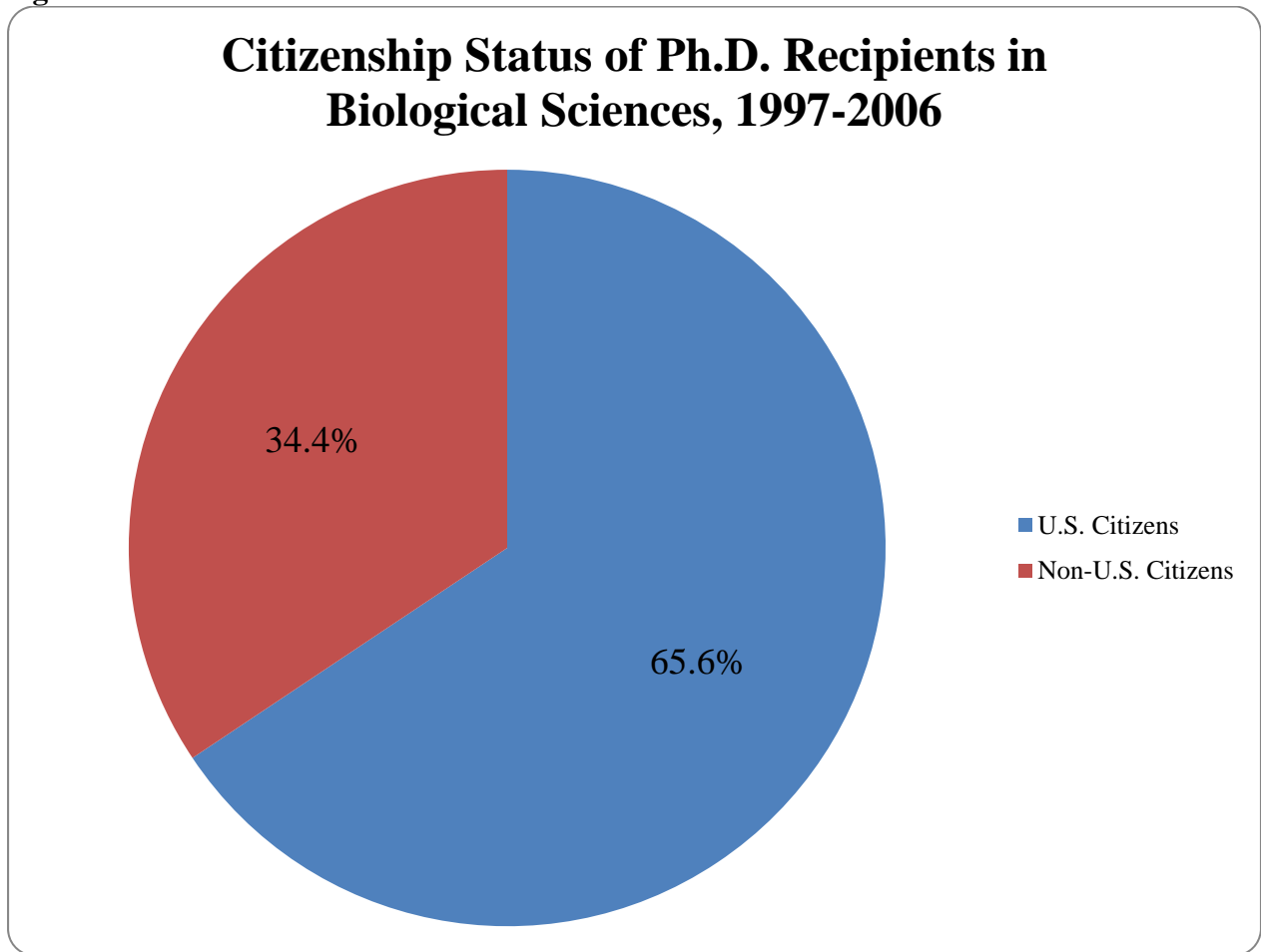
[5] For a complete listing of sub-fields included within Biological Sciences please refer to the appendix 1 entitled "Fine Field of Study" under Biological Sciences.

Out of the 38,784 doctorates awarded to U.S. citizens during the 1997-2006 period, 1,173 or 3.0% were earned by African Americans, 3,508 or 9.0% were earned by Asian Americans, 32,340 or 83.4% were earned by Caucasian or Other ethnicities, 1,637 or 4.2% were earned by Hispanic Americans, and 126 or 0.3% were earned by Native Americans.
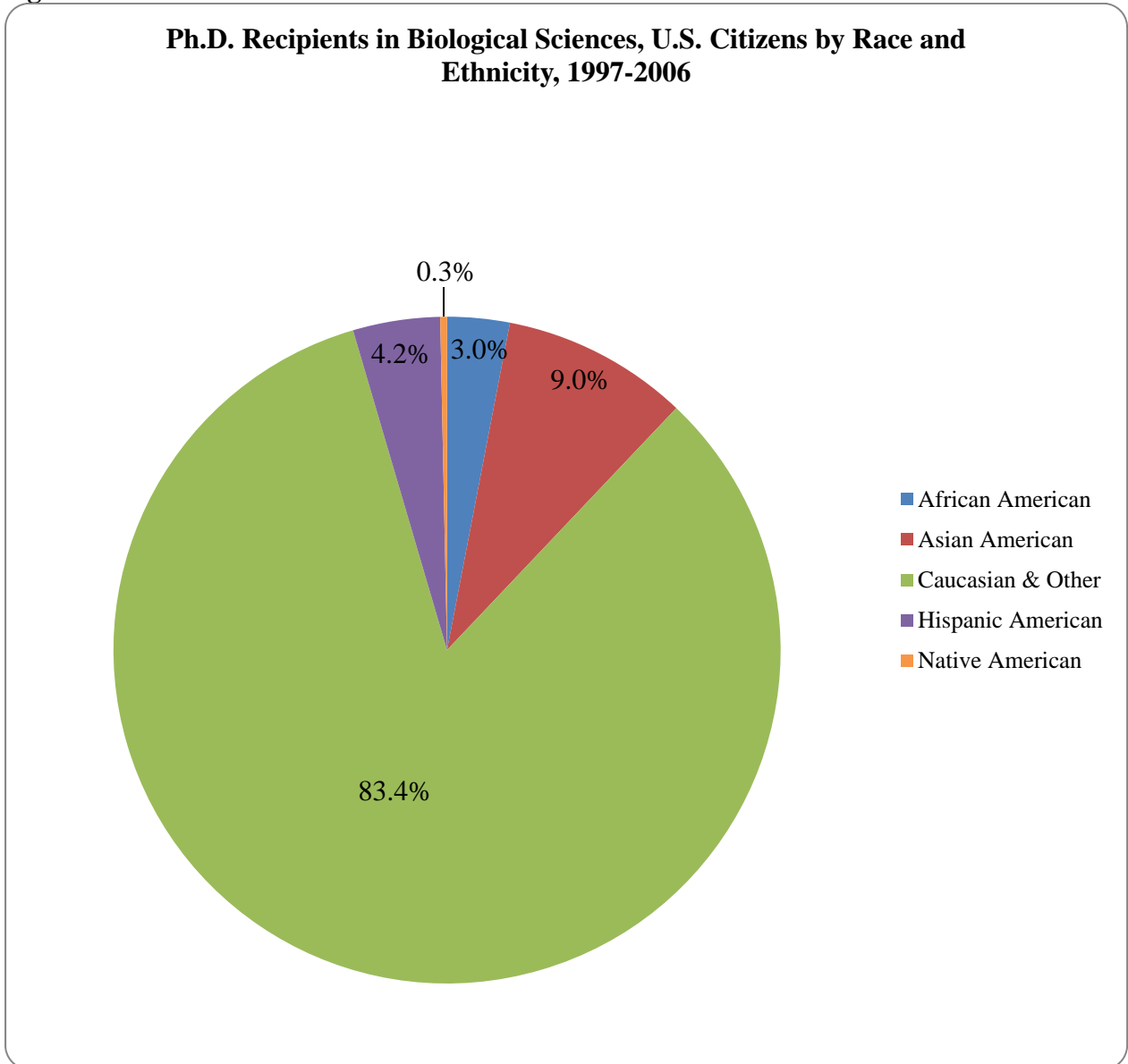
Figure 6

Ph.D. Recipients in Biological Sciences, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of doctorates in Biological Sciences awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 7. The number of members of historically under-represented groups in the fields of Biological Sciences has increased over time but has never exceeded 800.

Figure 7

Ph.D.'s in Biological Sciences Awarded to U.S. Citizens, Members of Historically Under-represented Groups

Figure 8 shows the percentage of Ph.D.'s in Biological Sciences for U.S. citizens awarded to members of historically under-represented groups, comparing 1997 with 2006. The percentage has risen to 17.8% in 2006 as compared to 13.5% 10 years earlier. During these 10 years, African Americans increased by 0.4%, Asian Americans increased by 2.8%, Hispanic Americans increased by 1.1%, and Native Americans decreased by 0.1%.

Figure 8
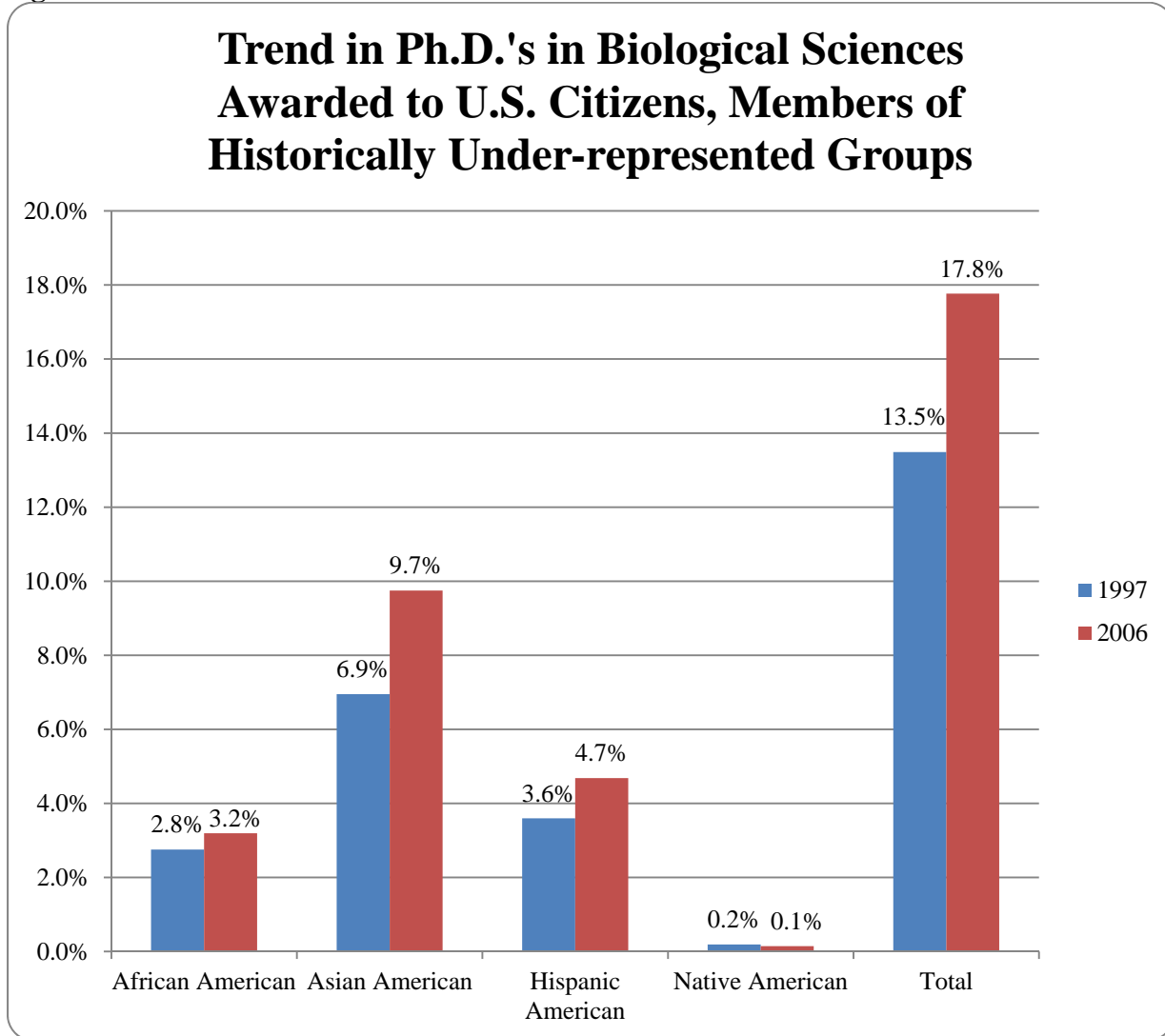
Trend in Ph.D.'s in Biological Sciences Awarded to U.S. Citizens, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each historically under-represented minority group in terms of the numbers of Biological Sciences Ph.D.'s awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 22 Top 10 institutions for African American Ph.D's in Biological Sciences

Institution	City, State	# of Graduates
Meharry Medical College	Nashville, Tennessee	92
Howard University	Washington, D.C.	78
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	34
Harvard University	Cambridge, Massachusetts	33
University of Alabama at Birmingham	Birmingham, Alabama	31
Johns Hopkins University	Baltimore, Maryland	26
University of Michigan at Ann Arbor	Ann Arbor, Michigan	24
University of Pennsylvania	Philadelphia, Pennsylvania	22
Yeshiva University	New York, New York	21
North Carolina State University at Raleigh	Raleigh, North Carolina	18

Table 23 Top 10 institutions for Asian American Ph.D's in Biological Sciences

Institution	City, State	# of Graduates
University of California-Los Angeles	Los Angeles, California	201
Harvard University	Cambridge, Massachusetts	159
Johns Hopkins University	Baltimore, Maryland	98
University of California-Davis	Davis, California	98
University of California-Berkeley	Berkeley, California	97
University of California-San Diego	San Diego, California	97
Stanford University	Palo Alto, California	96
University of California-San Francisco	San Francisco, California	95
University of Pennsylvania	Philadelphia, Pennsylvania	89
Columbia University in the City of New York	New York, New York	81

Table 24 Top 10 institutions for Hispanic American Ph.D's in Biological Sciences

Institution	City, State	# of Graduates
University of California-Davis	Davis, California	56
University of Puerto Rico Rio Piedras Campus	San Juan, Puerto Rico	48
University of California-Los Angeles	Los Angeles, California	45
University of California-San Diego	San Diego, California	44
Harvard University	Cambridge, Massachusetts	43
University of California-Berkeley	Berkeley, California	40
University of Wisconsin-Madison	Madison, Wisconsin	39
Cornell University, All Campuses	Ithaca, New York	33
Stanford University	Palo Alto, California	32
University of Puerto Rico Medical Sciences Campus	San Juan, Puerto Rico	32

Table 25 Top 10 institutions for Native American Ph.D's in Biological Sciences

Institution	City, State	# of Graduates
University of California-Davis	Davis, California	7
University of Washington - Seattle	Seattle, Washington	5
University of California-Los Angeles	Los Angeles, California	4
University of California-San Diego	San Diego, California	4
University of Michigan at Ann Arbor	Ann Arbor, Michigan	4
University of Oklahoma, Norman Campus	Norman, Oklahoma	4
University of Texas Medical Branch at Galveston	Galveston, Texas	4
Colorado State University	Fort Collins, Colorado	3
Oklahoma State University, All Campuses	Stillwater, Oklahoma	3
Old Dominion University	Norfolk, Virginia	3
University of California-San Francisco	San Francisco, California	3
University of Texas at Austin	Austin, Texas	3
Washington University	St. Louis, Missouri	3

The following table identifies the top 20 institutions in terms of the number of Biological Science Ph.D.'s awarded to U.S. citizens for the most recent 10-year period for which data are available.

Table 26 Top 20 institutions in terms of number of Ph.D.'s in Biological Sciences for all U.S. citizens

Institution	City, State	All US Citizens
University of Wisconsin-Madison	Madison, Wisconsin	1,220
University of California-Davis	Davis, California	1,212
Harvard University	Cambridge, Massachusetts	1,207
Johns Hopkins University	Baltimore, Maryland	1,013
University of California-Los Angeles	Los Angeles, California	979
University of Washington - Seattle	Seattle, Washington	890
University of California-Berkeley	Berkeley, California	889
Ohio State University, Main Campus	Columbus, Ohio	879
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	798
University of Minnesota - Twin Cities	Minneapolis-St. Paul, Minnesota	776
University of Pennsylvania	Philadelphia, Pennsylvania	770
Cornell University, All Campuses	Ithaca, New York	756
University of California-San Diego	San Diego, California	750
Yale University	New Haven, Connecticut	747
Stanford University	Palo Alto, California	727
University of Michigan at Ann Arbor	Ann Arbor, Michigan	720
University of Florida	Gainesville, Florida	700
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	689
Pennsylvania State University, Main Campus	University Park, Pennsylvania	685
Duke University	Durham, North Carolina	673

The following table identifies the top 20 institutions in terms of the number of Biological Science Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 27 Top 20 institutions in terms of number of Ph.D.'s in Biological Sciences awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of California-Los Angeles	Los Angeles, California	416
Johns Hopkins University	Baltimore, Maryland	375
Ohio State University, Main Campus	Columbus, Ohio	372
Harvard University	Cambridge, Massachusetts	369
University of California-Davis	Davis, California	360
University of Wisconsin-Madison	Madison, Wisconsin	339
Columbia University in the City of New York	New York, New York	297
University of Pennsylvania	Philadelphia, Pennsylvania	271
University of Southern California	Los Angeles, California	266
University of Texas Health Science Center Houston	Houston, Texas	264
Cornell University, All Campuses	Ithaca, New York	259
Rutgers the State University of New Jersey New Brunswick	New Brunswick, New Jersey	257
Texas A&M University Main Campus	College Station, Texas	256
University of California-Berkeley	Berkeley, California	246
University of Alabama at Birmingham	Birmingham, Alabama	231
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	231
University of Michigan at Ann Arbor	Ann Arbor, Michigan	231
Yale University	New Haven, Connecticut	227
University of Florida	Gainesville, Florida	223
University of California-San Diego	San Diego, California	222

Table 28 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Biological Sciences.

	Degree Received: Doctorates in Biological Sciences											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total	Total all
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	(US citizen)	Doctorates Granted
2006	133	3.2%	406	9.7%	3,425	79.8%	195	4.7%	6	0.1%	4,165	6,631
2005	143	3.5%	423	10.2%	3,352	78.5%	207	5.0%	12	0.3%	4,137	6,368
2004	136	3.4%	400	10.1%	3,239	79.3%	175	4.4%	14	0.4%	3,964	5,940
2003	100	2.6%	395	10.4%	3,134	80.6%	158	4.2%	11	0.3%	3,798	5,695
2002	115	3.0%	392	10.3%	3,121	79.9%	161	4.2%	12	0.3%	3,801	5,694
2001	125	3.2%	373	9.5%	3,251	80.8%	149	3.8%	15	0.4%	3,913	5,697
2000	110	2.8%	318	8.1%	3,304	82.7%	155	4.0%	17	0.4%	3,904	5,853
1999	109	3.0%	288	7.9%	3,088	82.4%	154	4.2%	20	0.5%	3,659	5,581
1998	101	2.7%	258	6.8%	3,251	84.2%	151	4.0%	12	0.3%	3,773	5,846
1997	101	2.8%	255	6.9%	3,175	84.4%	132	3.6%	7	0.2%	3,670	5,788
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created January/2010: January 29, 2010												

Table 29 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Biological Sciences.

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents and U.S. Citizens.

Degree Received: Doctorates in Biological Sciences												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	192	3.7%	599	11.7%	4,012	78.1%	312	6.1%	20	0.4%	5,135	7,793
2007	187	3.9%	556	11.6%	3,771	78.8%	259	5.4%	14	0.3%	4,787	7,179

Doctorates in Chemistry

Earned Doctorate Degrees in Chemistry[6]

During the 10 most recent years for which data are available (1997 through 2006) a total of 20,904 doctorates were awarded in Chemistry. Of these, 11,753 or 56.2% were awarded to U.S. citizens and 9,151 or 43.8% were awarded to non-U.S. citizens.

Figure 9
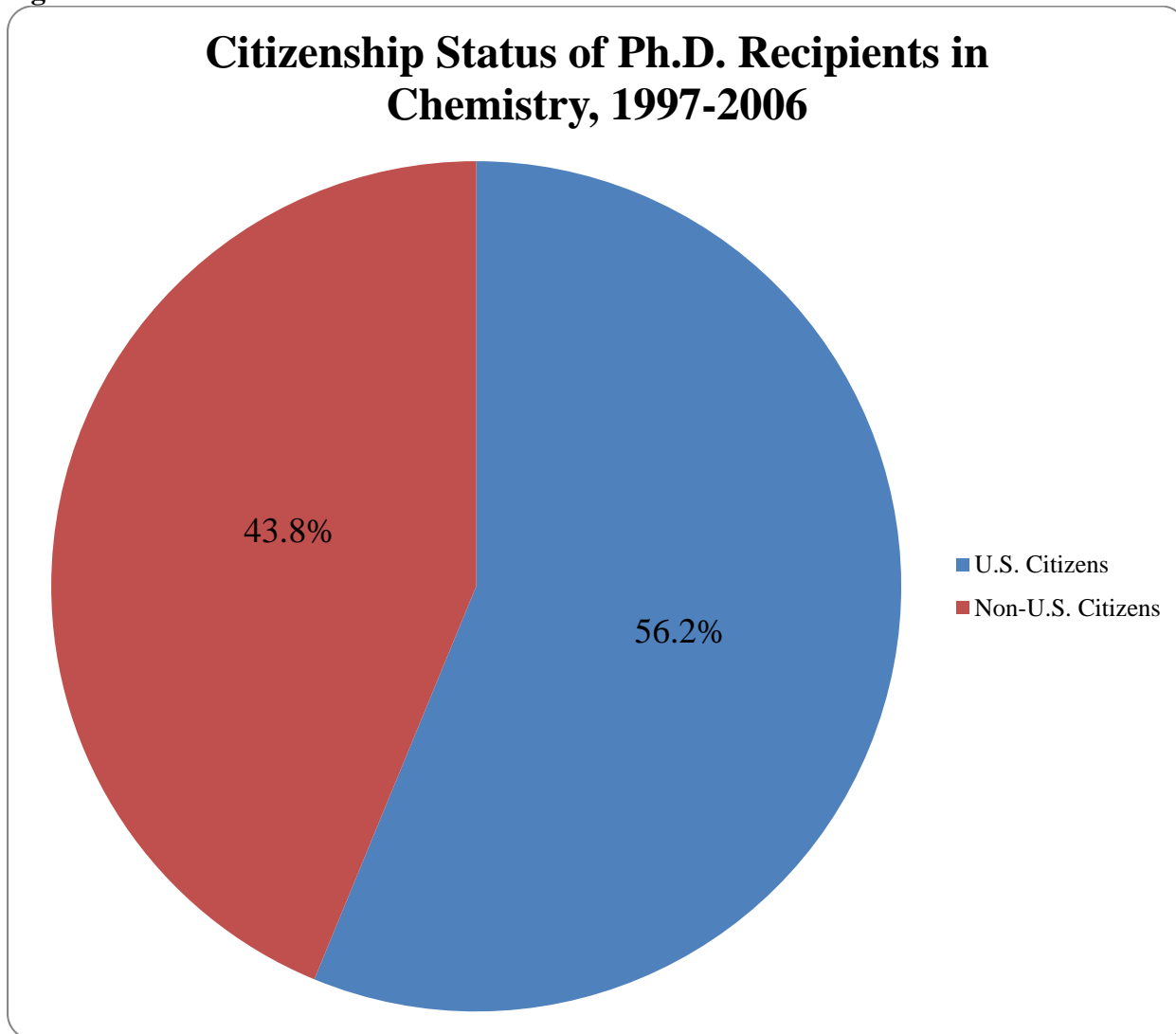
Citizenship Status of Ph.D. Recipients in Chemistry, 1997-2006

43.8%

56.2%

■ U.S. Citizens
■ Non-U.S. Citizens

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[6] For a complete listing of sub-fields included within Chemistry please refer to the appendix 1 entitled "Fine Field of Study" under Chemistry.

Out of the 11,753 doctorates awarded to U.S. citizens during the 1997-2006 period, 368 or 3.1% were earned by African Americans, 770 or 6.6% were earned by Asian Americans, 10,148 or 86.3% were earned by Caucasian or Other ethnicities, 415 or 3.5% were earned by Hispanic Americans, and 52 or 0.4% were earned by Native Americans.

Figure 10
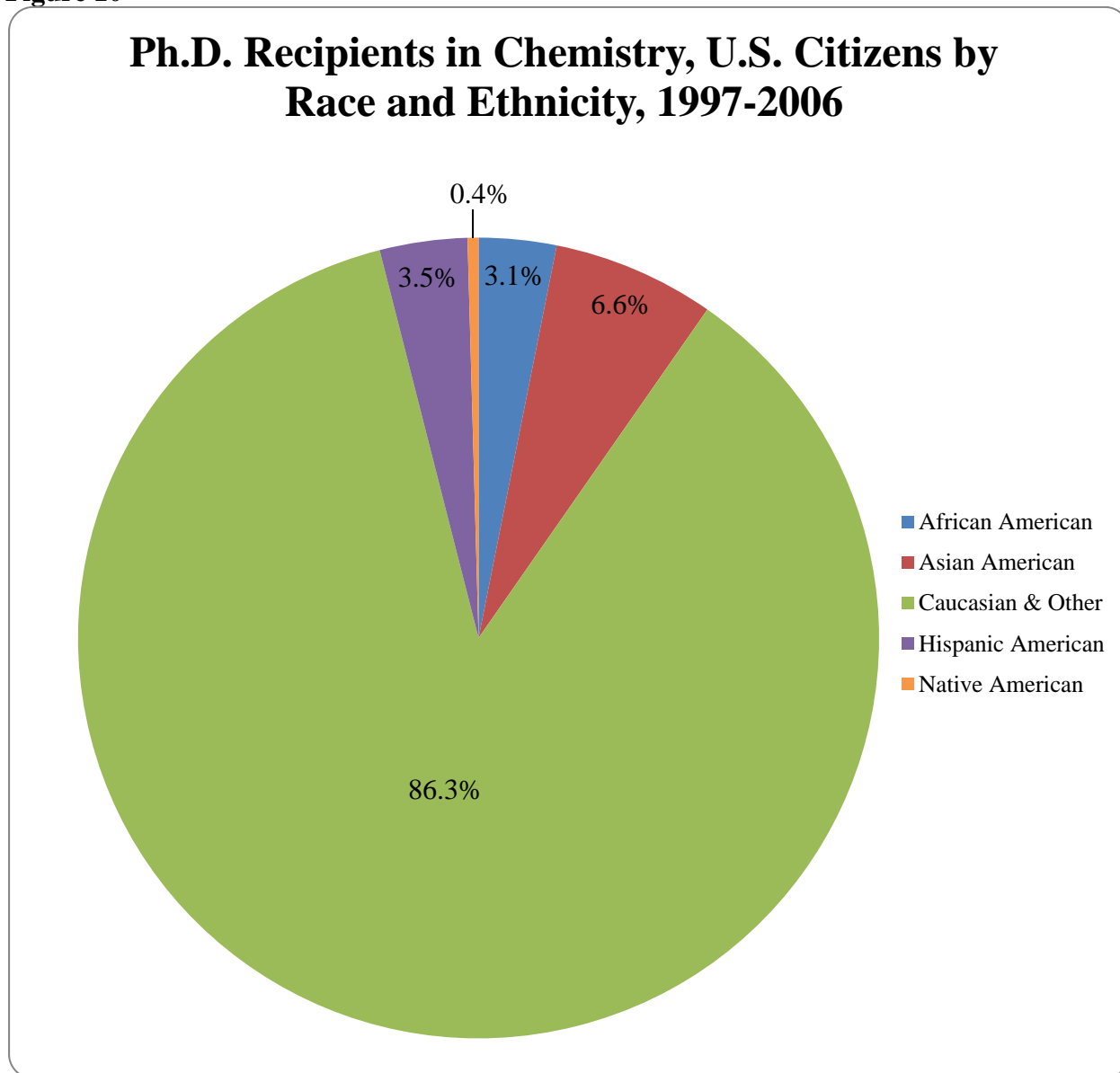
Ph.D. Recipients in Chemistry, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of doctorates in Chemistry awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 11. The number of members of historically under-represented groups receiving a doctorate in the Chemistry field has fluctuated over the past 10 years and has never exceeded 180.

Figure 11

Ph.D.'s in Chemistry Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006

Figure 12 shows the percentage of Ph.D.'s in Chemistry for U.S. citizens awarded to members of historically under-represented groups, comparing 1997 with 2006. The percentage increased slightly from 1997 (12.5%) to 2006 (14.1%). During these 10 years, African Americans decreased by 0.1%, Asian Americans increased by 0.3%, Hispanic Americans increased by 1.6%, and Native Americans decreased by 0.2%.

Figure 12

Percentage of Ph.D.'s in Chemistry Awarded to U.S. Citizens, Members of Historically Under-represented Groups

	1997	2006
African American	2.5%	2.4%
Asian American	6.6%	6.9%
Hispanic American	2.9%	4.5%
Native American	0.5%	0.3%
Total	12.5%	14.1%

The following tables identify the top 10 institutions for each under-represented minorities in terms of the numbers of Ph.D.'s awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 30 Top 10 institutions for African American Ph. D's in Chemistry

Institution	City, State	# of Graduates
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	11
Purdue University, Main Campus	West Lafayette, Indiana	8
University of Florida	Gainesville, Florida	8
Louisiana State University & Agriculture & Mechanical College	Baton Rouge, Louisiana	7
American University	Washington, DC	5
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	5
Howard University	Washington, DC	4
Northwestern University	Evanston, Illinois	4
Texas A&M University Main Campus	College Station, Texas	4
Virginia Polytechnic Institute and State University	Blacksburg, Virginia	4

Table 31 Top 10 institutions for Asian American Ph. D's in Chemistry

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	27
University of California-Los Angeles	Los Angeles, California	23
University of California-San Diego	San Diego, California	15
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	14
University of California-Irvine	Irvine, California	13
California Institute of Technology	Pasadena, California	13
University of California-Davis	Davis, California	12
University of Washington - Seattle	Seattle, Washington	11
University of California-Santa Barbara	Santa Barbara, California	10
Stanford University	Palo Alto, California	8
University of California-San Francisco	San Francisco, California	8
University of Florida	Gainesville, Florida	8

Table 32 Top 10 institutions for Hispanic American Ph. D's in Chemistry

Institution	City, State	# of Graduates
University of Puerto Rico Rio Piedras Campus	San Juan, Puerto Rico	20
University of California-Berkeley	Berkeley, California	16
Purdue University, Main Campus	West Lafayette, Indiana	15
Harvard University	Cambridge, Massachusetts	7
University of California-San Diego	San Diego, California	6
University of Florida	Gainesville, Florida	6
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	5
Massachusetts Institute of Technology	Cambridge, Massachusetts	5
SUNY at Buffalo	Buffalo, New York	5
University of California-Irvine	Irvine, California	5
University of Kansas, Main Campus	Lawrence, Kansas	5
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	5

Table 33 Top 10 institutions for Native American Ph. D's in Chemistry

Institution	City, State	# of Graduates
Texas A&M University Main Campus	College Station, Texas	3
University of California-Berkeley	Berkeley, California	3
Oklahoma State University, All Campuses	Stillwater, Oklahoma	2
California Institute of Technology	Pasadena, California	1
Duke University	Durham, North Carolina	1
Massachusetts Institute of Technology	Cambridge, Massachusetts	1
University of California-San Diego	San Diego, California	1
University of Missouri, Kansas City	Kansas City, Missouri	1
University of South Florida	Tampa, Florida	1
University of Utah	Salt Lake City, Utah	1
Washington State University	Pullman, Washington	1

The following table identifies the top 20 institutions in terms of the number of Chemistry Ph.D.'s awarded to U.S. citizens for the most recent 10-year period for which data are available.

Table 34 Top 20 institutions in terms of number of Ph.D.'s in Chemistry for all U.S. citizens

Institution	City, State	All US Citizens
University of California-Berkeley	Berkeley, California	468
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	292
Purdue University, Main Campus	West Lafayette, Indiana	286
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	272
University of Wisconsin-Madison	Madison, Wisconsin	265
University of Florida	Gainesville, Florida	234
University of Michigan at Ann Arbor	Ann Arbor, Michigan	226
Pennsylvania State University, Main Campus	University Park, Pennsylvania	218
California Institute of Technology	Pasadena, California	211
University of Minnesota - Twin Cities	Minneapolis-St. Paul, Minnesota	207
Stanford University	Palo Alto, California	195
University of California-Irvine	Irvine, California	194
University of Washington - Seattle	Seattle, Washington	193
University of Texas at Austin	Austin, Texas	192
University of California-Los Angeles	Los Angeles, California	189
Texas A&M University Main Campus	College Station, Texas	179
Harvard University	Cambridge, Massachusetts	178
University of Colorado at Boulder	Boulder, Colorado	163
Northwestern University	Evanston, Illinois	161
University of California-Davis	Davis, California	159

The following table identifies the top 20 institutions in terms of the number of Chemistry Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 35 Top 20 institutions in terms of number of Ph.D.'s in Chemistry awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of California-Berkeley	Berkeley, California	88
University of California-Los Angeles	Los Angeles, California	57
Purdue University, Main Campus	West Lafayette, Indiana	45
University of PR Rio Piedras Campus	San Juan, Puerto Rico	44
California Institute of Technology	Pasadena, California	37
Harvard University	Cambridge, Massachusetts	37
Louisiana State University & Agriculture & Mechanical College	Baton Rouge, Louisiana	36
University of Florida	Gainesville, Florida	36
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	36
University of California-Irvine	Irvine, California	35
University of Illinois at Urbana-Champaign	Urbana & Champaign, Illinois	34
Texas A&M University Main Campus	College Station, Texas	32
University of California-Davis	Davis, California	32
University of California-San Diego	San Diego, California	32
University of California-Santa Barbara	Santa Barbara, California	26
University of Washington - Seattle	Seattle, Washington	25
University of Texas at Austin	Austin, Texas	23
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	21
Massachusetts Institute of Technology	Cambridge, Massachusetts	21
University of California-San Francisco	San Francisco, California	21

Table 36 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Chemistry

Year	\[Degree Received: Doctorates in Chemistry\] African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	28	2.4%	81	6.9%	1,005	85.9%	53	4.5%	3	0.3%	1,170	2,363
2005	35	3.1%	87	7.7%	954	84.4%	52	4.6%	2	0.2%	1,130	2,126
2004	40	3.6%	88	7.9%	942	84.7%	38	3.4%	4	0.4%	1,112	1,987
2003	35	3.0%	66	5.6%	1,031	88.0%	38	3.2%	2	0.2%	1,172	2,041
2002	41	3.6%	78	6.9%	977	86.0%	35	3.1%	5	0.4%	1,136	1,922
2001	36	3.2%	76	6.7%	969	85.7%	39	3.4%	11	1.0%	1,131	1,981
2000	36	3.2%	49	4.4%	978	87.4%	49	4.4%	7	0.6%	1,119	1,989
1999	46	3.7%	88	7.0%	1,076	85.7%	41	3.3%	5	0.4%	1,256	2,132
1998	40	3.1%	76	5.9%	1,137	87.9%	34	2.6%	7	0.5%	1,294	2,216
1997	31	2.5%	81	6.6%	1,079	87.5%	36	2.9%	6	0.5%	1,233	2,147
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created January/2010: January 28, 2010												

Table 37 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Chemistry

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents and U.S. Citizens.

Degree Received: Doctorates in Chemistry											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	50	4.07%	137	11.17%	966	78.73%	72	5.87%	2	0.16%	1,227	2,247
2007	62	5.22%	123	10.36%	941	79.28%	57	4.80%	4	0.34%	1,187	2,325

Doctorates in Engineering

Earned Doctorate Degrees in Engineering[7]
During the 10 most recent years for which data are available (1997 through 2006) a total of 57,951 doctorates were awarded in Engineering. Of these, 22,112 or 38.2% were awarded to U.S. citizens and 35,839 or 61.8% were awarded to non-U.S. citizens.

Figure 13
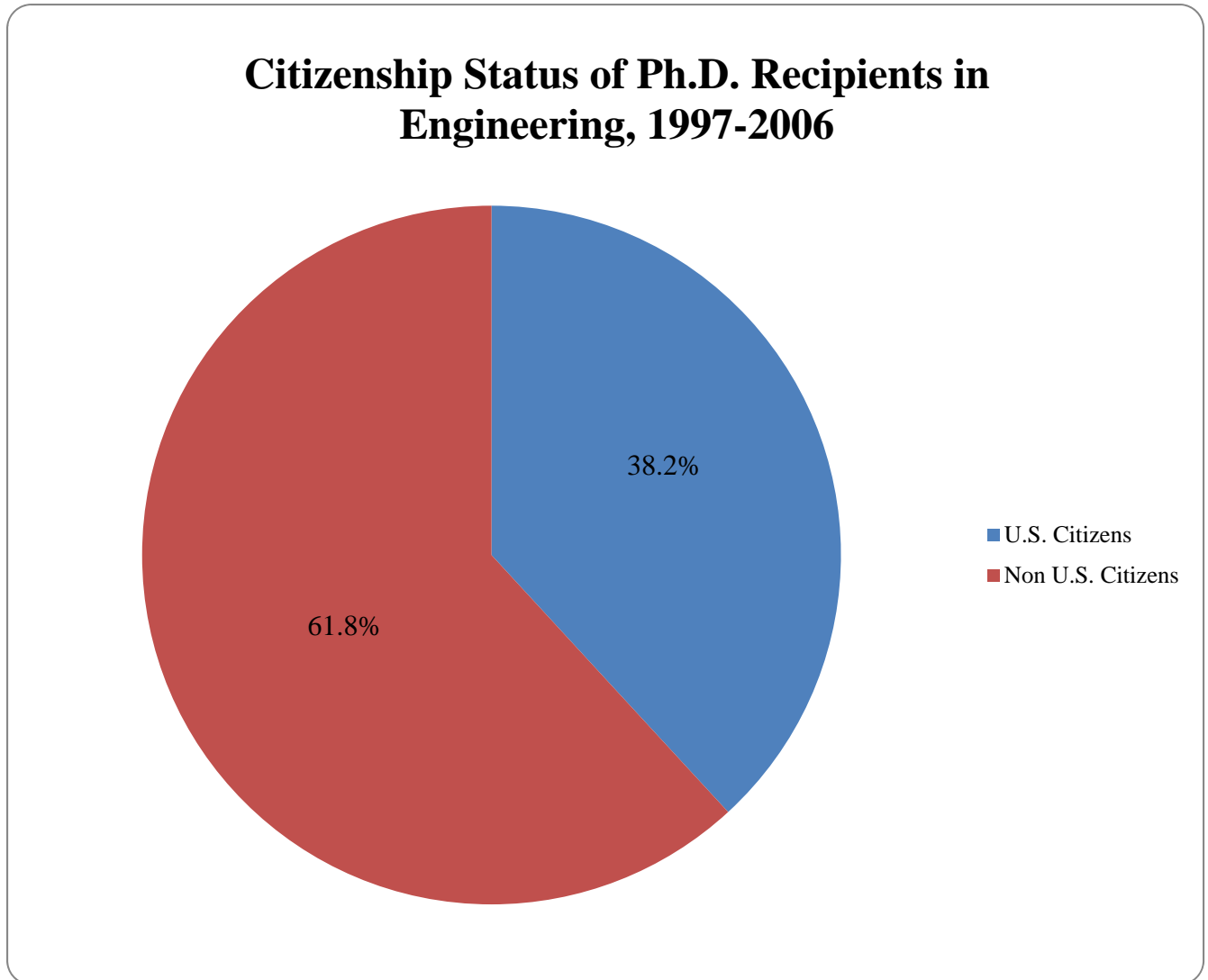
Citizenship Status of Ph.D. Recipients in Engineering, 1997-2006

38.2%

61.8%

■ U.S. Citizens
■ Non U.S. Citizens

[7] For a complete listing of sub-fields included within Engineering please refer to the appendix 1 entitled "Fine Field of Study" under Engineering.

Out of the 22,112 doctorates awarded to U.S. citizens during the 1997-2006 period, 802 or 3.6% were earned by African Americans, 2,514 or 11.4% were earned by Asian Americans, 17,885 or 80.9% were earned by Caucasian or Other ethnicities, 822 or 3.7% were earned by Hispanic Americans, and 89 or 0.4% were earned by Native Americans.

Figure 14

Ph.D. Recipients in Engineering, U.S. Citizens
by Race and Ethnicity, 1997-2006

- African American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

The number of doctorates in Engineering awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 15. The total number of members of historically under-represented groups in these fields is below 472 during the time period 1996 to 2006. It has fluctuated over the past 10 years; however, the number has decreased from a total of 472 in 1997 to 461 in 2006, reflecting a small decrease.

Figure 15

Ph.D.'s in Engineering Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
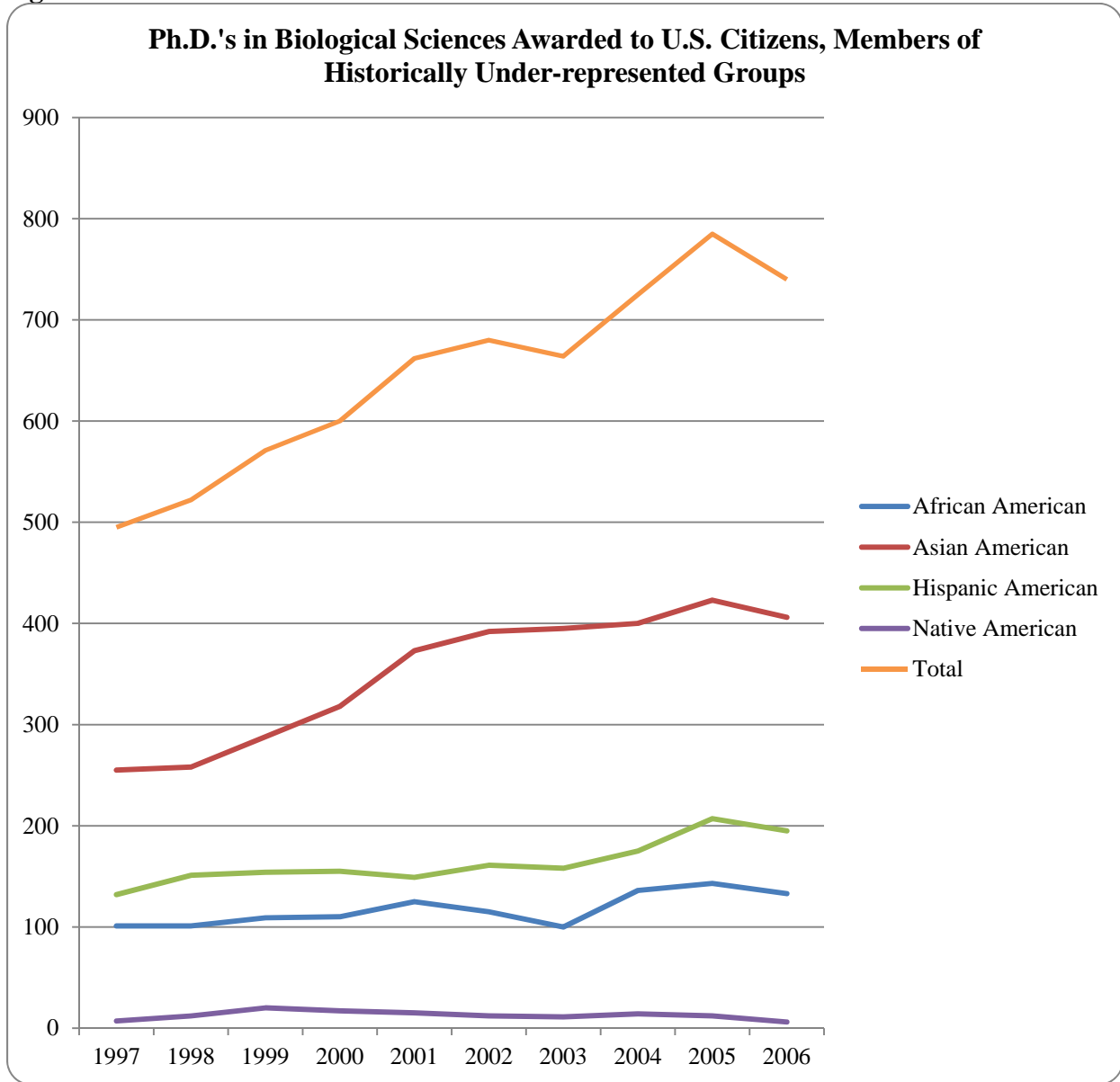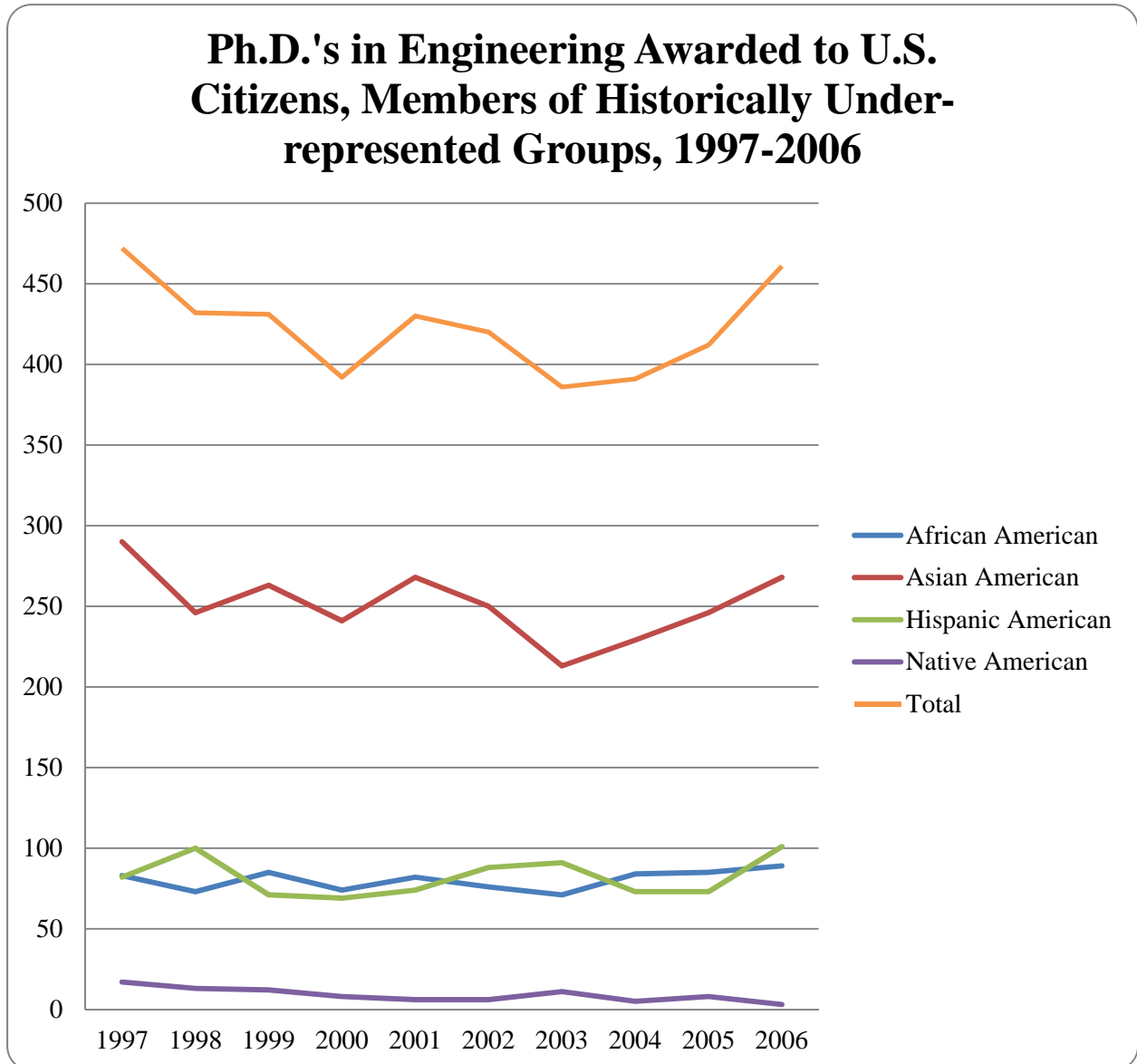
Figure 16 shows the percentage change of Ph.D.'s in Engineering for U.S. citizens awarded to members of historically under-represented groups, comparing 1997 to 2006. The percentage has increased to 21.1% of the total in 2006 as compared to 17.2% of the total 10 years earlier. During the 10 year time period, African Americans increased from 3.0% of the total to 4.1%, Asian Americans increased from 10.6% of the total to 12.3%, Hispanic Americans increased from 3.0% to the total to 4.6%, and Native Americans decreased from 0.6% of the total to 0.1%.

Figure 16
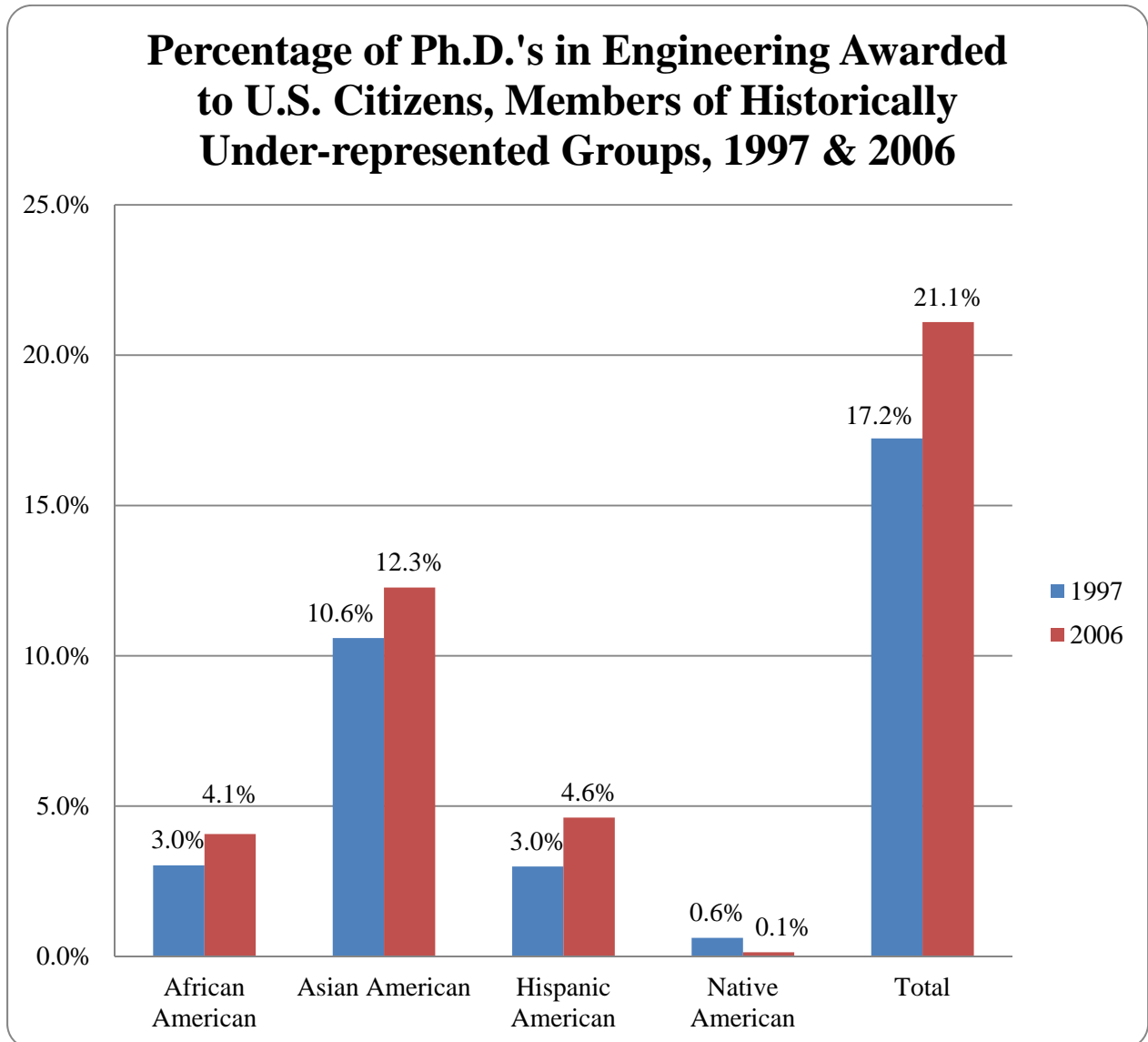
Percentage of Ph.D.'s in Engineering Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997 & 2006

The following tables identify the top 10 institutions for each under-represented minority in terms of the numbers of Ph.D.'s awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 38 Top 10 institutions for African American Ph. D's in Engineering

Institution	City, State	# of Graduates
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	66
North Carolina Agricultural & Technical State University	Greensboro, North Carolina	30
North Carolina State University	Raleigh, North Carolina	30
University of Maryland	College Park, Maryland	27
University of Michigan	Ann Arbor, Michigan	27
Stanford University	Palo Alto, California	25
University of California-Berkeley	Berkeley, California	23
Massachusetts Institute of Technology	Cambridge, Massachusetts	22
Purdue University, Main Campus	West Lafayette, Indiana	20

Table 39 Top 10 institutions for Asian American Ph. D's in Engineering

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	190
Stanford University	Palo Alto, California	178
Massachusetts Institute of Technology	Cambridge, Mass	175
University of California-Los Angeles	Los Angeles, California	134
Georgia Institute of Technology	Atlanta, Georgia	81
University of Michigan	Ann Arbor, Michigan	80
University of Illinois	Champaign-Urbana, Illinois	77
Northwestern University	Chicago, Illinois	68
University of California-Davis	Davis, California	62
University of Texas at Austin	Austin, ,Texas	58

Table 40 Top 10 institutions for Hispanic American Ph. D's in Engineering

Institution	City, State	# of Graduates
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	39
Stanford University	Palo Alto, California	35
University of Illinois	Champaign-Urbana, Illinois	32
University of California-Berkeley	Berkeley, California	29
Massachusetts Institute of Technology	Cambridge, Massachusetts	28
University of Texas	Austin, Texas	26
Texas A&M University	College Station, Texas	24
University of Florida	Gainesville, Florida	24
University of New Mexico, All Campuses	Albuquerque, New Mexico	21

Table 41 Top 10 institutions for Native American Ph. D's in Engineering

Institution	City, State	# of Graduates
University of Florida	Gainesville, Florida	5
University of Tennessee	Knoxville, Tennessee	4
Northwestern University	Chicago, Illinois	3
University of New Mexico, All Campuses	Albuquerque, New Mexico	3
University of Texas	Austin, Texas	3

The following table identifies the top 20 institutions in terms of the number of Engineering Ph.D.'s awarded to U.S. citizens, overall, for the most recent 10-year period for which data are available.

Table 42 Top 20 institutions in terms of number of Ph.D.'s in Engineering for all U.S. citizens

Institution	City, State	All U.S. Citizens
Georgia Institute of Technology	Atlanta, Georgia	644
Massachusetts Institute of Technology	Cambridge, Massachusetts	637
Stanford University	Palo Alto, California	627
University of California-Berkeley	Berkeley, California	583
University of Michigan	Ann Arbor, Michigan	550
University of Illinois	Champaign-Urbana, Illinois	462
University of Texas	Austin, Texas	459
Pennsylvania State University	University Park, Pennsylvania	412
Purdue University	Lafayette, Indiana	380
Northwestern University	Chicago, Illinois	375
Virginia Polytechnic Institute and State University	Virginia Beach, Virginia	322
University of Colorado	Boulder, Colorado	317
University of Florida	Gainesville, Florida	316
North Carolina State University	Raleigh, North Carolina	305
University of Wisconsin	Madison, Wisconsin	299
University of Minnesota	Twin Cities, Minnesota	292
Carnegie Mellon University	Pittsburgh, Pennsylvania	271
Cornell University	Ithaca, New York	256
University of Washington	Seattle, Washington	253
University of Virginia	Charlottesville, Virginia	251

The following table identifies the top 20 institutions in terms of the number of Engineering Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 43 Top 20 institutions in terms of number of Ph.D.'s in Engineering awarded to U.S. citizens from historically underrepresented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of California-Berkeley	Berkeley, California	245
Stanford University	Palo Alto, California	239
Massachusetts Institute of Technology	Cambridge, Massachusetts	226
Georgia Institute of Technology	Atlanta, Georgia	194
University of California-Los Angeles	Los Angeles, California	149
University of Michigan	Ann Arbor, Michigan	127
University of Illinois	Champaign-Urbana, Illinois	124
Northwestern University	Chicago, Illinois	105
University of Texas at Austin	Austin, Texas	99
Purdue University	Lafayette, Indiana	91
University of California-Davis	Davis, California	84
University of Maryland	College Park, Maryland	83
University of Florida	Gainesville, Florida	68
Pennsylvania State University	University Park, Pennsylvania	66
University of Washington	Seattle, Washington	64
North Carolina State University	Raleigh, North Carolina	63
Texas A&M University	College Station, Texas	58
Cornell University	Ithaca, New York	57
University of California-Irvine	Irvine, California	57
University of California-San Diego	San Diego, California	57

Table 44 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Engineering

	Degree Received: Doctorates in Engineering											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US Citizen)	Total All Doctorates Granted
	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen		
2006	89	4.1%	268	12.3%	1,724	78.9%	101	4.6%	3	0.1%	2,185	7,191
2005	85	4.3%	246	12.3%	1,589	79.4%	73	3.7%	8	0.4%	2,001	6,425
2004	84	4.3%	229	11.8%	1,555	79.9%	73	3.8%	5	0.3%	1,946	5,777
2003	71	3.7%	213	11.1%	1,526	79.8%	91	4.8%	11	0.6%	1,912	5,280
2002	76	4.0%	250	13.2%	1,474	77.8%	88	4.7%	6	0.3%	1,894	5,079
2001	82	3.8%	268	12.4%	1,726	80.1%	74	3.4%	6	0.3%	2,156	5,511
2000	74	3.3%	241	10.8%	1,831	82.4%	69	3.1%	8	0.4%	2,223	5,323
1999	85	3.4%	263	10.6%	2,056	82.7%	71	2.9%	12	0.5%	2,487	5,330
1998	73	2.8%	246	9.6%	2,137	83.2%	100	3.9%	13	0.5%	2,569	5,921
1997	83	3.0%	290	10.6%	2,267	82.8%	82	3.0%	17	0.6%	2,739	6,114
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created (month/year): January 2010												

Table 45 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Engineering

  These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents and U.S. Citizens.

Degree Received: Doctorates in Engineering													
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US Citizen and Permanent Residents)	Total All Doctorates Granted
	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen		
2008	111	3.8%	493	16.7%	2,204	74.8%	133	4.5%	7	0.2%	2,948	7,862
2007	91	3.6%	397	15.7%	1,913	75.45%	126	5.0%	7	0.3%	2,534	7,744

Doctorates in Geosciences

Earned Doctorate Degrees in Geosciences[8]

During the 10 most recent years for which data are available (1997 through 2006) a total of 7175 doctorates were awarded in Geosciences Of these, 4,311 or 60.1% were awarded to U.S. citizens and 2,864 or 39.9% were awarded to non-U.S. citizens.

Figure 17
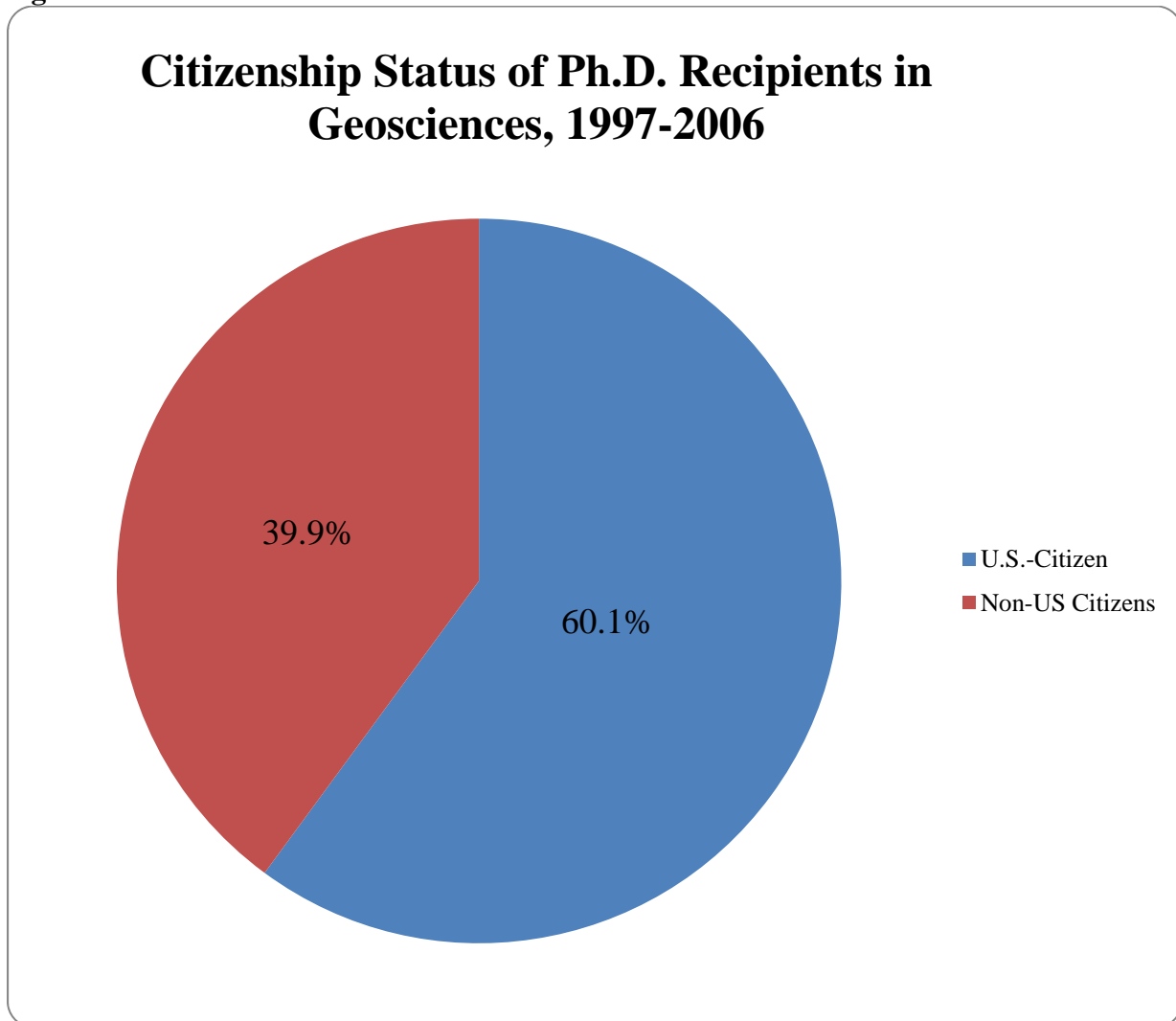
Citizenship Status of Ph.D. Recipients in Geosciences, 1997-2006

39.9%

60.1%

■U.S.-Citizen
■Non-US Citizens

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[8] For a complete listing of sub-fields included within Geosciences please refer to the appendix 1 entitled "Fine Field of Study" under Geological & Earth Sciences

Out of the 4,311 doctorates awarded to U.S. citizens during the 1997-2006 period, 54 or 1.3% were earned by African Americans, 100 or 2.3% were earned by Asian Americans, 3,995 or 92.7% were earned by Caucasian or Other ethnicities, 135 or 3.1% were earned by Hispanic Americans, and 27 or 0.6% were earned by Native Americans.

Figure 18
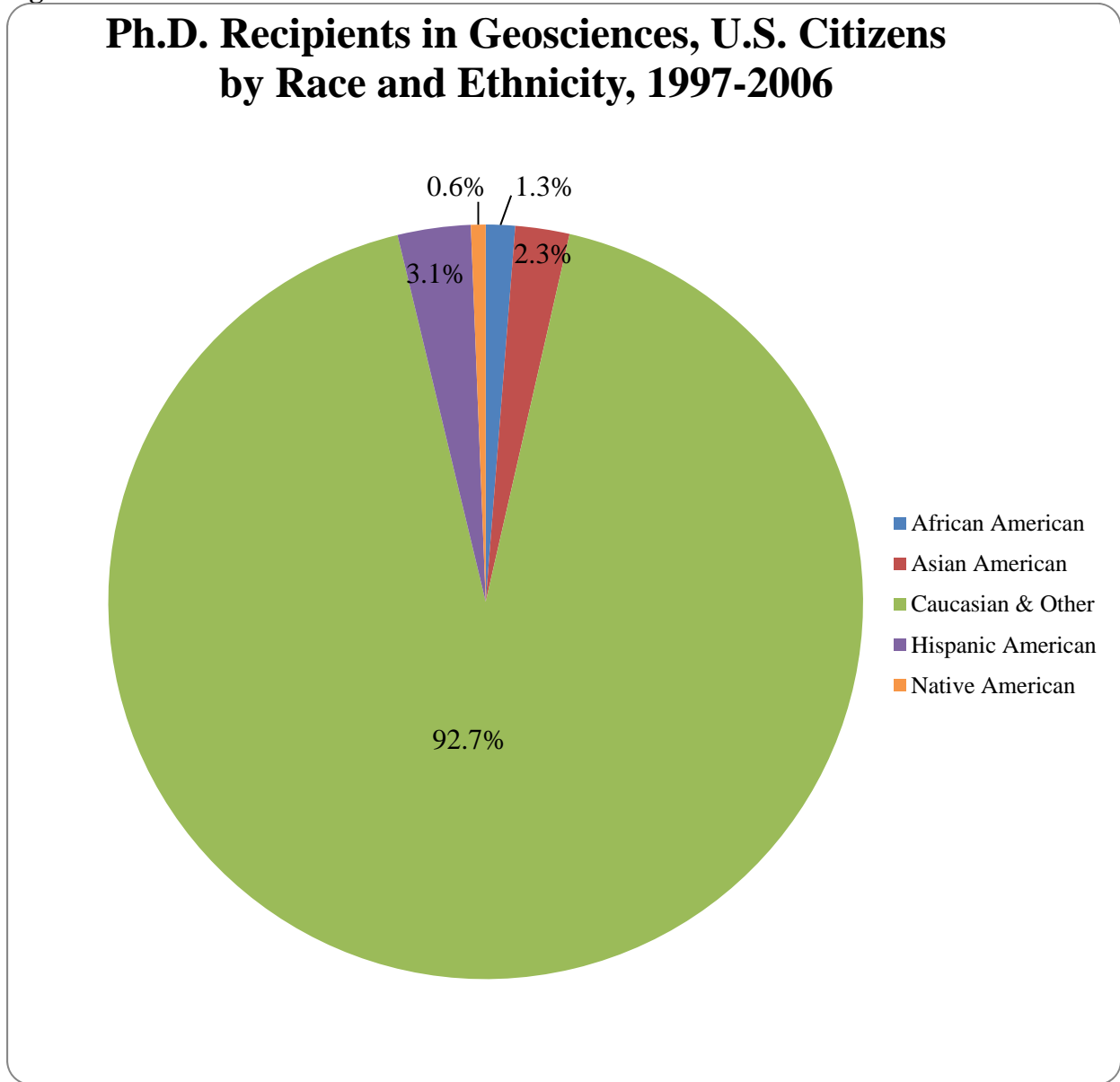
Ph.D. Recipients in Geosciences, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of doctorates in Geosciences awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 19. The number of members of historically under-represented groups receiving doctorates in Geosciences has fluctuated over the past 10 years and has never exceeded 46.

Figure 19

Ph.D.'s in Geosciences awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
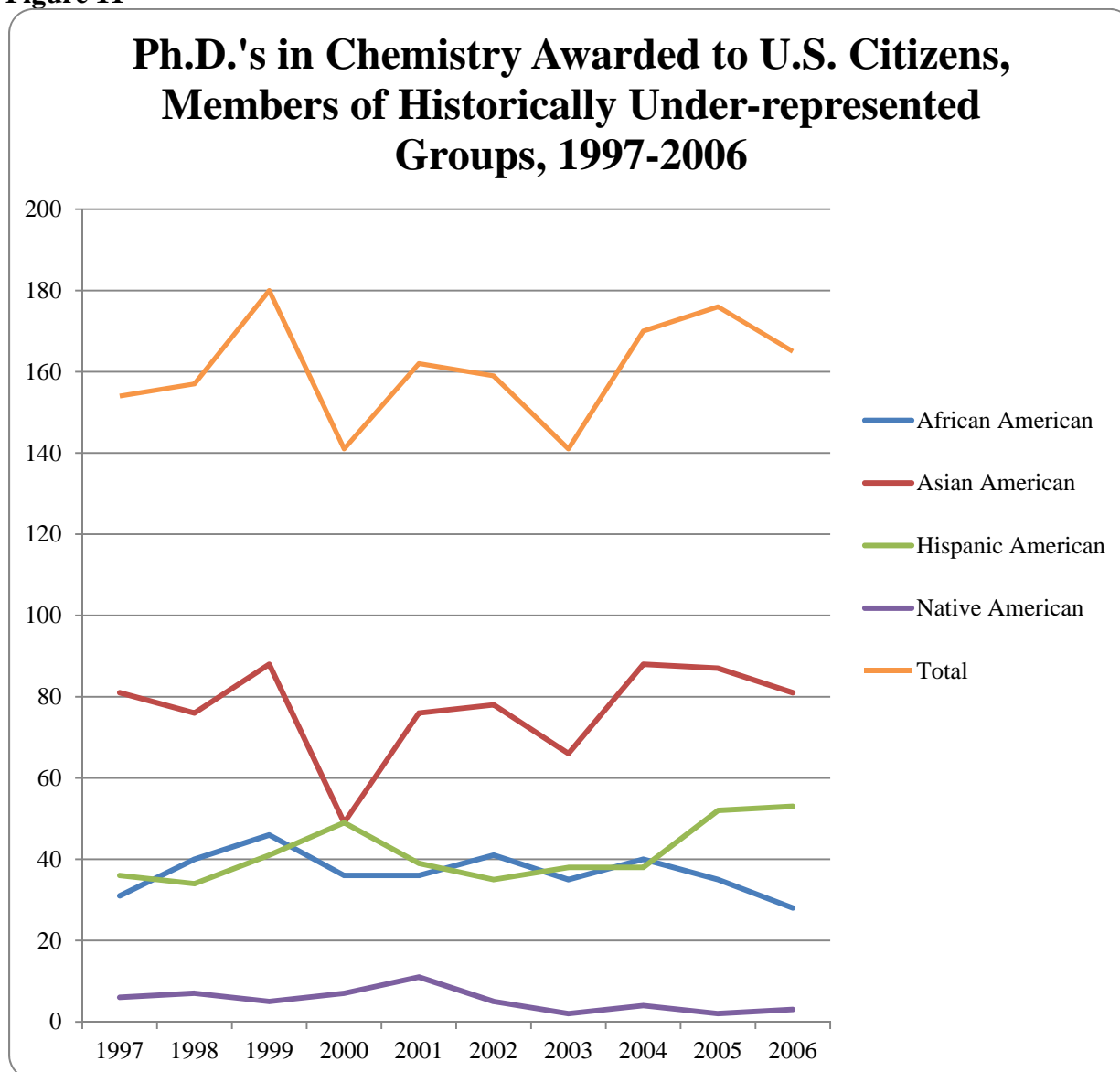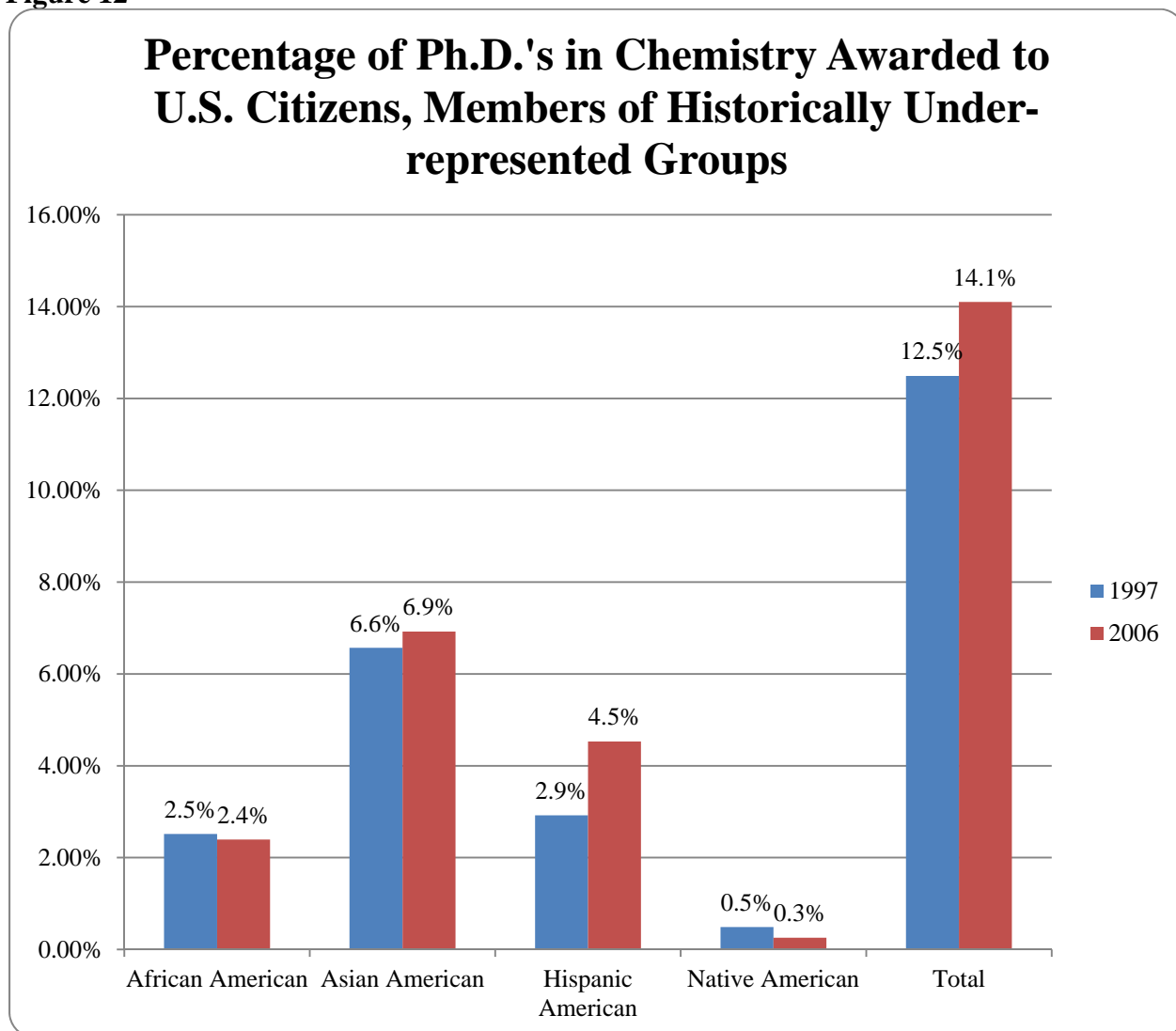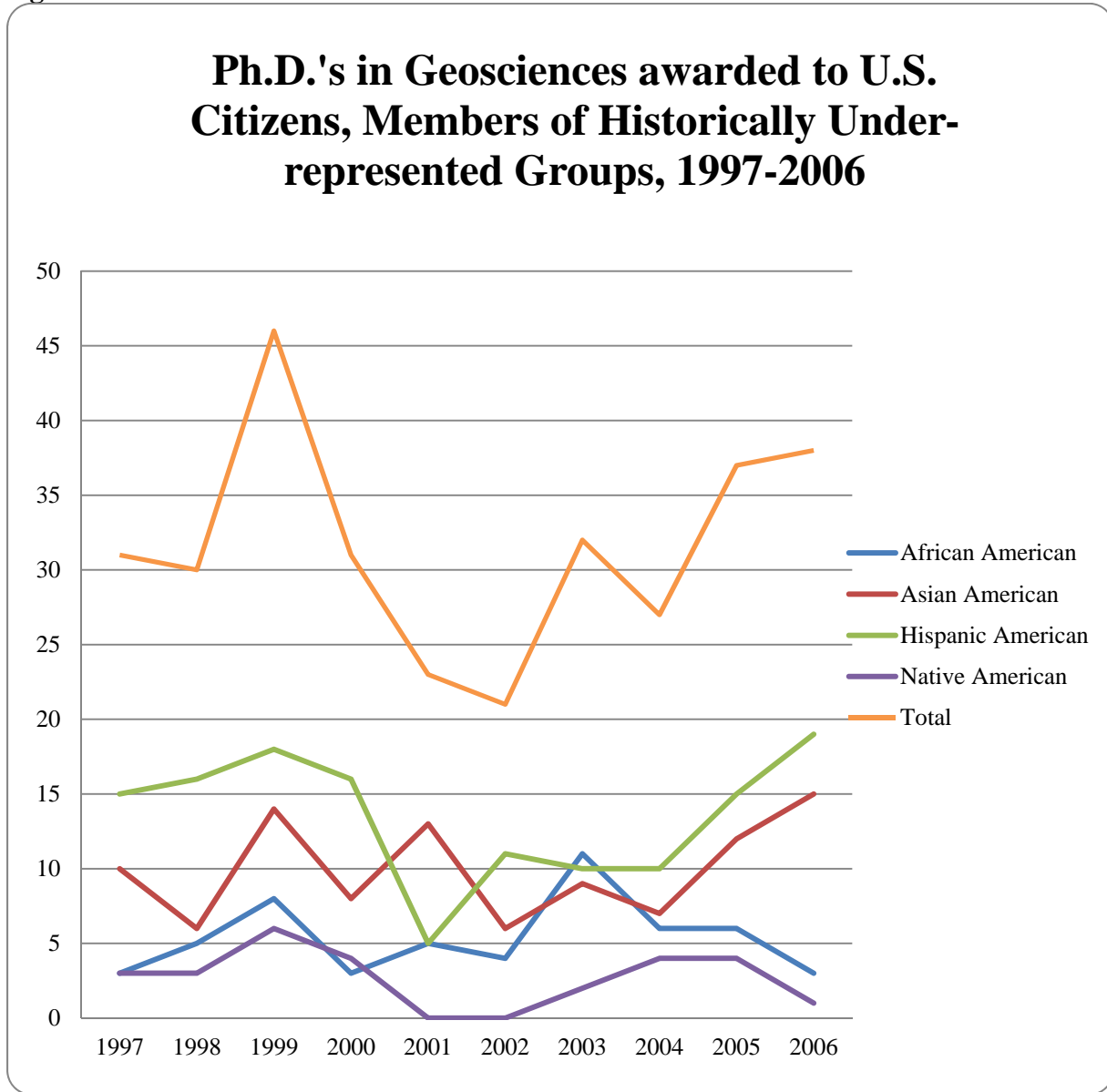
Figure 20 shows the percentage of Ph.D.'s in Geosciences for U.S. citizens awarded to members of historically under-represented groups, comparing 1997 with 2006. The total percentage has increased to 11.0% in 2006 as compared with 10.7% 10 years earlier. During these 10 years, African Americans increased by 0.9%, Asian Americans decreased by 1.5%, Hispanic Americans increased by 1.4%, and Native Americans decreased by 0.4%.

Figure 20

Percentage of Ph.D.'s in Geosciences Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997 & 2006
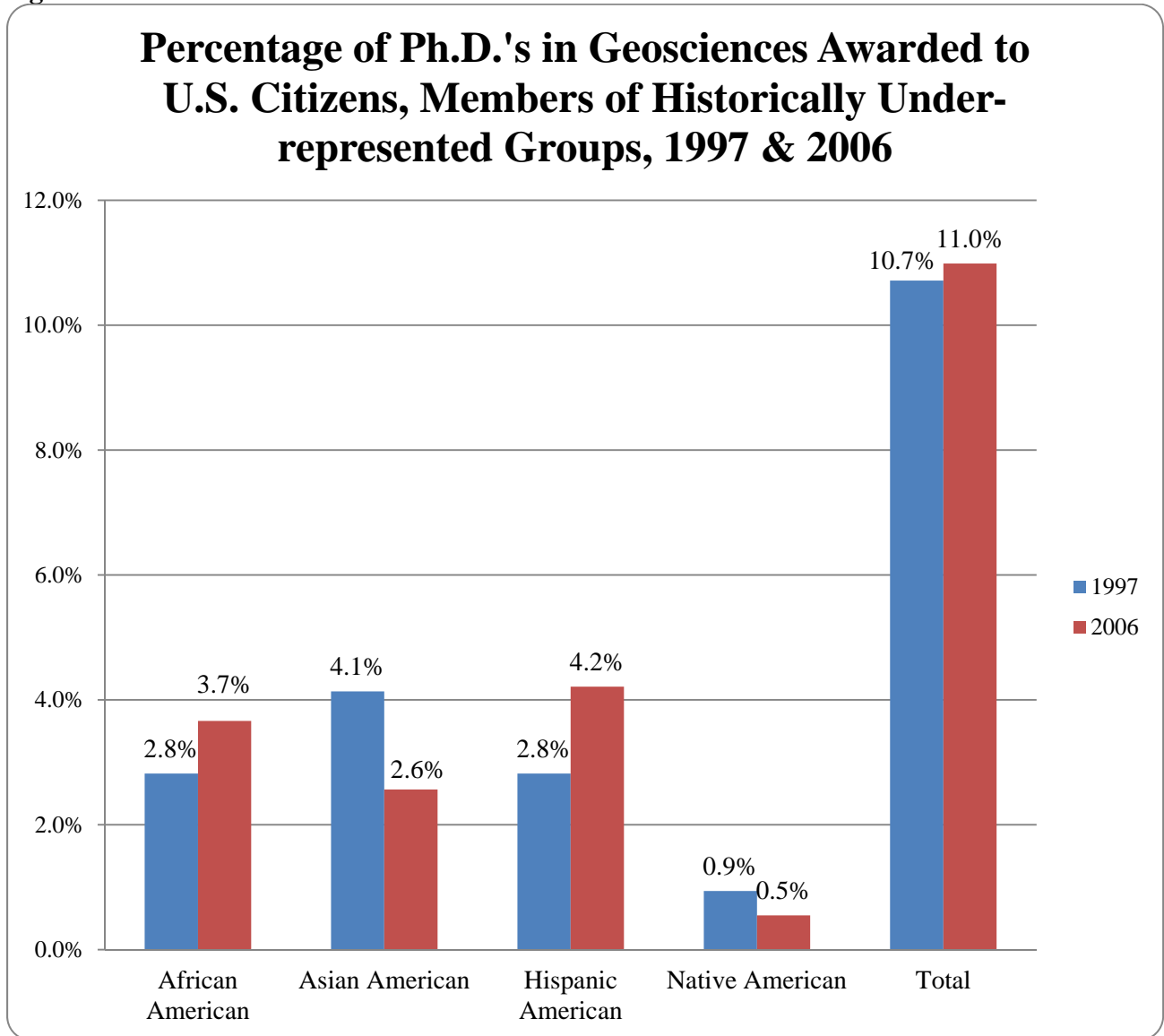
The following tables identify the top institutions for each under-represented minorities in terms of the numbers of Ph.D.'s awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 46 Top 10 institutions for African American Ph. D's in Geosciences

Institution	City, State	# of Graduates
University of Texas at El Paso	El Paso, Texas	4
University of Rhode Island	Kingston, Rhode Island	3
Harvard University	Cambridge, Massachusetts	2
Louisiana State University	Baton Rouge, Louisiana	2
Ohio State University, Main Campus	Columbus, Ohio	2
Rice University	Houston, Texas	2
Texas A&M University Main Campus	College Station, Texas	2
University of Delaware	Newark, Delaware	2
University of Michigan at Ann Arbor	Ann Arbor, Michigan	2
University of Texas at Austin	Austin, Texas	2
University of Texas at Dallas	Dallas, Texas	2

Table 47 Top 10 institutions for Asian American Ph. D's in Geosciences

Institution	City, State	# of Graduates
Massachusetts Institute of Technology	Cambridge, Massachusetts	8
University of Washington - Seattle	Seattle, Washington	7
College of William and Mary	Williamsburg, Virginia	5
University of California-Los Angeles	Los Angeles, California	5
Harvard University	Cambridge, Massachusetts	4
Stanford University	Stanford, California	4
University of California-Berkeley	Berkeley, California	4
University of Texas at Austin	Austin, Texas	4
Columbia University	New York, New York	3
Indiana University at Bloomington	Bloomington, Indiana	3
University of Maryland at College Park	College Park, Maryland	3

Table 48 Top 10 institutions for Hispanic American Ph. D's in Geosciences

Institution	City, State	# of Graduates
University of Puerto Rico Mayaguez Campus	Mayaguez, Puerto Rico	18
Massachusetts Institute of Technology	Cambridge, Massachusetts	8
University of Arizona	Tucson, Arizona	5
University of California-Berkeley	Berkeley, California	5
University of Colorado at Boulder	Boulder, Colorado	5
University of California-Santa Cruz	Santa Cruz California	4
University of South Carolina at Columbia	Columbia, South Carolina	4
University of Washington - Seattle	Seattle, Washington	4
Columbia University	New York, New York	3

Table 49 Top 10 institutions for Native American Ph. D's in Geosciences

Institution	City, State	# of Graduates
College of William and Mary	Williamsburg, Virginia	2
Carnegie Mellon University	Pittsburgh, Pennsylvania	1
Colorado School of Mines	Golden, Colorado	1
Colorado State University	Boulder, Colorado	1
Louisiana State University	Baton Rouge, Louisiana	1
Massachusetts Institute of Technology	Cambridge, Massachusetts	1
New Mexico State University, All Campuses	Las Cruces, New Mexico	1
Oregon State University	Corvallis, Oregon	1
Princeton University	Princeton, New Jersey	1
Rensselaer Polytechnic Institute	Troy, New York	1

The following table identifies the top 20 institutions in terms of the number of Geosciences Ph.D.'s awarded to U.S. citizens for the most recent 10-year period for which data are available.

Table 50 Top 20 institutions in terms of number of Ph.D.'s in Geosciences for all U.S. citizens

Institution	City, State	All US Citizens
University of Washington - Seattle	Seattle, Washington	169
University of Arizona	Tucson, Arizona	161
University of California-San Diego	San Diego California	129
University of Colorado at Boulder	Boulder, Colorado	129
Massachusetts Institute of Technology	Cambridge, Massachusetts	123
Stanford University	Stanford, California	116
University of Wisconsin-Madison	Madison, Wisconsin	94
University of Texas at Austin	Austin, Texas	91
Pennsylvania State U, Main Campus	University Park, Pennsylvania	86
Texas A&M University Main Campus	College Station, Texas	81
University of California-Berkeley	Berkeley, California	79
Colorado State University	Fort Collins, Colorado	73
University of California-Santa Cruz	Santa Cruz, California	72
University of Rhode Island	Kingston, Rhode Island	71
Columbia University	New York, New York	68
University of California-Santa Barbara	Santa Barbara, California	67
University of Michigan at Ann Arbor	Ann Arbor, Michigan	67
Oregon State University	Corvallis, Oregon	63
University of Delaware	Newark, Delaware	62
University of California-Los Angeles	Los Angeles, California	61

The following table identifies the top 20 institutions in terms of the number of Geosciences Ph.D.'s awarded to those citizens from any historically under-represented group for the most recent 10-year period for which data are available.

Table 51 Top 20 institutions in terms of number of Ph.D.'s in Geosciences awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of Puerto Rico Mayaguez Campus	Mayaguez, Puerto Rico	18
Massachusetts Institute of Technology	Cambridge, Massachusetts	17
University of Washington - Seattle	Seattle, Washington	12
University of California-Berkeley	Berkeley, California	10
College of William and Mary	Williamsburg, Virginia	9
Stanford University	Stanford, California	8
University of Arizona	Tucson, Arizona	8
University of Texas at Austin	Austin, Texas	8
University of California-Los Angeles	Los Angeles, California	7
University of California-Santa Cruz	Santa Cruz, California	7
University of Texas at El Paso	El Paso, Texas	7
Columbia University	New York, New York	6
Harvard University	Cambridge, Massachusetts	6
Rice University	Houston, Texas	6
Texas A&M University Main Campus	College Station, Texas	6
University of California-Santa Barbara	Santa Barbara, California	6
University of Colorado at Boulder	Boulder, Colorado	6
University of Delaware	Newark, Delaware	6
University of Maryland at College Park	College Park Maryland	6
University of Rhode Island	Kingston, Rhode Island	6

Table 52 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Geosciences

Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen		
2006	3	3.7%	15	2.6%	407	89.0%	19	4.2%	1	0.5%	445	757
2005	6	2.5%	12	2.5%	384	91.8%	15	2.7%	4	0.6%	421	714
2004	6	3.4%	7	2.6%	388	90.4%	10	2.8%	4	0.8%	415	686
2003	11	3.5%	9	1.9%	387	90.2%	10	3.6%	2	0.8%	419	683
2002	4	2.0%	6	3.0%	376	90.2%	11	4.3%	0	0.4%	397	689
2001	5	1.9%	13	2.3%	359	91.3%	5	4.5%	0	0.0%	382	660
2000	3	2.4%	8	3.0%	413	89.6%	16	4.0%	4	1.0%	444	694
1999	8	3.8%	14	4.3%	377	89.5%	18	2.2%	6	0.2%	423	723
1998	5	2.0%	6	1.8%	447	89.5%	16	4.9%	3	1.8%	477	765
1997	3	2.8%	10	4.1%	457	89.3%	15	2.8%	3	0.9%	488	804
Source: NSF												
Web Site: http://webcaspar.nsf.gov/												
Date Table Created (month/ year): January 2009												

Table 53 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Geosciences

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents with U.S. Citizens.

Degree Received: Doctorates in Geosciences													
Year	Native American		Asian, Native Hawaiian & Other Pacific Islander		African American		Hispanic		White & Other		Total (US citizen)	Total all Doctorates Granted
	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen		
2008	1	0.4%	16	5.7%	5	1.8%	12	4.3%	246	87.9%	280	458
2007	0	0.0%	4	1.3%	3	1.0%	12	3.9%	288	93.8%	307	480

Doctorates in Physics

Earned Doctorate Degrees in Physics[9]

During the 10 most recent years for which data are available (1997 through 2006) a total of 12,539 doctorates were awarded in Physics. Of these, 5,910 or 47.1% were awarded to U.S. citizens and 6,629 or 52.9% were awarded to non-U.S. citizens.
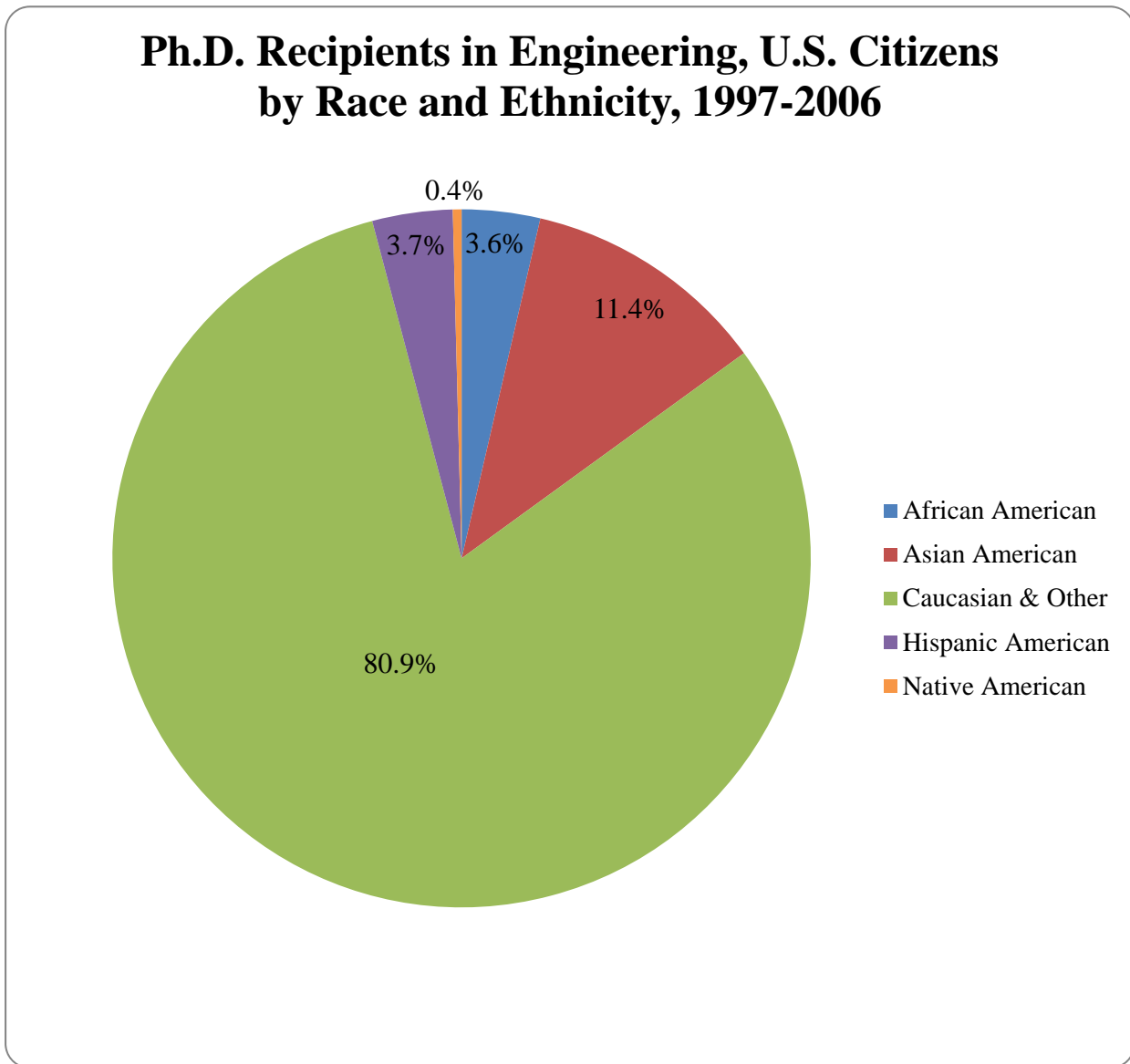
Figure 21

Citizenship Status of Ph.D. Recipients in Physics, 1997-2006

47.1%

52.9%

■ US Citizens
■ Non-US Citizens

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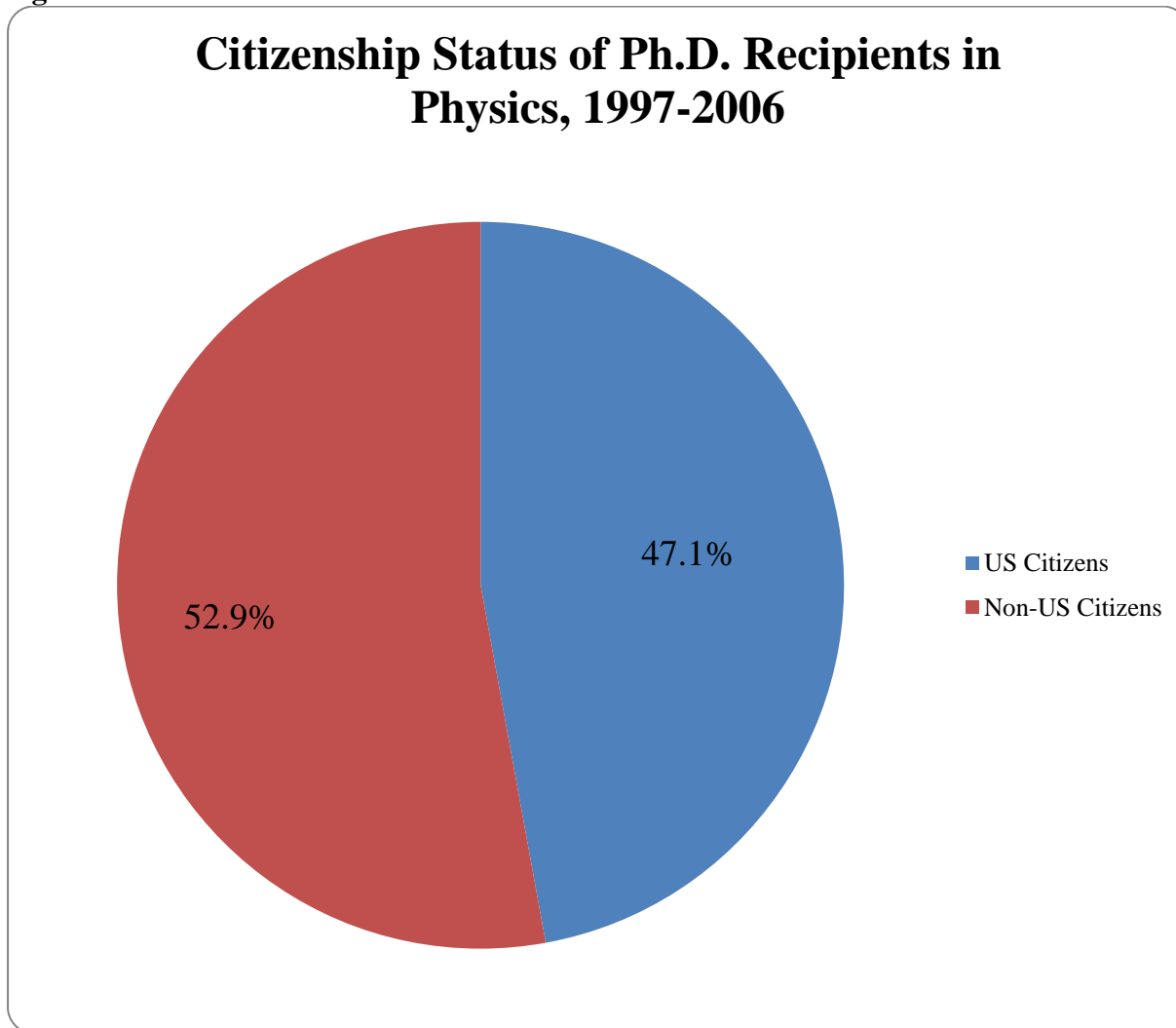
[9] For a complete listing of sub-fields included within Physics please refer to the appendix 1 entitled "Fine Field of Study" under Physics.

Out of the 5,910 doctorates awarded to U.S. citizens during the 1997-2006 period, 103 or 1.7% were earned by African Americans, 415 or 7.0% were earned by Asian Americans, 5,222 or 88.4% were earned by Caucasian or Other ethnicities, 157 or 2.7% were earned by Hispanic Americans, and 13 or 0.2 % were earned by Native Americans.

Figure 22

Ph.D. Recipients in Physics, U.S. Citizens by Race and Ethnicity, 1997-2006

- African American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

The number of doctorates in Physics awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 23. The number of members of historically under-represented graduates in Physics has fluctuated over the past 10 years and has never exceeded 100.

Figure 23

Ph.D.'s in Physics awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
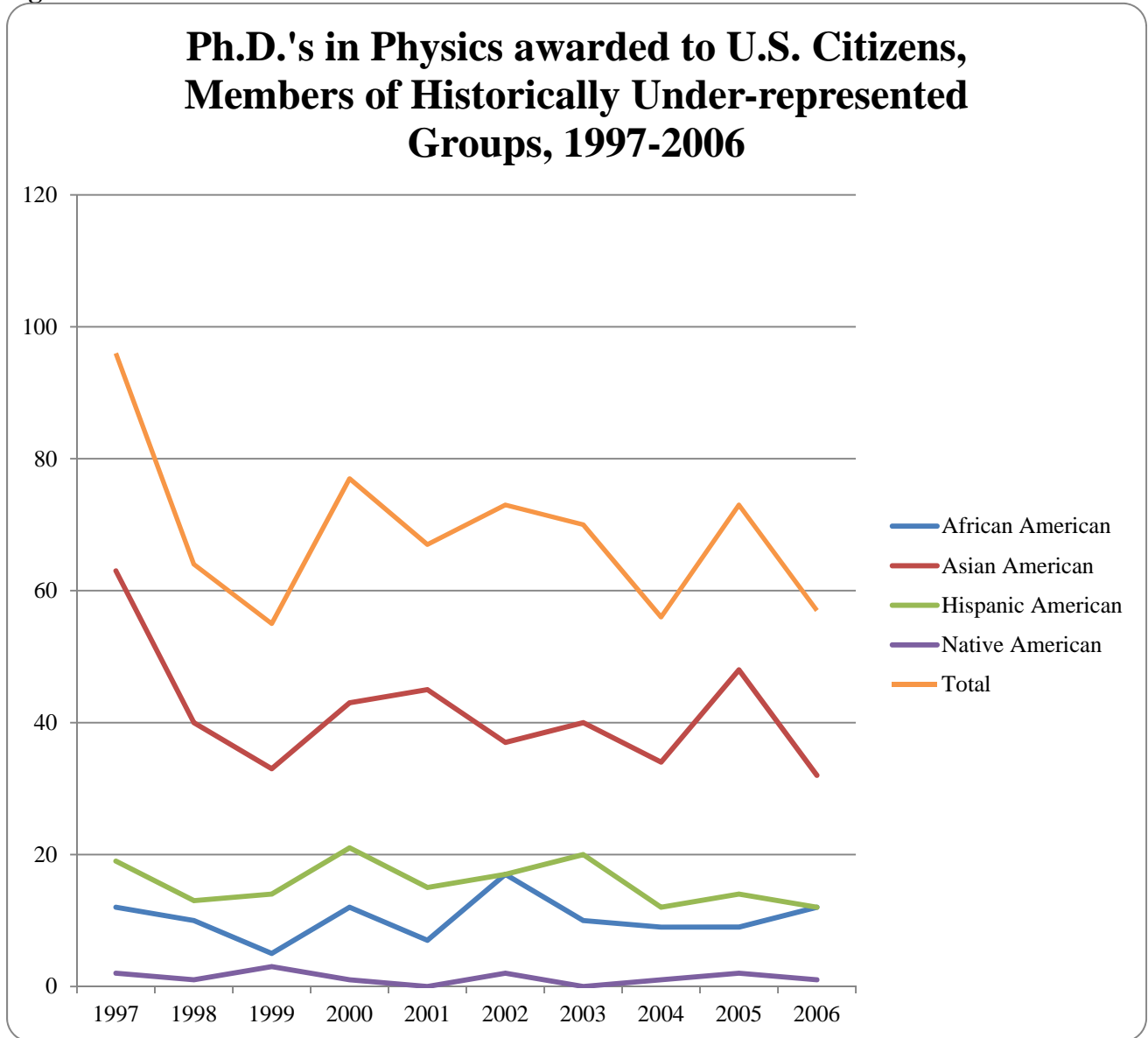
Figure 24 shows the percentage of Ph.D.'s in Physics for U.S. citizens awarded to members of historically under-represented groups, comparing 1997 with 2006. The percentage has decreased to 10.5% in 2006 as compared with 13.1% 10 years earlier. During these 10 years, African Americans increased from 1.6% to 2.2%, Asian Americans decreased from 8.6% to 5.9%, Hispanic Americans decreased from 2.6% to 2.2% and Native Americans remained virtually the same at 0.3% and 0.2%.

Figure 24
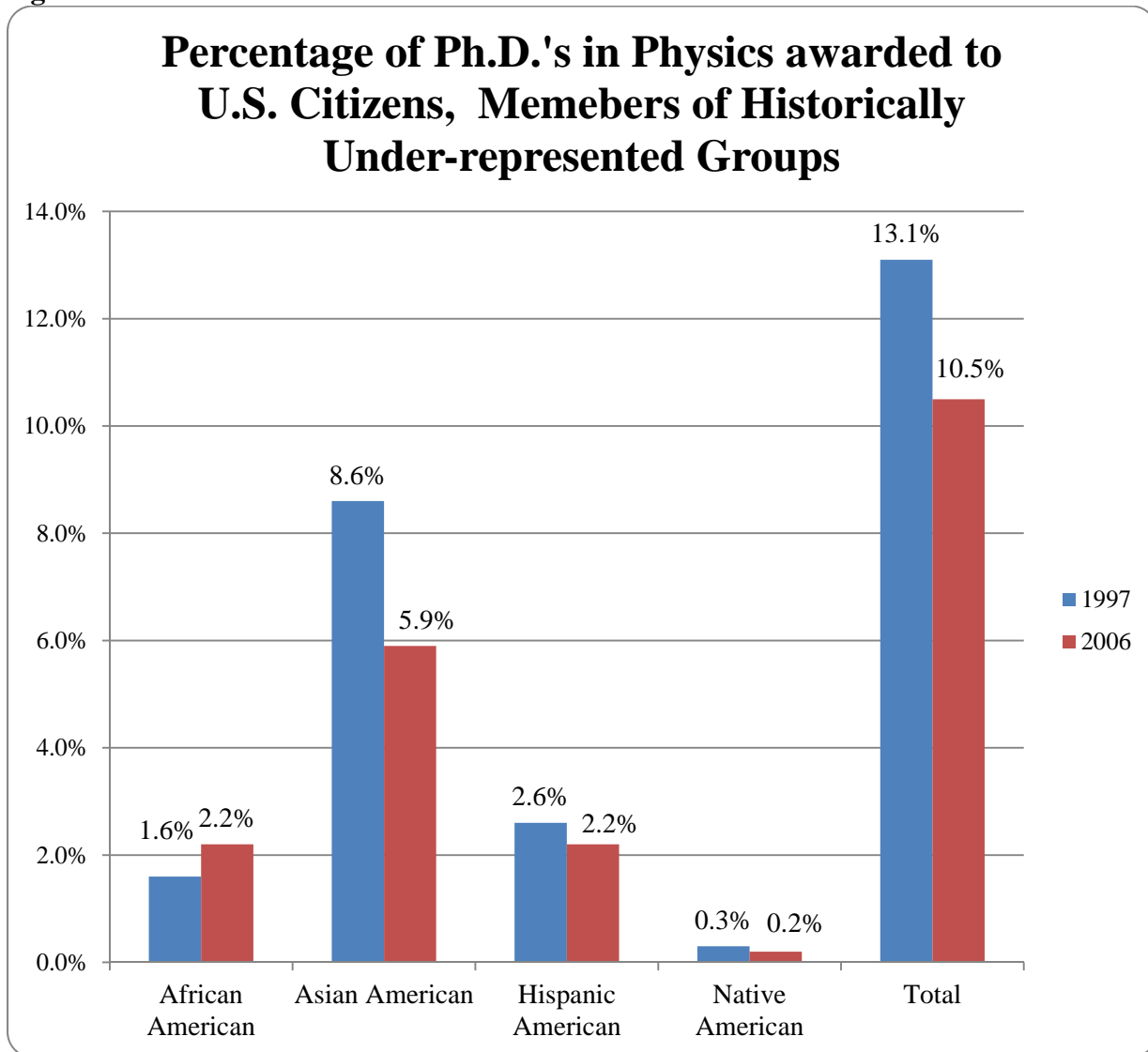
Percentage of Ph.D.'s in Physics awarded to U.S. Citizens, Memebers of Historically Under-represented Groups

The following tables identify the top 10 institutions for each under-represented minorities in terms of the numbers of Ph.D.'s awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 54 Top 10 institutions for African American Ph. D's in Physics

Institution	City, State	# of Graduates
University of Michigan at Ann Arbor	Ann Arbor, Michigan	10
Alabama Agricultural and Mechanical University	Normal, Alabama	8
Howard University	Washington, DC	8
Massachusetts Institute of Technology	Cambridge, Massachusetts	6
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	5
Stanford University	Stanford, California	5
Harvard University	Cambridge, Massachusetts	4
Pennsylvania State University, Main Campus	University Park, Pennsylvania	3
University of Alabama at Birmingham	Birmingham, Alabama	3
CUNY Graduate School and University Center	New York, New York	2
California Institute of Technology	Pasadena, California	2
Cornell University, All Campuses	Ithaca, New York	2
Michigan State University	East Lansing, Michigan	2
University of Arkansas, Main Campus	Fayetteville, Arkansas	2
University of Pittsburgh Main Campus	Pittsburgh, Pennsylvania	2

Table 55 Top 10 institutions for Asian American Ph. D's in Physics

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	29
University of California-Los Angeles	Los Angeles, California	27
Stanford University	Stanford, California	23
Harvard University	Cambridge, Massachusetts	22
Massachusetts Institute of Technology	Cambridge, Massachusetts	19
University of Illinois at Urbana-Champaign	Champaign, Illinois	18
University of California-Davis	Davis, California	14
University of Chicago	Chicago, Illinois	13
Princeton University	Princeton, New Jersey	13
University of California-Santa Barbara	Santa Barbara, California	12
California Institute of Technology	Pasadena, California	12

Table 56 Top 10 institutions for Hispanic American Ph. D's in Physics

Institution	City, State	# of Graduates
University of Arizona	Tucson, Arizona	8
University of California-Davis	Davis, California	8
Stanford University	Stanford, California	7
Massachusetts Institute of Technology	Cambridge, Massachusetts	6
University of Texas at Austin	Austin, Texas	6
California Institute of Technology	Pasadena, California	5
University of California-Berkeley	Berkeley, California	5
Brown University	Providence, Rhode Island	4
Florida State University	Tallahassee, Florida	4
Indiana University at Bloomington	Bloomington, Indiana	4
Pennsylvania State U, Main Campus	University Park, Pennsylvania	4
University of California-Los Angeles	Los Angeles, California	4
University of California-San Diego	San Diego, California	4
University of Maryland at College Park	College Park, Maryland	4

Table 57 Top 10 institutions for Native American Ph. D's in Physics

Institution	City, State	# of Graduates
Alabama Agricultural and Mechanical University	Normal, Alabama	2
Air Force Institute of Technology	Wright-Patterson AFB, Ohio	1
Massachusetts Institute of Technology	Cambridge, Massachusetts	1
Ohio State University, Main Campus	Columbus, Ohio	1
Stanford University	Stanford, California	1
University of Alabama in Huntsville	Huntsville, Alabama	1
University of California-Davis	Davis, California	1
University of California-Santa Barbara	Santa Barbara, California	1
University of Massachusetts at Amherst	Amherst, Massachusetts	1
University of Oklahoma, Norman Campus	Norman, Oklahoma	1
University of Texas at Dallas	Dallas, Texas	1
University of Wisconsin-Madison	Madison, Wisconsin	1

The following table identifies the top 20 institutions in terms of the number of Physics Ph.D.'s awarded to U.S. citizens for the most recent 10-year period for which data are available.

Table 58 Top 20 institutions in terms of number of Ph.D.'s in Physics for all U.S. citizens

Institution	City, State	All US Citizens
University of California-Berkeley	Berkeley, California	205
University of Illinois at Urbana-Champaign	Champaign, Illinois	182
Massachusetts Institute of Technology	Cambridge, Massachusetts	169
Stanford University	Stanford, California	164
Harvard University	Cambridge, Massachusetts	160
University of Wisconsin-Madison	Madison, Wisconsin	149
Cornell University, All Campuses	Ithaca, New York	147
University of Texas at Austin	Austin, Texas	146
University of Arizona	Tucson, Arizona	141
University of Michigan at Ann Arbor	Ann Arbor, Michigan	120
University of Rochester	Rochester, New York	120
University of Colorado at Boulder	Boulder, Colorado	112
University of Maryland at College Park	College Park, Maryland	112
University of California-Davis	Davis, California	110
California Institute of Technology	Pasadena, California	106
University of California-Los Angeles	Los Angeles, California	105
University of California-Santa Barbara	Santa Barbara, California	103
University of Washington - Seattle	Seattle, Washington	103
Princeton University	Princeton, New Jersey	99
Pennsylvania State U, Main Campus	University Park, Pennsylvania	97
University of Minnesota - Twin Cities	Minneapolis/Saint Paul, Minnesota	97

The following table identifies the top 20 institutions in terms of the number of Physics Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 59 Top 20 institutions in terms of number of Ph.D.'s in Physics awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-represented Groups
Stanford University	Stanford, California	36
University of California-Berkeley	Berkeley, California	35
Massachusetts Institute of Technology	Cambridge, Massachusetts	32
University of California-Los Angeles	Los Angeles, California	31
Harvard University	Cambridge, Massachusetts	29
University of California-Davis	Davis, California	23
University of Illinois at Urbana-Champaign	Champaign, Illinois	23
California Institute of Technology	Pasadena, California	19
University of Michigan at Ann Arbor	Ann Arbor, Michigan	17
University of Arizona	Tucson, Arizona	15
University of California-Santa Barbara	Santa Barbara, California	15
University of Chicago	Chicago, Illinois	14
University of Texas at Austin	Austin, Texas	14
Cornell University, All Campuses	Ithaca, New York	13
Princeton University	Princeton, New Jersey	13
University of California-San Diego	San Diego, California	12
Pennsylvania State University, Main Campus	University Park, Pennsylvania	11
Alabama A&M University	Normal, Alabama	10
Purdue University, Main Campus	West Lafayette, Indiana	10
SUNY at Stony Brook, All Campuses	Stony Brook, New York	10
University of Colorado at Boulder	Boulder, Colorado	10
University of Maryland at College Park	College Park, Maryland	10

Table 60 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Physics

Year	African Americans		Asian Americans		Caucasian or Other ethnicities		Hispanic Americans		Native Americans		Total (US citizen)	Total all Doctorates Granted
	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen	Count (US Citizens)	% Total US citizen		
2006	12	2.2%	32	5.9%	490	89.6%	12	2.2%	1	0.2%	547	1365
2005	9	1.8%	48	9.3%	441	85.8%	14	2.7%	2	0.4%	514	1333
2004	9	1.8%	34	6.6%	458	89.1%	12	2.3%	1	0.2%	514	1186
2003	10	2.0%	40	8.0%	431	86.0%	20	4.0%	0	0.0%	501	1081
2002	17	3.3%	37	7.1%	449	86.0%	17	3.3%	2	0.4%	522	1123
2001	7	1.2%	45	7.5%	533	88.8%	15	2.5%	0	0.0%	600	1197
2000	12	1.9%	43	6.9%	543	87.6%	21	3.4%	1	0.2%	620	1204
1999	5	0.8%	33	5.0%	600	91.6%	14	2.1%	3	0.5%	655	1271
1998	10	1.4%	40	5.7%	642	90.9%	13	1.8%	1	0.1%	706	1378
1997	12	1.6%	63	8.6%	635	86.9%	19	2.6%	2	0.3%	731	1401
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov/												
Date Table Created (month/ year): 01/2010												

Table 61 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Physics

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents with U.S. Citizens.

Degree Received: Doctorates in Physics												
Year	African Americans		Asian Americans		Caucasian or Other		Hispanic Americans		Native Americans		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	15	2.1%	68	9.30%	625	85.5%	23	3.2%	0	0.0%	731	1586
2007	20	2.8%	62	8.8%	589	83.8%	30	4.3%	2	0.3%	703	1554

Social Science

The following tables identify the top 20 institutions for each under-represented historically under-represented group in terms of the numbers of Ph.D.'s in Social Sciences awarded to U.S. citizens for the most recent 10 year period for which data are available (1997-2006). Disciplines included within this category are: Anthropology, Economics, International Relations, Political Science, Public Administration, Public Policy Analysis, Social Sciences-General and Sociology.

Table 62 Top 20 institutions for Ph.D's in Social Sciences awarded to U.S. Citizens

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	1078
University of Texas at Austin	Austin, Texas	837
University of Michigan at Ann Arbor	Ann Arbor, Michigan	789
University of California-Los Angeles	Los Angeles, California	749
Harvard University	Cambridge, Massachusetts	729
University of Maryland at College Park	College Park, Maryland	728
University of Wisconsin-Madison	Madison, Wisconsin	726
University of Minnesota - Twin Cities	Minneapolis/St. Paul, Minnesota	712
CUNY Graduate School and University Center	New York City, New York	685
Ohio State University, Main Campus	Columbus, Ohio	653
University of Chicago	Chicago, Illinois	637
Pennsylvania State University, Main Campus	University Park, Pennsylvania	588
Michigan State University	East Lansing, Michigan	563
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	559
University of Southern California	Los Angeles, California	557
New York University	New York City, New York	546
University of Florida	Gainesville, Florida	543
University of Pennsylvania	Philadelphia, Pennsylvania	524
Indiana University at Bloomington	Bloomington, Indiana	513
University of Illinois at Urbana-Champaign	Urbana/Champaign, Illinois	500

Table 63 Top 20 institutions for all historically under-represented minorities Ph.D's in Social Sciences

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	239
University of Michigan at Ann Arbor	Ann Arbor, Michigan	226
Howard University	Washington, D.C.	220
Caribbean Center for Advanced Studies	Miami, Florida	217
University of California-Los Angeles	Los Angeles, California	163
Harvard University	Cambridge, Massachusetts	149
University of Puerto Rico Rio Piedras Campus	San Juan, Puerto Rico	144
California School Prof Psych at Los Angeles	Los Angeles, California	142
CUNY Graduate School and University Center	New York City, New York	134
University of Southern California	Los Angeles, California	133
University of Maryland at College Park	College Park, Maryland	123
University of Texas at Austin	Austin, Texas	311
University of California-Santa Barbara	Santa Barbara, California	108
Michigan State University	East Lansing, Michigan	98
Temple University	Philadelphia, Pennsylvania	96
Pennsylvania State University, Main Campus	University Park, Michigan	94
Ohio State University, Main Campus	Columbus, Ohio	92
University of Wisconsin-Madison	Madison, Wisconsin	90
Northwestern University	Chicago, Illinois	79
Nova Southeastern University	Davie, Florida	79

Table 64 Top 10 institutions for African American Ph. D's in Social Sciences

Institution	City, State	# of Graduates
Howard University	Washington, D.C.	96
University of Michigan at Ann Arbor	Ann Arbor, Michigan	57
Harvard University	Cambridge, Massachusetts	40
University of Maryland at College Park	College Park, Maryland	40
Temple University	Philadelphia, Pennsylvania	35
Wayne State University	Detroit, Michigan	35
University of California-Berkeley	Berkeley, California	33
Northwestern University	Chicago, Illinois	31
City University of New York Graduate School and University Center	New York, New York	30
University of Pennsylvania	Philadelphia, Pennsylvania	30
University of Southern California	Los Angeles, California	30

Table 65 Top 10 institutions for Asian American Ph. D's in Social Sciences

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	97
Harvard University	Cambridge, Massachusetts	46
University of California-Los Angeles	Los Angeles, California	43
University of Hawaii at Manoa	Manoa, Hawaii	41
Columbia University in the City of New York	New York, New York	38
University of Southern California	Los Angeles, California	32
Stanford University	Palo Alto, California	29
University of Michigan at Ann Arbor	Ann Arbor, Michigan	29
University of Pennsylvania	Philadelphia, Pennsylvania	28
University of Chicago	Chicago, Illinois	27

Table 66 Top 10 institutions for Caucasian & Other Ph. D's in Social Sciences

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	699
Harvard University	Cambridge, Massachusetts	474
University of Chicago	Chicago, Illinois	455
University of Wisconsin-Madison	Madison, Wisconsin	453
University of Texas at Austin	Austin, Texas	425
University of California-Los Angeles	Los Angeles, California	419
University of Michigan at Ann Arbor	Ann Arbor, Michigan	392
University of Pennsylvania	Philadelphia, Pennsylvania	357
Indiana University at Bloomington	Bloomington, Indiana	339
University of Minnesota - Twin Cities	St. Paul/Minneapolis, Minnesota	337

Table 67 Top 10 institutions for Hispanic American Ph. D's in Social Sciences

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	59
University of Michigan at Ann Arbor	Ann Arbor, Michigan	41
Harvard University	Cambridge, Massachusetts	37
University of California-Los Angeles	Los Angeles, California	36
University of Texas at Austin	Austin, Texas	32
Stanford University	Palo Alto, California	28
University of California-Santa Barbara	Santa Barbara, California	28
City University of New York Graduate School and University Center	New York, New York	26
University of Chicago	Chicago, Illinois	23
University of Wisconsin-Madison	Madison, Wisconsin	23

Table 68 Top 10 institutions for Native American Ph. D's in Social Sciences

Institution	City, State	# of Graduates
University of New Mexico, All Campuses	Albuquerque, New Mexico	9
University of California-Berkeley	Berkeley, California	8
Harvard University	Cambridge, Massachusetts	6
State University of New York at Buffalo	Buffalo, New York	6
Stanford University	Palo Alto, California	6
University of Minnesota - Twin Cities	St. Paul/Minneapolis, Minnesota	6
Oklahoma State University, All Campuses	Stillwater, Oklahoma	5
University of Hawaii at Manoa	Manoa, Hawaii	5
University of Michigan at Ann Arbor	Ann Arbor, Michigan	5

Doctorate in Anthropology

Earned Doctorate Degrees in Anthropology[10]

During the 10 most recent years for which data are available (1997 through 2006) a total of 4,951 doctorates were awarded in Anthropology. Of these, 3,874 or 78.2% were awarded to U.S. citizens and 1,077 or 21.7% were awarded to non-U.S. citizens.
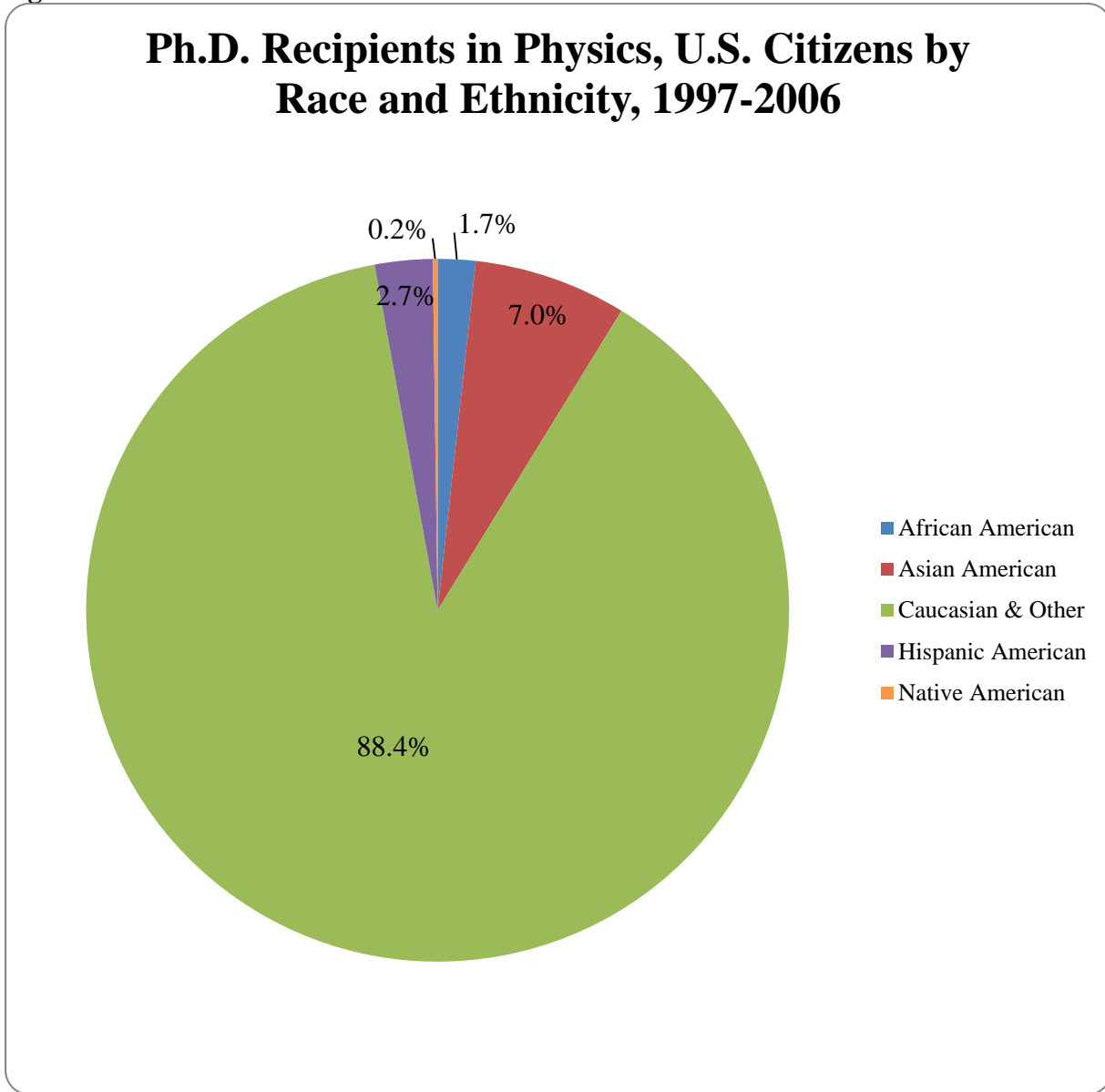
Figure 25

Citizenship Status of Ph.D. Recipients in Anthropology, 1997-2006

- U.S. Citizens
- Non-U.S. Citizens

21.7%

78.2%

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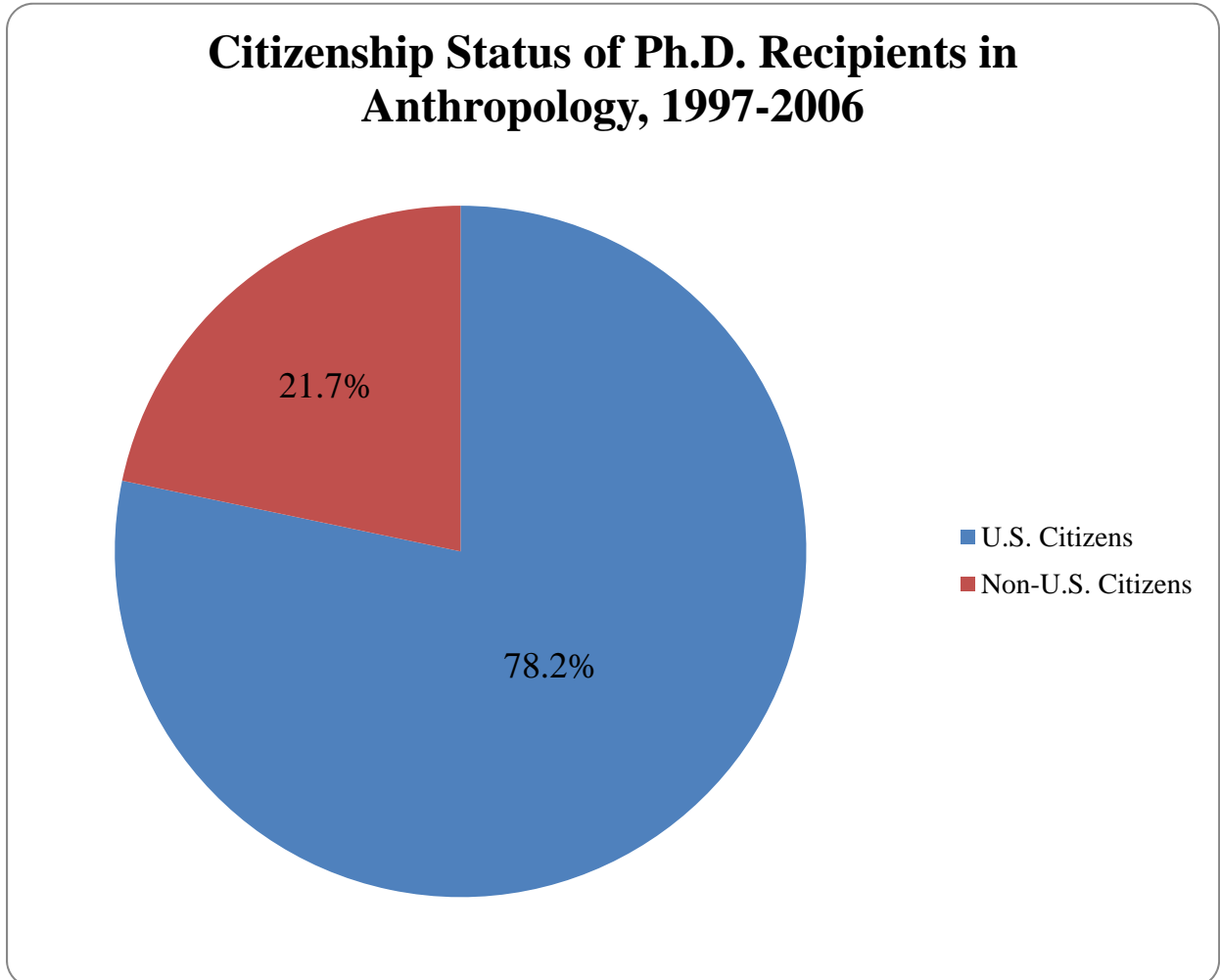
[10] For a complete listing of sub-fields included within Anthropology please refer to the appendix 1 entitled "Fine Field of Study" under Anthropology.

Out of the 3,874 doctorates awarded to U.S. citizens during the 1997-2006 period, 159 or 4.1% were earned by African Americans, 128 or 3.3% were earned by Asian Americans, 3,346 or 86.4% were earned by Caucasian or Other ethnicities, 195 or 5.0% were earned by Hispanic Americans, and 46 or 1.2% were earned by Native Americans.

Figure 26
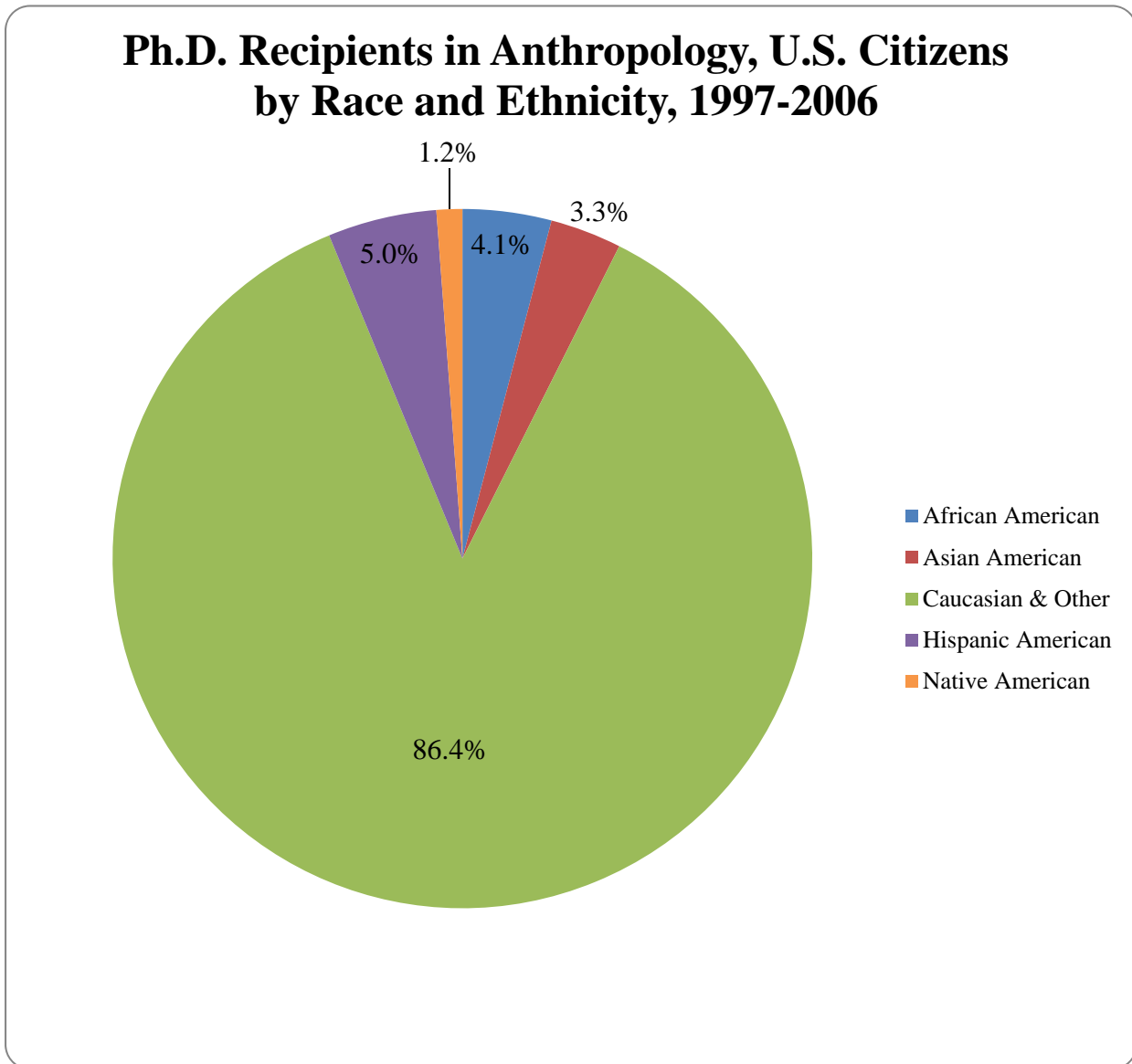
Ph.D. Recipients in Anthropology, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of Doctorates in Anthropology awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 27. The total number of graduates of historically under-represented groups receiving a doctorate in the Anthropology field has never exceeded 71 during the time period 1996 to 2006. It has fluctuated over the past 10 years; however, the total number has increased from 38 in 1997 to 60 in 2006.

Figure 27

Ph.D.'s in Anthropology Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
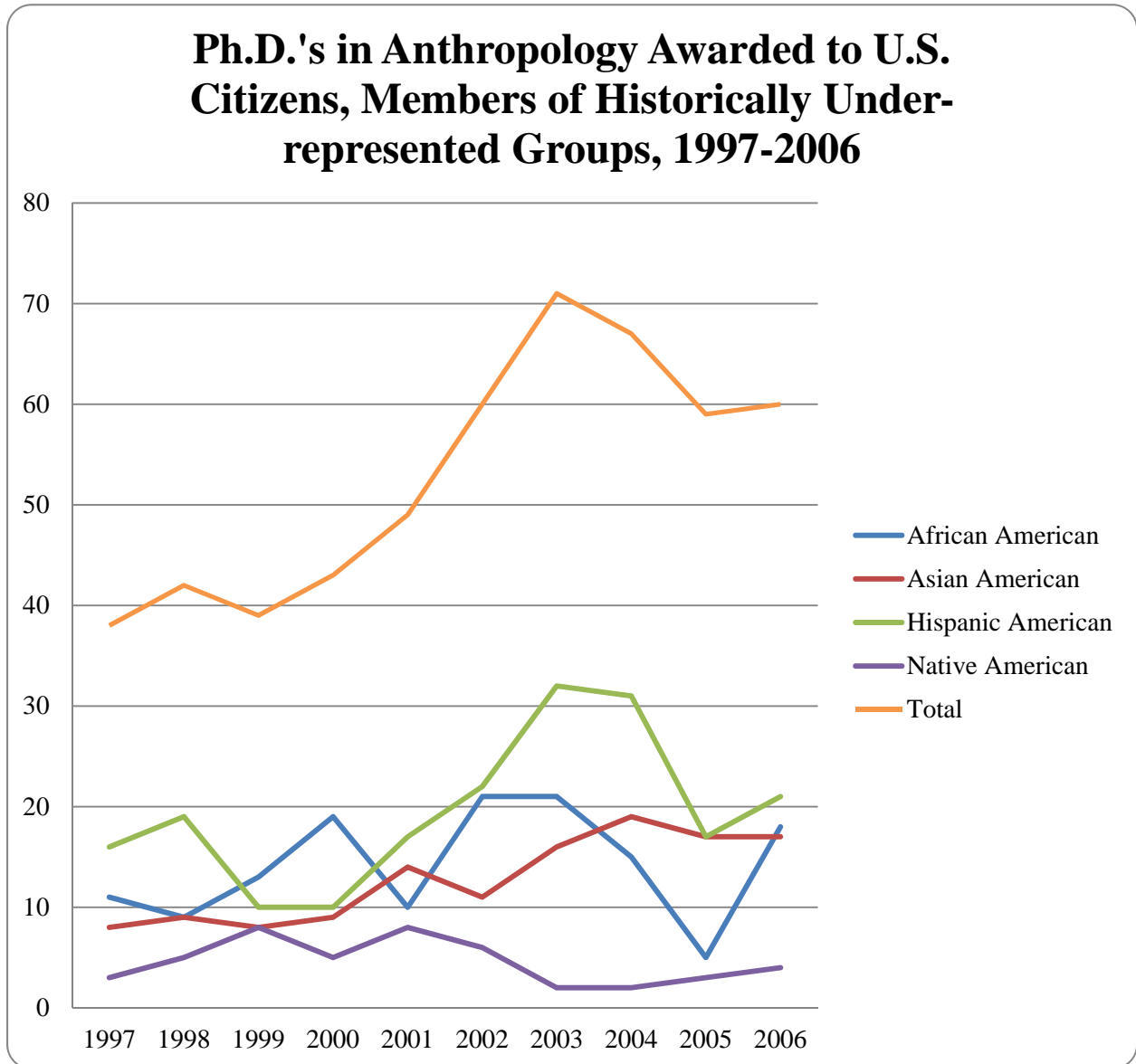
Figure 28 shows the percentage change of Ph.D.'s in Anthropology for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 to 2006. The percentage has risen to 14.5% in 2006 as compared to 10.7%, in 1997. During the 10 year time period, African Americans increased by 1.2%, Asian Americans increased by 1.8%, Hispanic Americans increased by 0.6%, and Native Americans increased by 0.2%.

Figure 28
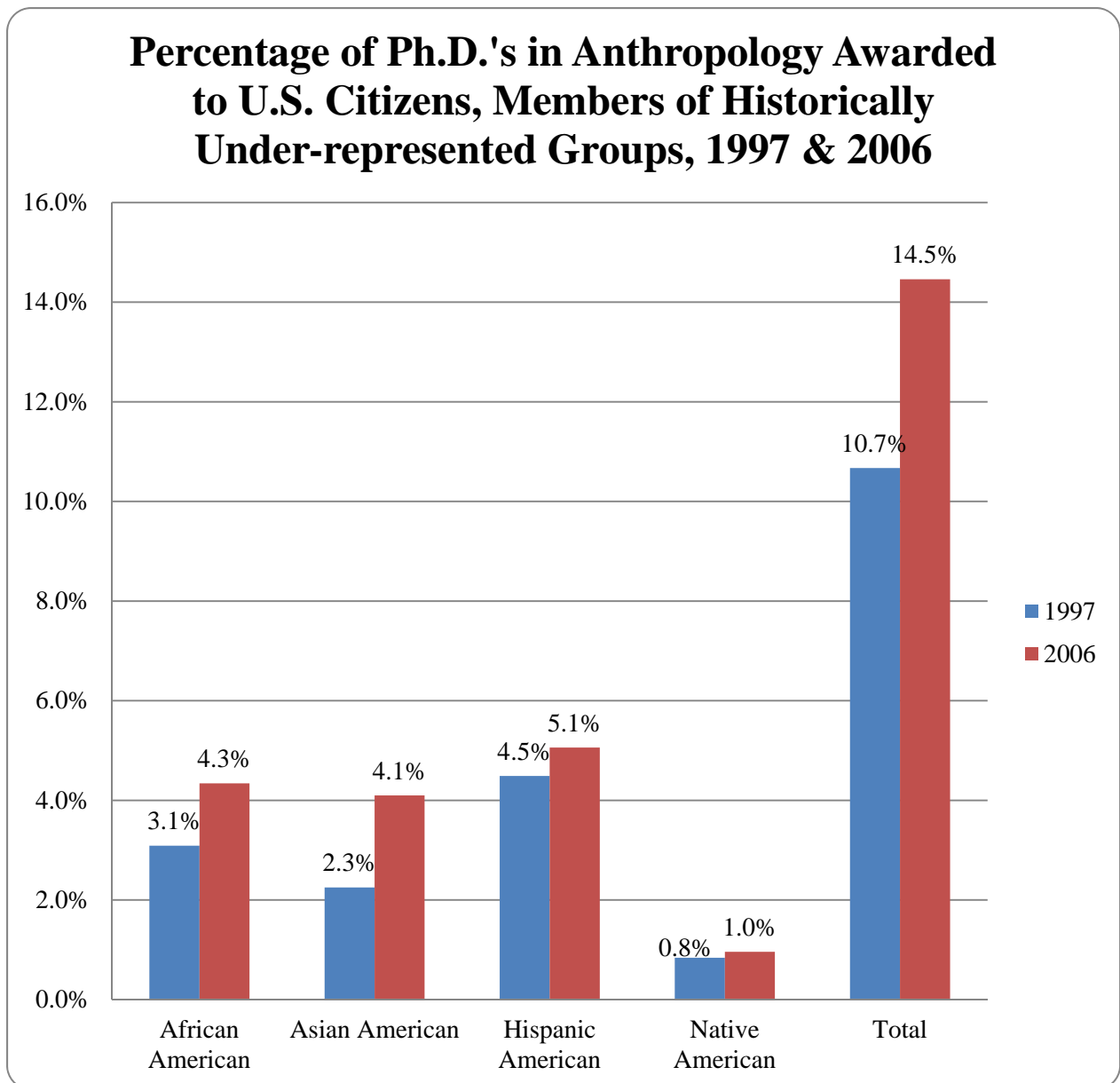
Percentage of Ph.D.'s in Anthropology Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997 & 2006

The following tables identify the top 10 institutions for each historically under-represented minority group in terms of the numbers of Anthropology Ph.D.'s awarded to U.S. citizens for the most recent 10 year period (1997-2006) for which data are available.

Table 69 Top 10 institutions for African American Ph. D's in Anthropology

Institution	City, State	# of Graduates
University of Texas	Austin, Texas	11
University of California-Berkeley	Berkeley, California	9
City University of New York	New York City, New York	8
University of South Florida	Tampa, Florida	8
Stanford University	Palo Alto, California	7
University of Florida	Gainesville, Florida	7
University of Michigan	Ann Arbor, Michigan	6
University of Pennsylvania	Philadelphia, Pennsylvania	6
Columbia University	New York City, New York	5
Harvard University	Cambridge, Massachusetts	5

Table 70 Top 10 institutions for Asian American Ph. D's in Anthropology

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	8
Columbia University	New York City, New York	7
University of Hawaii	Manoa, Hawaii	7
New York University	New York City, New York	6
University of California	Los Angeles, California	5
University of Pennsylvania	Philadelphia, Pennsylvania	5
University of California-Santa Cruz	Santa Cruz, California	4
Boston University	Boston, Massachusetts	4
Stanford University	Palo Alto, California	4
University of Chicago	Chicago, Illinois	4

Table 71 Top 10 institutions for Hispanic American Ph. D's in Anthropology

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	12
University of Texas	Austin, Texas	11
University of California-Santa Barbara	Santa Barbara, California	9
Stanford University	Palo Alto, California	7
University of Arizona	Tucson, Arizona	7
University of Michigan	Ann Arbor, Michigan	7
Harvard University	Cambridge, Massachusetts	6
University of California-Los Angeles	Los Angeles, California	6
Arizona State University	Tempe, Arizona	5
City University of New York	New York City, New York	5

Table 72 Top 10 institutions for Native American Ph. D's in Anthropology

Institution	City, State	# of Graduates
Harvard University	Cambridge, Massachusetts	5
Stanford University	Palo Alto, California	3
City University of New York	New York City, New York	2
University of Florida	Gainesville, Florida	2
University of Michigan	Ann Arbor, Michigan	2
University of New Mexico	Albuquerque, New Mexico	2
University of Oklahoma	Norman, Oklahoma	2
University of Pennsylvania	Philadelphia, Pennsylvania	2
University of Tennessee	Knoxville, Tennessee	2
Cornell University, All Campuses	Ithaca & New York City, New York (Qatar Campus)	1

The following table identifies the top 20 institutions in the terms of the number of Anthropology Ph.D.'s awarded to U.S. citizens for the most recent 10-year period for which data are available.

Table 73 Top 20 institutions in terms of number of Ph.D.'s in Anthropology for all U.S. citizens

Institution	City, State	All US Citizens
University of California-Berkeley	Berkeley, California	145
University of Michigan	Ann Arbor, Michigan	139
University of Chicago	Chicago, Illinois	135
University of Arizona	Tucson, Arizona	118
University of California-Los Angeles	Los Angeles, California	110
University of Texas	Austin, Texas	109
Harvard University	Cambridge, Massachusetts	106
University of Pennsylvania	Philadelphia, Pennsylvania	106
University of New Mexico	Albuquerque, New Mexico	98
University of Florida	Gainesville, Florida	95
New York University	New York City, New York	79
University of Wisconsin	Madison, Wisconsin	76
City University of New York	New York City, New York	71
University of Pittsburgh	Pittsburgh, Pennsylvania	69
University of Washington	Seattle, Washington	69
Columbia University	New York City, New York	68
Yale University	New Haven, Connecticut	68
Indiana University	Bloomington, Indiana	57
University of North Carolina	Chapel Hill, North Carolina	57
Arizona State University	Tempe, Arizona	56

The following table identifies the top 20 institutions in terms of number of Anthropology Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 74 Top 20 institutions in terms of number of Ph.D.'s in Anthropology awarded to U.S. citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of California-Berkeley	Berkeley, California	30
University of Texas	Austin, Texas	26
Stanford University	Palo Alto, California	21
Columbia University	New York City, New York	19
City University of New York	New York City, New York	18
Harvard University	Cambridge, Massachusetts	18
University of Michigan	Ann Arbor, Michigan	17
University of California-Los Angeles	Los Angeles, California	14
University of Pennsylvania	Philadelphia, Pennsylvania	14
University of Florida	Gainesville, Florida	13
New York University	New York City, New York	12
University of Chicago	Chicago, Illinois	12
University of California-Santa Barbara	Santa Barbara, California	11
University of South Florida	Tampa, Florida	11
Temple University	Philadelphia, Pennsylvania	10
University of California-Santa Cruz	Santa Cruz, California	10
Rutgers University	New Brunswick, New Jersey	9
University of California-Riverside	Riverside, California	9
University of California-Davis	Davis, California	8
Yale University	New Haven, Connecticut	**8**

Table 75 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Anthropology

Degree Received: Doctorate in Anthropology												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US Citizen)	Total All Doctorates Granted
	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen		
2006	18	4.3%	17	4.1%	355	85.5%	21	5.1%	4	1.0%	415	511
2005	22	5.9%	17	4.5%	316	84.3%	17	4.5%	3	0.8%	375	499
2004	15	3.3%	19	4.2%	382	85.1%	31	6.9%	2	0.5%	449	565
2003	21	5.2%	16	3.9%	336	82.6%	32	7.9%	2	0.5%	407	505
2002	21	5.2%	11	2.7%	346	85.2%	22	5.4%	6	1.5%	406	522
2001	10	2.9%	14	4.0%	300	86.0%	17	4.9%	8	2.3%	349	451
2000	19	4.9%	9	2.3%	344	88.9%	10	2.6%	5	1.3%	387	482
1999	13	3.5%	8	2.1%	336	89.6%	10	2.7%	8	2.1%	375	488
1998	9	2.5%	9	2.5%	313	88.2%	19	5.4%	5	1.4%	355	459
1997	11	3.1%	8	2.3%	318	89.3%	16	4.5%	3	0.8%	356	469
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created (month/year): January 2010												

Table 76 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Anthropology

These are the newest available data provided by the National Science Foundation; however, these data combines Permanent U.S. Residents and U.S. Citizens.

Degree Received: Doctorate in Anthropology													
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US Citizen and Permanent Residents)	Total All Doctorates Granted
	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen		
2008	12	3.0%	27	6.8%	332	83.6%	25	6.3%	1	0.3%	397	481
2007	17	4.2%	25	6.1%	340	83.1%	23	5.6%	4	1.0%	409	511

Earned Master of Business Administration[11]

During the 10 most recent years for which data are available (1997 through 2007, excluding 1999) a total of 705,277 Master of Business Administration were awarded. Of these, 599,472 or 85.0% were awarded to U.S. citizens and permanent residents and 105,805 or 15.0% were awarded to temporary residents.

Figure 29

Citizenship Status of Master of Business Administration Recipients, 1997-2007

15.0%

85.0%

■ U.S. Citizens and Permanent Residents

■ Temporary Residents

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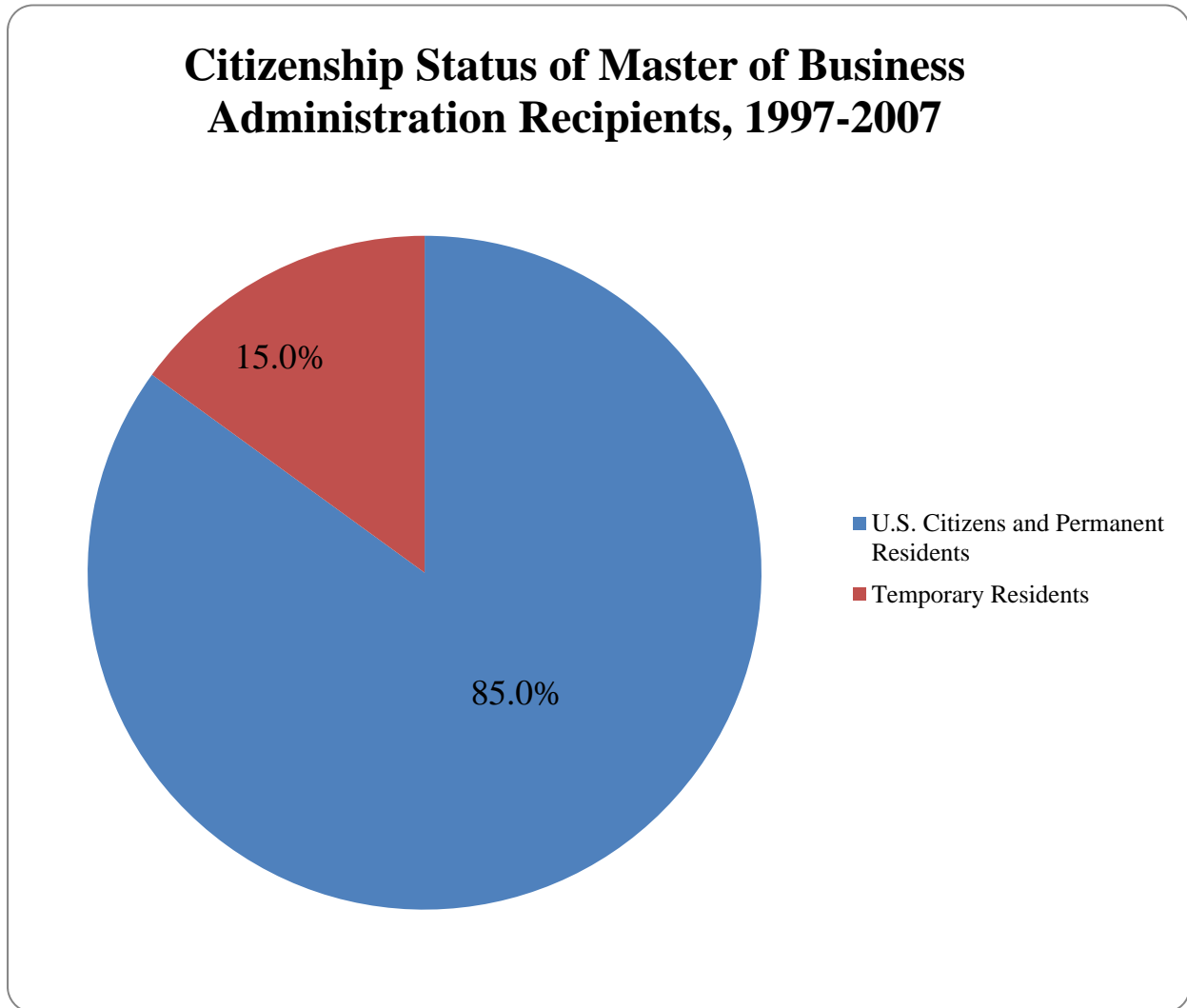
[11]Master of Business Administration is defined in the IPEDS Survey of Earned Masters as the following subfield:
    52.02.01 Master of Business Administration

Out of the 599,472 masters awarded to U.S. citizens and permanent residents during the 1997-2007 (excluding 1999) period, 56,530 or 9.4% were earned by African Americans, 46,787 or 7.8% were earned by Asian Americans, 465,693 or 77.7% were earned by Caucasian & Other ethnicities, 27,654 or 4.6% were earned by Hispanic Americans, and 2,708 or 0.5% were earned by Native Americans.

Table 30

Master of Business Administration Recipients, US Citizens and Permanent Residents by Race and Ethnicity, 1997-2007
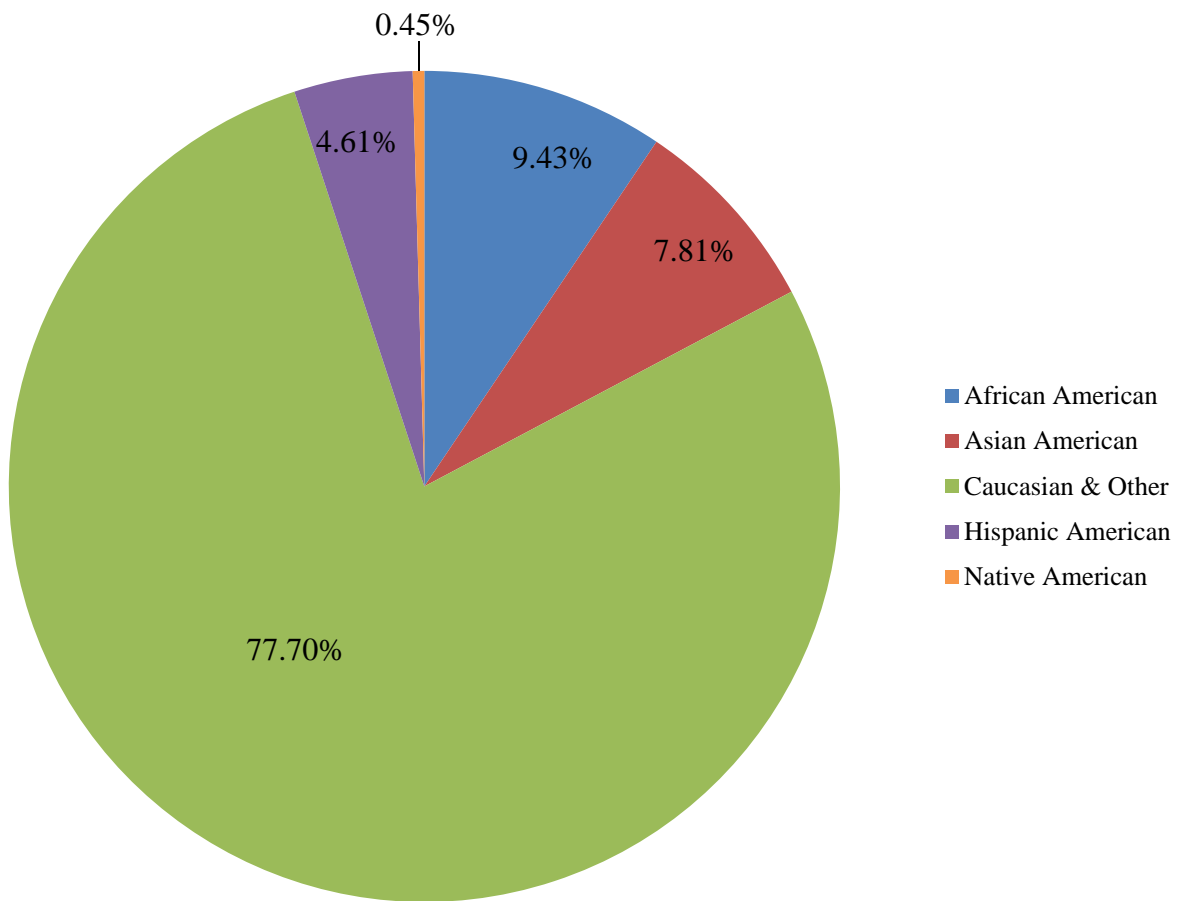
The number of awarded Masters of Business Administration to U.S. citizens and permanent residents who are members of historically under-represented groups is shown in Figure 31. The number of graduates of historically under-represented groups in the field of Business Administration has increased over the last 10 years from 7,941 to 19,358.

Figure 31

Masters in Business Administration Awarded to U.S. Citizens & Permanent Residents, Members of Historically Under-represented Groups, 1997-2007
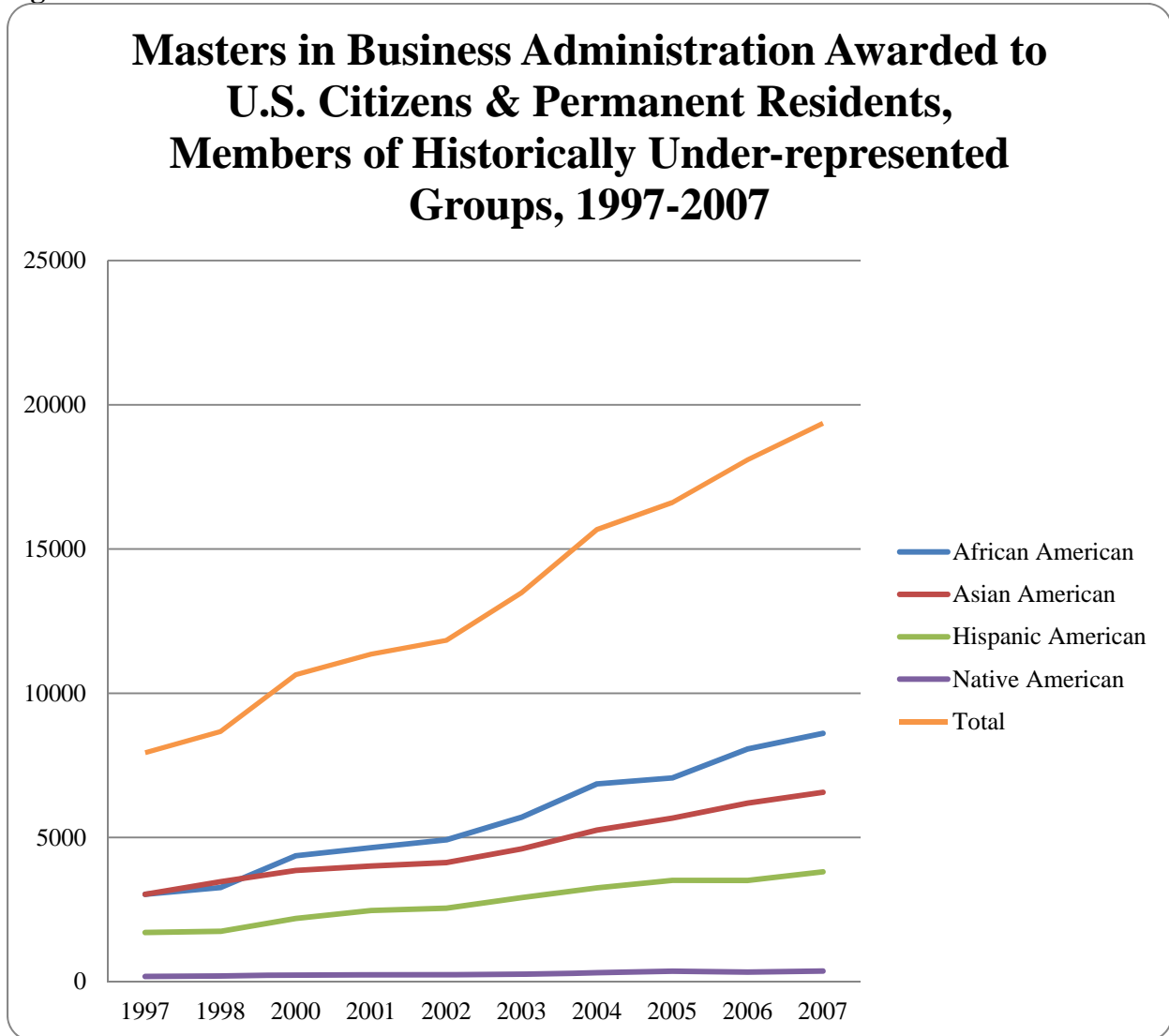
Figure 32 shows the percentage of Master of Business Administration awarded to members of historically under-represented groups, comparing 1997 with 2007. The percentage has risen to 26.7% in 2007 as compared to 17.3% in 1997, a 9.4% increase. During these 10 years, African Americans increased by 5.2%, Asian Americans increased by 2.5%, Hispanic Americans increased by 1.6%, and Native Americans increased by 0.1%.

Figure 32
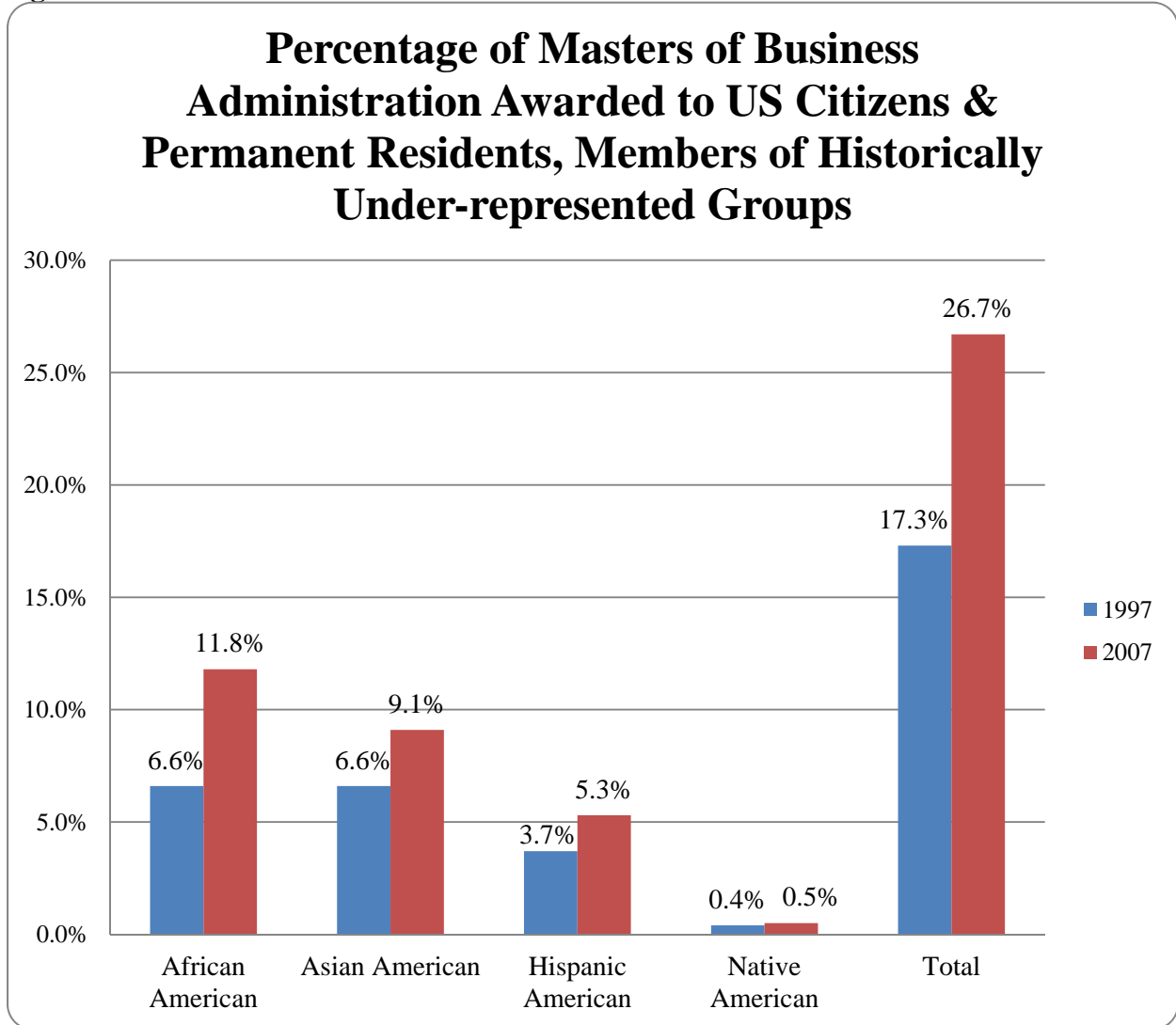
Percentage of Masters of Business Administration Awarded to US Citizens & Permanent Residents, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each historically under-represented group in terms of the numbers of Master of Business Administration awarded to U.S. Citizens and permanent residents for the most recent 10-year period data is available.

Table 77 Top 10 institutions for African American Master in Business Administration

Institution	City, State	# of Graduates
Webster University	St. Louis, Missouri	4,089
University of Phoenix	Phoenix, Arizona	2,803
University of Maryland, University College	Adelphi, Maryland	2,237
Troy State University, Main Campus	Troy, Alabama	1,984
Strayer College	District of Columbia	1,731
Nova Southeastern University	Fort Lauderdale-Davie, Florida	1,175
Indiana Wesleyan University	Marion, Indiana	1,109
DeVry Institute of Technology	Decatur, Georgia	1,089
DeVry Institute of Technology	Oakbrook Terr., Illinois	901
Florida Agricultural and Mechanical University	Tallahassee, Florida	843

Table 78 Top 10 institutions for Asian American Master in Business Administration

Institution	City, State	# of Graduates
University of Chicago	Chicago, Illinois	1,541
University of Phoenix	Phoenix, Arizona	1,299
University of California-Los Angeles	Los Angeles, California	1,146
Pepperdine University	Malibu, California	947
Columbia University in the City of New York	New York, New York	936
University of Southern California	Los Angeles, California	917
University of Hawaii at Manoa	Manoa, Hawaii	887
University of California-Berkeley	Berkeley, California	882
University of Michigan at Ann Arbor	Ann Arbor, Michigan	825
Santa Clara University	Santa Clara, California	793

Table 79 Top 10 institutions for Hispanic American Master in Business Administration

Institution	City, State	# of Graduates
University of Phoenix	Phoenix, Arizona	1,964
University of Miami	Miami, Florida	1,208
Nova Southeastern University	Fort Lauderdale-Davie, Florida	992
Florida International University	Miami, Florida	991
Pepperdine University	Malibu, California	918
Our Lady of the Lake University	San Antonio, Texas	498
University of La Verne	La Verne, California	384
University of Florida	Gainesville, Florida	372
University of Texas Pan-American	Edinburg, Texas	355

Table 80 Top 10 institutions for Native American Master in Business Administration

Institutions	City, State	# of Graduates
University of Phoenix	Phoenix, Arizona	152
Long Island University, C W Post Campus	Greenvale, New York	89
Webster University	St. Louis, Missouri	87
University of Mary	Bismarck, North Dakota	56
Northeastern State University	Tahlequah, Oklahoma	40
University of La Verne	La Verne, California	40
Baker University	Baldwin City, Kansas	39
Oklahoma City University	Oklahoma City, Oklahoma	39
Oklahoma State University, All Campuses	Oklahoma City, Stillwater, Tulsa, Oklahoma	34
Arizona State University, Main Campus	Tempe, Arizona	33

The following table identifies the top 20 institutions in terms of the numbers of Master of Business Administration awarded to U.S. Citizens and permanent residents.

Table 81 Top 20 institutions in terms of number of Master in Business Administration for All U.S. Citizens and permanent residents

Institution	City, State	All US Citizens & Permanent Residents
University of Phoenix	Phoenix, Arizona	22,948
Webster University	St. Louis, Missouri	16,096
University of Chicago	Chicago, Illinois	9,112
Columbia University in the City of New York	New York, New York	7,310
Pepperdine University	Malibu, California	6,671
University of Maryland, University College	Adelphi, Maryland	6,147
Indiana Wesleyan University	Marion, Indiana	5,881
Troy State University, Main Campus	Troy, Alabama	5,755
University of Michigan at Ann Arbor	Ann Arbor, Michigan	5,370
Duke University	Durham, North Carolina	5,362
Arizona State University, Main	Tempe, Arizona	5,233
Regis University	Denver, Colorado	5,105
University of California-Los Angeles	Los Angeles, California	4,818
Nova Southeastern University	Fort Lauderdale-Davie, Florida	4,654
University of Minnesota-Twin Cities	Minneapolis, Minnesota	4,265
Fordham University	New York, New York	4,100
University of Florida	Gainesville, Florida	3,982
Strayer College	District of Columbia	3,939
New York University	New York, New York	3,725
Wayne State University	Detroit, Michigan	3,706

The following table identifies the top 20 institutions in terms of the number of Master of Business Administration awarded to those citizens and permanent residents from all historically under-represented groups for the most recent 10-year period data is available.

Table 82 Top 20 institutions in terms of the number of Master in Business Administration awarded to citizens and permanent residents from historically under-represented groups

Institution	City, State	US Citizens/Permanent Residents from Under-Represented Groups
University of Phoenix	Phoenix, Arizona	6,218
Webster University	St. Louis, Missouri	5,745
University of Maryland, University College	Adelphi, Maryland	2,787
Troy State University, Main Campus	Troy, Alabama	2,370
Nova Southeastern University	Fort Lauderdale-Davie, Florida	2,362
Strayer College	District of Columbia	2,263
University of Chicago	Chicago, Illinois	2,149
Pepperdine University	Malibu, California	1,789
University of Miami	Miami, Florida	1,617
Columbia University in the City of New York	New York, New York	1,604
University of California-Los Angeles	Los Angeles, California	1,521
University of Michigan at Ann Arbor	Ann Arbor, Michigan	1,402
Indiana Wesleyan University	Marion, Indiana	1,341
DeVry University of Technology	Oakbrook Terr., Illinois	1,324
DeVry University of Technology	Decatur, Georgia	1,265
Duke University	Durham, North Carolina	1,233
University of Southern California	Los Angeles, California	1,169
University of La Verne	La Verne, California	1,166
University of California-Berkeley	Berkeley, California	1,140
Florida International University	Miami, Florida	1,109

Table 83 Data from 1997 through 2007 (excluding 1999) from the Integrated Postsecondary Education Data System for Master in Business Administration

	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total (All Master Granted)
Year	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2007	8610	11.9%	6567	9.1%	52850	73.2%	3812	5.3%	369	0.5%	72208	83838
2006	8070	11.6%	6190	8.9%	51326	73.9%	3509	5.1%	329	0.5%	69424	81252
2005	7064	10.4%	5672	8.4%	51103	75.5%	3513	5.2%	363	0.5%	67715	79534
2004	6857	10.2%	5258	7.8%	51480	76.7%	3253	4.8%	309	0.5%	67157	79458
2003	5703	9.3%	4607	7.5%	47900	78.0%	2914	4.7%	264	0.4%	61388	73657
2002	4920	8.5%	4129	7.1%	45999	79.5%	2547	4.4%	237	0.4%	57832	68478
2001	4649	8.4%	4008	7.2%	44283	79.6%	2469	4.4%	232	0.4%	55641	65983
2000	4364	8.0%	3859	7.1%	44086	80.6%	2190	4.0%	231	0.4%	54730	63874
1999												
1998	3263	6.8%	3467	7.3%	39097	81.8%	1746	3.7%	194	0.4%	47767	56026
1997	3030	6.6%	3030	6.6%	37669	82.6%	1701	3.7%	180	0.4%	45610	53177
Source: "Integrated Postsecondary Education Data System"												
Web Site: webcaspar.nsf.org												
Date Table Created (month/year): December 2009												

Doctorates of Business Administration

Earned Doctorate Degrees in Business Administration[12]

During the 10 most recent years for which data are available (1997 through 2006) a total of 11,542 doctorates were awarded in Business Administration. Of these, 6,564 or 56.8 % were awarded to U.S. citizens and 4,985 or 43.2% were awarded to non-U.S. citizens.

Figure 33

Citizenship Status of Ph.D. Recipients in Business Administration, 1997-2006

- US Citizens
- Non-US Citizens

43.2%

56.8%

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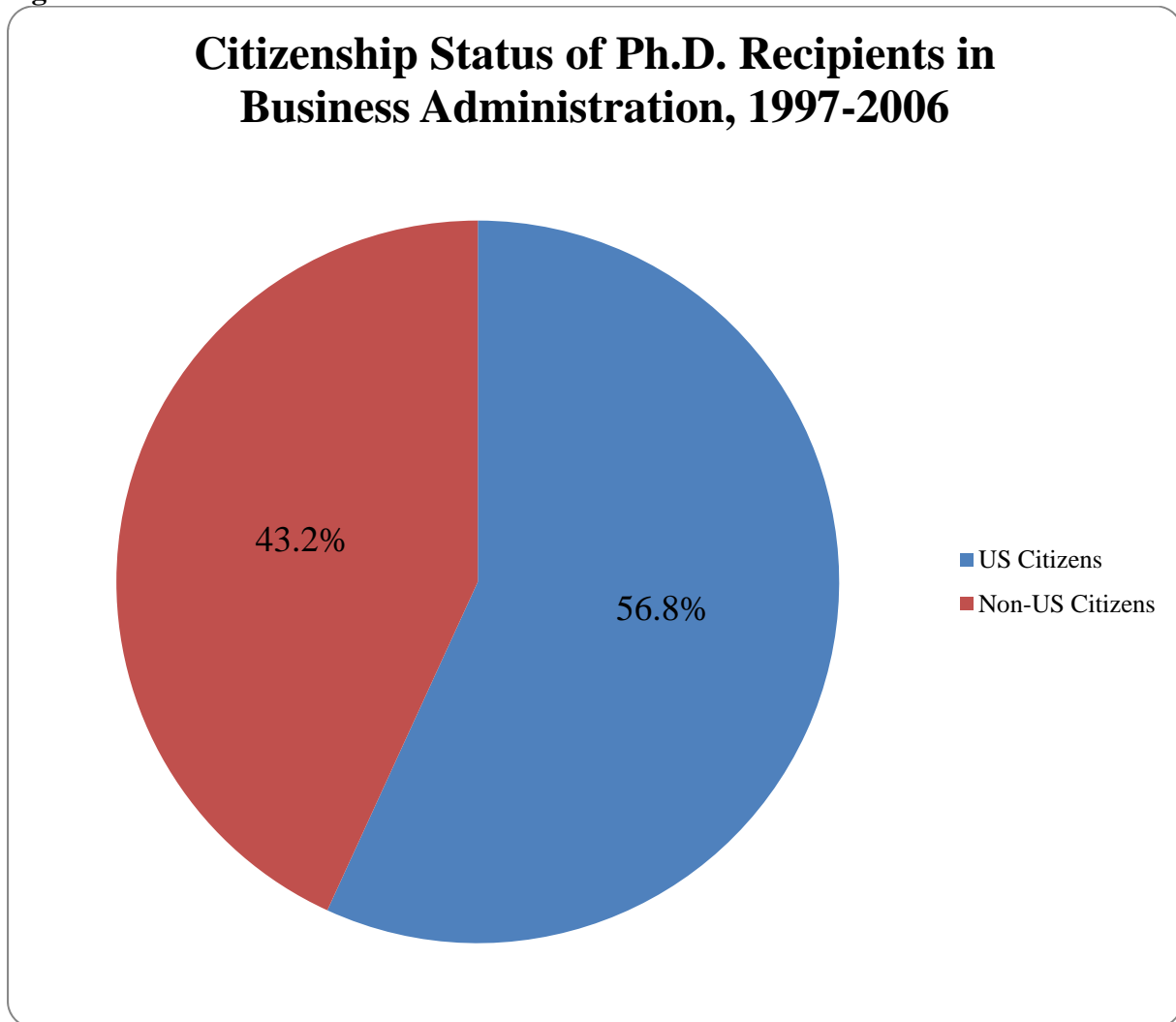
[12] For a complete listing of sub-fields included within Business Administration please refer to the appendix 1 entitled "Fine Field of Study" under Business Management and Administrative Services

Out of the 6,564 doctorates awarded to U.S. citizens during the 1997-2006 period, 516 or 7.9% were earned by African Americans, 311 or 4.7% were earned by Asian Americans, 5,474 or 83.4% were earned by Caucasian or Other ethnicities, 218 or 3.3% were earned by Hispanic Americans, and 45 or 0.7 % were earned by Native Americans.

Figure 34
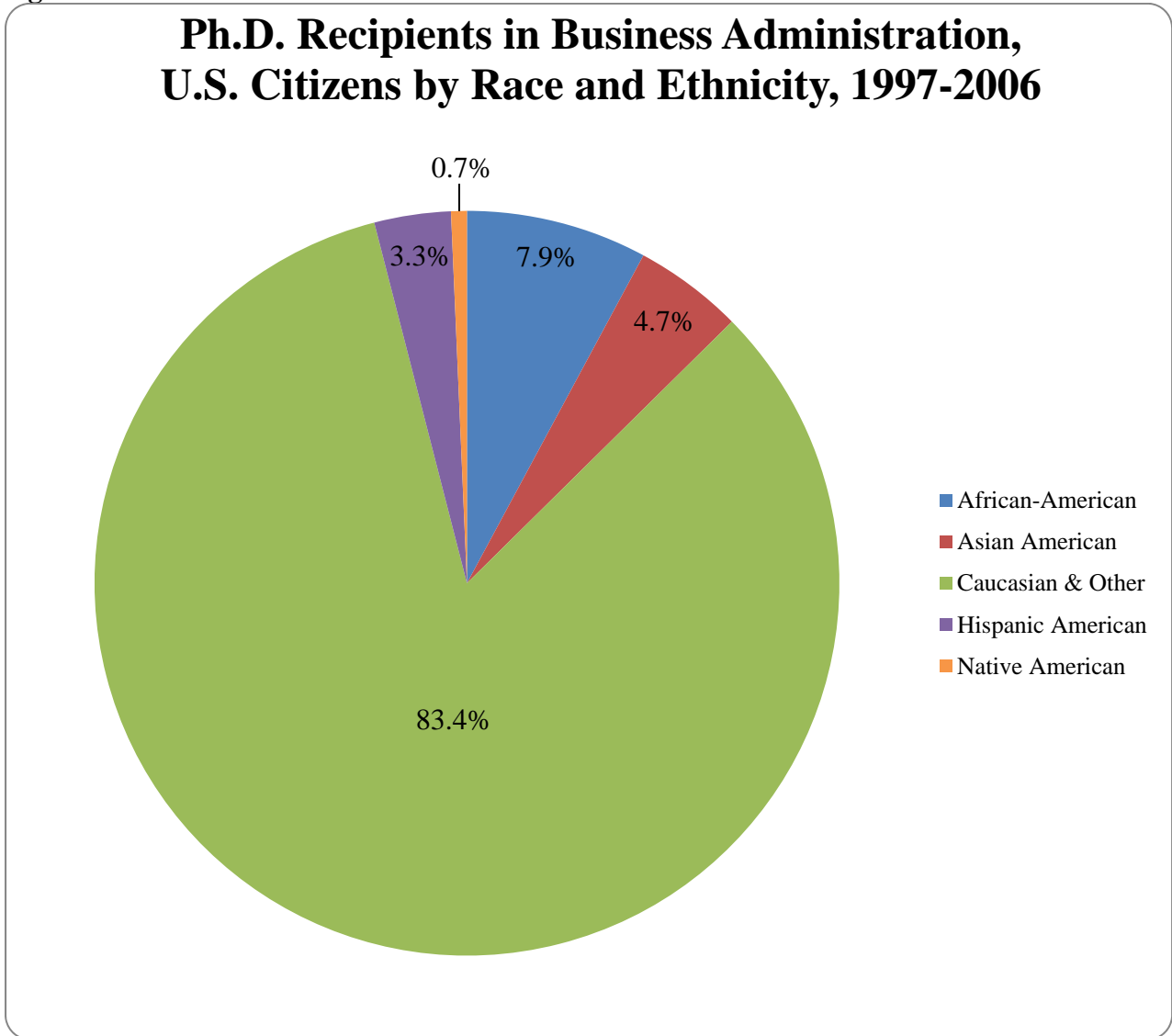
**Ph.D. Recipients in Business Administration,
U.S. Citizens by Race and Ethnicity, 1997-2006**

- African-American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

The number of Doctorates in Business Administration awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 35. The number of members of historically under-represented groups receiving a doctorate in the Business Administration field has fluctuated over the past 10 years and has never exceeded 130.

Figure 35

Ph.D.'s in Business Administration Awarded to U.S. Citizens, Members of Historically Under-represented Groups 1997-2006
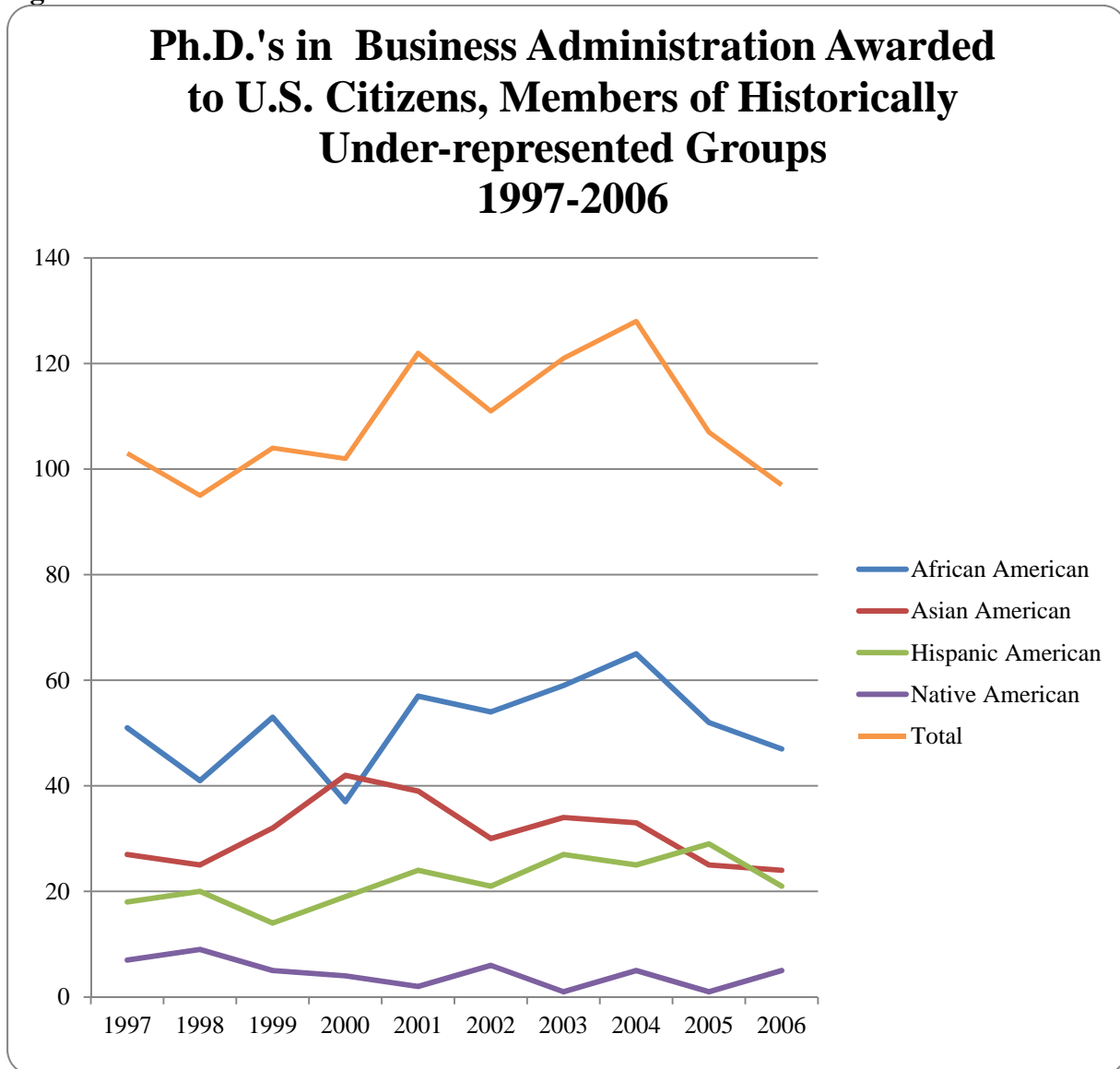
Figure 36 shows the percentage of Ph.D.'s in Business Administration for U.S. citizens awarded to members of historically under-represented groups, comparing 1997 with 2006. The percentage has increased to 16.3% of the total in 2006 as compared with 12.7% of the total 10 years earlier. During these 10 years, African Americans increased from 6.3% of the total to 7.9%, Asian Americans increased from 3.3% of the total to 4.1%, Hispanic Americans increased from 2.2% of the total to 3.5%, and Native Americans decreased from .9% to .8%.

Figure 36
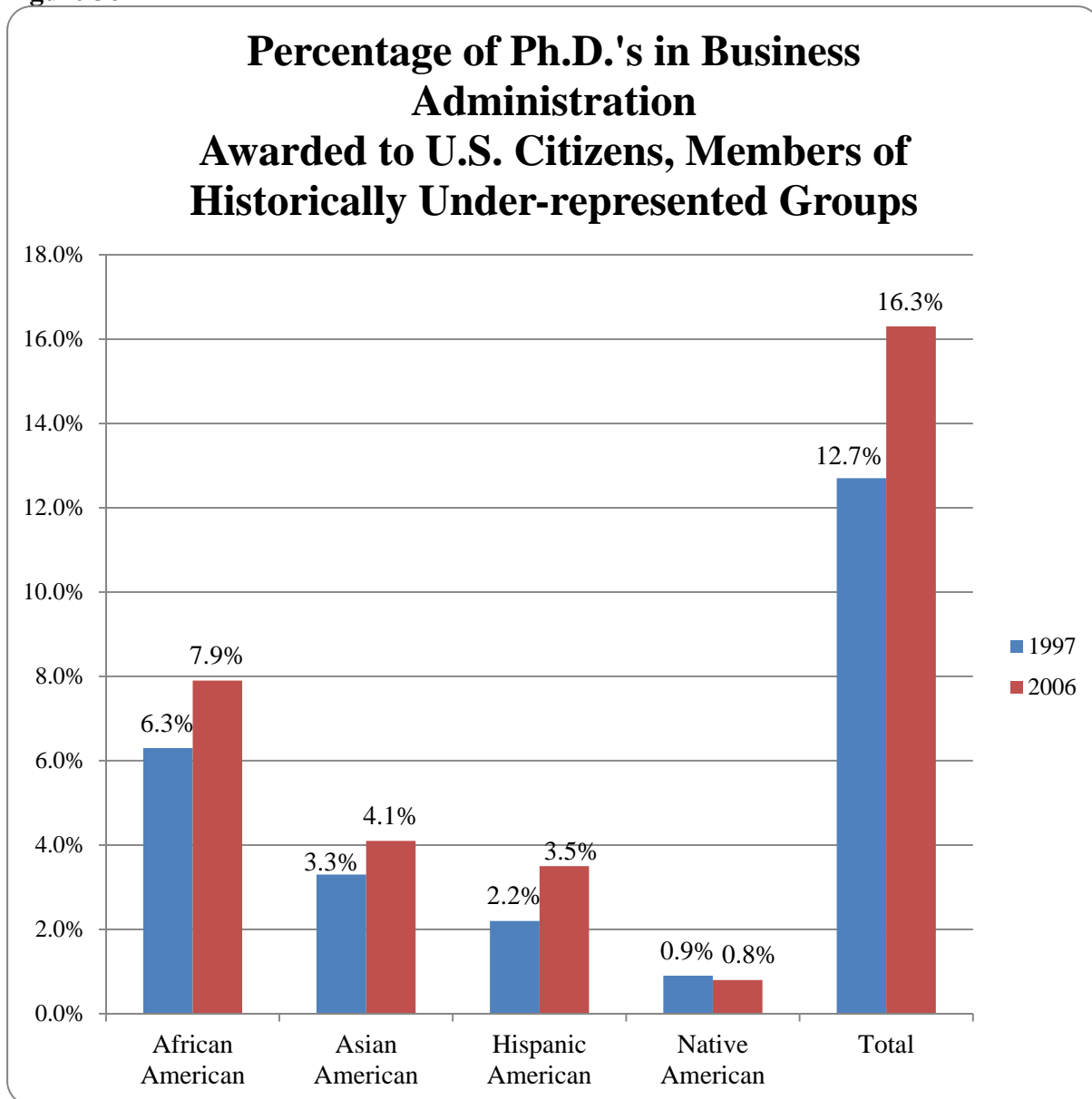
Percentage of Ph.D.'s in Business Administration
Awarded to U.S. Citizens, Members of
Historically Under-represented Groups

The following tables identify the top 10 institutions for each under-represented minority group in terms of the numbers of Ph.D.'s in Business Administration awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 84 Top 10 institutions for African American Ph.D's in Business Administration

Institution	City, State	# of Graduates
Nova Southeastern University	Fort Lauderdale, Florida	51
Walden University	Minneapolis, Minnesota	49
Florida State University	Tallahassee, Florida	22
George Washington University	District of Columbia	22
University of Sarasota	Sarasota, Florida	13
Ohio State University	Columbus, Ohio	12
Virginia Polytechnic Institute & State University	Blacksburg, Virginia	11
Case Western Reserve University	Cleveland, Ohio	10
Michigan State University	East Lansing, Michigan	10
Northwestern University	Evanston, Illinois	10

Table 85 Top 10 institutions for Asian American Ph.D's in Business Administration

Institution	City, State	# of Graduates
Nova Southeastern University	Fort Lauderdale, Florida	22
New York University	New York, New York	8
Stanford University	Stanford, California	7
Boston University	Boston, Massachusetts	3
Rutgers State University	Newark, New Jersey	3
University of California-Los Angeles	Los Angeles, California	3
University of Michigan at Ann Arbor	Ann Arbor, Michigan	3
University of North Texas	Denton, Texas	3
University of Pennsylvania	Philadelphia, Pennsylvania	3
University of Rhodes Island	Kingston, Rhode Island	3

Table 86 Top 10 institutions for Hispanic American Ph.D's in Business Administration

Institution	City, State	# of Graduates
Nova Southeastern University	Fort Lauderdale, Florida	20
University of Sarasota	Sarasota, Florida	11
Texas A&M University	College Station, Texas	7
University of Texas - Pan American	Edinburg, Texas	7
Arizona State University Main Campus	Tempe, Arizona	6
Florida State University	Tallahassee, Florida	6
University of Arizona	Phoenix, Arizona	6
Walden University	Minneapolis, Minnesota	6
Fielding Institute	Santa Barbara, California	5
George Washington University	District of Columbia	5

Table 87 Top 10 institutions for Native American Ph.D's in Business Administration

Institution	City, State	# of Graduates
Walden University	Minneapolis, Minnesota	3
Georges Washington University	District of Columbia	2
Pepperdine University	Malibu, California	2
Stanford University	Palo Alto, California	2
Texas A&M University	College Station, Texas	2
University of Mississippi	Oxford, Mississippi	2
University of Missouri	Columbia, Missouri	2
University of North Carolina	Chapel Hill, North Carolina	2
Walden University	Minneapolis, Minnesota	2

The following table identifies the top 20 institutions in terms of the number of Business Administration Ph.D.'s awarded to U.S. citizens for the most recent 10-year period for which data are available.

Table 88 Top 20 institutions in terms of number of Ph.D.'s in Business Administration for all U.S. citizens

Institution	City, State	All US Citizens
Nova Southeastern	Fort Lauderdale, Florida	432
Walden University	Minneapolis, Minnesota	203
Georges Washington University	District of Columbia	132
Fielding Institute	Santa Barbara, California	105
Texas A&M University	College Station, Texas	107
Florida State University	Tallahassee, Florida	119
University of Sarasota	Sarasota, Florida	112
Indiana University	Sarasota, Florida	101
University of Nebraska	Lincoln, Nebraska	82
Michigan State University	East Lansing, Michigan	81
Pennsylvania State University	University Park, Pennsylvania	79
University of Texas	Austin, Texas	76
University of Arizona	Phoenix, Arizona	75
Georgia State University	Atlanta, Georgia	74
Arizona State University	Tempe, Arizona	74
University of Kentucky	Lexington, Kentucky	71
University of Minnesota	Minneapolis, Minnesota	69
University of North Texas	Denton, Texas	69
University of South Carolina	Columbia, South Carolina	67
University of Georgia	Athens, Georgia	64

The following table identifies the top 20 institutions in terms of the number of Business Administration Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 89 Top 20 institutions in terms of number of Ph.D.'s in Business Administration awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
Nova Southeastern University	Fort Lauderdale, Florida	93
Walden University	Minneapolis, Minnesota	52
George Washington University	District of Columbia	29
University of Sarasota	Sarasota, Florida	24
Florida State University	Tallahassee, Florida	22
Ohio State University	Columbus, Ohio	12
Virginia Polytechnic Institute & State University	Blacksburg, Virginia	11
Case Western Reserve University	Cleveland, Ohio	10
Michigan State University	East Lansing, Michigan	10
Northwestern University	Evanston, Illinois	10
Texas A&M University	College Station, Texas	9
Stanford University	Palo Alto, California	9
New York University	New York, New York	8
University of Texas-Pan American	Edinburg, Texas	7
Arizona State University	Tempe, Arizona	6
University of Arizona	Phoenix, Arizona	6
Boston University	Boston, Massachusetts	3
Rutgers State University	Newark, New Jersey	3
University of California	Los Angeles, California	3
University of Michigan	Ann Arbor, Michigan	3

Table 90 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Business Administration

Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	47	7.9%	24	4.1%	496	83.6%	21	3.5%	5	0.8%	593	1,312
2005	52	9.0%	25	4.3%	472	81.5%	29	5.0%	1	0.2%	579	1,171
2004	65	11.0%	33	5.6%	465	78.4%	25	4.2%	5	0.8%	593	1,253
2003	59	10.6%	34	6.1%	439	78.5%	27	4.8%	1	0.2%	559	1,036
2002	54	8.9%	30	4.9%	496	81.7%	21	3.5%	6	1.0%	607	1,113
2001	57	8.5%	39	5.8%	549	81.8%	24	3.6%	2	0.3%	671	1,064
2000	37	5.5%	42	6.3%	568	84.8%	19	2.8%	4	0.6%	670	1,065
1999	53	7.5%	32	4.6%	599	85.2%	14	2.0%	5	0.7%	703	1,108
1998	41	5.3%	25	3.2%	682	87.8%	20	2.6%	9	1.2%	777	1,175
1997	51	6.3%	27	3.3%	708	87.3%	18	2.2%	7	0.9%	811	1,245
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created October 2009												

Table 91 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Business Administration

This is the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents with U.S. Citizens.

Degree Received: Doctorates in Business Administration											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	68	9.7%	65	9.2%	547	77.6%	23	3.3%	2	0.3%	705	1,437
2007	56	7.5%	76	10.2%	584	78.5%	24	3.2%	4	0.5%	744	1,506

Doctorate in Economics

Earned Doctorate Degrees in Economics[13]

During the 10 most recent years for which data are available (1997 through 2006) a total of 11,033 doctorates were awarded in Economics. Of these, 4,014 or 36.4% were awarded to U.S. citizens and 7,019 or 63.6% were awarded to non-U.S. citizens.

Figure 37

Citizenship Status of Ph.D. Recipients in Economics, 1997-2006

36.4%

63.6%

■ U.S. Citizens
■ Non-U.S. Citizens

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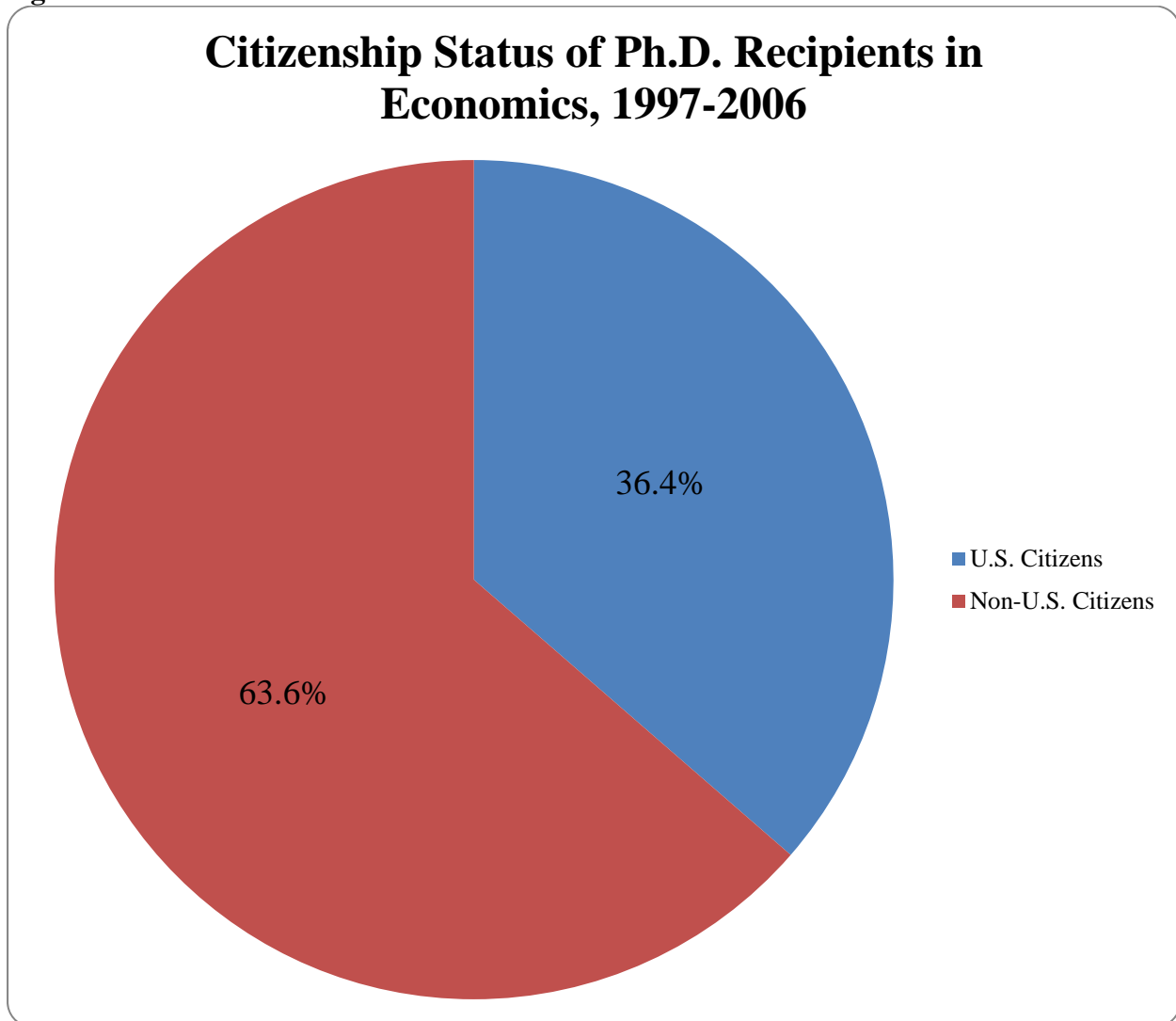
[13] For a complete listing of sub-fields included within Economics please refer to the appendix 1 entitled "Fine Field of Study."

Out of the 4,014 doctorates awarded to U.S. citizens during the 1997-2006 period, 133 or 3.3% were earned by African Americans, 294 or 7.3% were earned by Asian Americans, 3,426 or 85.4% were earned by Caucasian or Other ethnicities, 152 or 3.8% were earned by Hispanic Americans, and 9 or 0.2% were earned by Native Americans.

Figure 38
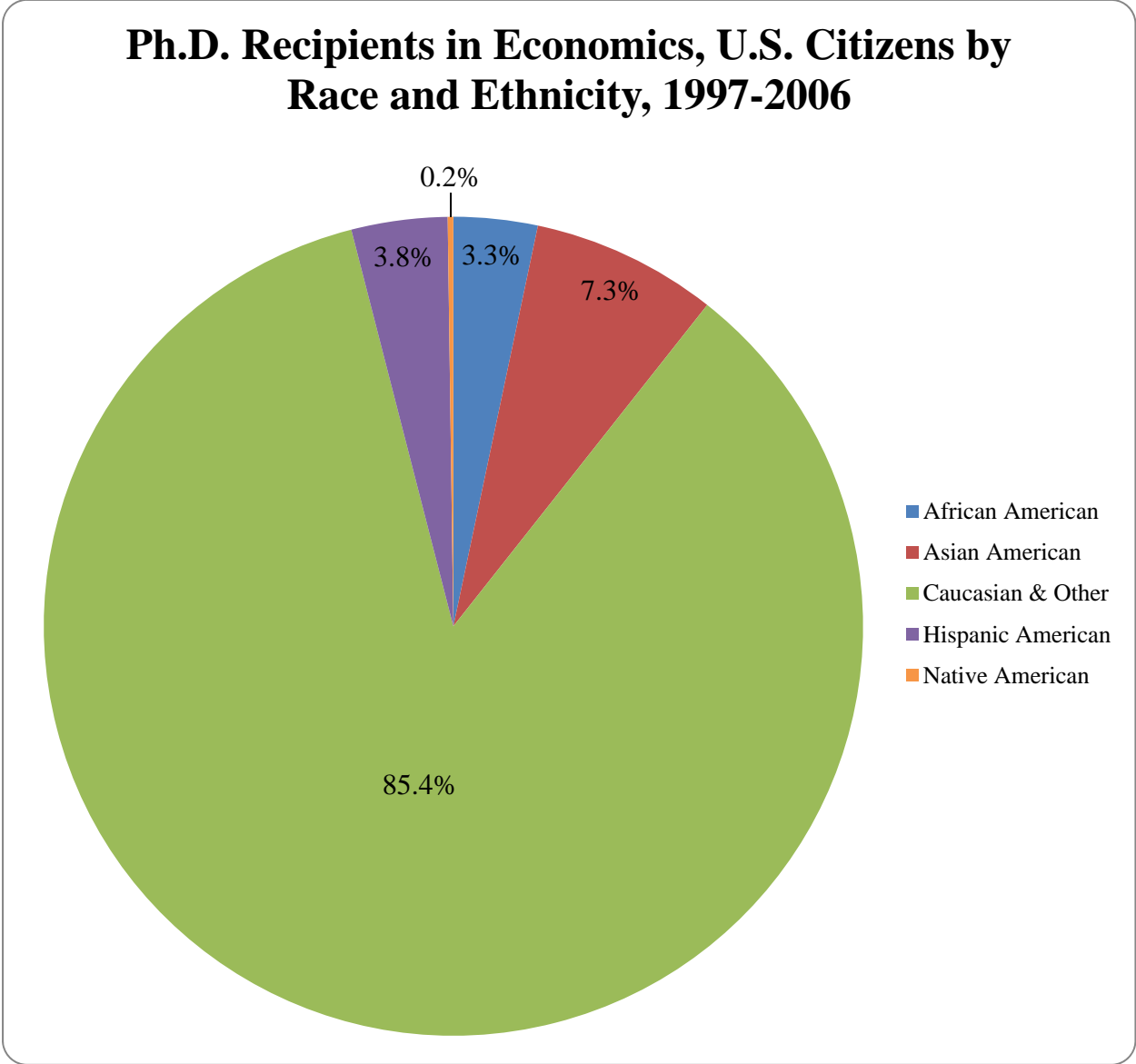
Ph.D. Recipients in Economics, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of Doctorates in Economics awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 39. The number of graduates of historically under-represented groups in these fields is under 70. It has fluctuated over the past 10 years; however, the number has remained the same from a total of 67 in 1997 to 67 in 2006.

Figure 39

Ph.D.'s in Economics Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
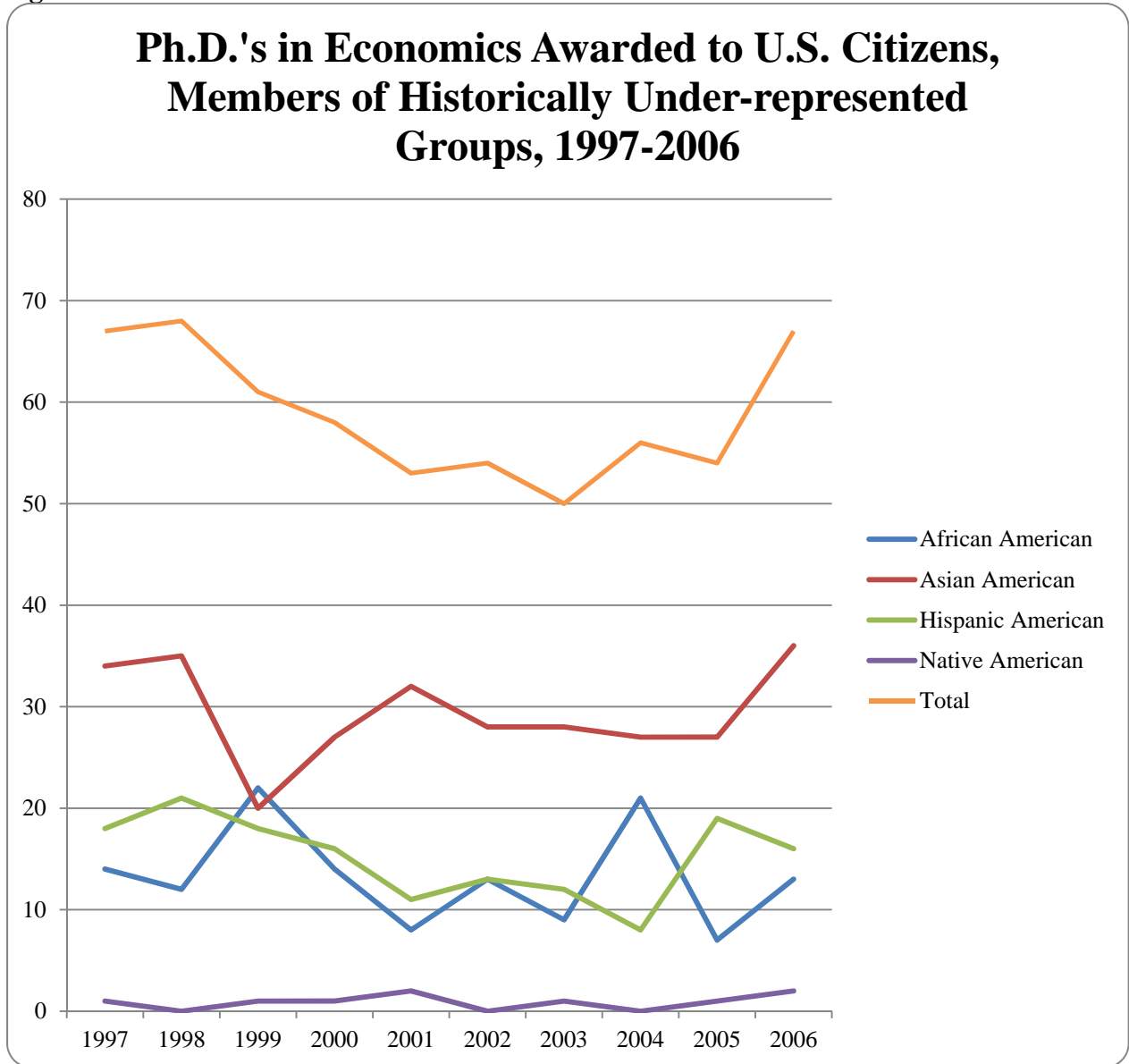
Figure 40 shows the percentage of Ph.D.'s in Economics for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 with 2006. The percentage has risen to 20.6% in 2006 as compared with 13.8% 10 years earlier[14]. During these 10 years, African Americans increased by 1.1%, Asian Americans increased by 4.1%, Hispanic Americans increased by 1.2%, and Native Americans increased by 0.4%.

Figure 40

Percentage of Ph.D.'s in Economics Awarded to U.S. Citizens, Members of Historically Under-represented Groups

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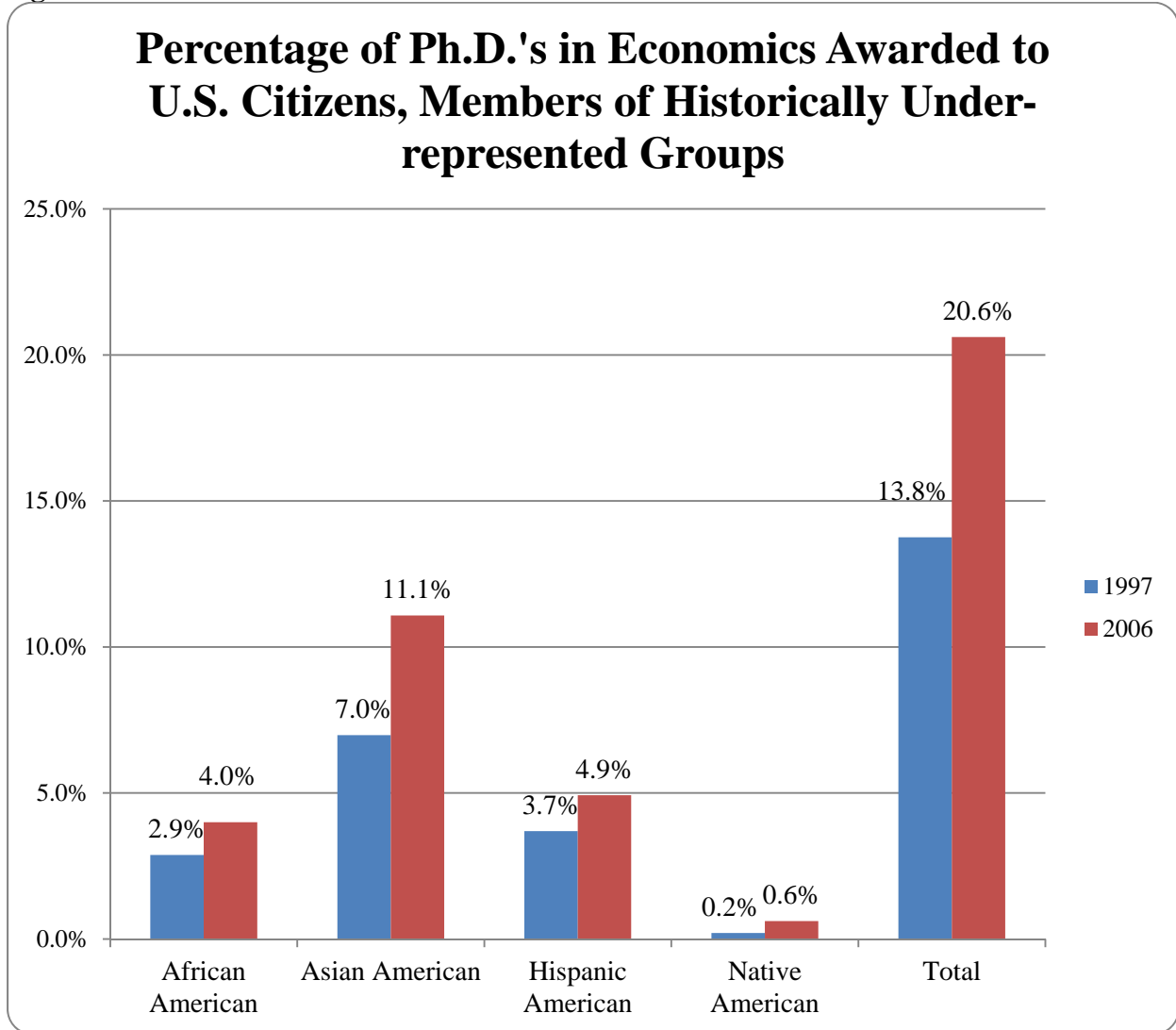
[14] Please note that the numbers in Figure 39 are the actual number of graduate minorities. The numbers in Figure 40 represent the overall percentage change between 1997 and 2006. This means that while the end number of graduates remained the same, the amount of Caucasian & Other students dropped.

The following tables identify the top 10 institutions for each under-represented minorities in terms of the numbers of Ph.D.'s awarded to U.S. citizens for the most recent 10 year period (1997-2006) for which data are available.

Table 92 Top 10 institutions for African American Ph.D's in Economics

Institution	City, State	# of Graduates
Howard University	Washington, D.C.	9
Fordham University	New York, New York	6
New School for Social Research	New York, New York	5
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	5
University of Maryland at College Park	College Park, Maryland	5
Northwestern University	Evanston, Illinois	4
Princeton University	Princeton, New Jersey	4
Purdue University, Main Campus	West Lafayette, Indiana	4
University of California-Berkeley	Berkeley, California	4
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	4
Wayne State University	Detroit, Michigan	4

Table 93 Top 10 institutions for Asian American Ph.D's in Economics

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	31
Harvard University	Cambridge, Massachusetts	20
University of Chicago	Chicago, Illinois	12
Stanford University	Palo Alto, California	11
Columbia University in the City of New York	New York, New York	9
Massachusetts Institute of Technology	Cambridge, Massachusetts	9
University of California-Irvine	Irvine, California	9
University of California-Davis	Davis, California	8
University of California-Los Angeles	Los Angeles, California	8
University of Wisconsin-Madison	Madison, Wisconsin	7
Yale University	New Haven, Connecticut	7

Table 94 Top 10 institutions for Hispanic American Ph.D's in Economics

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	21
New School for Social Research	New York, New York	6
Texas A&M University Main Campus	College Station, Texas	5
American University	Washington, D.C.	4
Harvard University	Cambridge, Massachusetts	4
Ohio State University, Main Campus	Columbus, Ohio	4
Stanford University	Palo Alto, California	4
University of Connecticut	Storrs, Connecticut	4
University of Florida	Gainesville, Florida	4
University of Maryland at College Park	College Park, Maryland	4
University of Massachusetts at Amherst	Amherst, Massachusetts	4
University of Notre Dame	Notre Dame, Indiana	4

Table 95 Top 10 institutions for Native American Ph.D's in Economics

Institution	City, State	# of Graduates
Oklahoma State University, All Campuses	Stillwater, Oklahoma	1
SUNY at Binghamton	Binghamton, New York	1
SUNY at Buffalo	Buffalo, New York	1
Stanford University	Palo Alto, California	1
University of California-Berkeley	Berkeley, California	1
University of Colorado at Boulder	Boulder, Colorado	1
University of Minnesota - Twin Cities	Minneapolis-St. Paul, Minnesota	1
University of Utah	Salt Lake City, Utah	1
Wayne State University	Detroit, Michigan	1

The following table identifies the top 20 institutions in terms of the number of Economics Ph.D.'s awarded to U.S. citizens for the most recent 10 year period for which data are available.

Table 96 Top 20 institutions in terms of number of Ph.D.'s in Economics for all U.S. citizens

Institution	City, State	All US Citizens
University of California-Berkeley	Berkeley, California	216
Harvard University	Cambridge, Massachusetts	136
University of Chicago	Chicago, Illinois	106
University of Maryland at College Park	College Park, Maryland	103
University of Wisconsin-Madison	Madison, Wisconsin	102
University of California-Davis	Davis, California	84
Stanford University	Palo Alto, California	81
George Mason University	Fairfax, Virginia	78
Massachusetts Institute of Technology	Cambridge, Massachusetts	78
University of Illinois at Urbana-Champaign	Urbana & Champaign, Illinois	70
Cornell University, All Campuses	Ithaca, New York	67
Northwestern University	Evanston, Illinois	66
University of Michigan at Ann Arbor	Ann Arbor, Michigan	66
University of Minnesota - Twin Cities	Minneapolis & St. Paul, Minnesota	66
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	62
Purdue University, Main Campus	West Lafayette, Indiana	60
University of Texas at Austin	Austin, Texas	58
Princeton University	Princeton, New Jersey	57
Columbia University in the City of New York	New York, New York	56
Ohio State University, Main Campus	Columbus, Ohio	55

The following table identifies the top 20 institutions in terms of the number of Economics Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10 year period for which data are available.

Table 97-- Top 20 institutions in terms of number of Ph.D.'s in Economics awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of California-Berkeley	Berkeley, California	57
Harvard University	Cambridge, Massachusetts	27
Stanford University	Palo Alto, California	17
University of Chicago	Chicago, Illinois	16
New School for Social Research	New York, New York	14
University of California-Irvine	Irvine, California	14
Columbia University in the City of New York	New York, New York	13
Princeton University	Princeton, New Jersey	13
Fordham University	New York, New York	12
University of California-Davis	Davis, California	11
University of California-Los Angeles	Los Angeles, California	11
University of Illinois at Urbana-Champaign	Urbana-Champaign, Illinois	11
University of Maryland at College Park	College Park, Maryland	11
Massachusetts Institute of Technology	Cambridge, Massachusetts	10
Purdue University, Main Campus	West Lafayette, Indiana	10
University of Massachusetts at Amherst	Amherst, Massachusetts	10
University of Wisconsin-Madison	Madison, Wisconsin	10
American University	Washington, D.C.	9
Howard University	Washington, D.C.	9
Texas A&M University Main Campus	College Station, Texas	9

Table 98 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Economics

Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	13	4.0%	36	11.1%	258	76.8%	16	4.9%	2	0.6%	325	1,142
2005	7	2.1%	27	8.2%	277	82.2%	19	5.7%	1	0.3%	331	1,183
2004	21	5.9%	27	7.6%	301	79.6%	8	2.2%	0	0.0%	357	1,069
2003	9	2.6%	28	8.0%	299	83.8%	12	3.4%	1	0.3%	349	1,050
2002	13	3.5%	28	7.5%	317	82.6%	13	3.5%	0	0.0%	371	1,027
2001	8	2.0%	32	7.9%	350	85.6%	11	2.7%	2	0.5%	403	1,081
2000	14	3.2%	27	6.1%	385	84.4%	16	3.6%	1	0.2%	443	1,086
1999	22	4.8%	20	4.3%	402	83.1%	18	3.9%	1	0.2%	463	1,075
1998	12	2.5%	35	7.2%	417	83.9%	21	4.3%	0	0.0%	485	1,157
1997	14	2.9%	34	7.0%	420	84.0%	18	3.7%	1	0.2%	487	1,163
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created January/2010: January 29, 2010												

Degree Received: Doctorates in Economics

Table 99 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Economics

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents and U.S. Citizens.

Degree Received: Doctorates in Economics											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	16	4.0%	58	14.3%	315	77.8%	16	4.0%	0	0.0%	405	1,091
2007	18	5.6%	48	14.9%	239	74.0%	16	5.0%	2	0.6%	323	994

Master of International Relations/Affairs and Area Studies

Earned Master Degrees in International Relations/Affairs and Area Studies[15]

During the 10 most recent years for which data are available (1997 through 2007, with data missing for 1999) a total of 39,305 masters were awarded in International Relations/Affairs and Area Studies. Of these, 29,722 or 75.6% were awarded to U.S. citizens and permanent residents and 9,583 or 24.2% were awarded to temporary residents.

Figure 41

Citizenship Status of Master Recipients in International Relations/Affairs and Area Studies, 1997-2007

- 24.4%
- 75.6%
- ■ US Citizens & Permanent Residents
- ■ Temporary Residents

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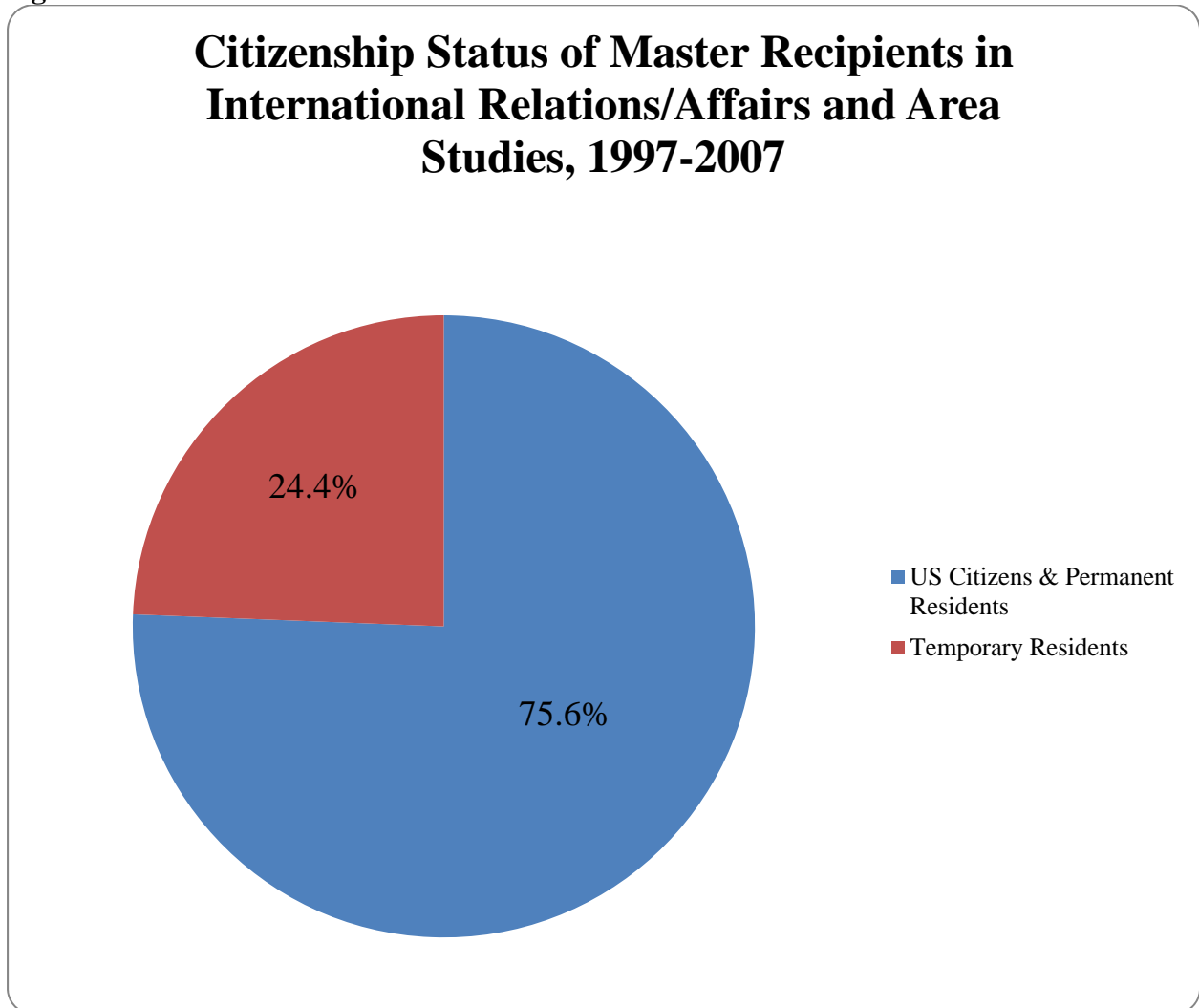
[15] International Relations/Affairs and Area Studies are defined in the IPEDS Survey of Earned Masters to include the following subfields: Area Studies and International Relations and Affairs

Out of the 29,722 masters awarded to U.S. citizens and permanent residents during the 1997-2007 period, 1,464 or 4.9% were earned by African Americans, 2,371 or 8.0% were earned by Asian Americans, 23,651 or 79.6% were earned by Caucasian or Other ethnicities, 2,109 or 7.1% were earned by Hispanic Americans, and 127 or 0.4 % were earned by Native Americans.

Figure 42
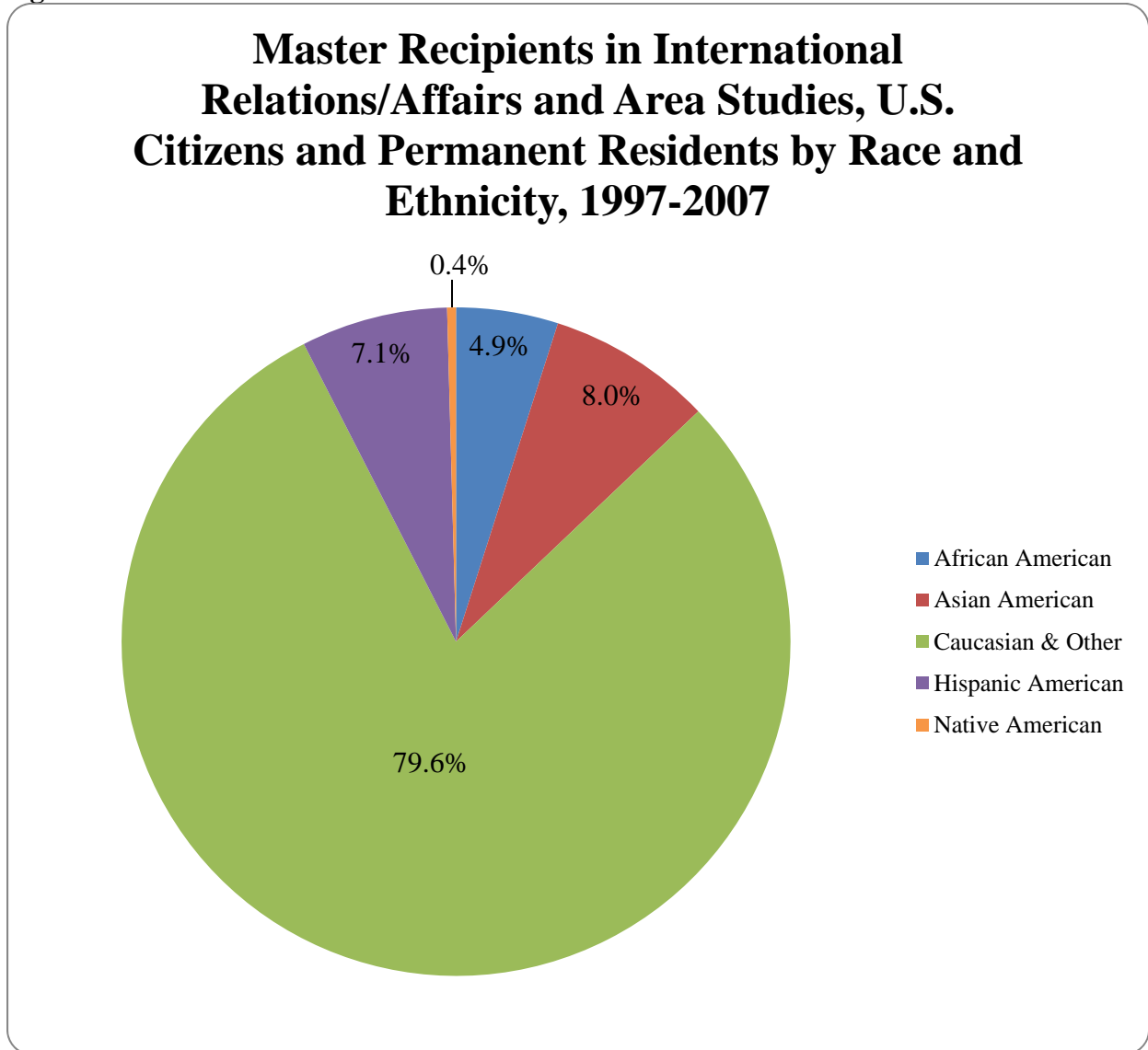
Master Recipients in International Relations/Affairs and Area Studies, U.S. Citizens and Permanent Residents by Race and Ethnicity, 1997-2007

Legend:
- African American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

Values shown: 0.4%, 4.9%, 8.0%, 7.1%, 79.6%

The number of Masters in International Relations/Affairs and Area Studies awarded to U.S. citizens and permanent residents who are graduates of historically under-represented groups is shown in Figure 43. The number of graduates of historically under-represented groups receiving masters in the International Relations/Affairs and Area Studies field has fluctuated over the past 10 years and has never exceeded 825.

Figure 43

Masters in International Relations/Affairs and Area Studies Awarded to U.S. Citizens & Permanent Residents, Members of Historically Under-represented Groups, 1997-2007

Legend:
- African American
- Asian American
- Hispanic American
- Native American
- Total

Figure 44 shows the percentage of Masters in International Relations/Affairs and Area Studies for U.S. citizens and permanent residents awarded to graduates of historically under-represented groups, comparing 1997 with 2007. The percentage has increased to 21.6% of the total in 2007 as compared to 18.5% in 1997. During these 10 years, African Americans increased from 4.2% of the total to 5.3%, Asian Americans increased from 7.1% of the total to 8.1%, Hispanic Americans increased from 6.8% of the total to 7.9%, and Native Americans remained the same at 0.3%.

Figure 44
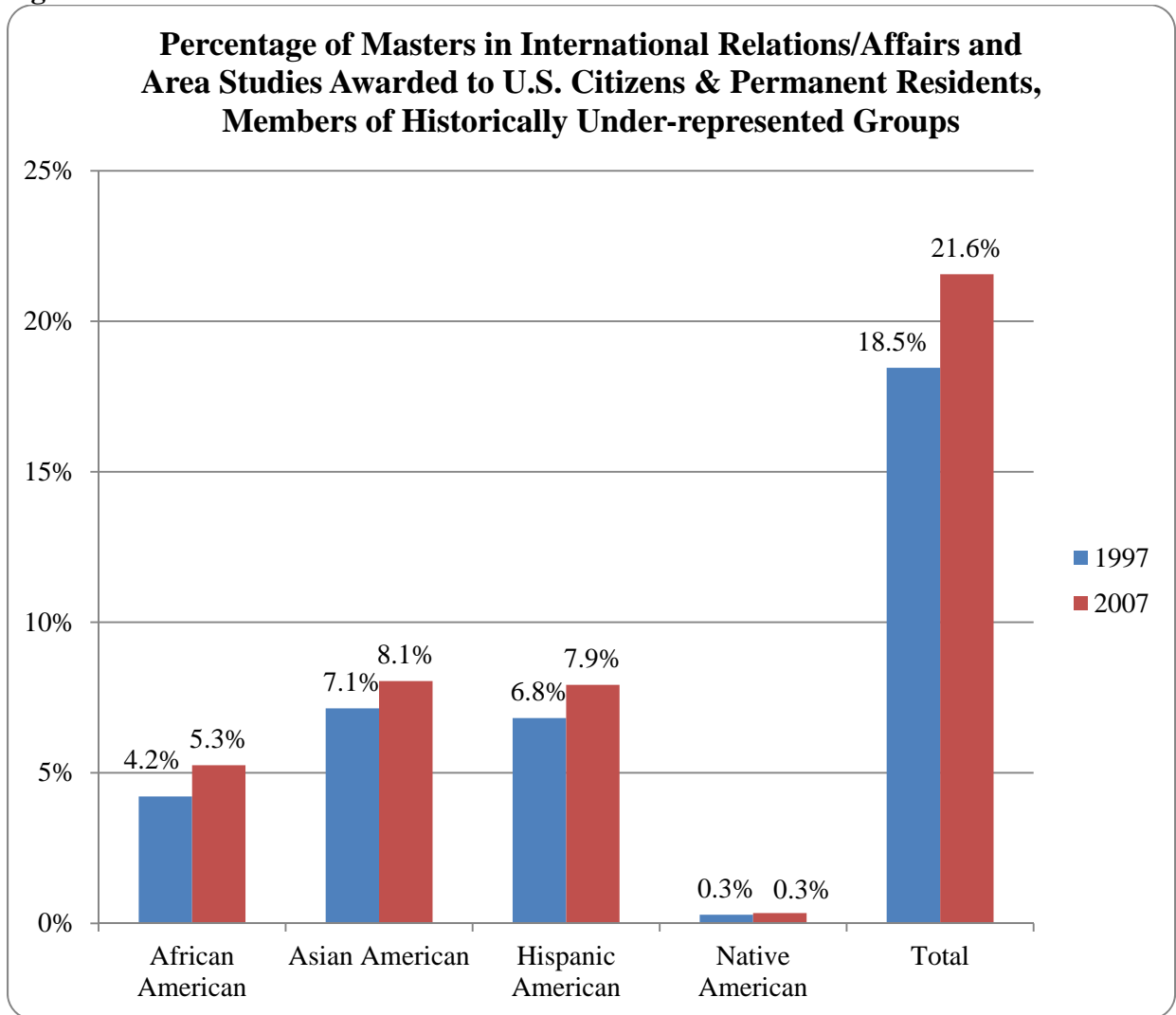
Percentage of Masters in International Relations/Affairs and Area Studies Awarded to U.S. Citizens & Permanent Residents, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each under-represented minority group in terms of the numbers of Masters in International Relations/Affairs and Area Studies awarded to U.S. citizens and permanent residents for the most recent 10-year period (1997-2007) for which data are available.

Table 100 Top 10 institutions for African American Master of International Relations/Affairs and Area Studies

Institution	City, State	# of Graduates
American University	Washington, District of Columbia	98
Columbia University in the City of New York	New York, New York	95
Johns Hopkins University	Baltimore, Maryland	81
George Mason University	Fairfax, Virginia	79
Troy State University, Main Campus	Troy, Alabama	79
Tufts University	Medford, Massachusetts	65
Georgetown University	Washington, District of Columbia	56
Clark Atlanta University	Atlanta, Georgia	50
CUNY City College	New York, New York	47

Table 101 Top 10 institutions for Asian American Master of International Relations/Affairs and Area Studies

Institution	City, State	# of Graduates
Columbia University in the City of New York	New York, New York	369
Johns Hopkins University	Baltimore, Maryland	193
University of Hawaii at Manoa	Manoa, Hawaii	146
Tufts University	Medford, Massachusetts	125
Georgetown University	Washington, District of Columbia	114
American University	Washington, District of Columbia	111
University of California-San Diego	San Diego, California	103
George Washington University	Washington, District of Columbia	94
George Mason University	Fairfax, Virginia	81
Stanford University	Palo Alto, California	70

Table 102 Top 10 institutions for Hispanic American Master of International Relations/Affairs and Area Studies

Institution	City, State	# of Graduates
Columbia University in the City of New York	New York, New York	145
George Mason University	Fairfax, Virginia	119
American University	Washington, District of Columbia	117
Georgetown University	Washington, District of Columbia	113
St Mary's University	San Antonio, Texas	102
University of California-Los Angeles	Los Angeles, California	88
George Washington University	Washington, District of Columbia	79
Tufts University	Medford, Massachusetts	73
University of New Mexico, All Campuses	Albuquerque, New Mexico	70

Table 103 Top 10 institutions for Native American Master of International Relations/Affairs and Area Studies

Institution	City, State	# of Graduates
George Mason University	Fairfax, Virginia	13
University of New Mexico, All Campuses	Albuquerque, New Mexico	9
American University	Washington, District of Columbia	8
SUNY at Buffalo	Buffalo, New York	7
Johns Hopkins University	Baltimore, Maryland	5
University of California-San Diego	San Diego, California	5
Columbia University in the City of New York	New York, New York	4
Northeastern State University	Tahlequah, Oklahoma	4
Tufts University	Medford, Massachusetts	4
University of Denver	Denver, Colorado	4

The following table identifies the top 20 institutions in terms of the number of International Relations/Affairs and Area Studies Masters awarded to U.S. citizens and permanent residents, overall, for the most recent 10-year period for which data are available.

Table 104 Top 20 institutions in terms of number of Masters in International Relations/Affairs and Area Studies for all U.S. citizens and permanent residents

Institution	City, State	All US Citizens and Permanent Residents
Columbia University in the City of New York	New York, New York	2436
Johns Hopkins University	Baltimore, Maryland	2076
Georgetown University	Washington, District of Columbia	2025
American University	Washington, District of Columbia	1947
George Washington University	Washington, District of Columbia	1388
Tufts University	Medford, Massachusetts	1205
Troy State University, Main Campus	Troy, Alabama	957
George Mason University	Fairfax, Virginia	838
Monterey Institute of International Studies	Monterey, California	705
University of Texas at Austin	Austin, Texas	567
University of Denver	Denver, Colorado	563
University of Pittsburgh Main Campus	Pittsburgh, Pennsylvania	528
University of California-San Diego	San Diego, California	493
School for International Training	Brattleboro, Vermont	490
University of Chicago	Chicago, Illinois	452
University of Washington - Seattle	Seattle, Washington	444
Seton Hall University	South Orange, New Jersey	417
Harvard University	Cambridge Massachusetts	412
New York University	New York, New York	395
Florida State University	Tallahassee, Florida	391

The following table identifies the top 20 institutions in terms of the number of International Relations/Affairs and Area Studies Masters awarded to those citizens and permanent residents from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 105 Top 20 institutions in terms of number of Masters in International Relations/Affairs and Area Studies awarded to citizens and permanent residents from historically under-represented groups

Institution	City, State	US Citizens/Permanent Residents from Under-Represented Groups
Columbia University in the City of New York	New York, New York	61?
American University	Washington, District of Columbia	334
Johns Hopkins University	Baltimore, Maryland	329
George Mason University	Fairfax, Virginia	292
Georgetown University	Washington, District of Columbia	286
Tufts University	Medford, Massachusetts	267
George Washington University	Washington, District of Columbia	204
University of California-San Diego	San Diego, California	165
University of Hawaii at Manoa	Manoa, Hawaii	156
Troy State University, Main Campus	Troy, Alabama	153
University of California-Los Angeles	Los Angeles, California	139
St Mary's University	San Antonio, Texas	127
Stanford University	Palo Alto, California	116
Florida State University	Tallahassee, Florida	100
University of Texas at Austin	Austin, Texas	97
Monterey Institute of International Studies	Monterey, California	96
University of Pittsburgh Main Campus	Pittsburgh, Pennsylvania	90
University of New Mexico, All Campuses	Albuquerque, New Mexico	88
Harvard University	Cambridge, Massachusetts	87
New York University	New York, New York	87

Table 106 Data from 1997 through 2007 (excluding 1999) from the Integrated Postsecondary Education Data System for Master of International Relations/Affairs and Area Studies

											Total (US citizen & permanent resident)	Total all Masters Granted
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American			
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2007	201	5.3%	308	8.1%	3001	78.4%	303	7.9%	13	0.3%	3826	4838
2006	186	4.8%	319	8.3%	3078	79.6%	269	7.0%	14	0.4%	3866	4900
2005	157	4.5%	304	8.6%	2806	79.7%	240	6.8%	14	0.4%	3521	4609
2004	151	4.8%	245	7.8%	2513	79.9%	221	7.0%	14	0.4%	3144	4209
2003	156	5.7%	227	8.4%	2097	77.2%	220	8.1%	17	0.6%	2717	3747
2002	115	4.8%	180	7.5%	1927	80.2%	172	7.2%	10	0.4%	2404	3363
2001	148	6.2%	197	8.2%	1856	77.7%	176	7.4%	12	0.5%	2389	3331
2000	110	4.5%	194	8.0%	1953	80.6%	153	6.3%	13	0.5%	2423	3302
1999												
1998	122	4.6%	197	7.5%	2136	81.2%	164	6.2%	12	0.5%	2631	3438
1997	118	4.2%	200	7.1%	2284	81.5%	191	6.8%	8	0.3%	2801	3568
Source: "IPEDS Completions Surveys by Race "												
Web Site: http://webcaspar.nsf.gov/TableBuilderIndex												
Date Table Created (month/ year): December 2009												

Degree Received: Masters in International Relations/Affairs and Area Studies

Doctorate of International Relations/Affairs and Area Studies

Earned Doctorate Degrees in International Relations/Affairs and Area Studies[16]
During the 10 most recent years for which data are available (1997 through 2006) a total of 1,252 doctorates were awarded in International Relations/Affairs and Area Studies. Of these, 771 or 61.6% were awarded to U.S. citizens and 481 or 38.4% were awarded to non-U.S. citizens.

Figure 45

Citizenship Status of Ph.D. Recipients in International Relations/Affairs and Area Studies, 1997-2006

38.4%

61.6%

■ US Citizens
■ Non US Citizens

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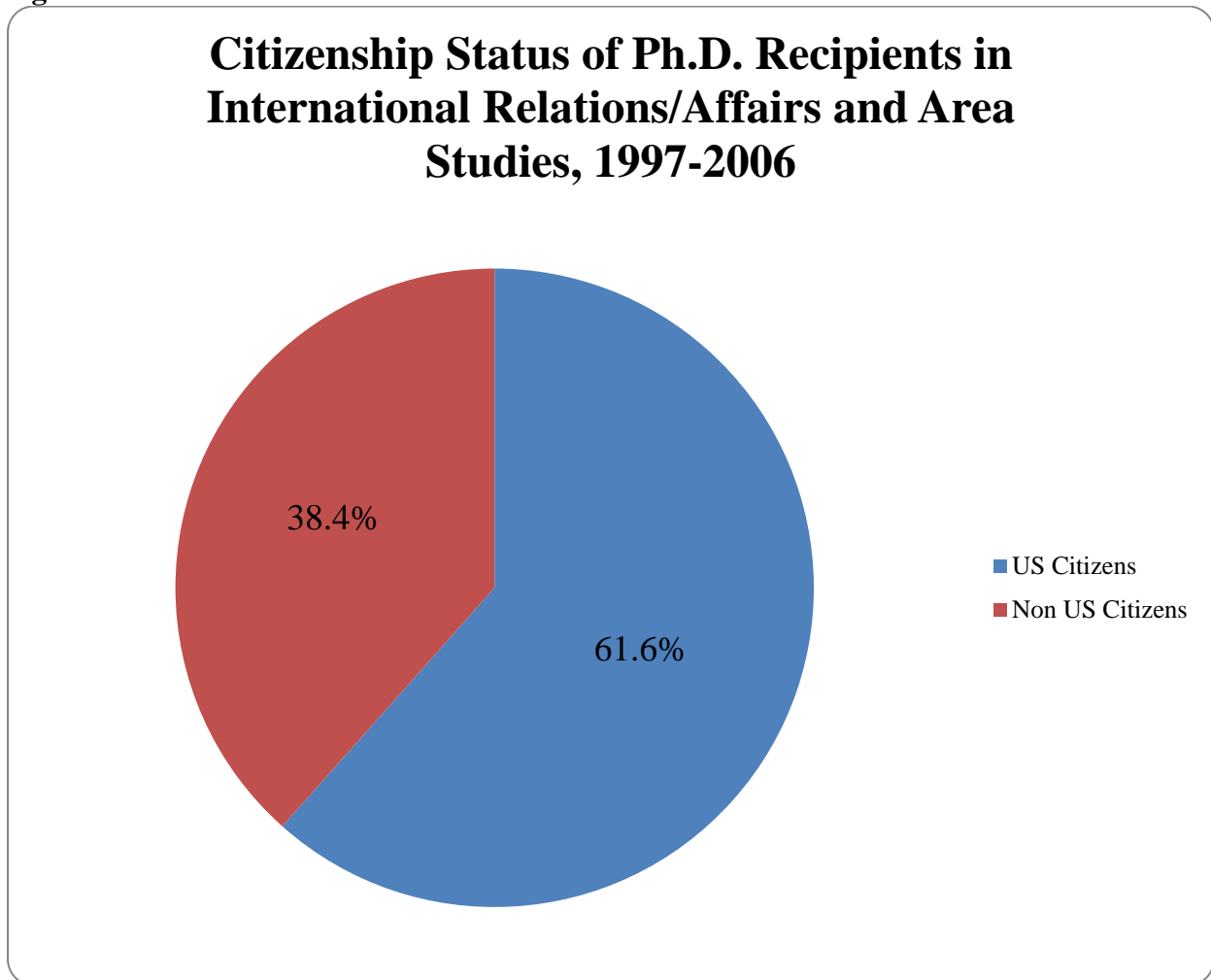
[16] International Relations/ Area Studies are a sub-field within Political Science and Administration. Please refer to the appendix 1 entitled "Fine Field of Study" under Political Science and Public Administration.

Out of the 771 doctorates awarded to U.S. citizens during the 1997-2006 period, 51 or 6.6% were earned by African Americans, 25 or 3.2% were earned by Asian Americans, 650 or 84.3% were earned by Caucasian or Other ethnicities, 50 or 6.5% were earned by Hispanic Americans, and 5 or 0.6% were earned by Native Americans.

Figure 46
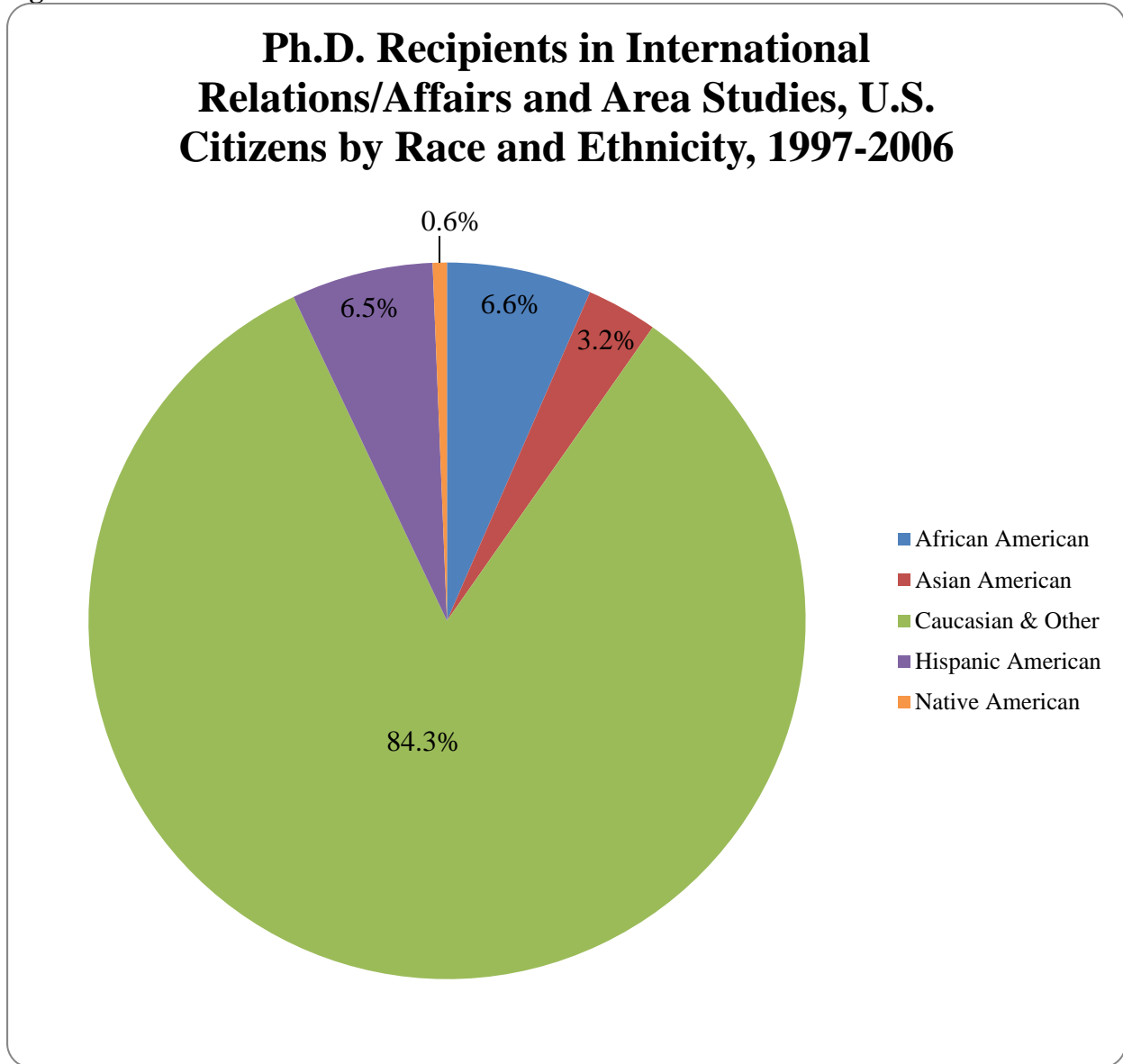
Ph.D. Recipients in International Relations/Affairs and Area Studies, U.S. Citizens by Race and Ethnicity, 1997-2006

- African American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

The number of Doctorates in International Relations/Affairs and Area Studies awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 47. The number of graduates of historically under-represented groups receiving a doctorate in the International Relations/Affairs and Area Studies field has fluctuated over the past 10 years and has never exceeded 18.
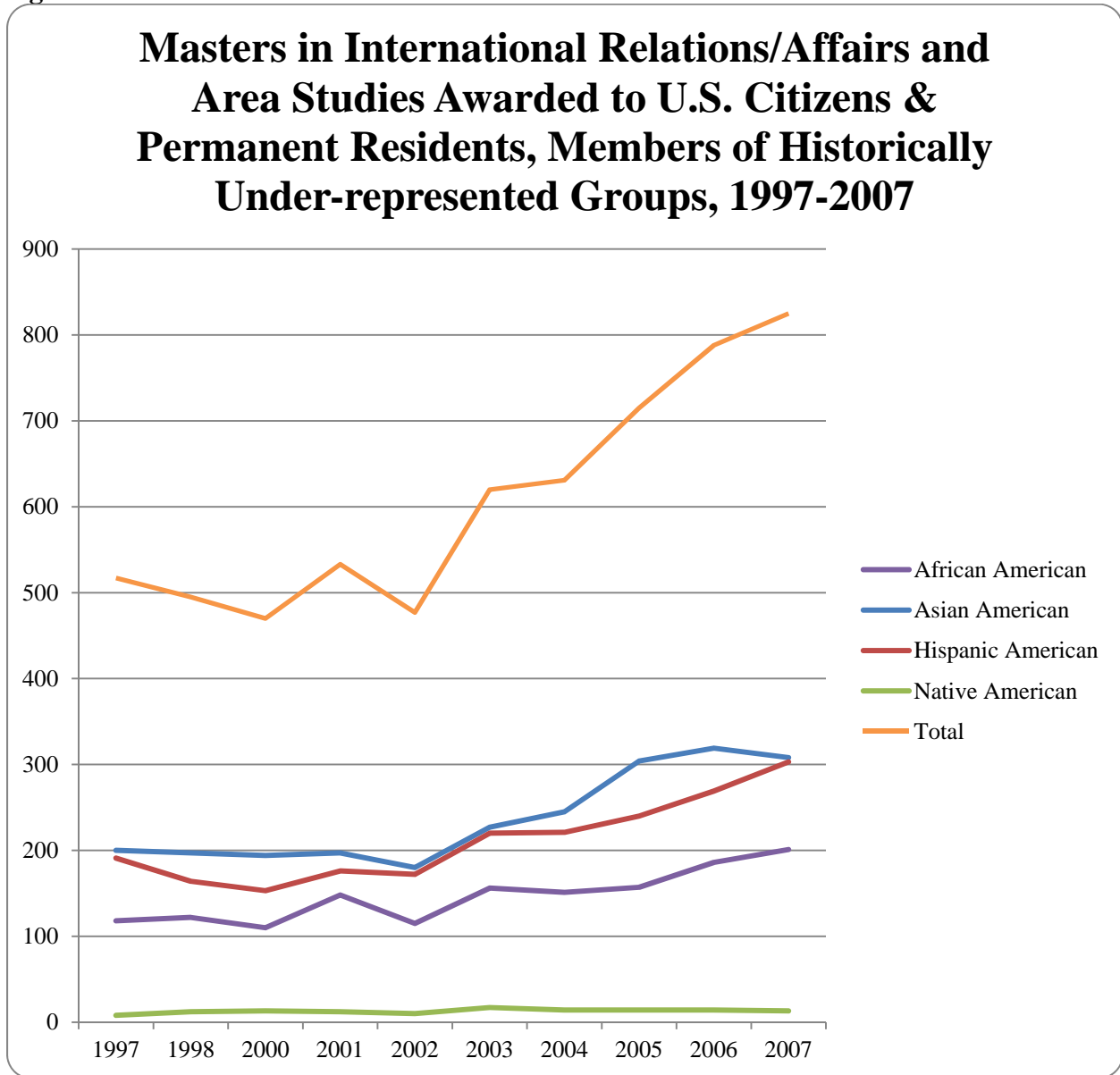
Figure 47

Ph.D.'s in International Relations/Affairs and Area Studies Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
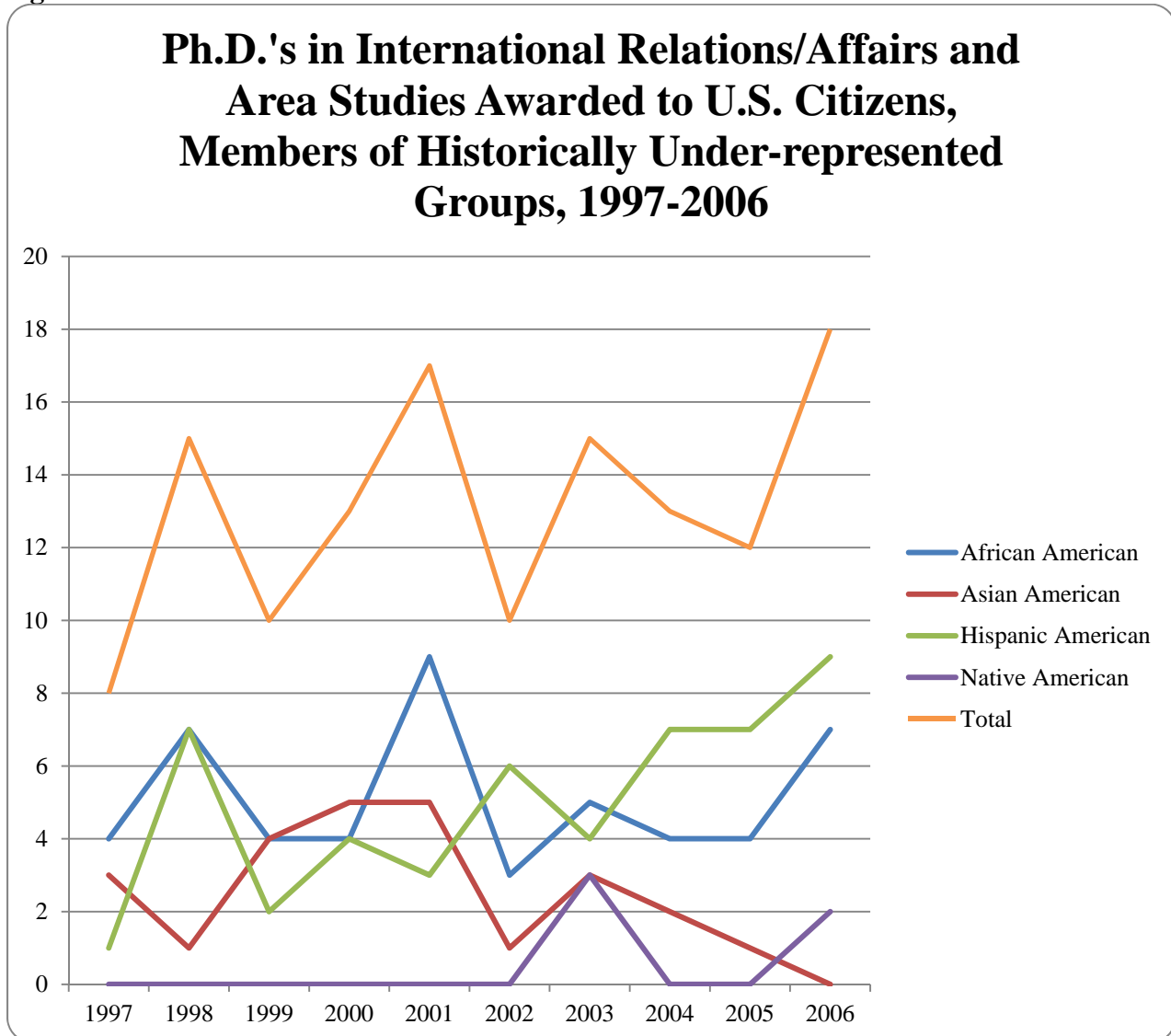
Figure 48 shows the percentage of Ph.D.'s in International Relations/Affairs and Area Studies for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 with 2006. The percentage has increased to 19.1% of the total in 2006 as compared to 11.3% of the total 10 years earlier. During these 10 years, African Americans increased from 5.6% of the total to 7.4%, Asian Americans decreased from 4.2% of the total to 0%, Hispanic Americans increased from 1.4% of the total to 9.6%, and Native Americans increased from 0% of the total to 2.1%.

Figure 48

Percentage of Ph.D.'s in International Relations/Affairs and Area Studies Awarded to U.S. Citizens, Members of Historically Under-represented Groups
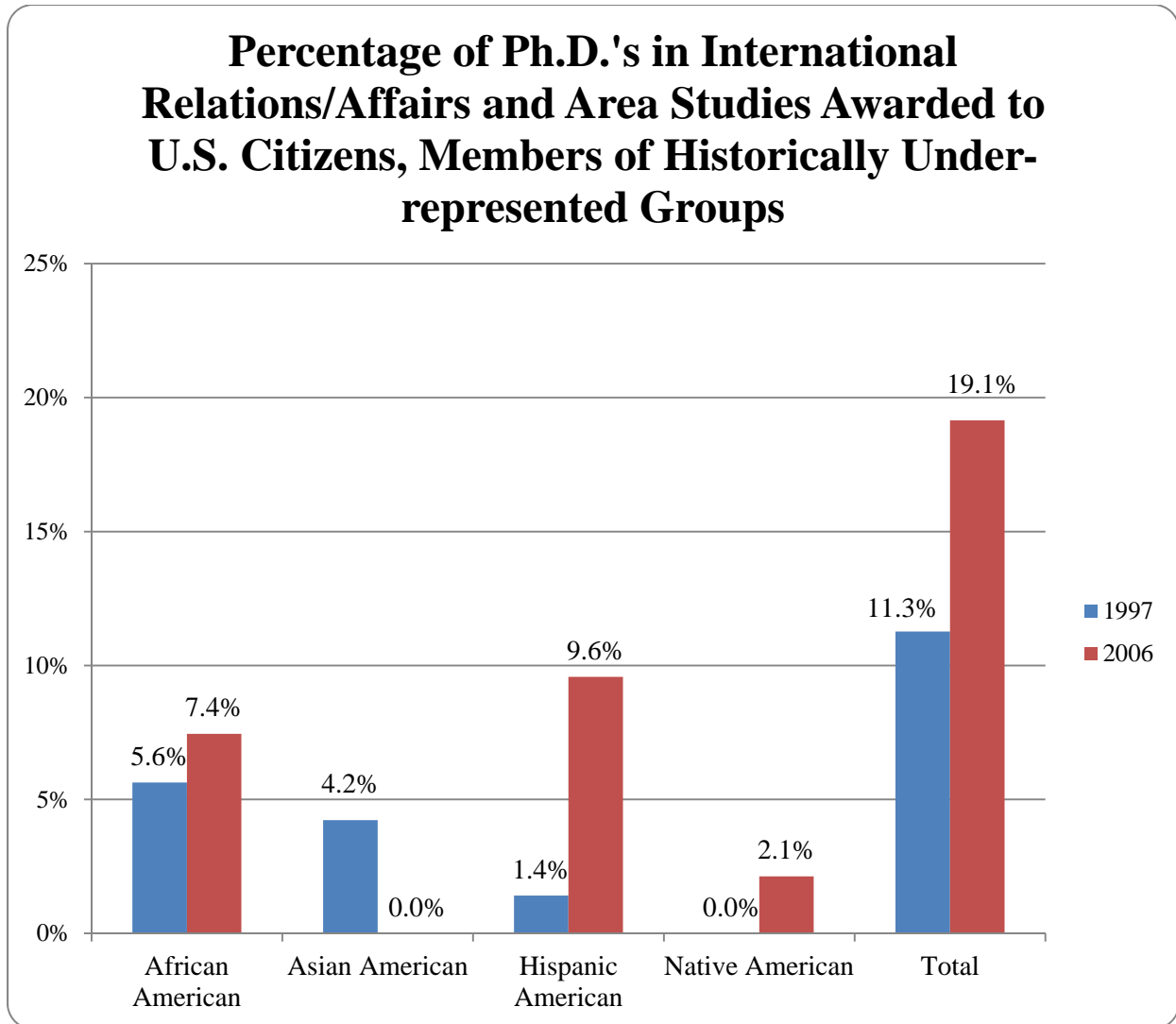
Table 107 Data from 1997 through 2006 from the Surveys of Earned Doctorates for International Relations/Affairs and Area Studies

											Total	Total all
Degree Received: International Relations/Affairs and Area Studies												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	7	7.4%	0	0.0%	76	80.9%	9	9.6%	2	2.1%	94	161
2005	4	5.3%	1	1.3%	63	84.0%	7	9.3%	0	0.0%	75	118
2004	4	5.3%	2	2.7%	62	82.7%	7	9.3%	0	0.0%	75	135
2003	5	6.8%	3	4.1%	59	80.8%	4	5.5%	3	4.1%	73	122
2002	3	4.3%	1	1.4%	59	85.5%	6	8.7%	0	0.0%	69	133
2001	9	9.9%	5	5.5%	74	81.3%	3	3.3%	0	0.0%	91	129
2000	4	6.3%	5	7.8%	51	79.7%	4	6.3%	0	0.0%	64	105
1999	4	4.4%	4	4.4%	81	89.0%	2	2.2%	0	0.0%	91	141
1998	7	10.3%	1	1.5%	59	86.8%	7	10.3%	0	0.0%	68	110
1997	4	5.6%	3	4.2%	66	93.0%	1	1.4%	0	0.0%	71	98
Source: "NSF Survey of Earned Doctorates/Doctorate Records File"												
Web Site: http://webcaspar.nsf.gov/TableBuilder#anchorAVAdd												
Date Table Created (month/ year): December 2009												

Table 108 Data from 2007 and 2008 from the Surveys of Earned Doctorates for International Relations/Affairs and Area Studies

This is the newest available data provided by the National Science Foundation; however, these data includes Permanent U.S. Residents as well as U.S. Citizens.

Degree Received: International Relations/Affairs and Area Studies											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2007	20	13.2%	12	7.9%	98	64.5%	19	12.5%	3	2.0%	152	224
2008	26	17.8%	15	10.3%	90	61.6%	12	8.2%	3	2.1%	146	195

Doctorate in Political Science and Public Administration

Earned Doctorate Degrees in Political Science and Public Administration[17]

During the 10 most recent years for which data are available (1997 through 2006) a total of 9,817 doctorates were awarded in Political Science and Public Administration. Of these, 7,211 or 73.5% were awarded to U.S. citizens and 2,606 or 26.5% were awarded to non-U.S. citizens.

Figure 49

Citizenship Status of Ph.D. Recipients in Political Science and Public Administration, 1997-2006

- US Citizens
- Non US Citizens

26.5%

73.5%

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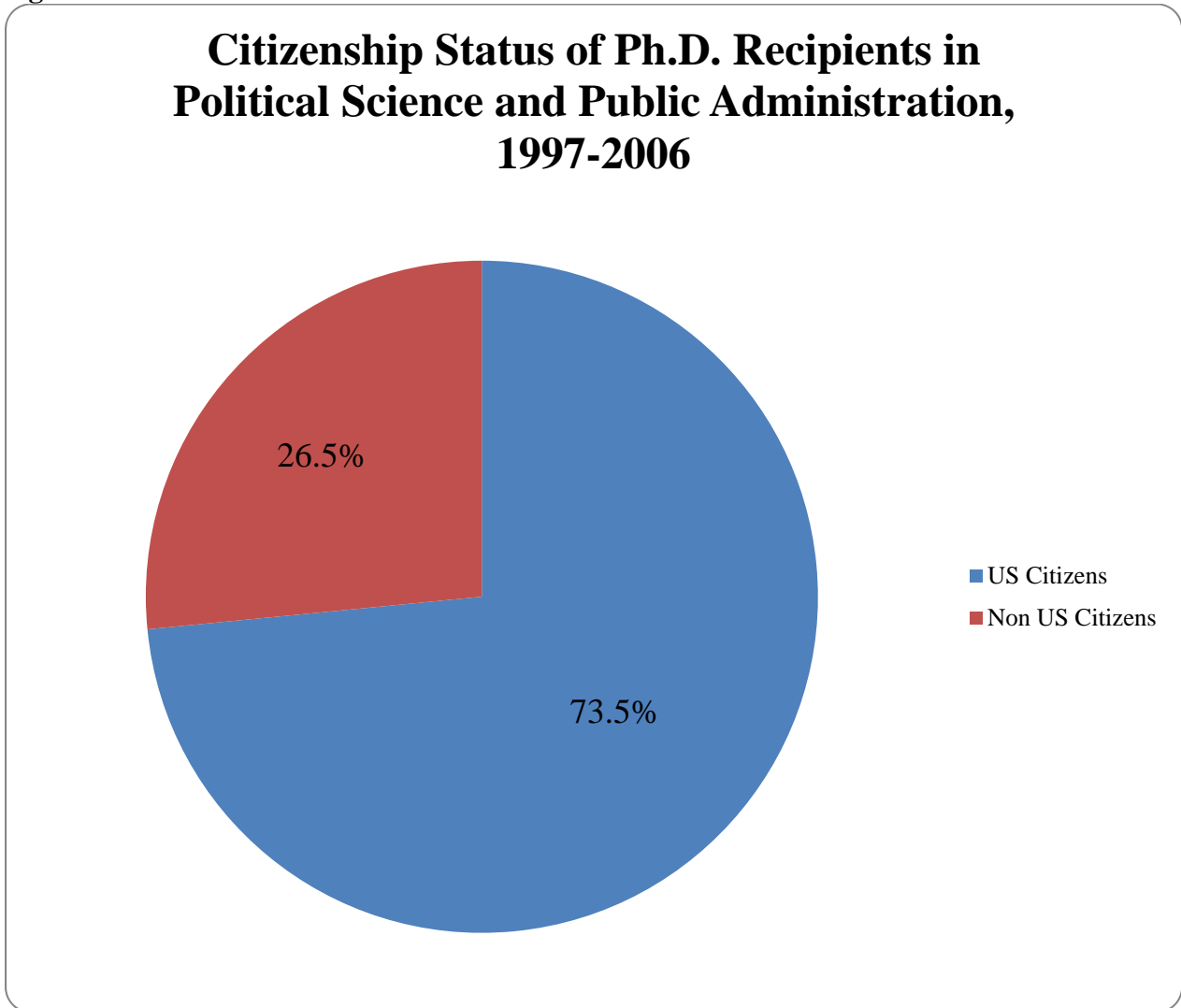
[17] For a complete listing of sub-fields included within Political Science and Public Administration please refer to the appendix 1 entitled "Fine Field of Study."

Out of the 7,211 doctorates awarded to U.S. citizens during the 1997-2006 period, 558 or 7.7% were earned by African Americans, 241 or 3.3% were earned by Asian Americans, 6,088 or 84.4% were earned by Caucasian or Other ethnicities, 283 or 3.9% were earned by Hispanic Americans, and 41 or 0.6% were earned by Native Americans.

Figure 50
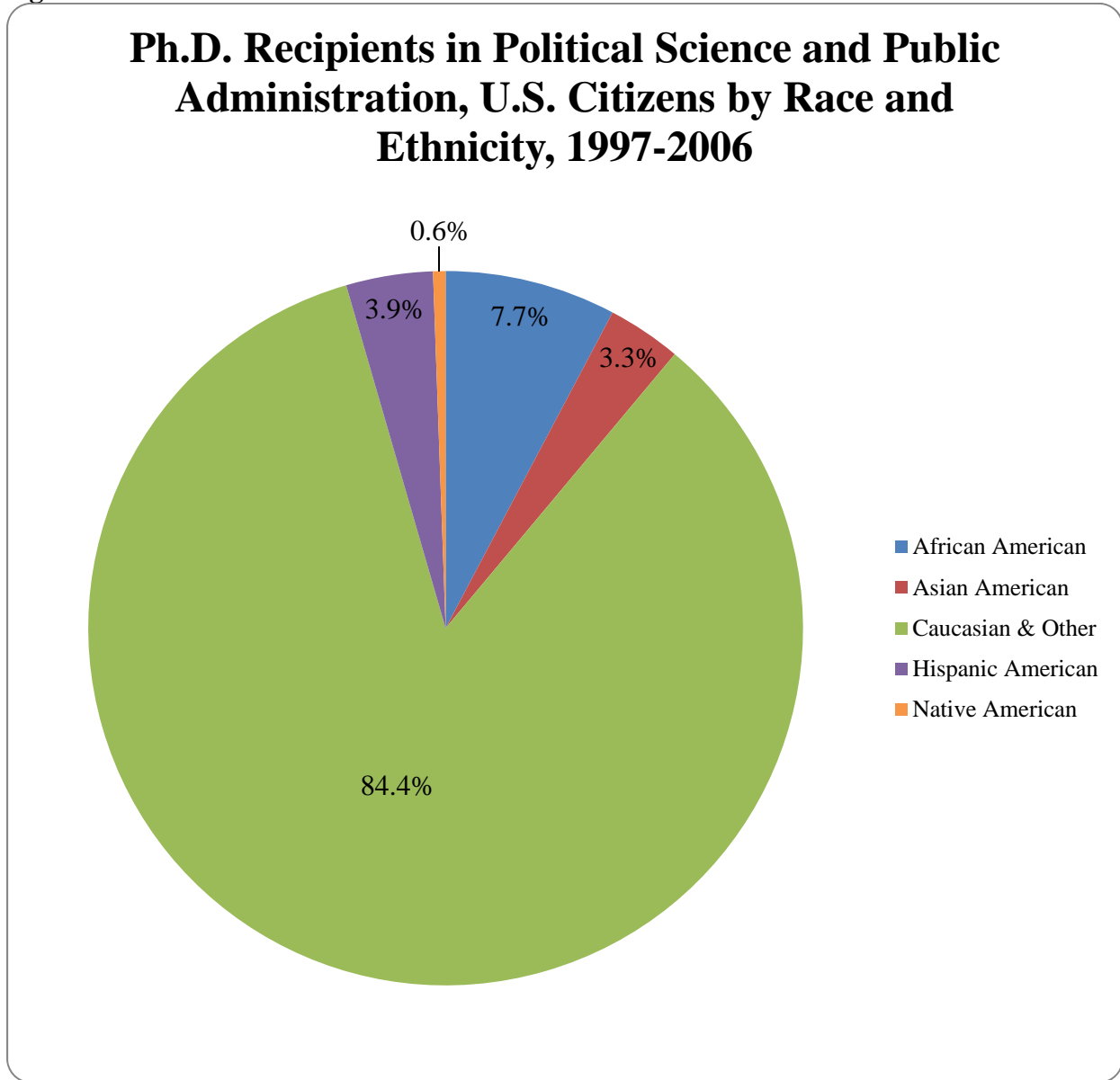
Ph.D. Recipients in Political Science and Public Administration, U.S. Citizens by Race and Ethnicity, 1997-2006

- African American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

The number of Doctorates in Political Science and Public Administration awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 51. The number of graduates of historically under-represented groups receiving a doctorate in the Political Science and Public Administration field has fluctuated over the past 10 years and has never exceeded 127.

Figure 51

Ph.D.'s in Political Science and Public Administration awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
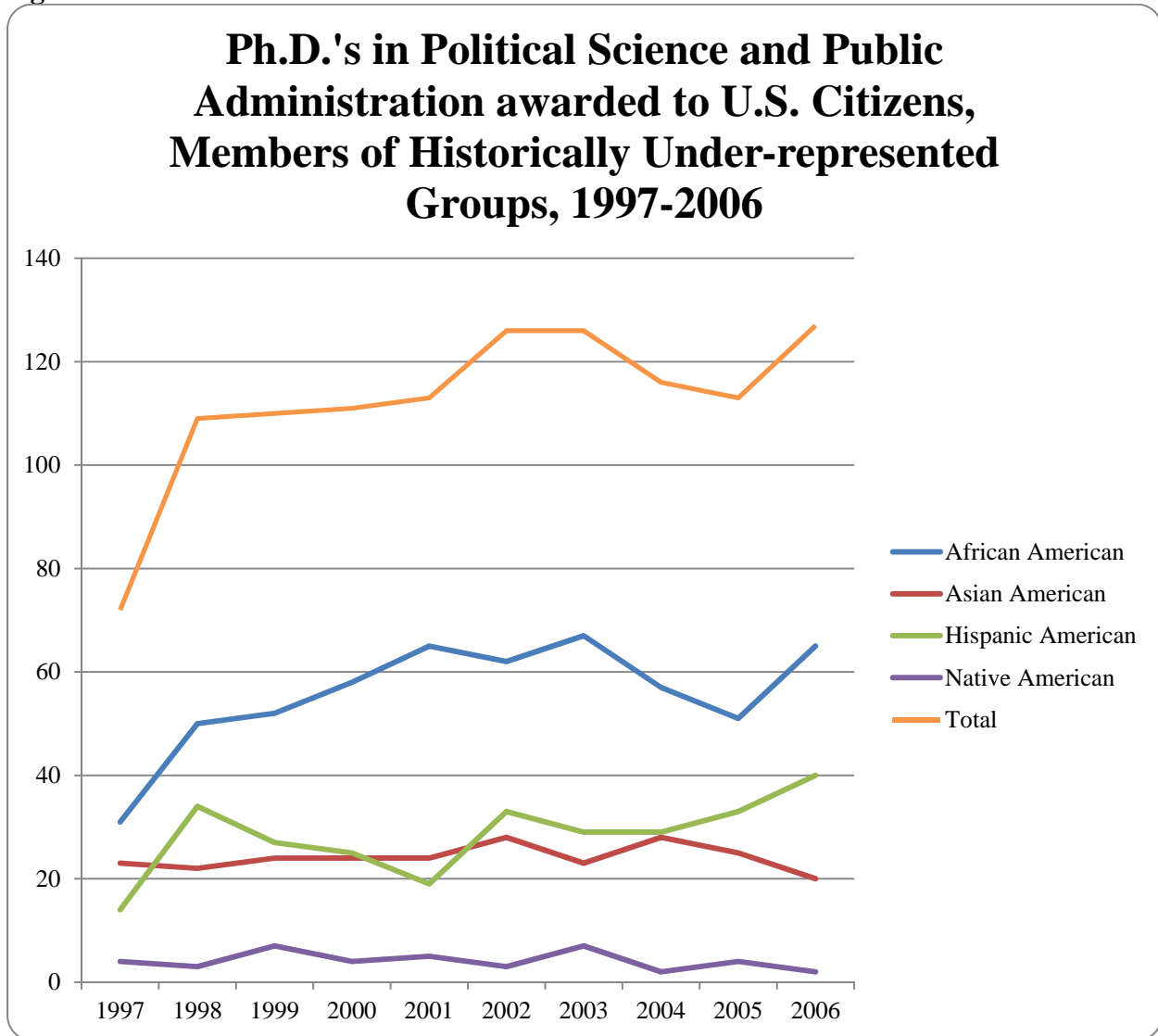
Figure 52 shows the percentage of Ph.D.'s in Political Science and Public Administration for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 with 2006. The percentage has increased to 18.5% of the total in 2006 as compared to 9.9% of the total 10 years earlier. During these 10 years, African Americans increased from 4.2% of the total to 9.4%, Asian Americans decreased from 3.2% of the total to 2.9%, Hispanic Americans increased from 1.9% of the total to 5.8%, and Native Americans decreased from 0.5% of the total to 0.3%.

Figure 52
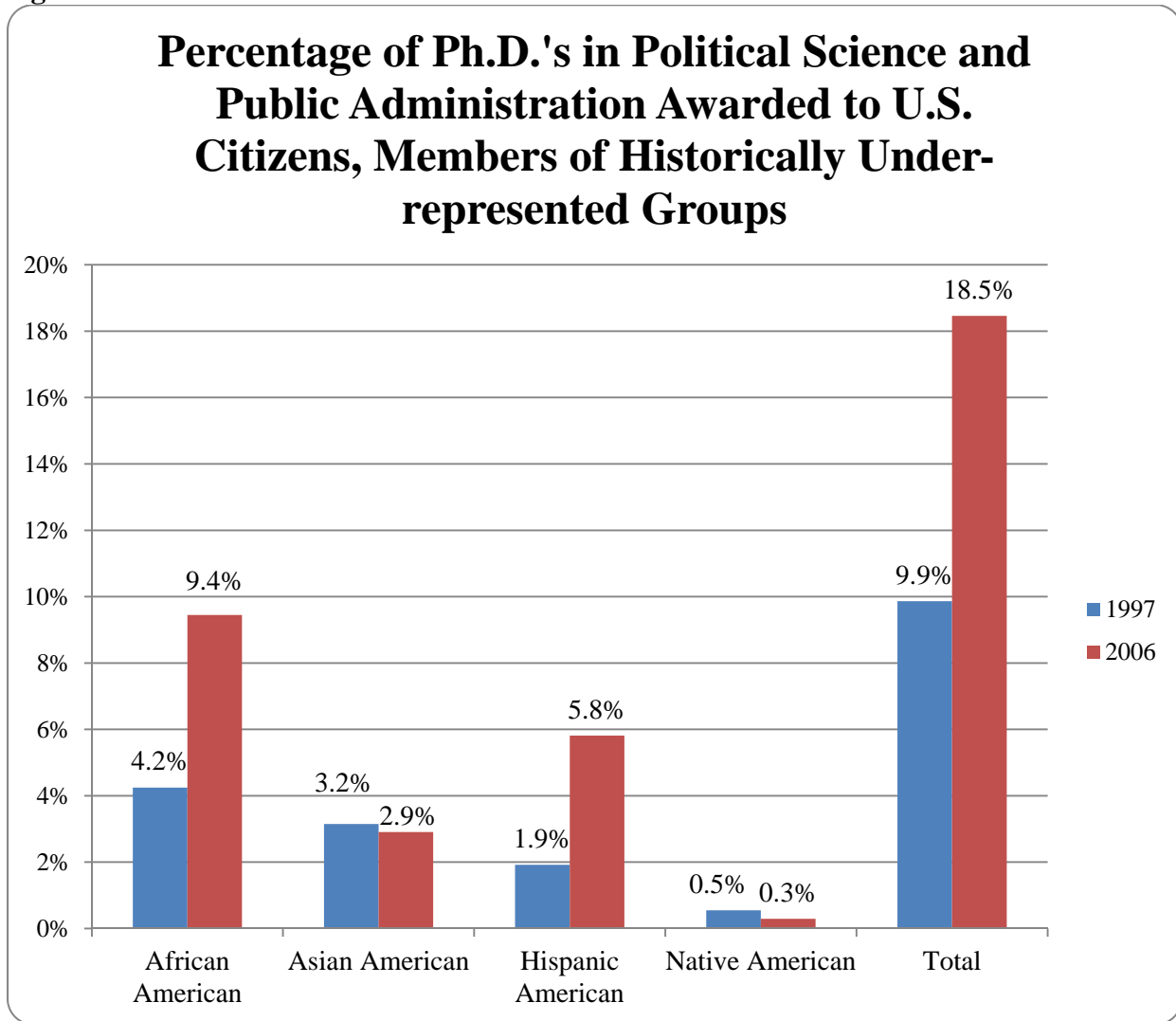
Percentage of Ph.D.'s in Political Science and Public Administration Awarded to U.S. Citizens, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each under-represented minority group in terms of the numbers of Ph.D.'s in Political Science and Public Administration awarded to U.S. citizens for the most recent 10 year period (1997-2006) for which data are available.

Table 109 Top 10 institutions for African American Ph.D's in Political Science and Public Administration

Institution	City, State	# of Graduates
Howard University	Washington, District of Columbia	41
Clark Atlanta University	Atlanta, Georgia	27
University of Michigan at Ann Arbor	Ann Arbor, Michigan	21
University of Southern California	Los Angeles, California	19
Harvard University	Cambridge, Massachusetts	14
Jackson State University	Jackson, Mississippi	14
Nova Southeastern University	Fort Lauderdale-Davie, Florida	13
University of Maryland at College Park	College Park, Maryland	12
Virginia Commonwealth University	Richmond, Virginia	12

Table 110 Top 10 institutions for Asian American Ph.D's in Political Science and Public Administration

Institution	City, State	# of Graduates
Harvard University	Cambridge, Massachusetts	18
University of Southern California	Los Angeles, California	16
University of California-Berkeley	Berkeley, California	11
Columbia University in New York	New York, New York	9
University of Hawaii at Manoa	Manoa, Hawaii	9
Stanford University	Palo Alto, California	7
University of California-Los Angeles	Los Angeles, California	7
Princeton University	Princeton, New Jersey	6
University of Chicago	Chicago, Illinois	6
University of Pennsylvania	Philadelphia, Pennsylvania	6

Table 111 Top 10 institutions for Hispanic American Ph.D's in Political Science and Public Administration

Institution	City, State	# of Graduates
Harvard University	Cambridge, Massachusetts	14
University of Southern California	Los Angeles, California	13
University of Michigan at Ann Arbor	Ann Arbor, Michigan	11
University of California-Los Angeles	Los Angeles, California	9
University of Chicago	Chicago, Illinois	9
University of California-Riverside	Riverside, California	8
Brandeis University	Waltham, Massachusetts	7
Princeton University	Princeton, New Jersey	7
Stanford University	Palo Alto, California	7

Table 112 Top 10 institutions for Native American Ph.D's in Political Science and Public Administration

Institution	City, State	# of Graduates
University of Southern California	Los Angeles, California	4
Northern Arizona University	Flagstaff, Arizona	3
University of Arizona	Tucson, Arizona	3
Indiana University at Bloomington	Bloomington, Indiana	2
University of Hawaii at Manoa	Manoa, Hawaii	2
University of Michigan at Ann Arbor	Ann Arbor, Michigan	2
Virginia Commonwealth University	Richmond, Virginia	2

The following table identifies the top 20 institutions in terms of the number of Political Science and Public Administration Ph.D.'s awarded to U.S. citizens, overall, for the most recent 10 year period for which data are available.

Table 113 Top 20 institutions in terms of number of Ph.D.'s in Political Science and Public Administration for all U.S. Citizens

Institution	City, State	All US Citizens
University of Southern California	Los Angeles, California	230
Harvard University	Cambridge, Massachusetts	210
University of California-Berkeley	Berkeley, California	204
Columbia University in the City of New York	New York, New York	161
University of Chicago	Chicago, Illinois	136
University of Maryland at College Park	College Park, Maryland	128
University of Michigan at Ann Arbor	Ann Arbor, Michigan	123
Brandeis University	Waltham, Massachusetts	122
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	120
Ohio State University, Main Campus	Columbus, Ohio	118
University of California-Los Angeles	Los Angeles, California	112
Princeton University	Princeton, New Jersey	107
University of Wisconsin-Madison	Madison, Wisconsin	106
Indiana University at Bloomington	Bloomington, Indiana	104
Claremont Graduate School	Claremont, California	99
George Washington University	Washington, District of Columbia	99
University of Virginia, Main Campus	Charlottesville, Virginia	95
Yale University	New Haven, Connecticut	92
Stanford University	Palo Alto, California	90
Johns Hopkins University	Baltimore, Maryland	89

The following table identifies the top 20 institutions in terms of the number of Political Science and Public Administration Ph.D.'s awarded to those citizens from all historically under-represented group for the most recent 10 year period for which data are available.

Table 114 Top 20 institutions in terms of number of Ph.D.'s in Political Science and Public Administration awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of Southern California	Los Angeles, California	52
Harvard University	Cambridge, Massachusetts	46
Howard University	Washington, District of Columbia	46
University of Michigan at Ann Arbor	Ann Arbor, Michigan	38
Clark Atlanta University	SW Atlanta, Georgia	27
University of Chicago	Chicago, Illinois	23
Columbia University in the City of New York	New York, New York	21
Stanford University	Palo Alto, California	21
University of California-Berkeley	Berkeley, California	20
Nova Southeastern University	Fort Lauderdale-Davie, Florida	19
Brandeis University	Waltham, Massachusetts	18
University of California-Los Angeles	Los Angeles, California	18
Claremont Graduate School	Claremont, California	17
Princeton University	Princeton, New Jersey	16
Jackson State University	Jackson, Mississippi	15
Ohio State University, Main Campus	Columbus, Ohio	15
Rutgers the State Univ. of NJ Newark Campus	Newark, New Jersey	15
University of California-Santa Barbara	Santa Barbara, California	15
University of Maryland at College Park	College Park, Maryland	15
Virginia Commonwealth University	Richmond, Virginia	15
Yale University	New Haven, Connecticut	15

Table 115 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Political Science and Public Administration

	Degree Received: Doctorates in Political Science and Public Administration										
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	65	9.4%	20	2.9%	561	81.5%	40	5.8%	2	0.3%	688	998
2005	51	7.5%	25	3.7%	569	83.4%	33	4.8%	4	0.6%	682	990
2004	57	8.2%	28	4.1%	575	83.2%	29	4.2%	2	0.3%	691	946
2003	67	9.1%	23	3.1%	610	82.9%	29	3.9%	7	1.0%	736	1025
2002	62	8.8%	28	4.0%	579	82.1%	33	4.7%	3	0.4%	705	939
2001	65	9.1%	24	3.4%	598	84.1%	19	2.7%	5	0.7%	711	984
2000	58	7.6%	24	3.1%	652	85.5%	25	3.3%	4	0.5%	763	986
1999	52	6.9%	24	3.2%	646	85.4%	27	3.6%	7	0.9%	756	1016
1998	50	6.7%	22	2.9%	640	85.4%	34	4.5%	3	0.4%	749	958
1997	31	4.2%	23	3.2%	658	90.1%	14	1.9%	4	0.5%	730	975

Source: "NSF Survey of Earned Doctorates/Doctorate Records File"

Web Site: http://webcaspar.nsf.gov/TableBuilder#anchorAVAdd

Date Table Created (month/ year): December 2009

Table 116 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Political Science and Public Administration

This is the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents with U.S. Citizens.

Degree Received: Doctorates in Political Science and Public Administration												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	69	8.6%	54	6.7%	628	78.3%	46	5.7%	5	0.6%	802	1131
2007	70	8.9%	36	4.6%	623	79.1%	54	6.9%	5	0.6%	788	1135

Doctorate in Psychology

Earned Doctorate Degrees in Psychology[18]

During the 10 most recent years for which data are available (1997 through 2006) a total of 34,309 doctorates were awarded in Psychology. Of these, 29,295 or 85.4% were awarded to U.S. citizens and 5,014 or 14.6% were awarded to non-U.S. citizens.

Figure 53

Citizenship Status of Ph.D. Recipients in Psychology, 1997-2006

- US Citizens
- Non-US Citizens

14.6%

85.4%

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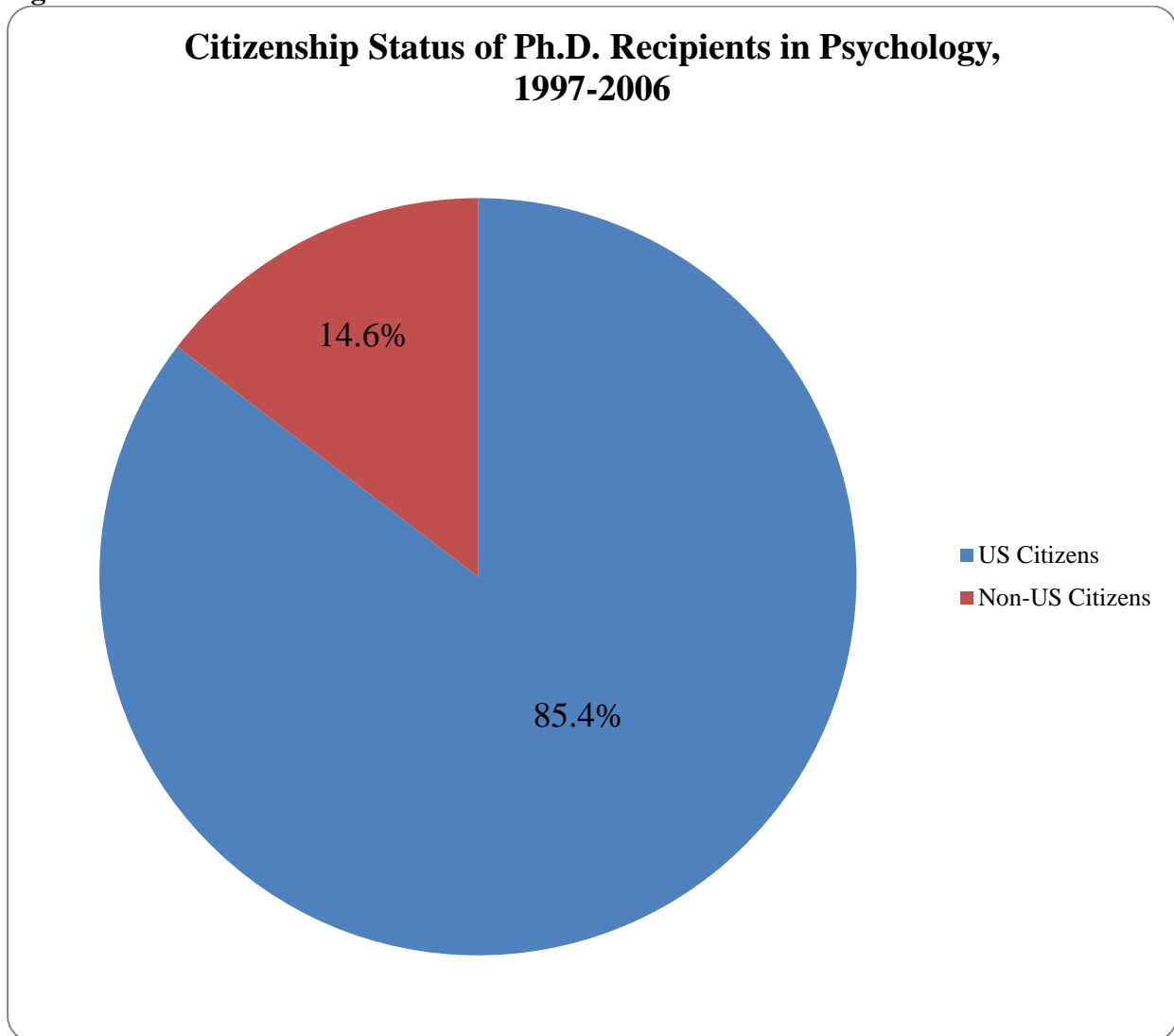
[18] For a complete listing of sub-fields included within Psychology please refer to the appendix 1 entitled "Fine Field of Study" under Psychology.

Out of the 29,295 doctorates awarded to U.S. citizens during the 1997-2006 period, 1,672 or 5.7% were earned by African Americans, 1,176 or 4.0% were earned by Asian Americans, 24,435 or 83.4% were earned by Caucasian or Other ethnicities, 1,810 or 6.2% were earned by Hispanic Americans, and 202 or 0.7% were earned by Native Americans.

Figure 54
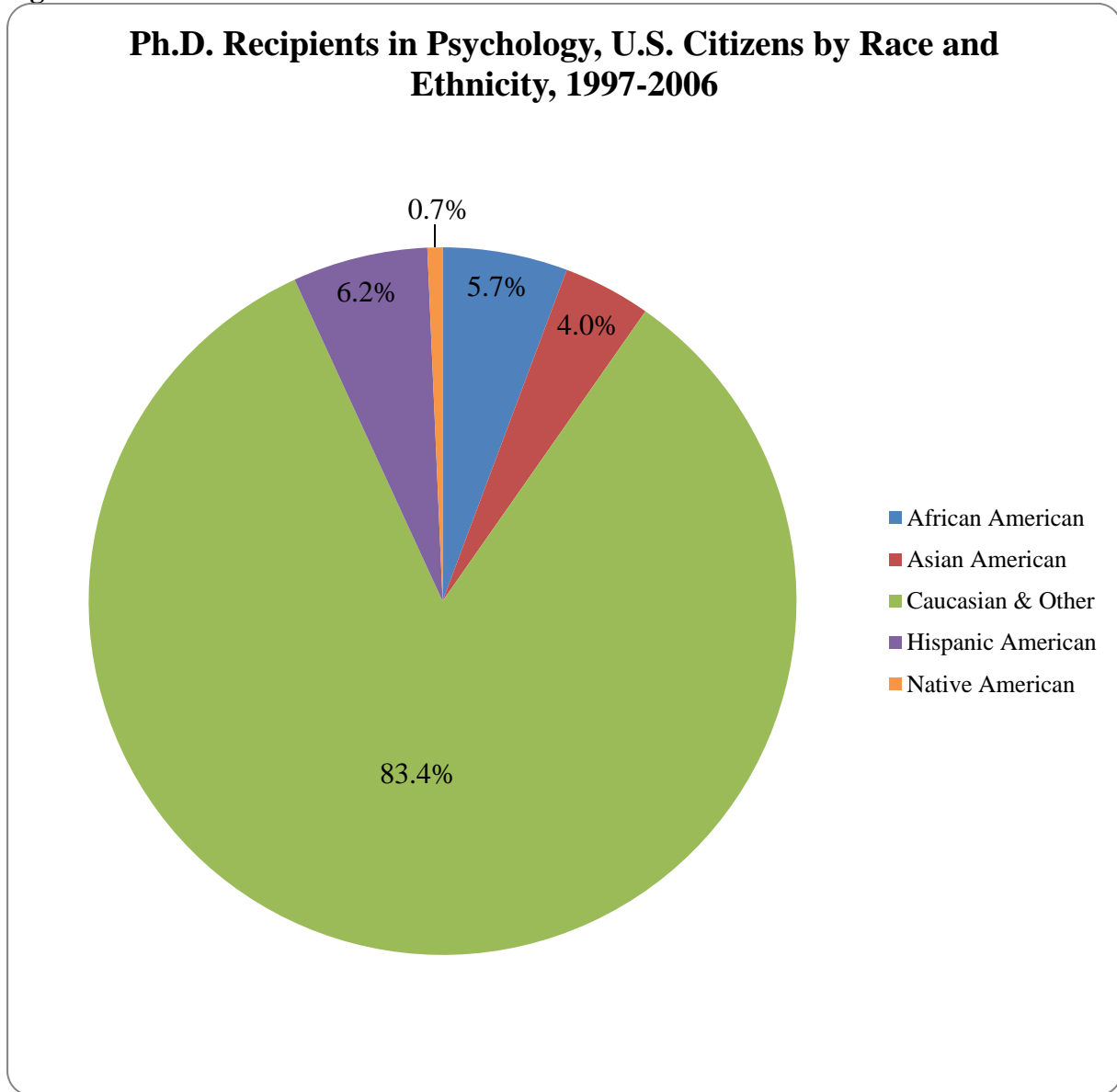
Ph.D. Recipients in Psychology, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of Doctorates in Psychology awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 55. The total number of students of historically under-represented groups receiving a doctorate in the field of Psychology has fluctuated over the past 10 years and has never exceeded 600.

Figure 55

Ph.D.'s in Psychology Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
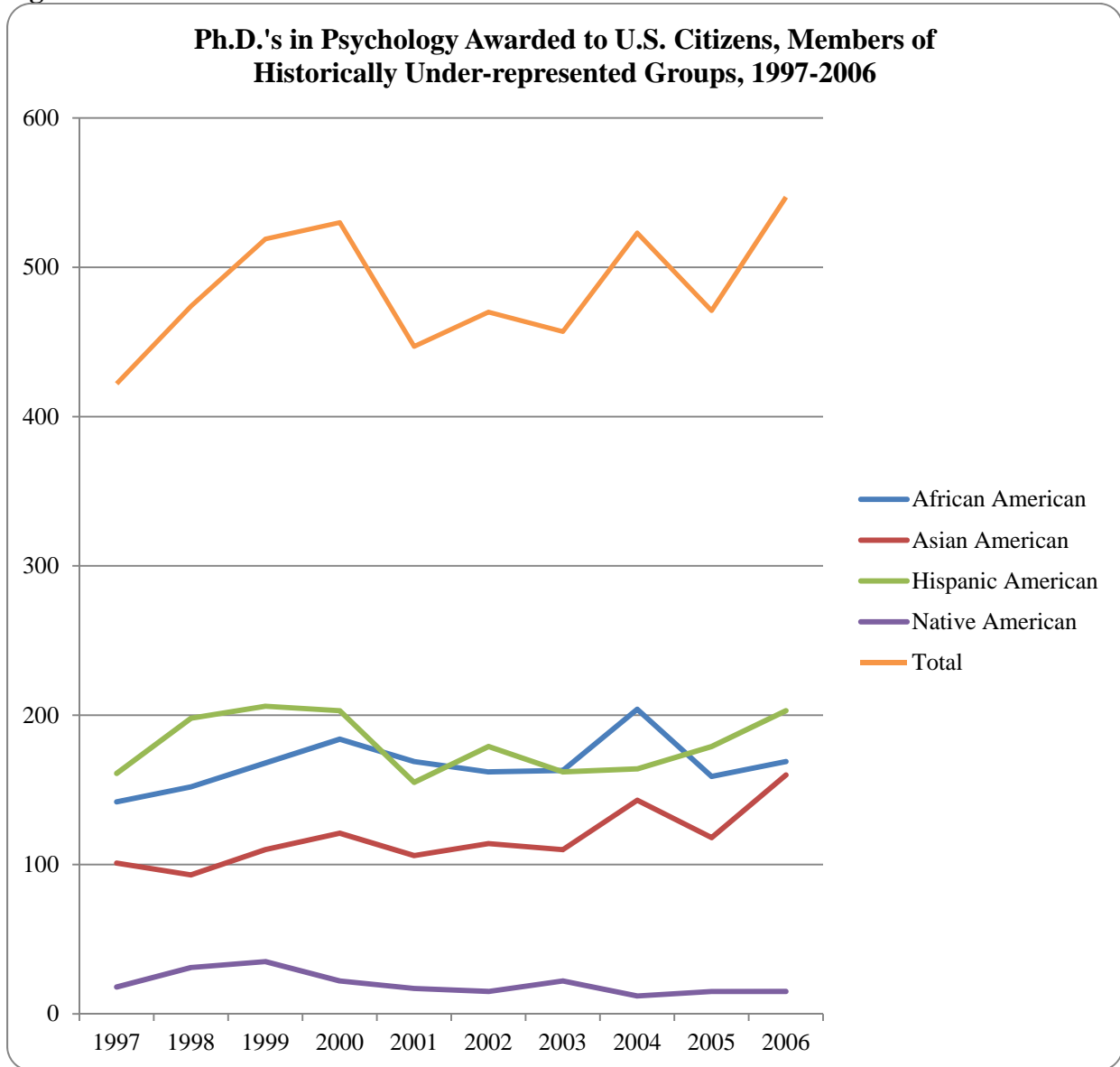
Figure 56 shows the percentage of Ph.D.'s in Psychology for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 with 2006. The percentage has increased to 20.2% of the total in 2006 as compared to 13.9% of the total 10 years earlier. During these 10 years, African Americans increased from 4.7% of the total to 6.2%, Asian Americans increased from 3.3% of the total to 5.9%, Hispanic Americans increased from 5.3% of the total to 7.5%, and Native Americans remained the same at 0.6%.

Figure 56
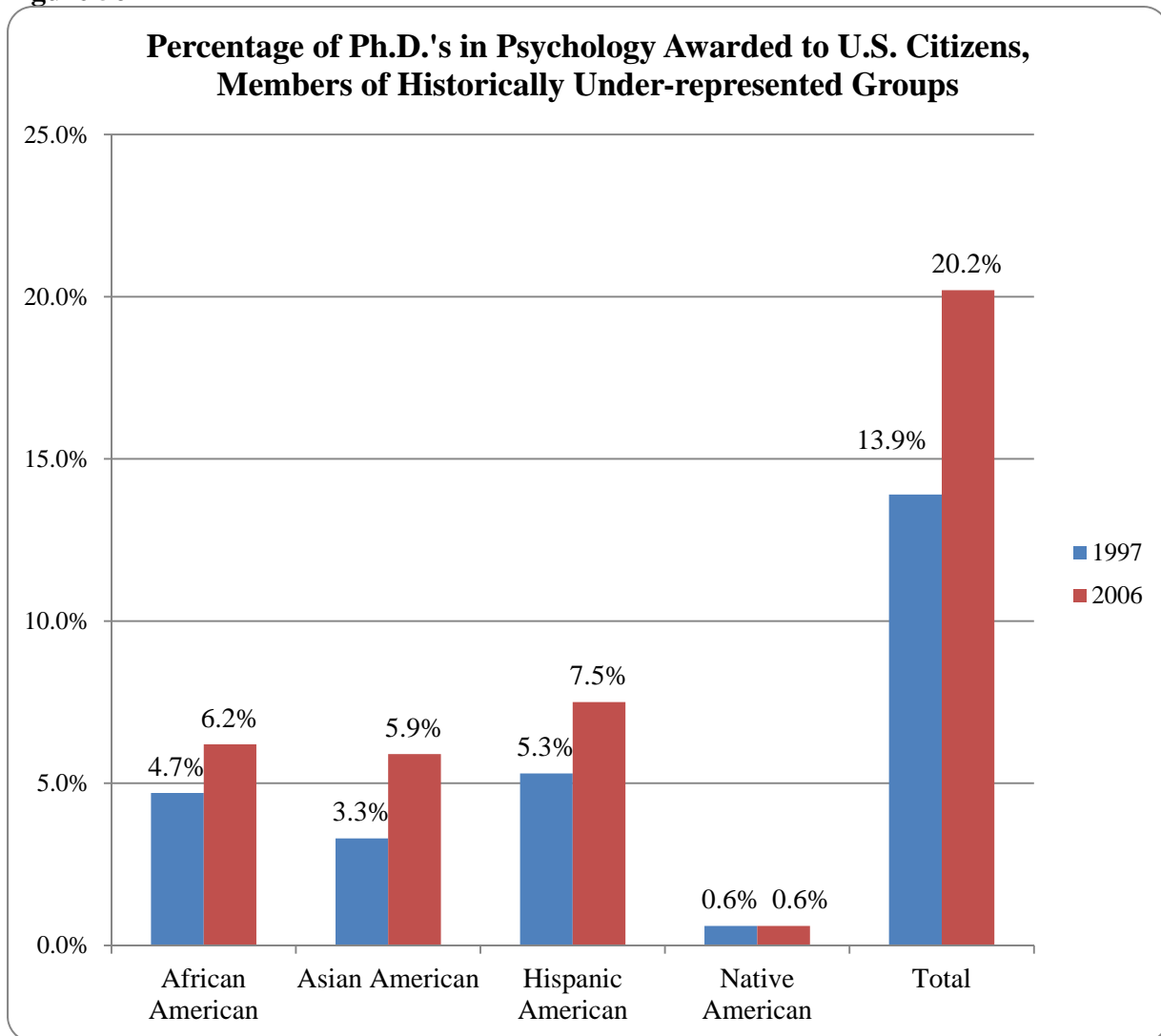
Percentage of Ph.D.'s in Psychology Awarded to U.S. Citizens, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each historically under-represented minority group in terms of the numbers of Ph.D.'s awarded to U.S. citizens for the most recent 10 year period (1997-2006) for which data are available.

Table 117 Top 10 institutions for African American Ph.D's in Psychology

Institution	City, State	# of Graduates
Howard University	Washington, D.C.	111
University of Michigan	Ann Arbor, Michigan	51
California School Prof Psych	Los Angeles, California	39
University of Maryland	College Park, Maryland	38
Pennsylvania State University	Philadelphia, Pennsylvania	33
Temple University	Philadelphia, Pennsylvania	30
University of Georgia	Athens, Georgia	27
Michigan State University	East Lansing, Michigan	25
Nova Southeastern University	Davie, Florida	25
City University of New York	New York City, New York	24

Table 118 Top 10 institutions for Asian American Ph.D's in Psychology

Institution	City, State	# of Graduates
California School Professional Psychology	Los Angeles, California	50
California School Professional Psychology	Berkeley, California	33
University of California- Santa Barbara	Santa Barbara, California	26
University of California- Los Angeles	Los Angeles, California	25
Fuller Theological Seminary	Pasadena, California	23
University of Hawaii	Manoa, Hawaii	22
Pacific Graduate School of Psychology	Palo Alto, California	21
University of Illinois	Urbana-Champaign, Illinois	21
California School Professional Psychology	San Diego, California	20
University of California- Berkeley	Berkeley, California	20
University of Maryland	College Park, Maryland	20

Table 119 Top 10 institutions for Hispanic American Ph.D's in Psychology

Institution	City, State	# of Graduates
Caribbean Center for Advanced Studies	Miami, Florida	214
University of Puerto Rico	San Juan, Puerto Rico	139
California School Professional Psychology	Los Angles, California	47
City University of New York	New York City, New York	34
University of Texas	Austin, Texas	32
Fordham University	New York City, New York	31
Texas A&M University	College Station, Texas	30
California School Prof Psych	San Diego, California	28
University of Michigan	Ann Arbor, Michigan	28
Arizona State University	Tempe, Arizona	23

Table 120 Top 10 institutions for Native American Ph.D's in Psychology

Institution	City, State	# of Graduates
University of North Dakota	Grand Forks, North Dakota	12
Oklahoma State University	Stillwater, Oklahoma	10
California School Prof Psych	San Diego, California	7
California School Prof Psych	Fresno, California	6
California School Prof Psych	Los Angeles, California	6
Fielding Institute	Santa Barbara, California	6
Utah State University	Logan, Utah	6
University of Oklahoma	Norman, Oklahoma	5
Arizona State University	Tempe, Arizona	4
California School Prof Psych-	Berkeley, California	4
University of Nebraska	Lincoln, Nebraska	4
University of South Dakota	Vermillion, South Dakota	4
University of Texas	Austin, Texas	4

The following table identifies the top 20 institutions in terms of the number of Psychology Ph.D.'s awarded to U.S. citizens, overall, for the most recent 10 year period for which data are available.

Table 121 Top 20 institutions in terms of number of Ph.D.'s in Psychology for all U.S. citizens

Institution	City, State	All US Citizens
Nova Southeastern University	Davie, Florida	491
California School Prof Psych	San Diego, California	419
California School Prof Psych	Los Angeles, California	393
City University of New York	New York City, New York	379
University of Texas	Austin, Texas	345
University of Minnesota	St .Paul/ Minneapolis, Minnesota	338
California School Prof Psych	Berkeley, California	331
Temple University	Philadelphia, Pennsylvania	327
Pennsylvania State University	Philadelphia, Pennsylvania	317
University of Georgia	Athens, Georgia	311
University of Maryland	College Park, Maryland	307
Ohio State University	Columbus, Ohio	306
Fordham University	New York City, New York	305
University of Kansas	Kansas City, Kansas	299
California School Prof Psych	Fresno, California	296
Pacific Graduate School of Psychology	Palo Alto, California	279
Michigan State University	East Lansing, Michigan	276
University of Florida	Gainesville, Florida	274
Fielding Institute	Santa Barbara, California	273
University of Michigan	Ann Arbor, Michigan	265
New York University	New York City, New York	264

The following table identifies the top 20 institutions in terms of the number of Psychology Ph.D.'s awarded to those citizens from any historically under-represented group for the most recent 10 year period for which data are available.

Table 122 Top 20 institutions in terms of number of Ph.D.'s in Psychology awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
Caribbean Center for Advanced Studies	Miami, Florida	217
California School Prof Psych	Los Angeles, California	142
University of Puerto Rico	San Juan, Puerto Rico	139
Howard University	Washington, D.C.	117
University of Michigan	Ann Arbor, Michigan	94
City University of New York	New York City, New York	69
Pennsylvania State University	Philadelphia, Pennsylvania	68
California School Prof Psych	Berkeley, California	67
University of Maryland	College Park, Maryland	66
California School Prof Psych	San Diego, California	62
Fordham University	New York City, New York	60
University of California	Santa Barbara, California	58
Michigan State University	East Lansing, Michigan	56
Nova Southeastern University	Davie, Florida	56
Ohio State University	Columbus, Ohio	55
California School Prof Psych	Fresno, California	53
University of California	Los Angeles, California	53
University of Illinois	Urbana-Champaign, Illinois	52
University of Texas	Austin, Texas	51

Table 123 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Psychology

	*Degree Received: Doctorates in Psychology*										
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total	Total all
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	(US citizen)	Doctorates Granted
2006	169	6.2%	160	5.9%	2,175	79.9%	203	7.5%	15	0.6%	2,722	3,263
2005	159	5.7%	118	4.2%	2,342	83.3%	179	6.4%	15	0.5%	2,813	3,323
2004	204	7.5%	143	5.3%	2,200	80.8%	164	6.0%	12	0.4%	2,723	3,327
2003	163	5.8%	110	3.9%	2,332	83.6%	162	5.8%	22	0.8%	2,789	3,276
2002	162	5.9%	114	4.2%	2,259	82.8%	179	6.6%	15	0.6%	2,729	3,207
2001	169	5.8%	106	3.6%	2,470	84.7%	155	5.3%	17	0.6%	2,917	3,399
2000	184	5.8%	121	3.8%	2,626	83.2%	203	6.4%	22	0.7%	3,156	3,616
1999	168	5.2%	110	3.4%	2,704	83.9%	206	6.4%	35	1.1%	3,223	3,668
1998	152	4.8%	93	2.9%	2,713	85.1%	198	6.2%	31	1.0%	3,187	3,673
1997	142	4.7%	101	3.3%	2,614	86.1%	161	5.3%	18	0.6%	3,036	3,557
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created (month/ year): November 2009												

Table 124 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Psychology

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents and U.S. Citizens.

Degree Received: Doctorates in Psychology												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	165	5.7%	147	5.1%	2284	79.1%	276	9.6%	14	0.5%	2,886	3,361
2007	163	5.8%	154	5.5%	2246	80.5%	205	7.4%	23	0.8%	2,791	3,292

Master of Public Administration

Earned Master Degrees in Public Administration[19]

During the 10 most recent years for which data are available (1997 through 2007, with data missing for 1999) a total of 80,357 masters were awarded in Public Administration. Of these, 72,466 or 90.2% were awarded to U.S. citizens and permanent residents and 7,891 or 9.8% were awarded to temporary residents.

Figure 57

Citizenship Status of Master Recipients in Public Administration, 1997-2007

9.8%

90.2%

- US Citizens & Permanent Residents
- Temporary Residents

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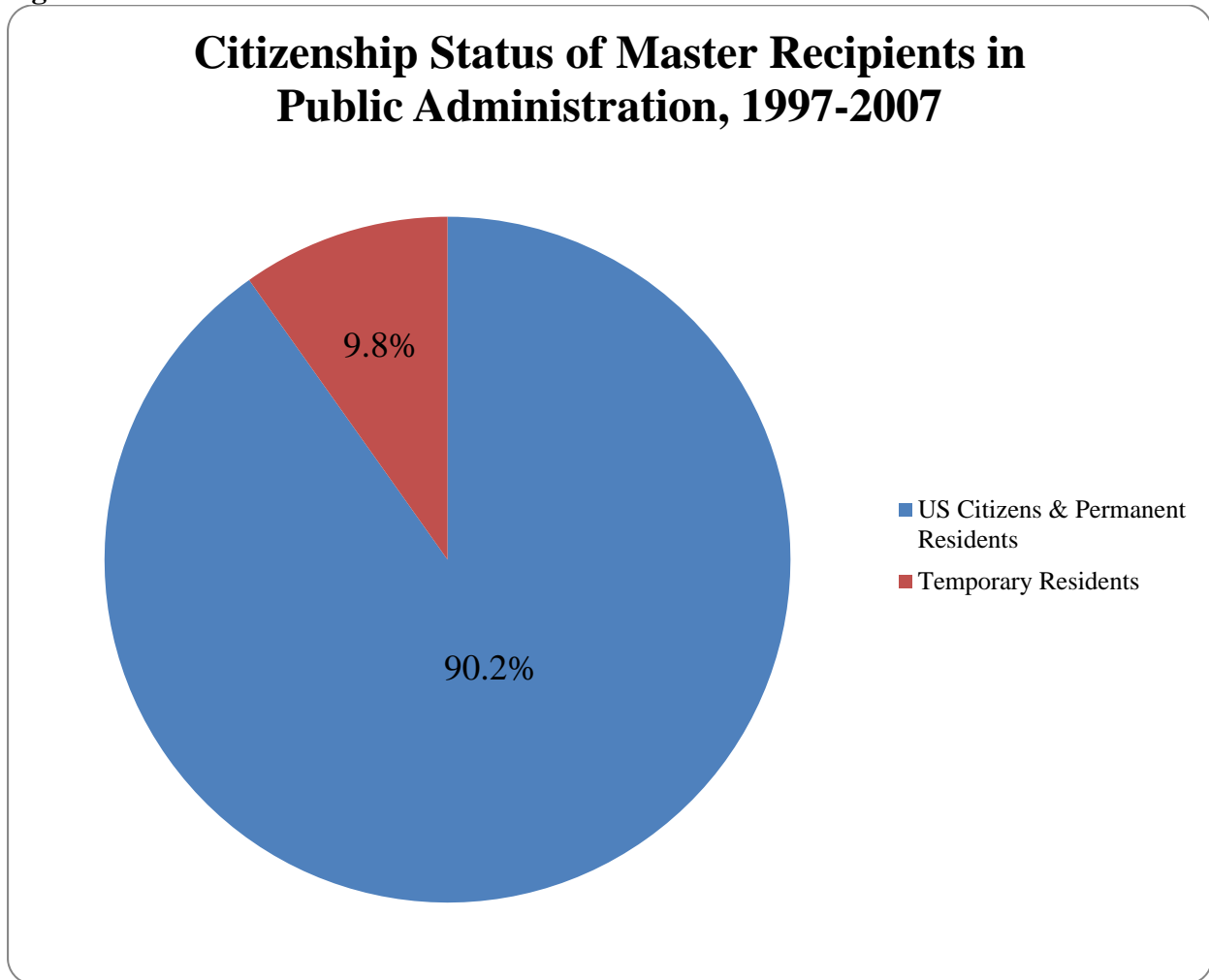
[19] Public Administration is defined in the IPEDS Survey of Earned Masters to include the following subfields:
44.04. Public Administration

Out of the 72,466 masters awarded to U.S. citizens/permanent residents during the 1997-2007 period, 13,644 or 18.8% were earned by African Americans, 2,968 or 4.1% were earned by Asian Americans, 50,276 or 69.4% were earned by Caucasian or Other ethnicities, 5,025 or 6.9% were earned by Hispanic Americans, and 553 or 0.8% were earned by Native Americans.

Figure 58
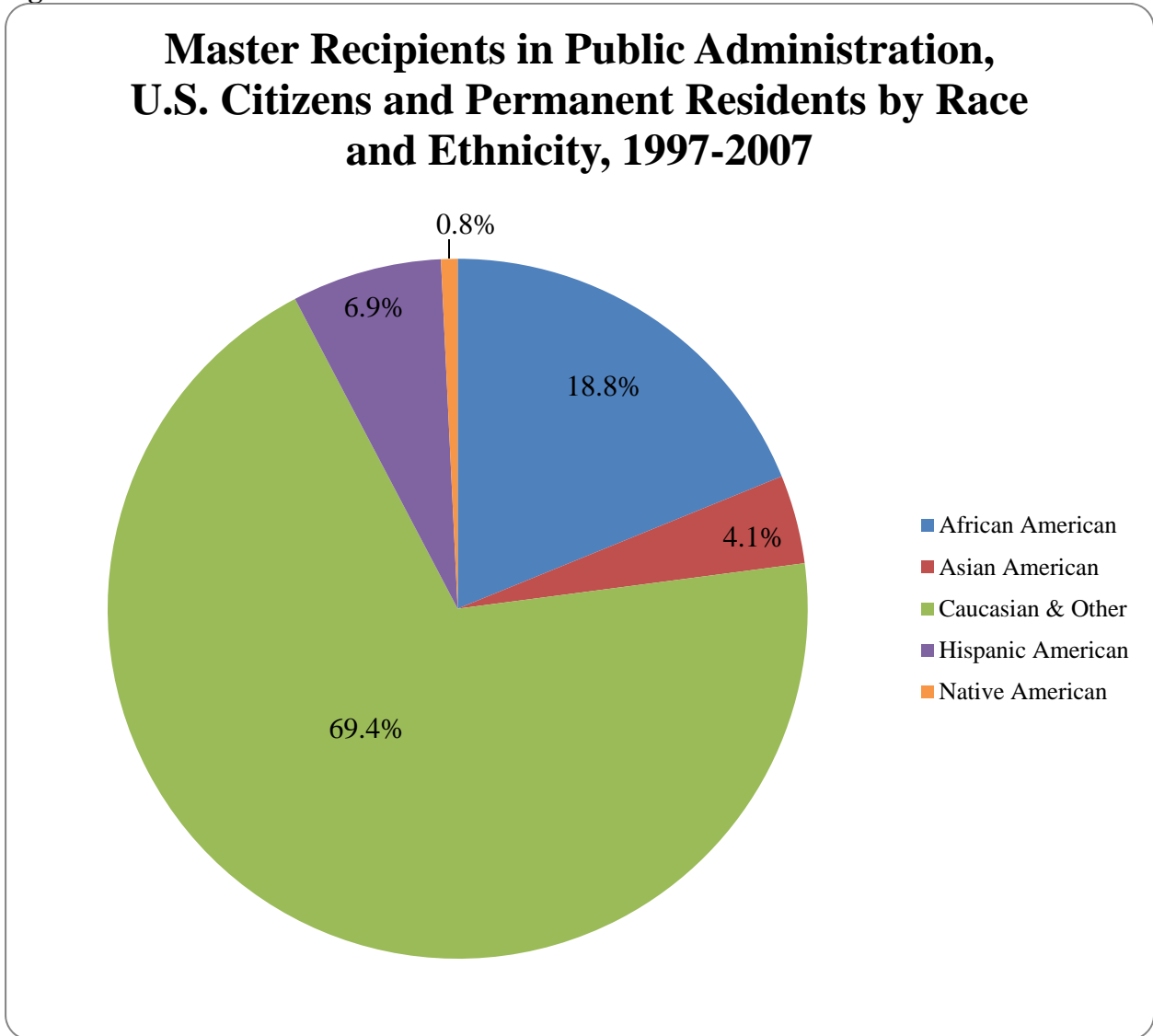
Master Recipients in Public Administration, U.S. Citizens and Permanent Residents by Race and Ethnicity, 1997-2007

The number of Masters in Public Administration awarded to U.S. citizens and permanent residents who are graduates of historically under-represented groups is shown in Figure 59. The number of graduates of historically under-represented groups receiving a Masters in the Public Administration field has fluctuated over the past 10 years and has never exceeded 2,865.

Figure 59

Masters in Public Administration awarded to U.S. Citizens and Permanent Residents, Members of Historically Under-represented Groups, 1997-2007
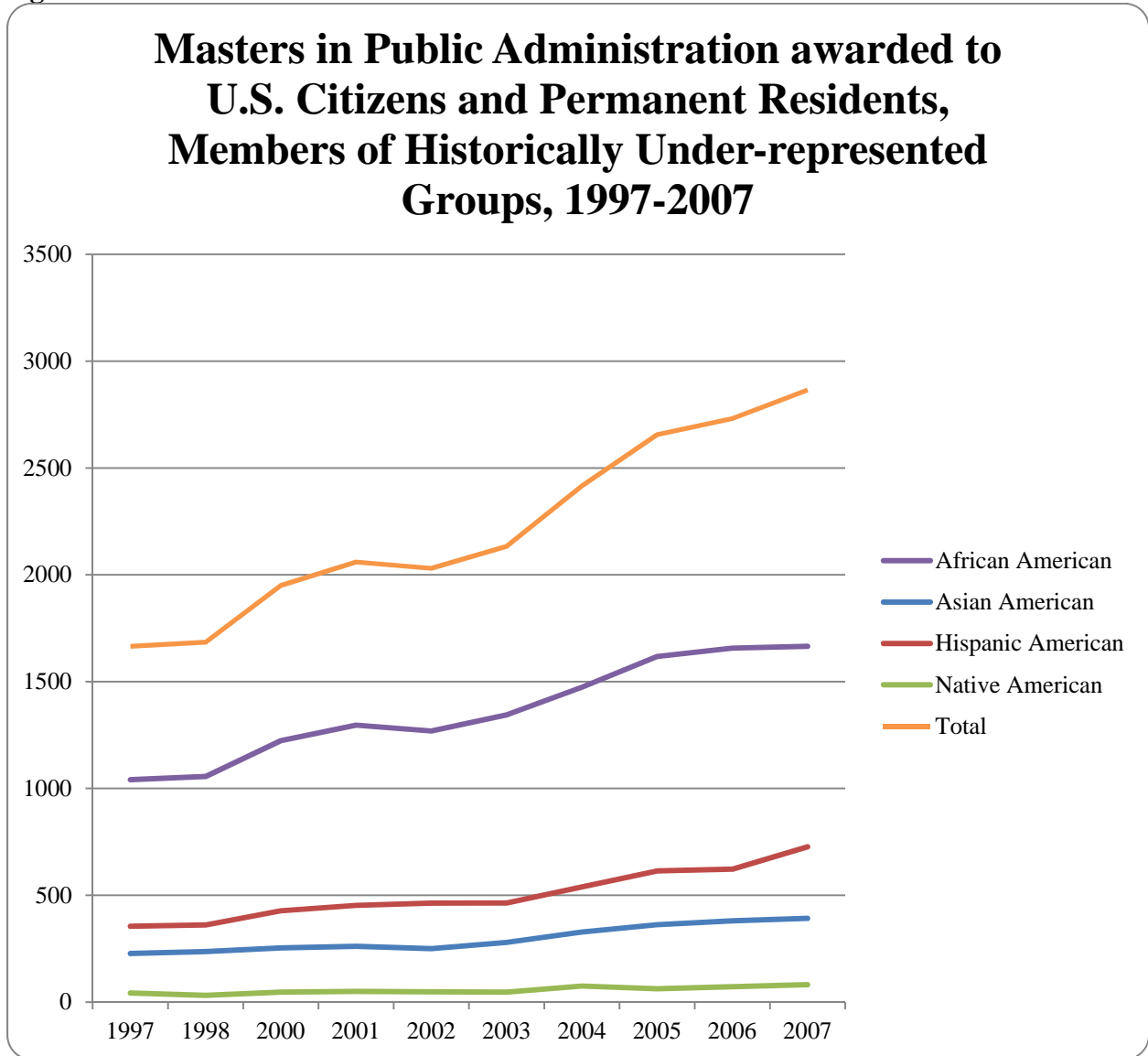
Figure 60 shows the percentage of Masters in Public Administration for U.S. citizens and permanent residents awarded to graduates of historically under-represented groups, comparing 1997 with 2007. The percentage has increased to 34.3% of the total in 2007 as compared to 24.4% of the total in 1997. During these 10 years, African Americans increased from 15.3% of the total to 20.0%, Asian Americans increased from 3.3% of the total to 4.7%, Hispanic Americans increased from 5.2% of the total to 8.7%, and Native Americans increased from 0.6% of the total 1.0%.
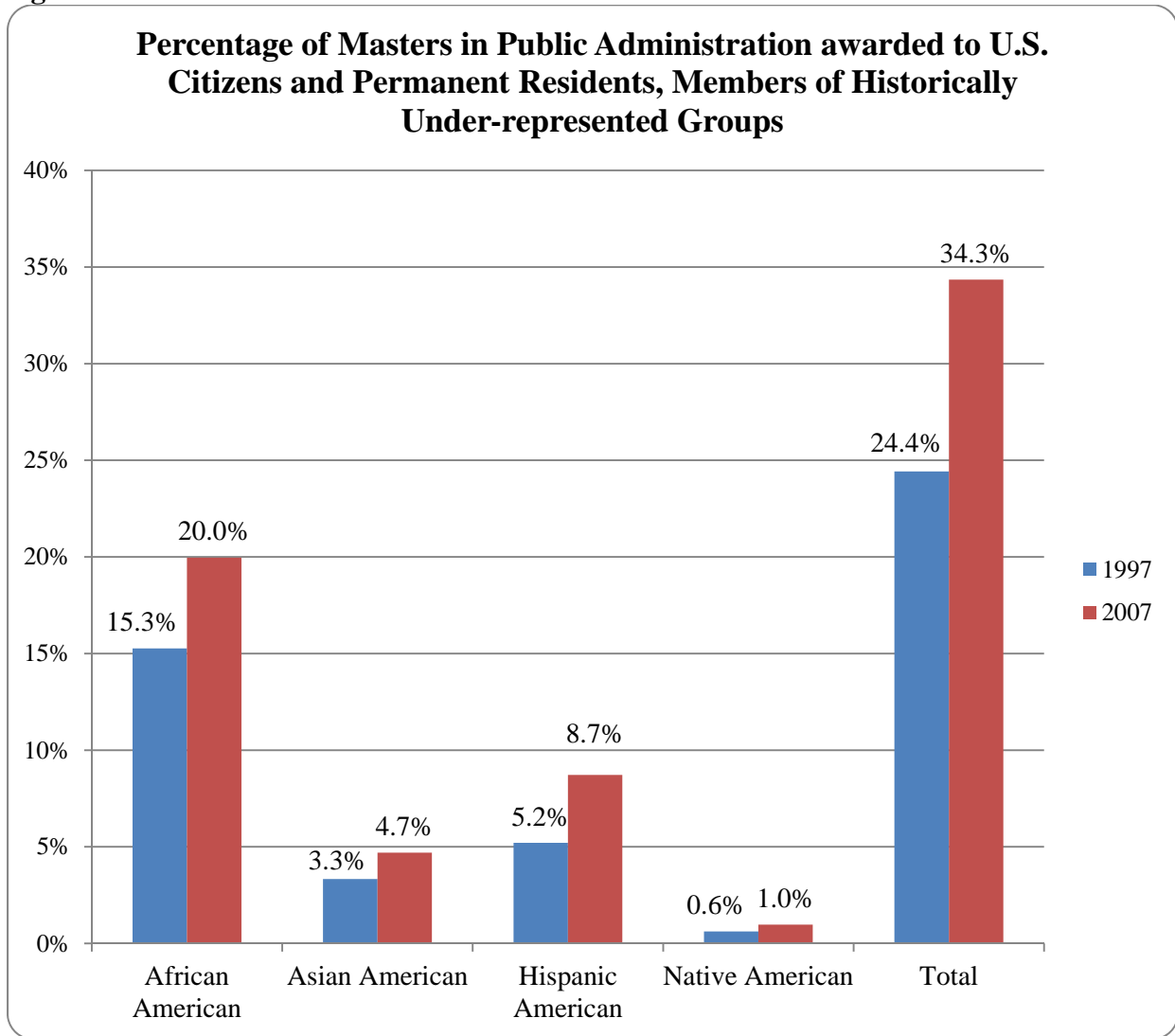
Figure 60

Percentage of Masters in Public Administration awarded to U.S. Citizens and Permanent Residents, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each under-represented minority group in terms of the numbers of Masters in Public Administration awarded to U.S. citizens and permanent residents for the most recent 10 year period (1997-2007) for which data are available.

Table 125 Top 10 institutions for African American Master of Public Administration

Institution	City, State	# of Graduates
Troy State University, Main Campus	Troy, Alabama	1217
Southern University A&M Col at Baton Rouge	Baton Rouge, Louisiana	373
Central Michigan University	Mount Pleasant, Michigan	364
CUNY John Jay College Criminal Justice	New York, New York	332
CUNY Bernard M Baruch College	New York, New York	327
Grambling State University	Grambling, Louisiana	288
Webster University	St. Louis, Missouri	237
California State University-Hayward	Hayward, California	236
Long Island University Brooklyn Campus	Brooklyn, New York	231

Table 126 Top 10 institutions for Asian American Master of Public Administration

Institution	City, State	# of Graduates
New York University	New York, New York	166
University of Guam	Mangilao, Guam	146
University of Hawaii at Manoa	Manoa, Hawaii	133
Columbia University in the City of New York	New York, New York	131
University of Southern California	Los Angeles, California	123
Harvard University	Cambridge, Massachusetts	118
University of Washington - Seattle	Seattle, Washington	91
California State University-Long Beach	Long Beach, California	83
California State University-Hayward	Hayward, California	81
CUNY Bernard M Baruch College	New York, New York	77

Table 127 Top 10 institutions for HispanicAmerican Master of Public Administration

Institution	City, State	# of Graduates
University of PR Rio Piedras Campus	San Juan, Puerto Rico	392
Florida International University	Miami, Florida	185
California State University-Long Beach	Long Beach, California	175
CUNY Bernard M Baruch College	New York, New York	151
National University	La Jolla, California	129
University of Southern California	Los Angeles, California	116
University of Texas at San Antonio	San Antonio, Texas	109
CUNY John Jay College Criminal Justice	New York, New York	98
California State University-Northridge	Northridge, California	97

Table 128 Top 10 institutions for Native American Master of Public Administration

Institution	City, State	# of Graduates
Evergreen State College	Olympia, Washington	33
University of North Carolina at Pembroke	Pembroke, North Carolina	26
University of Oklahoma, Norman Campus	Norman, Oklahoma	21
Harvard University	Cambridge, Massachusetts	16
Portland State University	Portland, Oregon	16
Arizona State University Main	Phoenix, Arizona	15
University of Washington - Seattle	Seattle, Washington	13
Webster University	St. Louis, Missouri	13
Central Michigan University	Mount Pleasant, Michigan	12
Troy State University, Main Campus	Troy, Alabama	12

The following table identifies the top 20 institutions in terms of the number of Public Administration Masters awarded to U.S. citizens and permanent residents, overall, for the most recent 10 year period for which data are available.

Table 129 Top 20 institutions in terms of number of Masters in Public Administration for all U.S. citizens and permanent residents

Institution	City, State	All US Citizens/Permanent Residents
Troy University, Main Campus	Troy, Alabama	2819[20]
Harvard University	Cambridge, Massachusetts	1600
New York University	New York, New York	1418
Columbia University in the City of New York	New York, New York	1158
Syracuse University, Main Campus	Syracuse, New York	1149
American University	Washington, District of Columbia	1054
University of Washington - Seattle	Seattle, Washington	984
CUNY Bernard M Baruch College	New York, New York	979
Marist College	Poughkeepsie, New York	971
Indiana University at Bloomington	Bloomington, Indiana	937
Central Michigan University	Mount Pleasant, Michigan	889
University of Oklahoma, Norman Campus	Norman, Oklahoma	856
California State University-Hayward	Hayward, California	823
Carnegie Mellon University	Pittsburgh, Pennsylvania	795
University of Colorado at Denver	Denver, Colorado	788
George Mason University	Fairfax, Virginia	771
University of Southern California	Los Angeles, California	752
California State University-Long Beach	Long Beach, California	747
CUNY John Jay College Criminal Justice	New York, New York	730
George Washington University	Washington, District of Columbia	724

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[20] Troy State University provides online courses to the public and governmental sectors that account for most of their degrees in Public Administration

The following table identifies the top 20 institutions in terms of the number of Public Administration Masters awarded to those citizens and permanent residents from all historically under-represented groups for the most recent 10 year period for which data are available.

Table 130 Top 20 institutions in terms of number of Masters in Public Administration awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens/Permanent Residents from Under-Represented Groups
Troy State University, Main Campus	Troy, Alabama	1352
CUNY Bernard M Baruch College	New York, New York	555
New York University	New York, New York	474
CUNY John Jay College Criminal Justice	New York, New York	462
California State University-Hayward	Hayward, California	417
Central Michigan University	Mount Pleasant, Michigan	413
University of Puerto Rico- Rio Piedras Campus	San Juan, Puerto Rico	392
Southern University A&M Col at Baton Rouge	Baton Rouge, Louisiana	383
Florida International University	Miami, Florida	377
California State University-Long Beach	Long Beach, California	361
California State University-Dominguez Hills	Dominguez Hill, California	349
Harvard University	Cambridge, Massachusetts	344
Webster University	St. Louis, Missouri	336
National University	La Jolla, California	333
University of Southern California	Los Angeles, California	312
Columbia University in the City of New York	New York, New York	306
Grambling State University	Grambling, Louisiana	291
American University	Washington, District of Columbia	278
Long Island University Brooklyn Campus	Brooklyn, New York	269
Kean College of New Jersey	Union, New Jersey	216

Table 131 Data from 1997 through 2007 (excluding 1999) from the Integrated Postsecondary Education Data System for Master of Public Administration

Degree Received: Masters in Public Administration											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen & permanent resident)	Total all Masters Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2007	1665	20.0%	392	4.7%	5476	65.7%	727	8.7%	81	1.0%	8341	9126
2006	1657	20.1%	380	4.6%	5529	66.9%	622	7.5%	72	0.9%	8260	9182
2005	1618	20.0%	362	4.5%	5427	67.1%	614	7.6%	62	0.8%	8083	9024
2004	1474	20.0%	328	4.5%	4946	67.2%	539	7.3%	75	1.0%	7362	8185
2003	1344	19.7%	279	4.1%	4697	68.8%	464	6.8%	46	0.7%	6830	7556
2002	1269	18.9%	250	3.7%	4684	69.8%	463	6.9%	48	0.7%	6714	7453
2001	1296	19.4%	261	3.9%	4637	69.2%	453	6.8%	50	0.7%	6697	7339
2000	1224	17.8%	253	3.7%	4942	71.7%	427	6.2%	46	0.7%	6892	7617
1999												
1998	1056	16.3%	236	3.6%	4785	74.0%	361	5.6%	31	0.5%	6469	7268
1997	1041	15.3%	227	3.3%	5153	75.6%	355	5.2%	42	0.6%	6818	7607
Source: "IPEDS Completions Surveys by Race "												
Web Site: http://webcaspar.nsf.gov/TableBuilderIndex												
Date Table Created (month/ year): December 2009												

Doctorate of Public Administration

Earned Doctorate Degrees in Public Administration[21]

During the 10 most recent years for which data are available (1997 through 2006) a total of 1,056 doctorates were awarded in Public Administration. Of these, 806 or 76.3% were awarded to U.S. citizens and 250 or 23.7% were awarded to non-U.S. citizens.

Figure 61

Citizenship Status of Ph.D. Recipients in Public Administration, 1997-2006

- US Citizens
- Non US Citizens

23.7%

76.3%

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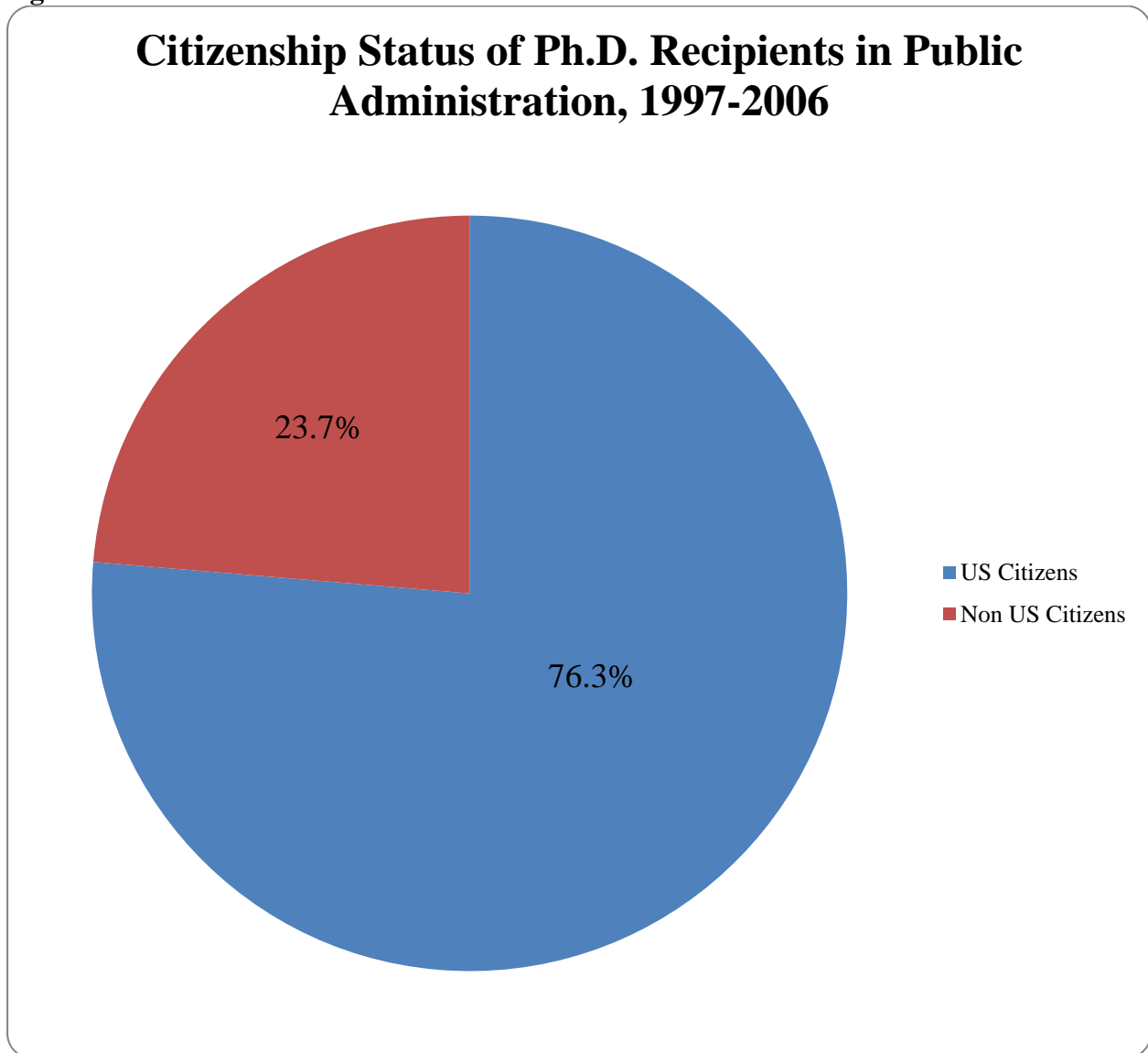
[21]Public Administration is a sub-field within Political Science and Administration. Please refer to the appendix 1entitled "Fine Field of Study" under Political Science and Public Administration.

Out of the 806 doctorates awarded to U.S. citizens during the 1997-2006 period, 118 or 14.6% were earned by African Americans, 23 or 2.9% were earned by Asian Americans, 623 or 77.3% were earned by Caucasian or Other ethnicities, 34 or 4.2% were earned by Hispanic Americans, and 8 or 1.0% were earned by Native Americans.

Figure 62
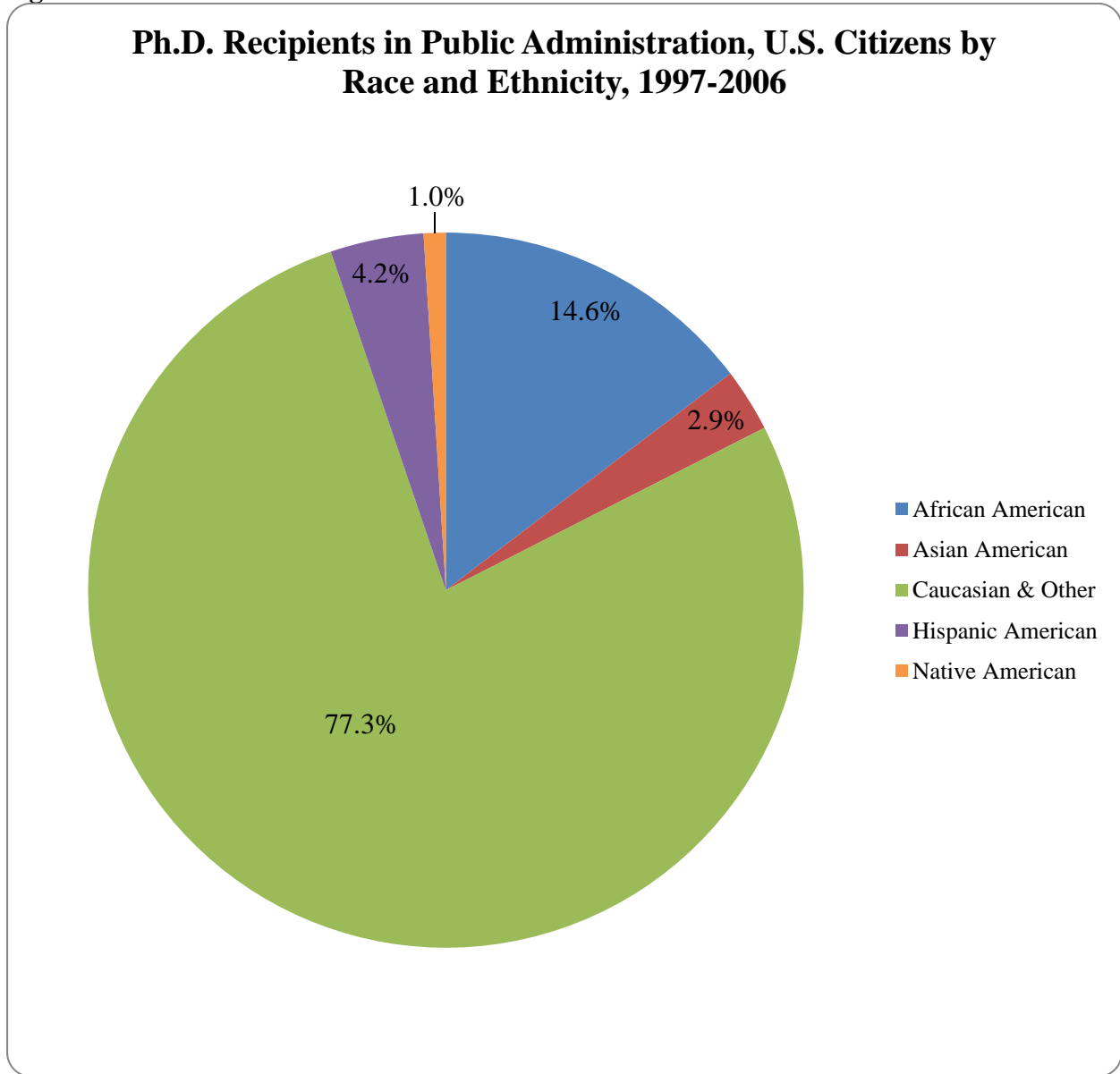
Ph.D. Recipients in Public Administration, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of Doctorates in Public Administration awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 63. The number of graduates of historically under-represented groups receiving a doctorate in the Public Administration field has fluctuated over the past 10 years and has never exceeded 27.

Figure 63

Ph.D.'s in Public Administration Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006

Figure 64 shows the percentage of Ph.D.'s in Public Administration for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 with 2006. The percentage has increased to 24.6% of the total in 2006 as compared to 12.1% of the total 10 years earlier. During these 10 years, African Americans increased from 6.1% of the total to 18.5%, Asian Americans decreased from 1.5% of the total to 0%, Hispanic Americans increased from 3.0% of the total to 6.2%, and Native Americans decreased from 1.5% of the total to 0%.

Figure 64

Percentage of Ph.D.'s in Public Administration awarded to U.S. Citizens, Members of Historically Under-represented Groups

Table 132 Data from 1997 through 2006 from the Surveys of Earned Doctorate for Public Administration

Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	12	18.5%	0	0.0%	49	75.4%	4	6.2%	0	0.0%	65	98
2005	6	7.9%	0	0.0%	67	88.2%	3	3.9%	0	0.0%	76	104
2004	18	19.8%	2	2.2%	64	70.3%	5	5.5%	2	2.2%	91	116
2003	16	18.6%	4	4.7%	61	70.9%	3	3.5%	2	2.3%	86	120
2002	12	14.5%	4	4.8%	63	75.9%	3	3.6%	1	1.2%	83	103
2001	14	18.7%	4	5.3%	53	70.7%	3	4.0%	1	1.3%	75	96
2000	16	18.0%	0	0.0%	70	78.7%	3	3.4%	0	0.0%	89	103
1999	11	12.2%	6	6.7%	68	75.6%	4	4.4%	1	1.1%	90	117
1998	9	10.6%	2	2.4%	70	82.4%	4	4.7%	0	0.0%	85	104
1997	4	6.1%	1	1.5%	58	87.9%	2	3.0%	1	1.5%	66	95

The table caption spanning the top reads: *Degree Received: Doctorates in Public Administration*

Source: "NSF Survey of Earned Doctorates/Doctorate Records File"

Web Site: http://webcaspar.nsf.gov/TableBuilder#anchorAVAdd

Date Table Created (month/ year): December 2009

Table 133 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Public Administration

This is the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents with U.S. Citizens.

Degree Received: Doctorates in Public Administration											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and permanent resident)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	9	10.8%	4	4.8%	63	75.9%	7	8.4%	0	0.0%	83	114
2007	6	7.6%	1	1.3%	65	82.3%	7	8.9%	0	0.0%	79	112

Earned Master Degrees in Public Policy Analysis[22]

During the 10 most recent years for which data are available (1997 through 2007, with missing data for 1999) a total of 13,489 masters were awarded in Public Policy Analysis. Of these, 11,410 or 84.6% were awarded to U.S. citizens and permanent residents and 2,079 or 15.4% were awarded to temporary residents.

Figure 65

Citizenship Status of Masters Recipients in Public Policy Analysis, 1997-2007

- US Citizens & Permanent Residents
- Temporary Residents

15.4%

84.6%

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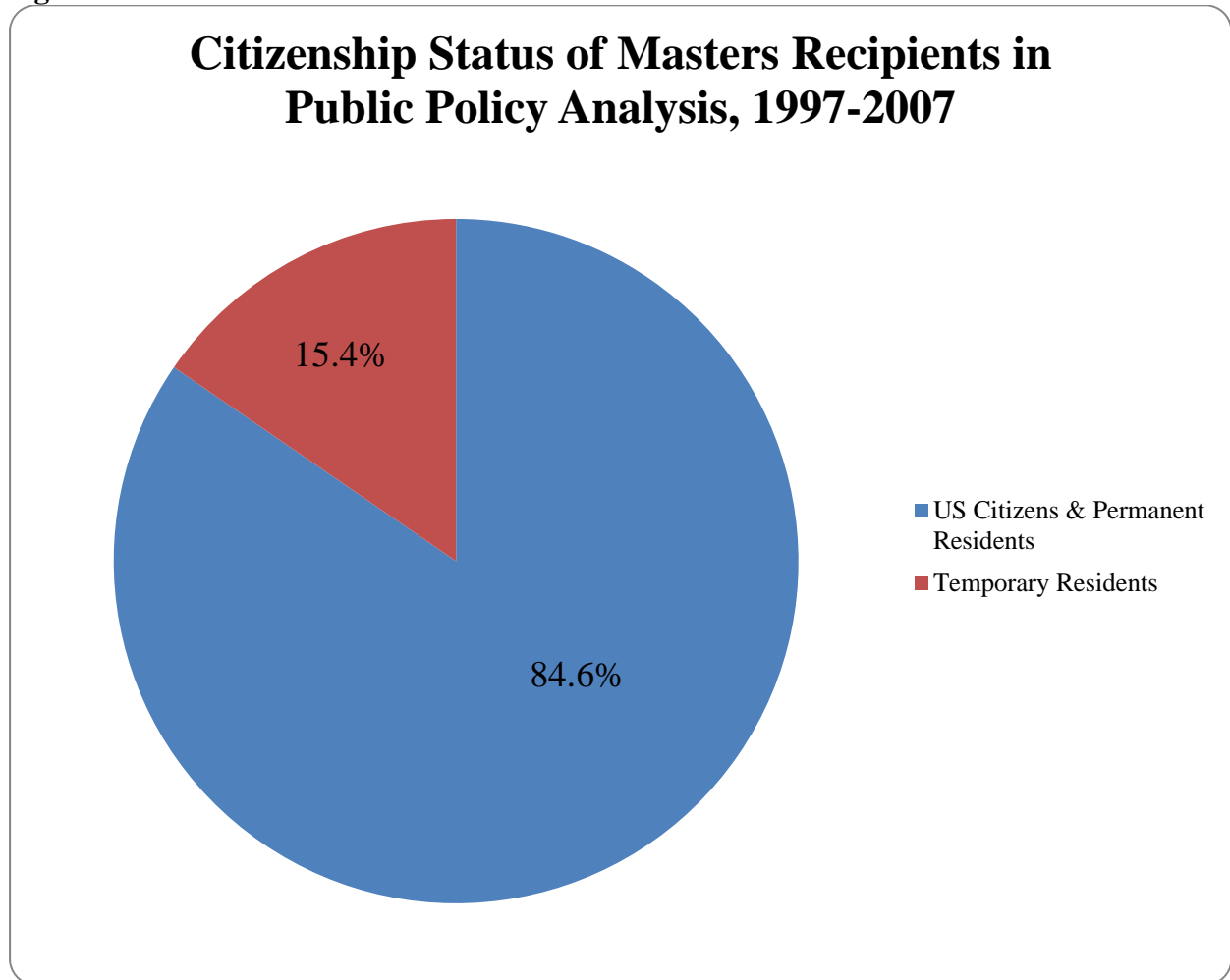
[22] Public Policy Analysis is defined in the IPEDS Survey of Earned Masters to include the following subfields:
    44.05. Public Policy Analysis

Out of the 11,410 masters awarded to U.S. citizens and permanent residents during the 1997-
2007 period, 869 or 7.6% were earned by African Americans, 964 or 8.4% were earned by Asian
Americans, 8,775 or 76.9% were earned by Caucasian or Other ethnicities, 739 or 6.5% were
earned by Hispanic Americans, and 63 or 0.6% % were earned by Native Americans.

Figure 66
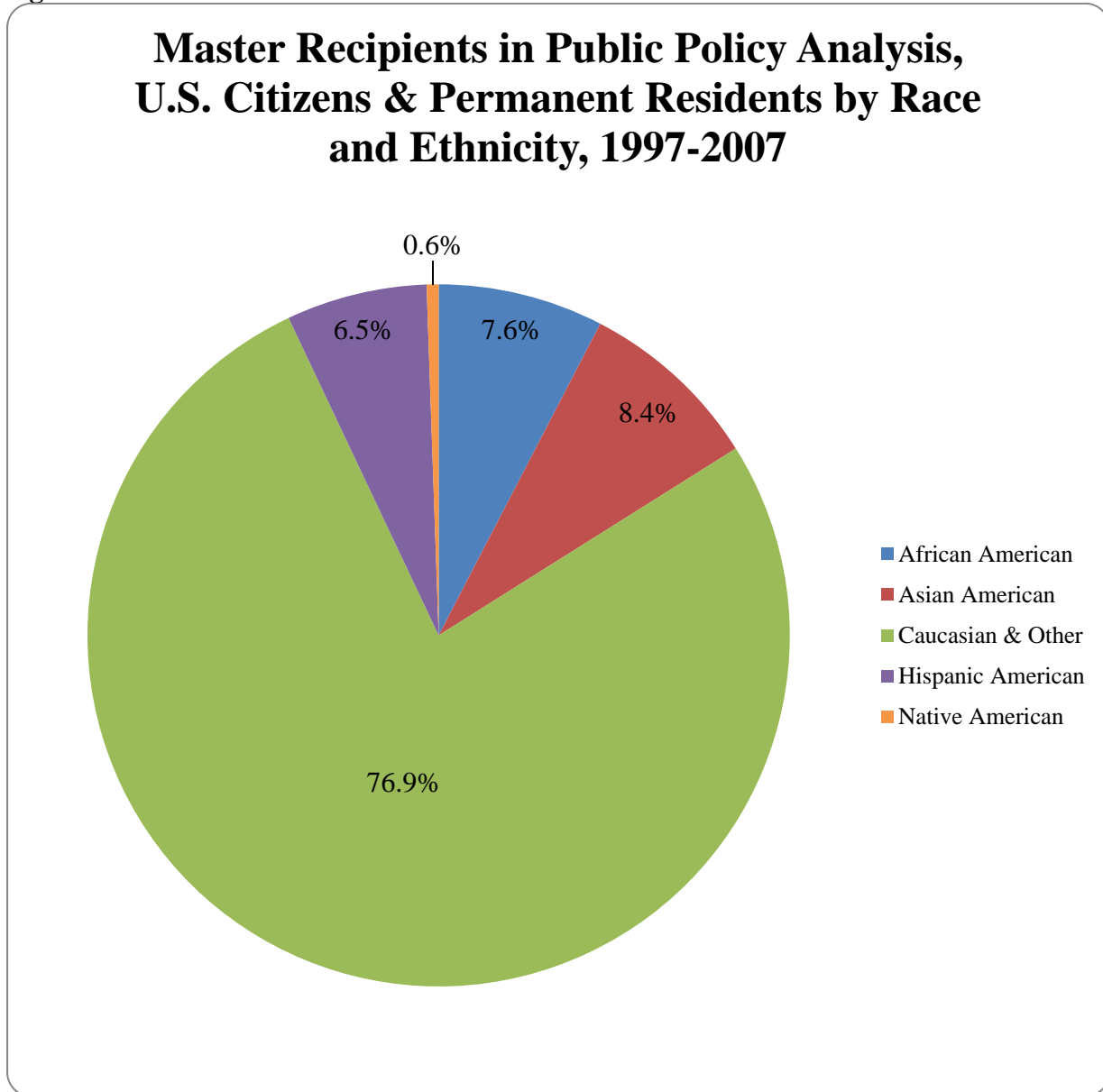
Master Recipients in Public Policy Analysis,
U.S. Citizens & Permanent Residents by Race
and Ethnicity, 1997-2007

The number of Masters in Public Policy Analysis awarded to U.S. citizens and permanent residents who are graduates of historically under-represented groups is shown in Figure 67. The number of graduates of historically under-represented groups receiving a Masters in the Public Policy Analysis field has fluctuated over the past 10 years and has never exceeded 396.
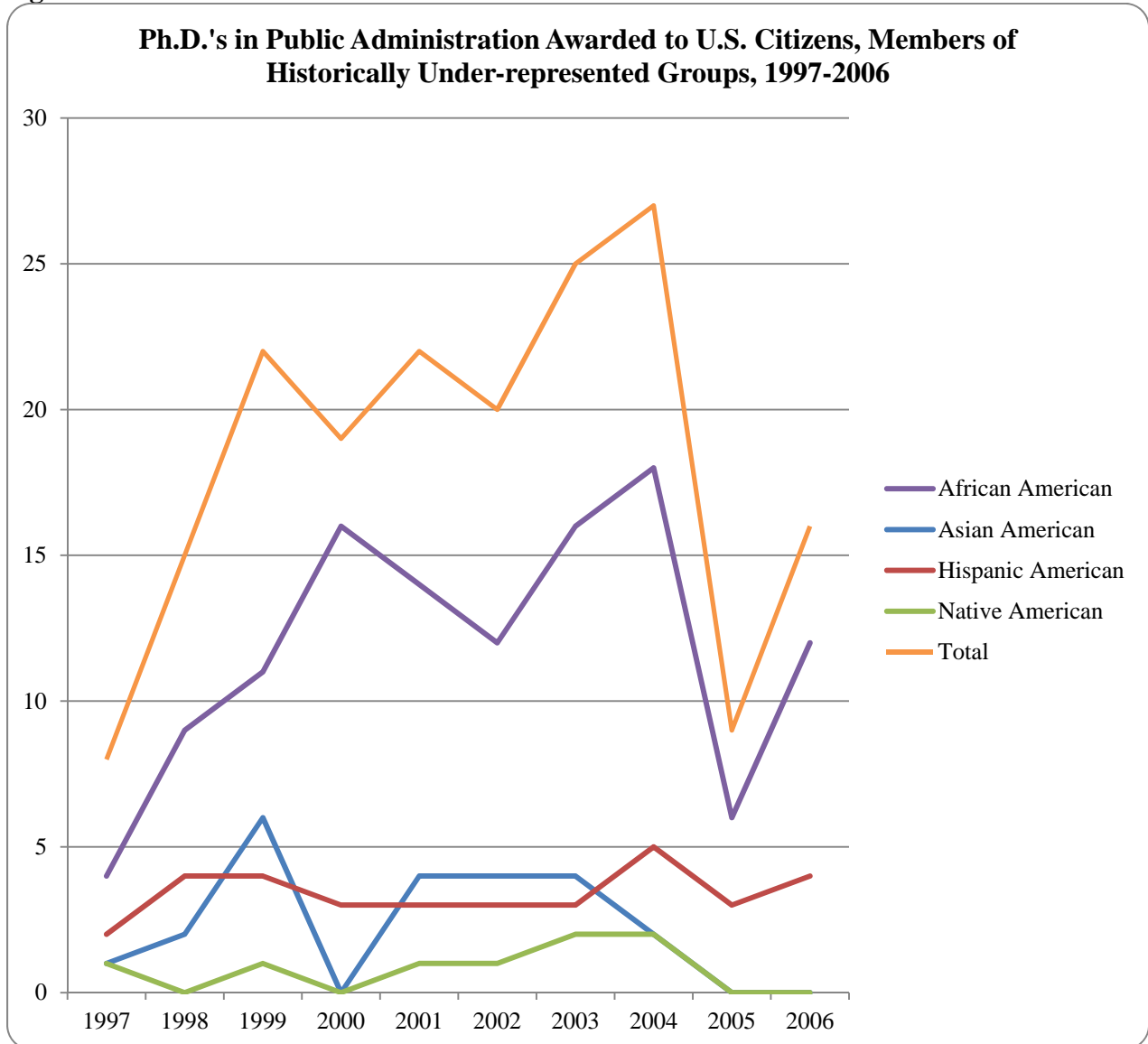
Figure 67

Masters in Public Policy Analysis Awarded to U.S. Citizens & Permanent Residents, Members of Historically Under-represented Groups, 1997-2007
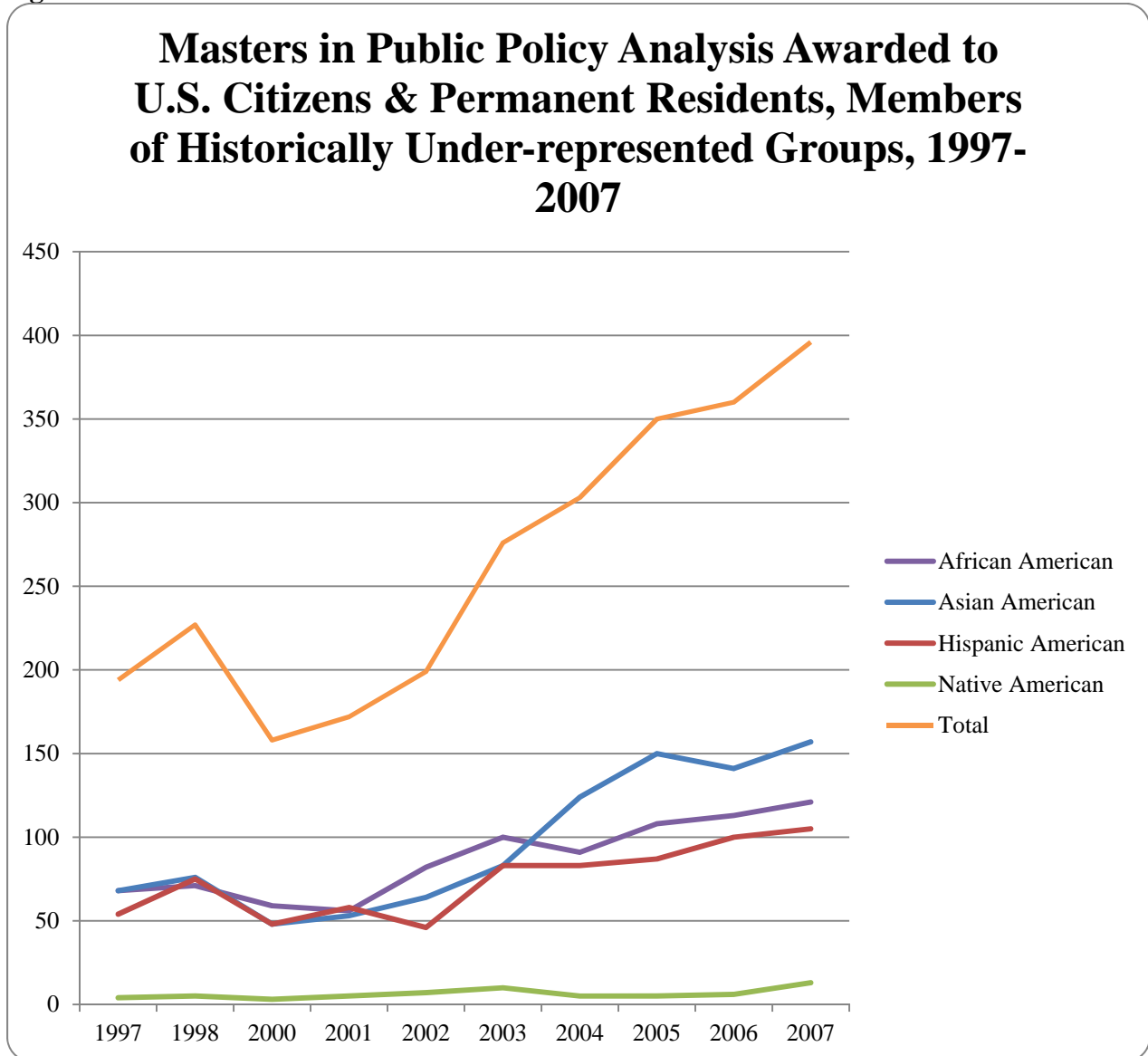
Figure 68 shows the percentage of Masters in Public Policy Analysis for U.S. citizens and permanent residents awarded to graduates of historically under-represented groups, comparing 1997 with 2007. The percentage has increased to 23.3% of the total in 2007 as compared to 22.7% of the total in 1997. During these 10 years, African Americans decreased from 8.0% of the total to 7.1%, Asian Americans increased from 8.0% of the total to 9.2%, Hispanic Americans decreased from 6.3% of the total to 6.2%, and Native Americans increased from 0.5% of the total to 0.8%.
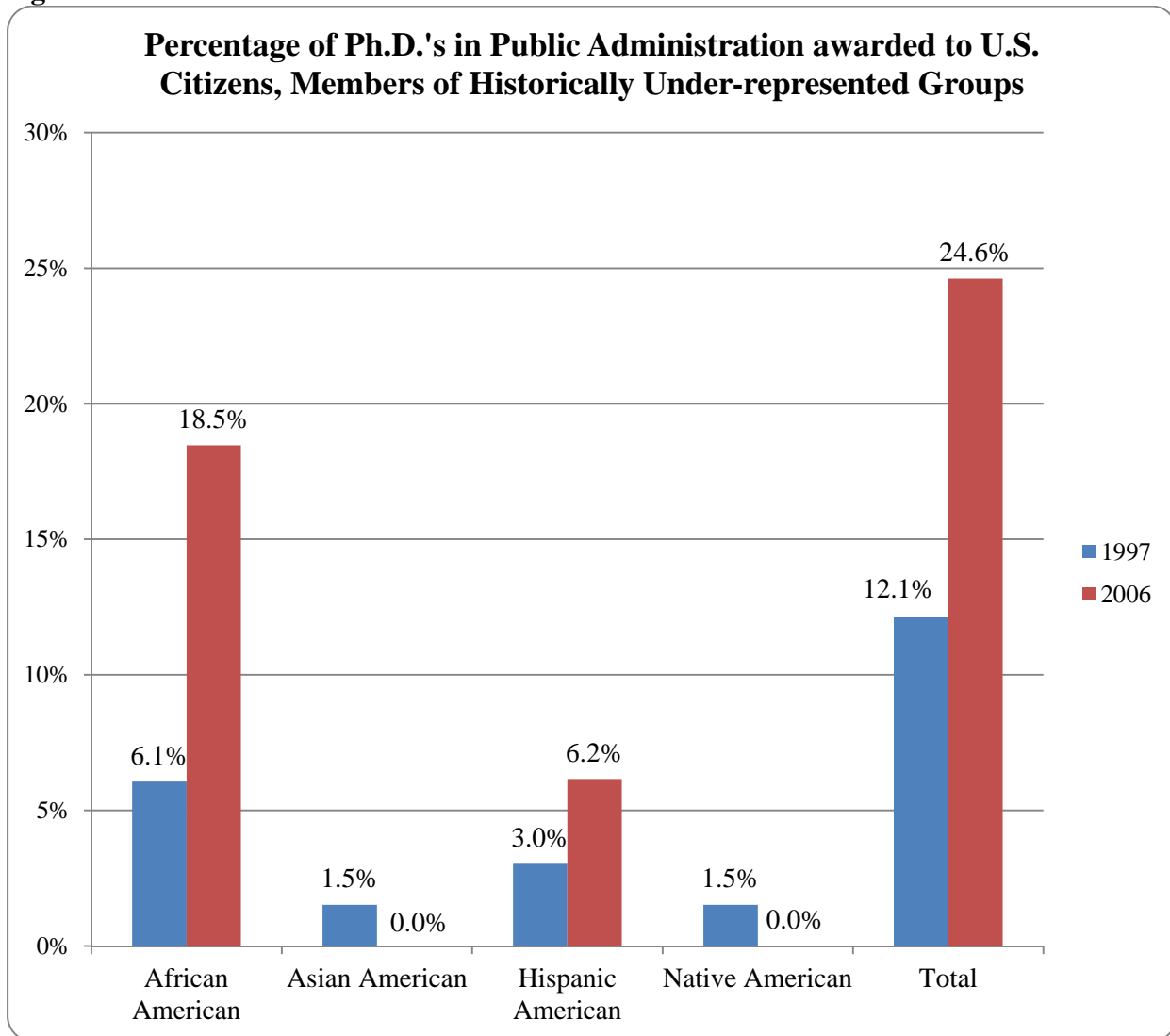
Figure 68
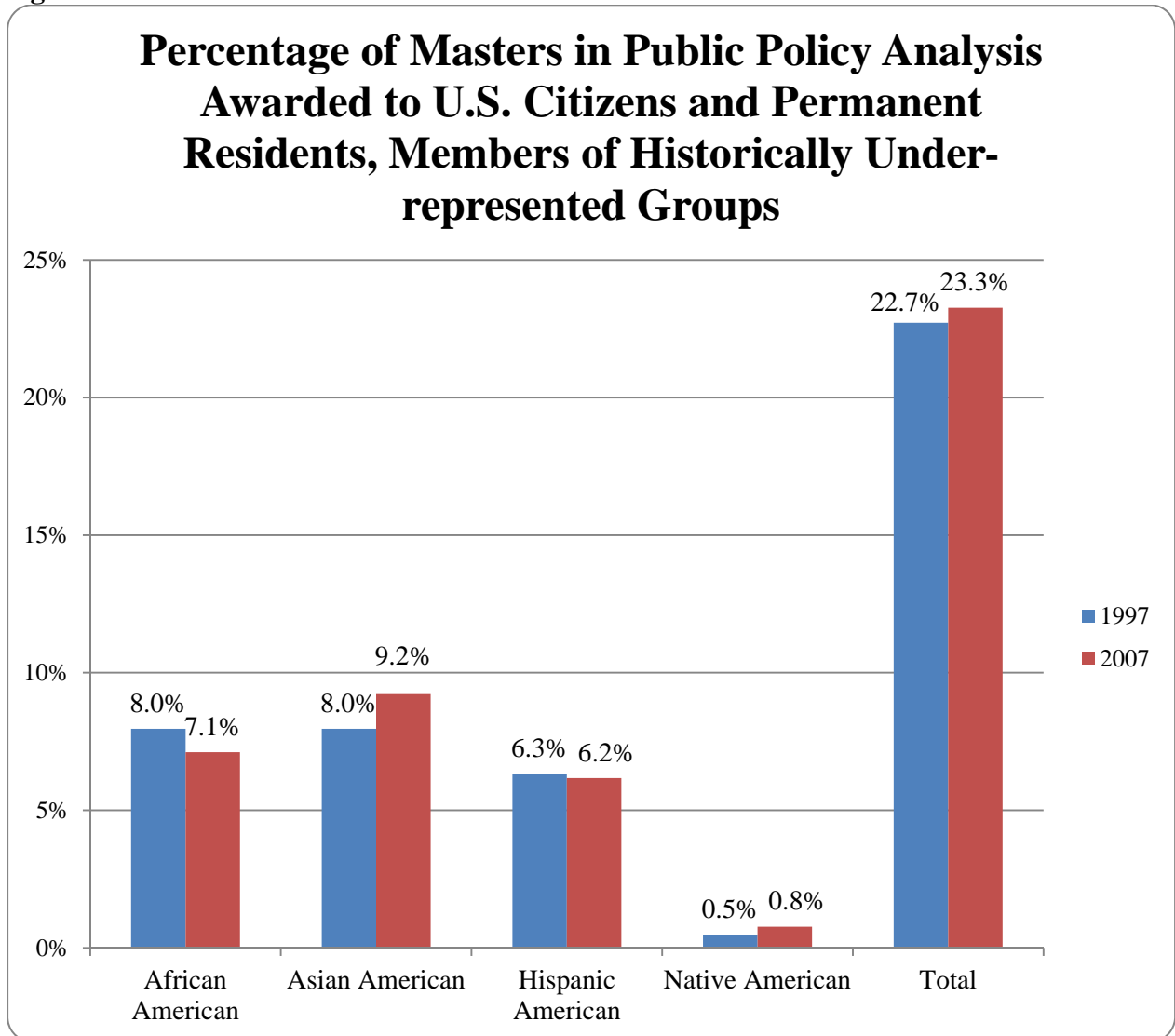
Percentage of Masters in Public Policy Analysis Awarded to U.S. Citizens and Permanent Residents, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each under-represented minority group in terms of the numbers of Masters awarded to U.S. citizens and permanent residents for the most recent 10 year period (1997-2007) for which data are available.

Table 134 Top 10 institutions for African American Master of Public Policy

Institution	City, State	# of Graduates
Harvard University	Cambridge, Massachusetts	128
Carnegie Mellon University	Pittsburgh, Pennsylvania	93
Georgetown University	Washington, District of Columbia	64
University of Chicago	Chicago, Illinois	61
University of Michigan at Ann Arbor	Ann Arbor, Michigan	58
University of Texas at Austin	Austin, Texas	55
Regent University	Virginia Beach, Virginia	39
University of Maryland at College Park	College Park, Maryland	38
Princeton University	Princeton, New Jersey	31

Table 135 Top 10 institutions for Asian American Master of Public Policy

Institution	City, State	# of Graduates
Harvard University	Cambridge, Massachusetts	179
Georgetown University	Washington, District of Columbia	92
Carnegie Mellon University	Pittsburgh, Pennsylvania	90
University of Chicago	Chicago, Illinois	77
University of Michigan at Ann Arbor	Ann Arbor, Michigan	54
Duke University	Durham, North Carolina	49
Princeton University	Princeton, New Jersey	48
University of California-Berkeley	Berkeley, California	48
University of Texas at Austin	Austin, Texas	48
University of Southern California	Los Angeles, California	43

Table 136 Top 10 institutions for Hispanic American Master of Public Policy

Institution	City, State	# of Graduates
Harvard University	Cambridge, Massachusetts	166
University of Texas at Austin	Austin, Texas	128
University of Michigan at Ann Arbor	Ann Arbor, Michigan	55
Carnegie Mellon University	Pittsburgh, Pennsylvania	44
Georgetown University	Washington, District of Columbia	41
University of Chicago	Chicago, Illinois	38
University of Southern California	Los Angeles, California	37
Princeton University	Princeton, New Jersey	26
University of California-Berkeley	Berkeley, California	24

Table 137 Top 10 institutions for Native American Master of Public Policy

Institution	City, State	# of Graduates
Harvard University	Cambridge, Massachusetts	17
University of Minnesota - Twin Cities	Twin Cities, Minnesota	7
University of Wisconsin-Madison	Madison, Wisconsin	5
George Washington University	Washington, District of Columbia	3
University of Michigan at Ann Arbor	Ann Arbor, Michigan	3
University of Texas at Austin	Austin, Texas	3

The following table identifies the top 20 institutions in terms of the number of Public Policy Analysis Masters awarded to U.S. citizens and permanent residents, overall, for the most recent 10 year period for which data are available.

Table 138 Top 20 institutions in terms of number of Masters in Public Policy Analysis for all U.S. citizens and permanent residents

Institution	City, State	All US Citizens/Permanent Residents
Harvard University	Cambridge, Massachusetts	1422
University of Texas at Austin	Austin, Texas	974
Georgetown University	Washington, District of Columbia	924
University of Chicago	Chicago, Illinois	797
Carnegie Mellon University	Pittsburgh, Pennsylvania	639
University of Michigan at Ann Arbor	Ann Arbor, Michigan	542
George Washington University	Washington, District of Columbia	525
Duke University	Durham, North Carolina	386
University of Minnesota - Twin Cities	Twin Cities, Minnesota	368
University of Maryland at College Park	College Park, Maryland	347
Princeton University	Princeton, New Jersey	327
University of California-Berkeley	Berkeley, California	322
Johns Hopkins University	Baltimore, Maryland	309
Regent University	Virginia Beach, Virginia	294
University of Wisconsin-Madison	Madison, Wisconsin	267
Pepperdine University	Malibu, California	230
George Mason University	Fairfax, Virginia	228
Rutgers the State University of NJ New Brunswick	New Brunswick, New Jersey	208
University of Southern California	Los Angeles, California	188
College of William and Mary	Williamsburg, Virginia	179

The following table identifies the top 20 institutions in terms of the number of Public Policy Analysis Masters awarded to those citizens and permanent residents from any historically under-represented group for the most recent 10 year period for which data are available.

Table 139 Top 20 institutions in terms of number of Masters in Public Policy Analysis awarded to citizens and permanent residents from historically under-represented groups

Institution	City, State	US Citizens/Permanent Residents from Under-Represented Groups
Harvard University	Cambridge, Massachusetts	490
University of Texas at Austin	Austin, Texas	234
Carnegie Mellon University	Pittsburgh, Pennsylvania	228
Georgetown University	Washington, District of Columbia	197
University of Chicago	Chicago, Illinois	178
University of Michigan at Ann Arbor	Ann Arbor, Michigan	170
Princeton University	Princeton, New Jersey	107
University of Southern California	Los Angeles, California	93
Duke University	Durham, North Carolina	87
University of California-Berkeley	Berkeley, California	87
University of Maryland at College Park	College Park, Maryland	67
George Mason University	Fairfax, Virginia	61
George Washington University	Washington, District of Columbia	59
University of Minnesota - Twin Cities	Twin Cities, Minnesota	57
University of California-Los Angeles	Los Angeles, California	54
Regent University	Virginia Beach, Virginia	50
Pepperdine University	Malibu, California	49
Johns Hopkins University	Baltimore, Maryland	41
Rutgers the State University of NJ New Brunswick	New Brunswick, New Jersey	34
Georgia Institute of Technology, Main Campus	Atlanta, Georgia	31

Table 140 Data from 1997 through 2007 from the Integrated Postsecondary Education Data System for Master of Public Policy

Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen & permanent resident)	Total all Masters Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2007	121	7.1%	157	9.2%	1306	76.7%	105	6.2%	13	0.8%	1702	2019
2006	113	7.1%	141	8.9%	1222	77.2%	100	6.3%	6	0.4%	1582	1838
2005	108	6.8%	150	9.5%	1228	77.8%	87	5.5%	5	0.3%	1578	1865
2004	91	6.6%	124	9.0%	1073	78.0%	83	6.0%	5	0.4%	1376	1658
2003	100	9.0%	83	7.5%	835	75.2%	83	7.5%	10	0.9%	1111	1366
2002	82	10.2%	64	8.0%	603	75.2%	46	5.7%	7	0.9%	802	988
2001	56	7.5%	53	7.1%	572	76.9%	58	7.8%	5	0.7%	744	864
2000	59	7.8%	48	6.3%	602	79.2%	48	6.3%	3	0.4%	760	860
1999												
1998	71	7.9%	76	8.4%	674	74.8%	75	8.3%	5	0.6%	901	1055
1997	68	8.0%	68	8.0%	660	77.3%	54	6.3%	4	0.5%	854	976
Source: "IPEDS Completions Surveys by Race "												
Web Site: http://webcaspar.nsf.gov/TableBuilderIndex												
Date Table Created (month/ year): December 2009												

Doctorate of Public Policy Analysis

Earned Doctorate Degrees in Public Policy Analysis[23]
During the 10 most recent years for which data are available (1997 through 2006) a total of 1,394 doctorates were awarded in Public Policy Analysis. Of these, 992 or 71.2% were awarded to U.S. citizens and 402 or 28.8% were awarded to non-U.S. citizens.

Figure 69

Citizenship Status of Ph.D. Recipients in Public Policy Analysis, 1997-2006

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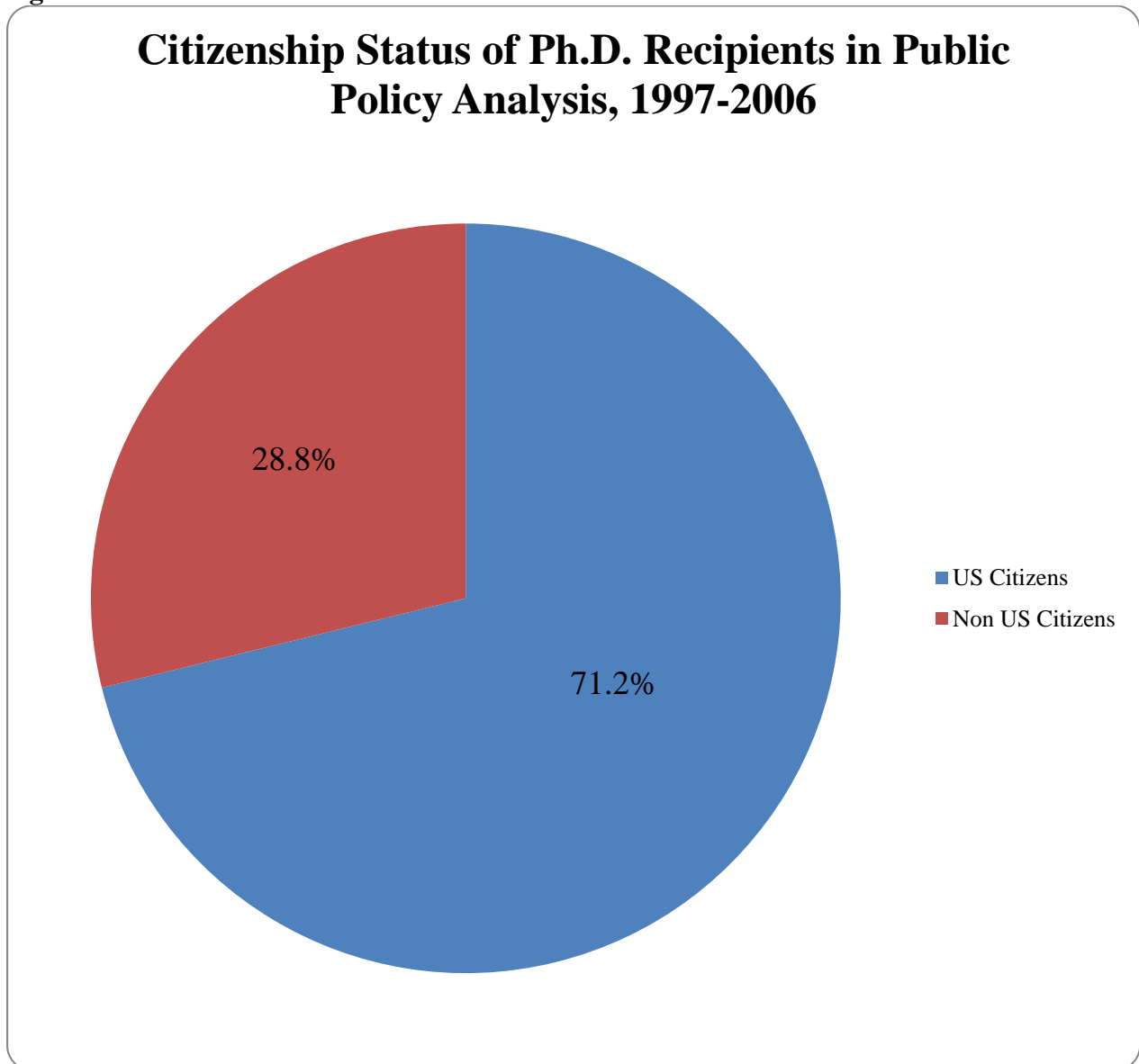
[23]Public Policy Analysis is a sub-field within Political Science and Administration. Please refer to the appendix 1 entitled "Fine Field of Study" under Political Science and Public Administration.

Out of the 992 doctorates awarded to U.S. citizens during the 1997-2006 period, 100 or 10.1% were earned by African Americans, 25 or 2.5% were earned by Asian Americans, 822 or 82.9% were earned by Caucasian or Other ethnicities, 37 or 3.7% were earned by Hispanic Americans, and 8 or 0.8% were earned by Native Americans.

Figure 70
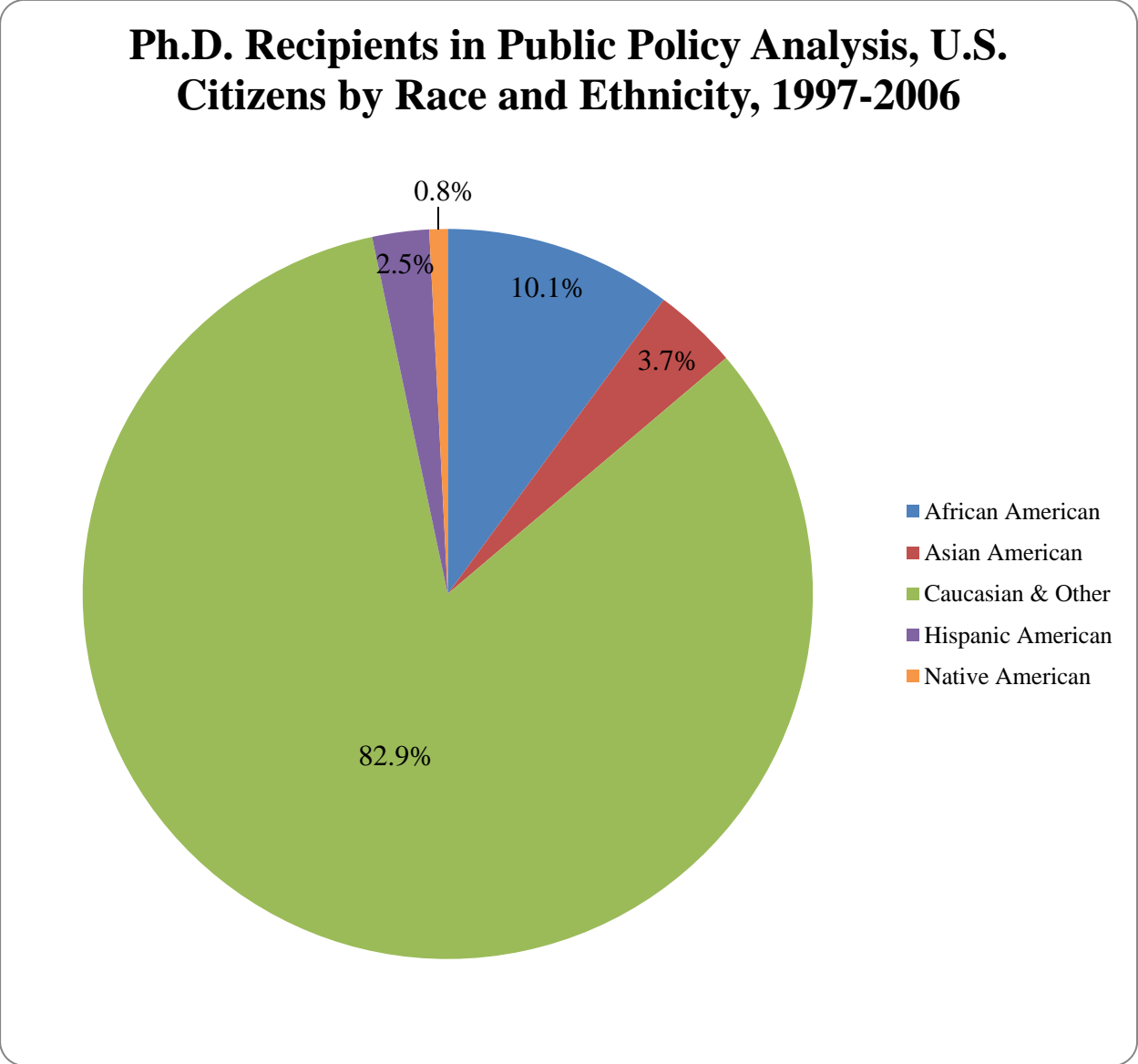
Ph.D. Recipients in Public Policy Analysis, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of Doctorates in Public Policy Analysis awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 71. The number of graduates of historically under-represented groups receiving a doctorate in the Public Policy Analysis field has fluctuated over the past 10 years and has never exceeded 28.

Figure 71

Ph.D.'s in Public Policy Analysis awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006

Figure 72 shows the percentage of Ph.D.'s in Public Policy Analysis for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 with 2006. The percentage has increased to 23.9% of the total in 2006 as compared to 12.0% of the total 10 years earlier. During these 10 years, African Americans increased from 3.3% of the total to 16.2%, Asian Americans decreased from 5.4% of the total to 4.3%, Hispanic Americans increased from 1.1% of the total to 3.4%, and Native Americans decreased from 2.2% of the total to 0%.

Figure 72

Percentage of Ph.D.'s in Public Policy Analysis awarded to U.S. Citizens, Members of Historically Under-represented Groups
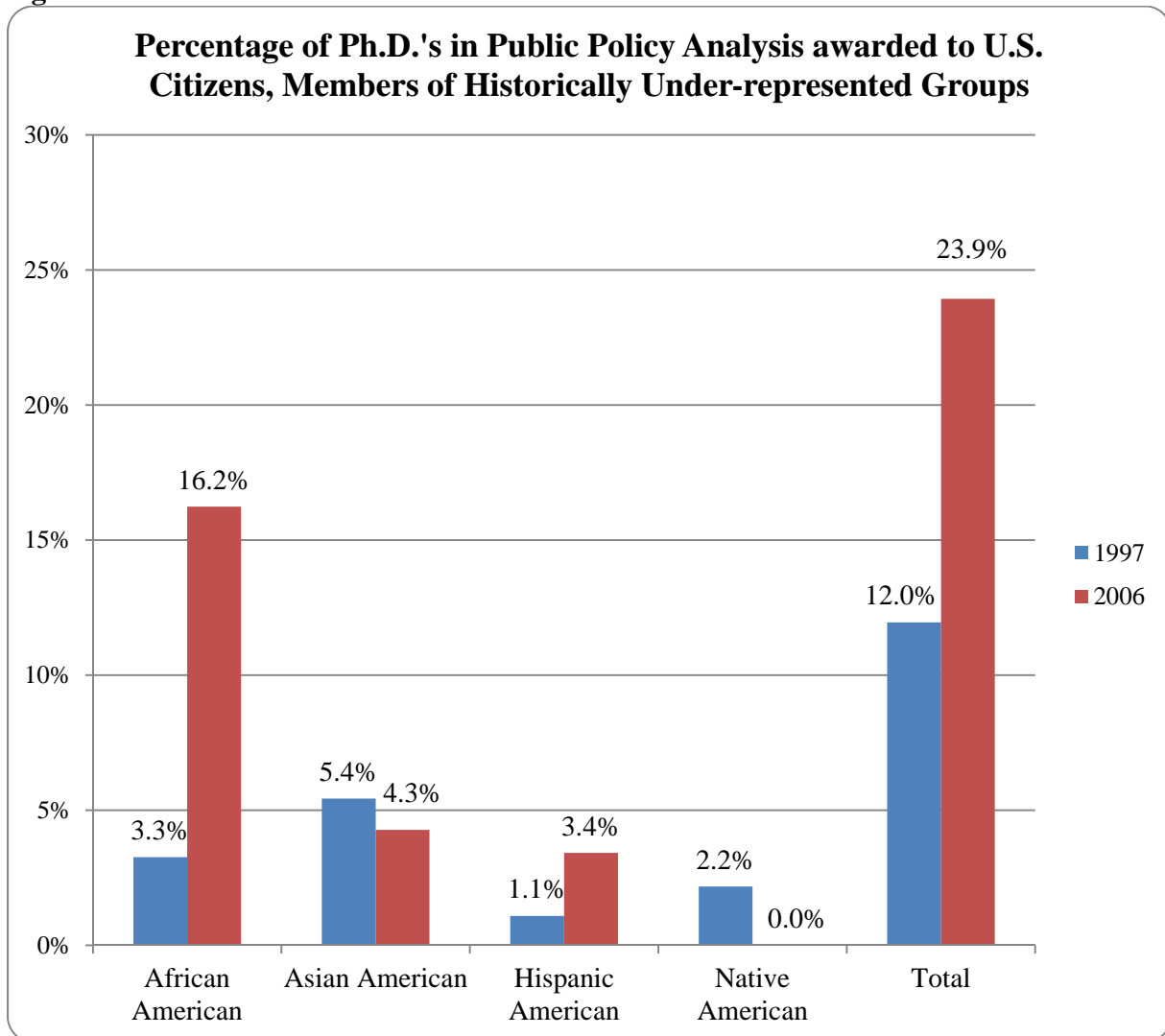
Table 141 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Public Policy Analysis

Degree Received: Doctorates in Public Policy Analysis												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	19	16.2%	5	4.3%	89	76.1%	4	3.4%	0	0.0%	117	171
2005	11	10.6%	4	3.8%	84	80.8%	4	3.8%	1	1.0%	104	161
2004	11	10.9%	1	1.0%	88	87.1%	1	1.0%	0	0.0%	101	145
2003	13	11.7%	5	4.5%	89	80.2%	1	0.9%	3	2.7%	111	146
2002	13	11.3%	8	7.0%	91	79.1%	3	2.6%	0	0.0%	115	147
2001	9	9.7%	3	3.2%	76	81.7%	5	5.4%	0	0.0%	93	139
2000	7	7.2%	3	3.1%	83	85.6%	2	2.1%	2	2.1%	97	137
1999	9	10.1%	2	2.2%	77	86.5%	1	1.1%	0	0.0%	89	125
1998	5	6.8%	1	1.4%	64	87.7%	3	4.1%	0	0.0%	73	96
1997	3	3.3%	5	5.4%	81	88.0%	1	1.1%	2	2.2%	92	127
Source: "NSF Survey of Earned Doctorates/Doctorate Records File"												
Web Site: http://webcaspar.nsf.gov/TableBuilder#anchorAVAdd												
Date Table Created (month/ year): December 2009												

Table 142 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Public Policy Analysis

This is the newest available data provided by the National Science Foundation; however, these data combines Permanent U.S. Residents with U.S. Citizens.

Degree Received: Doctorates in Public Policy Analysis												
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and permanent resident)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	12	9.0%	8	6.0%	109	81.3%	5	3.7%	0	0.0%	134	196
2007	17	12.6%	7	5.2%	107	79.3%	3	2.2%	1	0.7%	135	211

Doctorate in Sociology

Earned Doctorate Degrees in Sociology[24]

During the 10 most recent years for which data are available (1997 through 2006) a total of 5,904 doctorates were awarded in Sociology. Of these, 4,417 or 74.8% were awarded to U.S. citizens and 1,487 or 25.2% were awarded to non-U.S. citizens.

Figure 73

Citizenship Status of Ph.D. Recipients in Sociology, 1997-2006

25.2%

74.8%

■ US Citizens
■ Non-US Citizens

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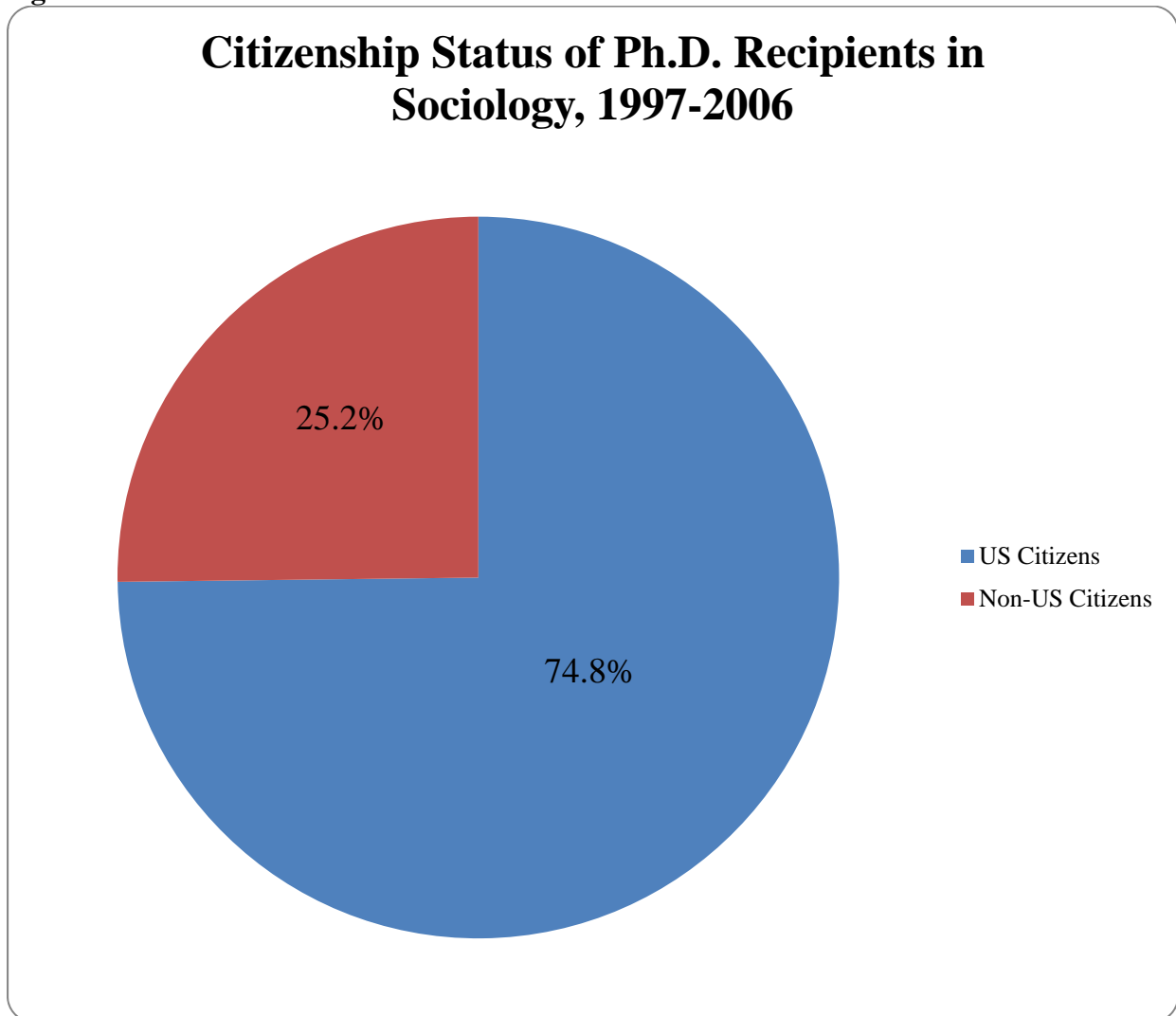
[24] For a complete listing of sub-fields included within Sociology please refer to the appendix 1 entitled "Fine Field of Study" under Sociology.

Out of the 4,417 doctorates awarded to U.S. citizens during the 1997-2006 period, 411 or 9.3% were earned by African Americans, 173 or 3.9% were earned by Asian Americans, 3,536 or 80.1% were earned by Caucasian or Other ethnicities, 265 or 6.0% were earned by Hispanic Americans, and 32 or 0.7 % were earned by Native Americans.

Figure 74
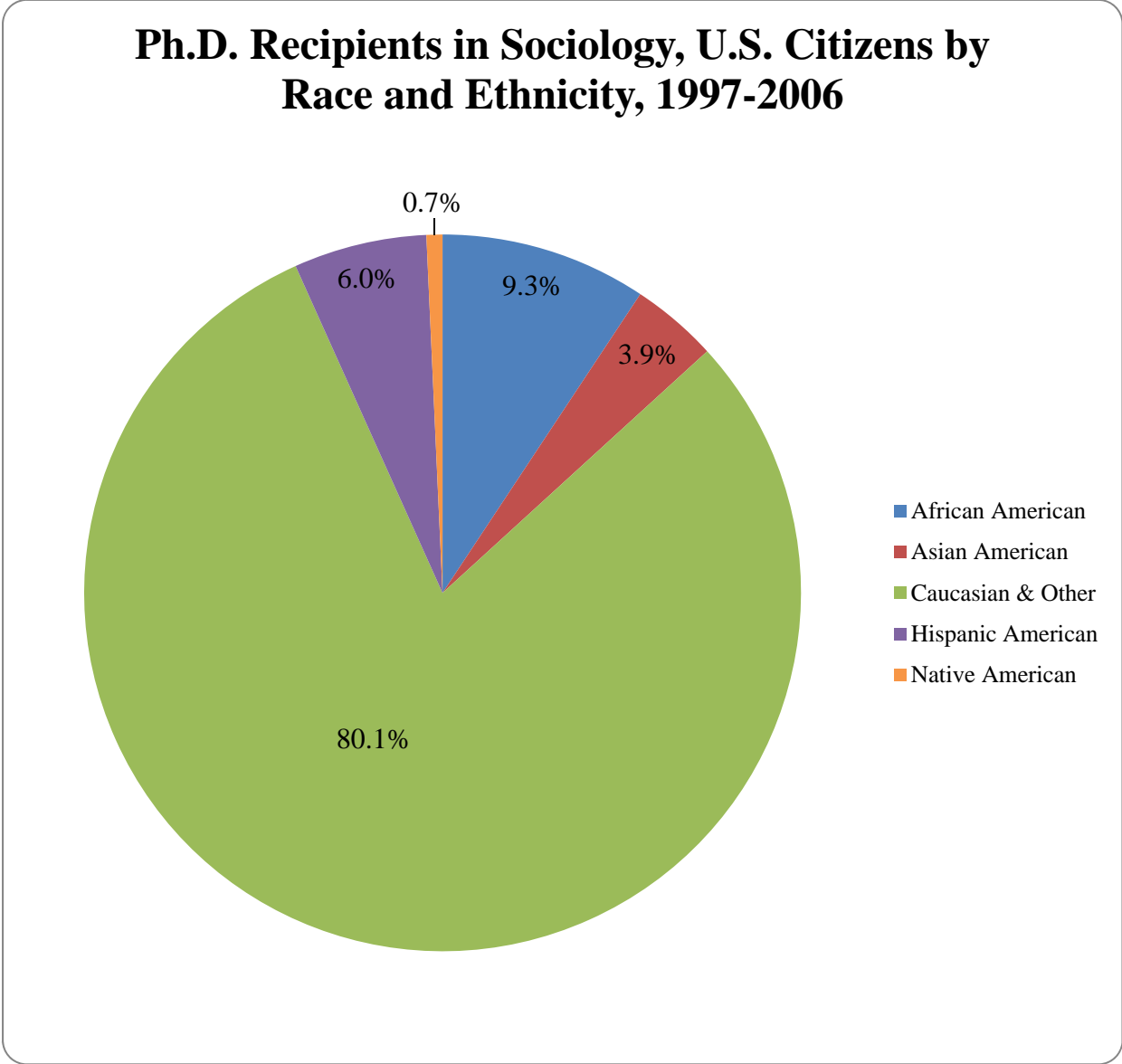
Ph.D. Recipients in Sociology, U.S. Citizens by Race and Ethnicity, 1997-2006

The number of Doctorates in Sociology awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 75. The total number of graduates of historically under-represented groups receiving a doctorate in the Sociology field has fluctuated over the past 10 year and has never exceeded 110.
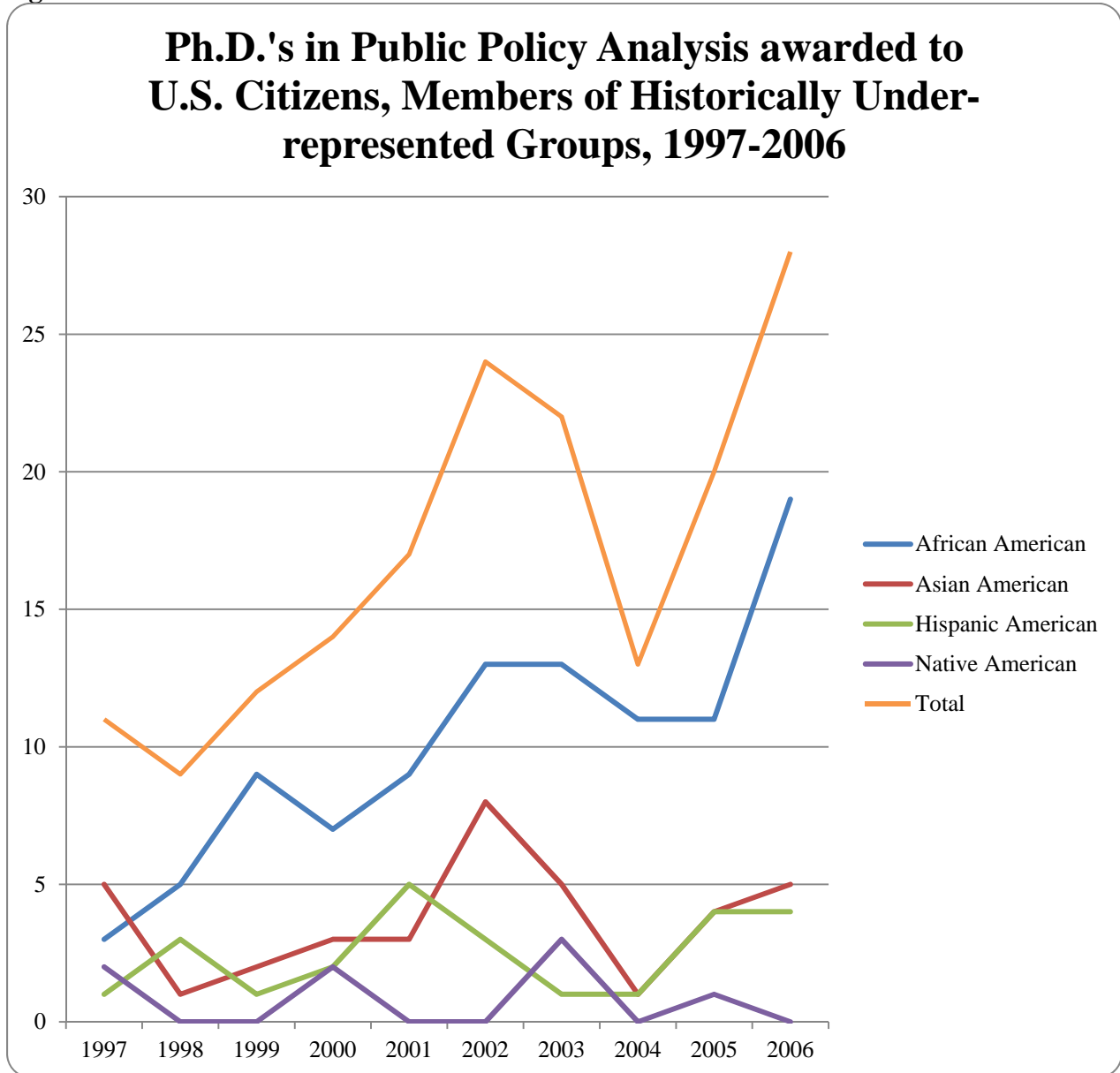
Figure 75

Ph.D.'s in Sociology Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
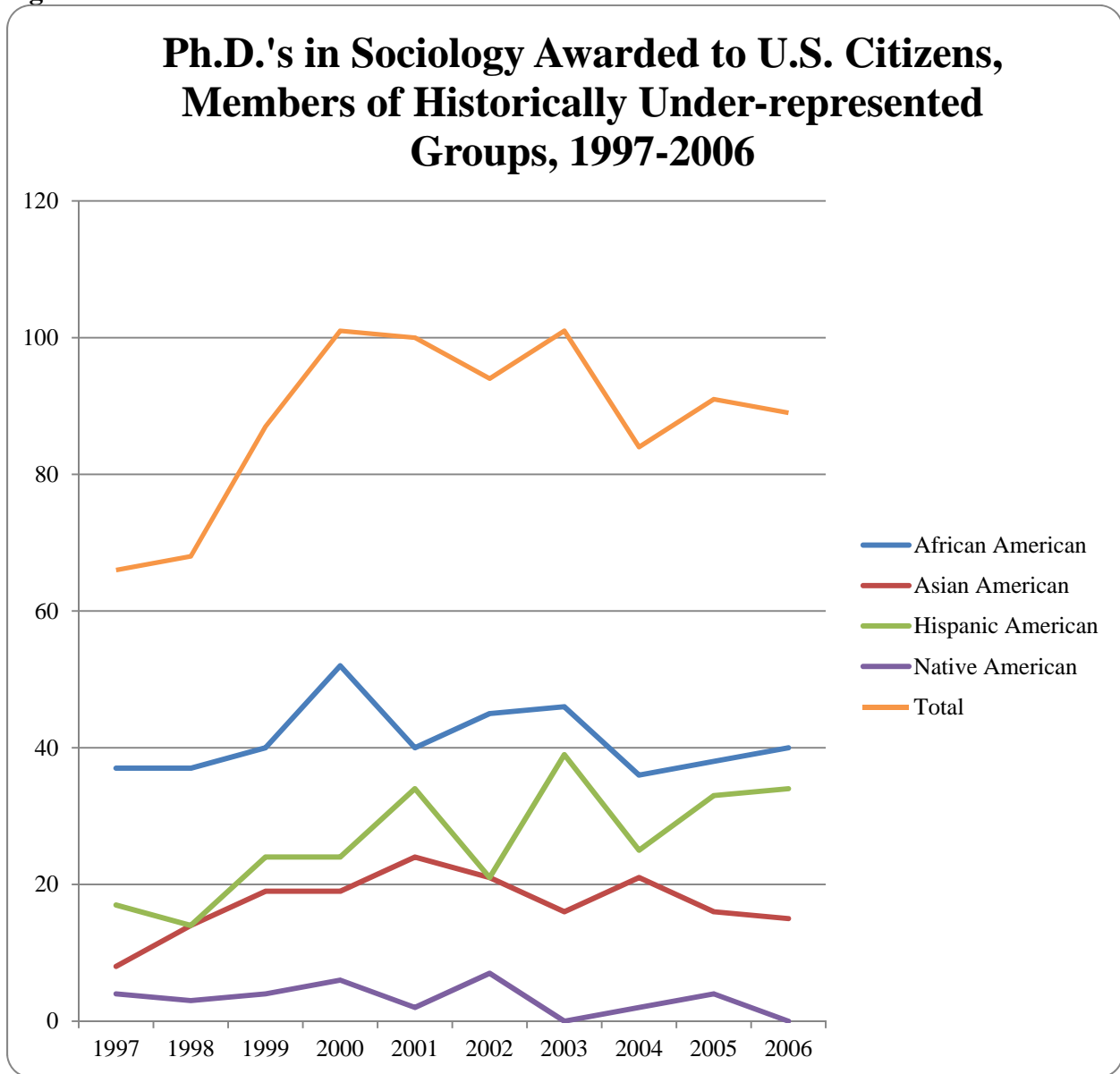
Figure 76 shows the percentage of Ph.D.'s in Sociology for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 with 2006. The percentage has increased to 19.8% of the total in 2006 as compared to 15.9% of the total 10 years earlier. During these 10 years, African Americans remained the same at 8.9%, Asian Americans increased from 1.9% of the total to 3.3%, Hispanic Americans increased from 4.1% of the total to 7.6%, and Native Americans decreased from 1.0% to 0.0%.

Figure 76
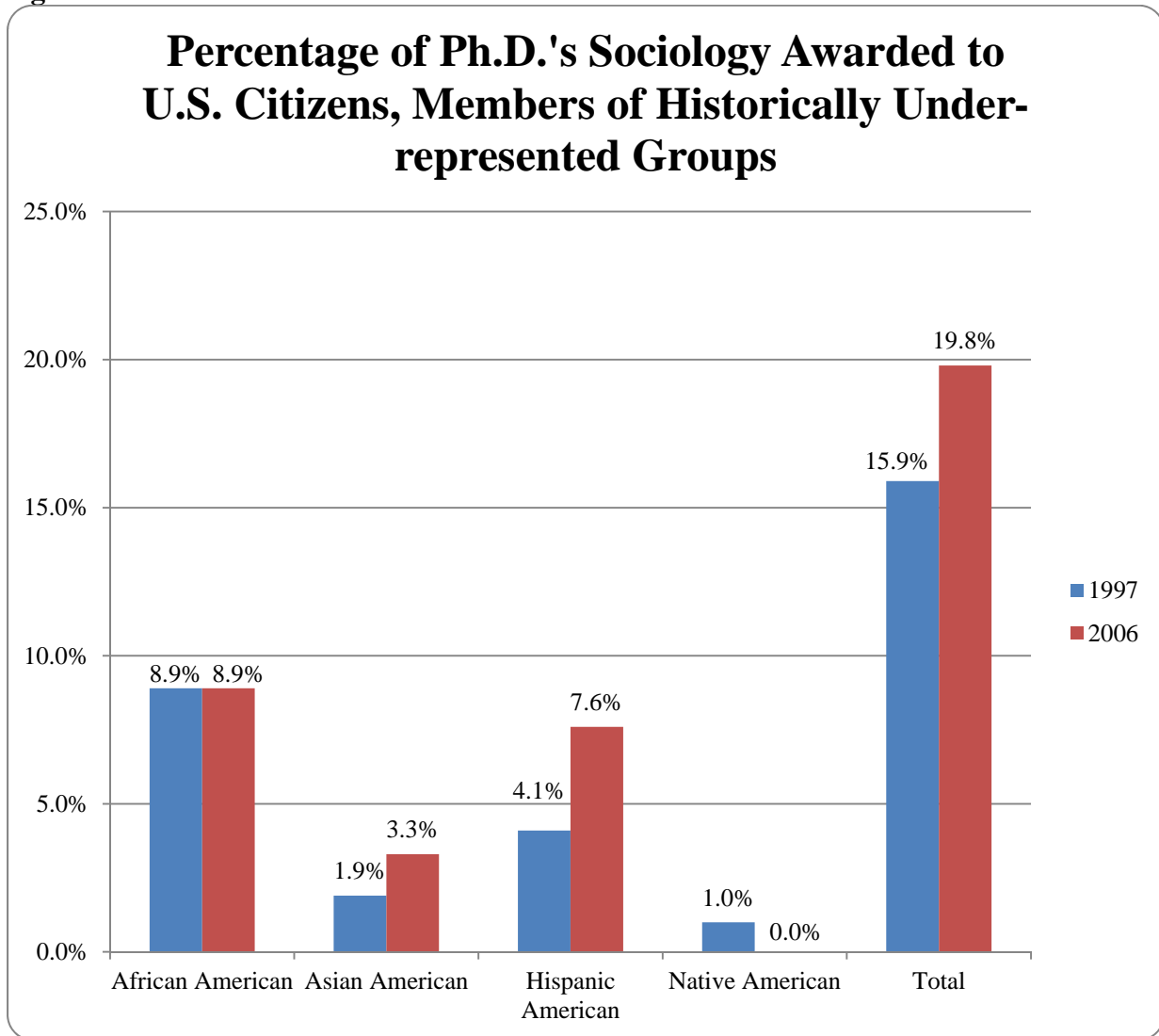
Percentage of Ph.D.'s Sociology Awarded to U.S. Citizens, Members of Historically Under-represented Groups

The following tables identify the top 10 institutions for each historically under-represented minority groups in terms of the numbers of Ph.D.'s awarded to U.S. citizens for the most recent 10-year period (1997-2006) for which data are available.

Table 143 Top 10 institutions for African American Ph.D's in Sociology

Institution	City, State	# of Graduates
Howard University	Washington, D.C.	33
University of Michigan	Ann Arbor, Michigan	20
Northwestern University	Chicago, Illinois	18
Wayne State University	Detroit, Michigan	18
University of Pennsylvania	Philadelphia, Pennsylvania	14
University of California-Berkeley	Berkeley, California	10
University of Chicago	Chicago, Illinois	10
Harvard University	Cambridge, Massachusetts	9
Western Michigan University	Kalamazoo, Michigan	9
North Carolina State University	Raleigh, North Carolina	8
University of California-Los Angeles	Los Angeles, California	8

Table 144 Top 10 institutions for Asian American Ph.D's in Sociology

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	14
University of California-Los Angeles	Los Angeles, California	13
University of Chicago	Chicago, Illinois	11
Columbia University	New York City, New York	8
University of Michigan	Ann Arbor, Michigan	8
University of Wisconsin	Madison, Wisconsin	6
Stanford University	Palo Alto, California	5
University of California-San Francisco	San Francisco, California	5
State University of New York	Albany, New York	4
University of Southern California	Los Angeles, California	4
University of Pennsylvania	Philadelphia, Pennsylvania	4

Table 145 Top 10 institutions for Hispanic American Ph.D's in Sociology

Institution	City, State	# of Graduates
City University of New York	New York City, New York	13
University of Michigan	Ann Arbor, Michigan	13
University of California-Los Angeles	Los Angeles, California	11
University of California-Santa Barbara	Santa Barbara, California	10
University of Texas	Austin, Texas	10
University of Wisconsin	Madison, Wisconsin	10
Harvard University	Cambridge, Massachusetts	8
Florida International University	Miami, Florida	6
Purdue University	West Lafayette, Indiana	6
Yale University	New Haven, Connecticut	6

Table 146 Top 10 institutions for Native American Ph.D's in Sociology

Native Americans	City, State	# of Graduates
Oklahoma State University	Stillwater, Oklahoma	4
South Dakota State University	Brookings, South Dakota	2
University of Chicago	Chicago, Illinois	2
University of North Carolina	Chapel Hill, North Carolina	2

The following table identifies the top 20 institutions in terms of the number of Sociology Ph.D.'s awarded to U.S. citizens, overall, for the most recent 10 year period for which data are available.

Table 147 Top 20 institutions in terms of number of Ph.D.'s in Sociology for all U.S. citizens

Institution	City, State	All US Citizens
University of Wisconsin	Madison, Wisconsin	121
University of California-Berkeley	Berkeley, California	115
University of Michigan	Ann Arbor, Michigan	112
University of Texas	Austin, Texas	104
University of California	Los Angeles, California	103
University of Chicago	Chicago, Illinois	98
University of Pennsylvania	Philadelphia, Pennsylvania	93
City University of New York	New York City, New York	88
Northwestern University	Chicago, Illinois	70
Ohio State University	Columbus Ohio	69
Indiana University	Bloomington, Indiana	67
Pennsylvania State University	Philadelphia, Pennsylvania	65
State University of New York	Albany, New York	63
North Carolina State University	Raleigh, North Carolina	61
University of Colorado	Boulder, Colorado	61
University of Arizona	Tucson, Arizona	60
University of North Carolina	Chapel Hill, North Carolina	58
University of California-Santa Barbara	Santa Barbara, California	56
University of Washington	Seattle, Washington	56
Harvard University	Cambridge, Massachusetts	52

The following table identifies the top 20 institutions in terms of the number of Sociology Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10 year period for which data are available.

Table 148 Top 20 institutions in terms of number of Ph.D.'s in Sociology awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of Michigan	Ann Arbor, Michigan	42
Howard University	Washington, D.C	34
University of California	Los Angeles, California	33
University of California	Berkeley, California	30
University of Chicago	Chicago, Illinois	28
Northwestern University	Chicago, Illinois	27
University of Wisconsin	Madison, Wisconsin	25
University of Pennsylvania	Philadelphia, Pennsylvania	23
City University of New York	New York City, New York	22
Harvard University	Cambridge, Massachusetts	20
Wayne State University	Detroit, Michigan	18
University of California	Santa Barbara, California	17
University of Texas	Austin, Texas	17
Columbia University	New York City, New York	16
Johns Hopkins University	Baltimore, Maryland	13
Florida International University	Miami, Florida	12
Oklahoma State University	Stillwater, Oklahoma	12
Stanford University	Palo Alto, California	12
Western Michigan University	Kalamazoo, Michigan	12
University of California	Riverside, California	11

Table 149 Data from 1997 through 2006 from the Surveys of Earned Doctorates for Sociology

Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen)	Total all Doctorates Granted
	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen	Count	% Total US citizen		
2006	40	8.9%	15	3.3%	361	80.2%	34	7.6%	0	0.0%	450	602
2005	38	9.5%	16	4.0%	308	77.2%	33	8.3%	4	1.0%	399	556
2004	36	8.0%	21	4.7%	368	81.4%	25	5.5%	2	0.4%	452	667
2003	46	9.9%	16	3.4%	365	78.3%	39	8.4%	0	0.0%	466	544
2002	45	9.9%	21	4.6%	362	79.4%	21	4.6%	7	1.5%	456	567
2001	40	8.9%	24	5.3%	350	77.8%	34	7.6%	2	0.4%	450	579
2000	52	10.9%	19	4.0%	377	78.9%	24	5.0%	6	1.2%	478	637
1999	40	9.3%	19	4.4%	342	79.7%	24	5.6%	4	1.0%	429	572
1998	37	8.8%	14	3.3%	354	83.9%	14	3.3%	3	0.7%	422	579
1997	37	8.9%	8	1.9%	349	84.1%	17	4.1%	4	1.0%	415	601
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created (month/ year): November 2009												

Degree Received: Doctorates in Sociology

Table 150 Data from 2007 and 2008 from the Surveys of Earned Doctorates for Sociology

These are the newest available data provided by the National Science Foundation; however, these data combine Permanent U.S. Residents and U.S. Citizens.

	Degree Received: Doctorates in Sociology											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US citizen and Permanent Residents)	Total all Doctorates Granted
	Count	% Total	Count	% Total	Count	% Total	Count	% Total	Count	% Total		
2008	39	8.4%	28	6.1%	355	76.7%	40	8.6%	1	0.2%	463	601
2007	34	7.7%	25	5.7%	349	79.7%	28	6.4%	2	0.5%	438	576

Humanities

The following tables identify the top 20 institutions for each historically under-represented group in terms of the numbers of Ph.D.s in Humanities awarded to U.S. citizens for the most recent 10 year period for which data are available (1997-2006). Disciplines included within this category are: Foreign Languages, History, Literature, Arts, Religion, and Philosophy.

Table 151 Top 20 institutions for Ph.D's in Humanities awarded to U.S. citizens

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	838
Columbia University in the City of New York	New York City, New York	657
University of California-Los Angeles	Los Angeles, California	626
New York University	New York City, New York	623
University of Wisconsin-Madison	Madison, Wisconsin	618
Indiana University at Bloomington	Bloomington, Indiana	559
University of Chicago	Chicago, Illinois	558
University of Texas at Austin	Austin, Texas	558
Harvard University	Cambridge, Massachusetts	553
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	510
Yale University	New Haven, Connecticut	498
University of Michigan at Ann Arbor	Ann Arbor, Michigan	482
University of Virginia, Main Campus	Charlottesville, Virginia	437
Ohio State University, Main Campus	Columbus, Ohio	424
University of Pennsylvania	Philadelphia, Pennsylvania	414
University of Minnesota - Twin Cities	Minneapolis/St. Paul, Minnesota	403
Princeton University	West Windsor, New Jersey	401
CUNY Graduate School and University Center	New York City, New York	388
Stanford University	Palo Alto, California	375
University of Washington - Seattle	Seattle, Washington	368

Table 152 Top 20 institutions for all historically under-represented minorities Ph.D's in Humanities

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	198
University of California-Los Angeles	Los Angeles, California	139
Harvard University	Cambridge, Massachusetts	95
Columbia University in the City of New York	New York City, New York	85
Stanford University	Palo Alto, California	85
New York University	New York City, New York	71
Yale University	New Haven, Connecticut	71
University of Texas at Austin	Austin, Texas	67
Cornell University, All Campuses	Philadelphia, Pennsylvania	66
Temple University	Ithaca, New York	62
University of Chicago	Chicago, Illinois	62
University of Pennsylvania	Philadelphia, Pennsylvania	60
Duke University	Durham, North Carolina	58
CUNY Graduate School and University Center	New York City, New York	56
Howard University	Washington, D.C.	56
Ohio State University, Main Campus	Columbus, Ohio	54
University of Puerto Rico Rio Piedras Campus	San Juan, Puerto Rico	54
Florida State University	Tallahassee, Florida	53
University of Arizona	Tucson, Arizona	48
University of California-Irvine	Irvine, California	46

Table 153 Top 10 institutions for African American Ph.D's in Humanities

Institution	City, State	# of Graduates
Howard University	Washington, D.C.	55
Temple University	Philadelphia, Pennsylvania	42
Duke University	Durham, North Carolina	34
New York University	New York, New York	31
University of California-Berkeley	Berkeley, California	31
Ohio State University, Main Campus	Columbus, Ohio	29
University of Pennsylvania	Philadelphia, Pennsylvania	26
University of California-Los Angeles	Los Angeles, California	25
Harvard University	Cambridge, Massachusetts	24
Florida State University	Tallahassee, Florida	23

Table 154 Top 10 institutions for Asian American Ph.D's in Humanities

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	91
University of California-Los Angeles	Los Angeles, California	59
Columbia University in the City of New York	New York, New York	39
Harvard University	Cambridge, Massachusetts	34
University of Michigan at Ann Arbor	Ann Arbor, Michigan	31
University of Chicago	Chicago, Illinois	26
Yale University	New Haven, Connecticut	24
Cornell University, All Campuses	Ithaca, New York	22
New York University	New York, New York	20
University of Pennsylvania	Philadelphia, Pennsylvania	20

Table 155 Top 10 institutions for Caucasian & Other Ph.D's in Humanities

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	640
Columbia University in the City of New York	New York, New York	572
University of Wisconsin-Madison	Madison, Wisconsin	568
New York University	New York, New York	552
Indiana University at Bloomington	Bloomington, Indiana	513
University of Chicago	Chicago, Illinois	496
University of Texas at Austin	Austin, Texas	491
University of California-Los Angeles	Los Angeles, California	487
University of North Carolina at Chapel Hill	Chapel Hill, North Carolina	467
Harvard University	Cambridge, Massachusetts	458

Table 156 Top 10 institutions for Hispanic American Ph.D's in Humanities

Institution	City, State	# of Graduates
University of California-Berkeley	Berkeley, California	73
University of California-Los Angeles	Los Angeles, California	54
University of Puerto Rico- Rio Piedras Campus	San Juan, Puerto Rico	54
University of Texas at Austin	Austin, Texas	46
Stanford University	Palo Alto, California	40
City University of New York Graduate School and University Center	New York, New York	37
University of Arizona	Tucson, Arizona	37
Harvard University	Cambridge, Massachusetts	36
Arizona State University Main	Tempe, Arizona	33
Florida State University	Tallahassee, Florida	29
University of California-Santa Barbara	Santa Barbara, California	29

Table 157 Top 10 institutions for NativeAmerican Ph.D's in Humanities

Institution	City, State	# of Graduates
Stanford University	Palo Alto, California	7
University of Oklahoma, Norman Campus	Norman, Oklahoma	7
University of California-Riverside	Riverside, California	6
University of Minnesota - Twin Cities	St. Paul/Minneapolis, Minnesota	5
Arizona State University Main	Tempe, Arizona	4
University of Nebraska at Lincoln	Lincoln, Nebraska	4
Bowling Green State University, All Campuses	Bowling Green, Ohio	3
Cornell University, All Campuses	Ithaca, New York	3
University of Arizona	Tucson, Arizona	3
University of California-Berkeley	Berkeley, California	3
University of California-Santa Barbara	Santa Barbara, California	3
University of California-Santa Cruz	Santa Cruz, California	3
University of New Mexico, All Campuses	Albuquerque, New Mexico	3

Doctorate in History

Earned Doctorate Degrees in History[25]

During the 10 most recent years for which data are available (1997 through 2006) a total of 9,451 doctorates were awarded in History. Of these, 8,031 or 85.0% were awarded to U.S. citizens and 1,420 or 15.0% were awarded to non-U.S. citizens.

Figure 77
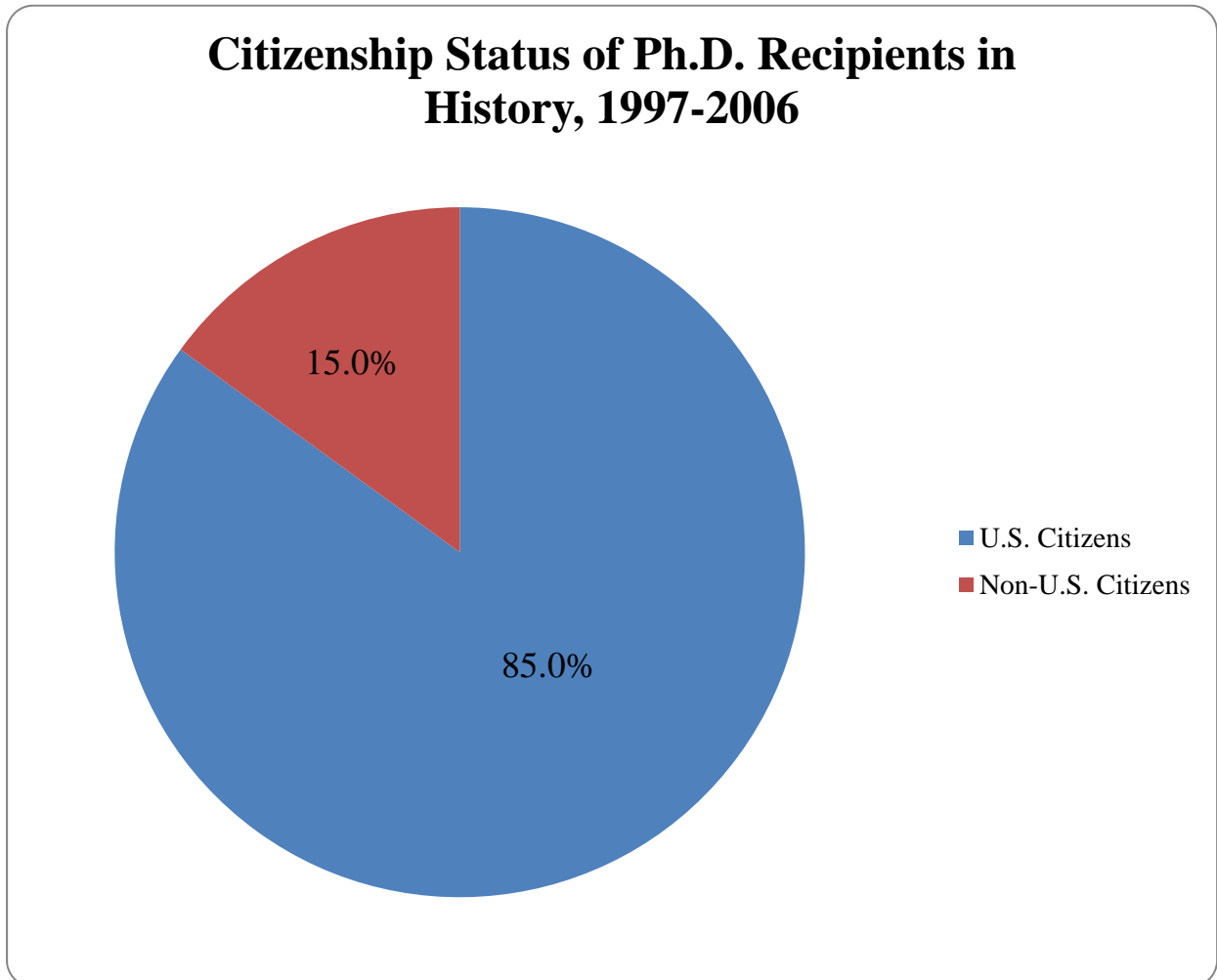
Citizenship Status of Ph.D. Recipients in History, 1997-2006

15.0%

85.0%

- U.S. Citizens
- Non-U.S. Citizens

Out of the 8,031 doctorates awarded to U.S. citizens during the 1997-2006 period, 365 or 4.5% were earned by African Americans, 223 or 2.8% were earned by Asian Americans, 7,084 or 88.2% were earned by Caucasian or Other ethnicities, 312 or 3.9% were earned by Hispanic Americans, and 47 or 0.6% were earned by Native Americans.

Figure 78
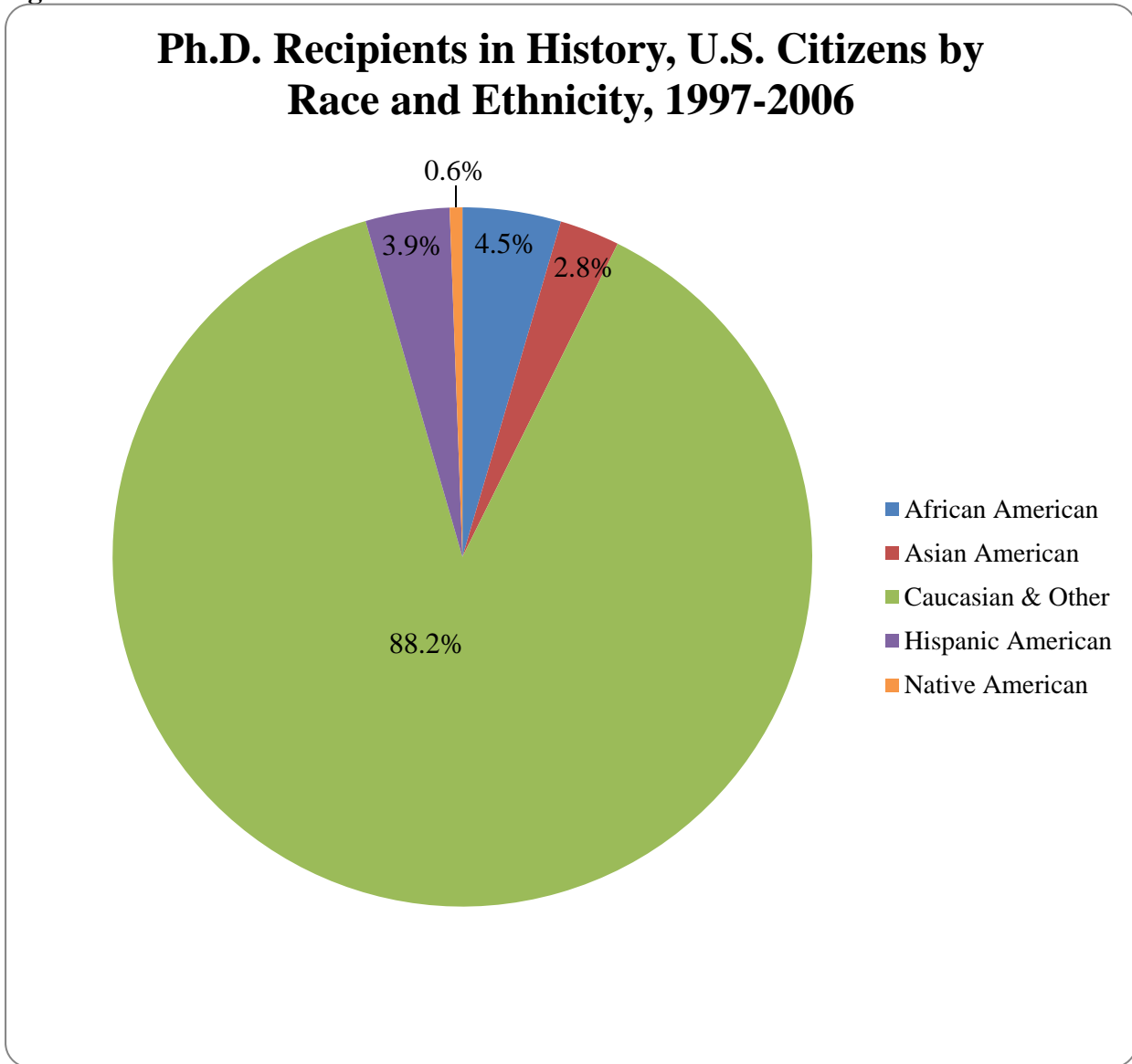
Ph.D. Recipients in History, U.S. Citizens by Race and Ethnicity, 1997-2006

- African American
- Asian American
- Caucasian & Other
- Hispanic American
- Native American

The number of Doctorates in History awarded to U.S. citizens who are graduates of historically under-represented groups is shown in Figure 79. The total number of graduates of historically under-represented groups in these fields remains below 109 during the time period of 1996 to 2006. It has fluctuated over the past 10 years; however, the number has increased from a total of 66 in 1997 to 109 in 2006.

Figure 79

Ph.D.'s in History Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997-2006
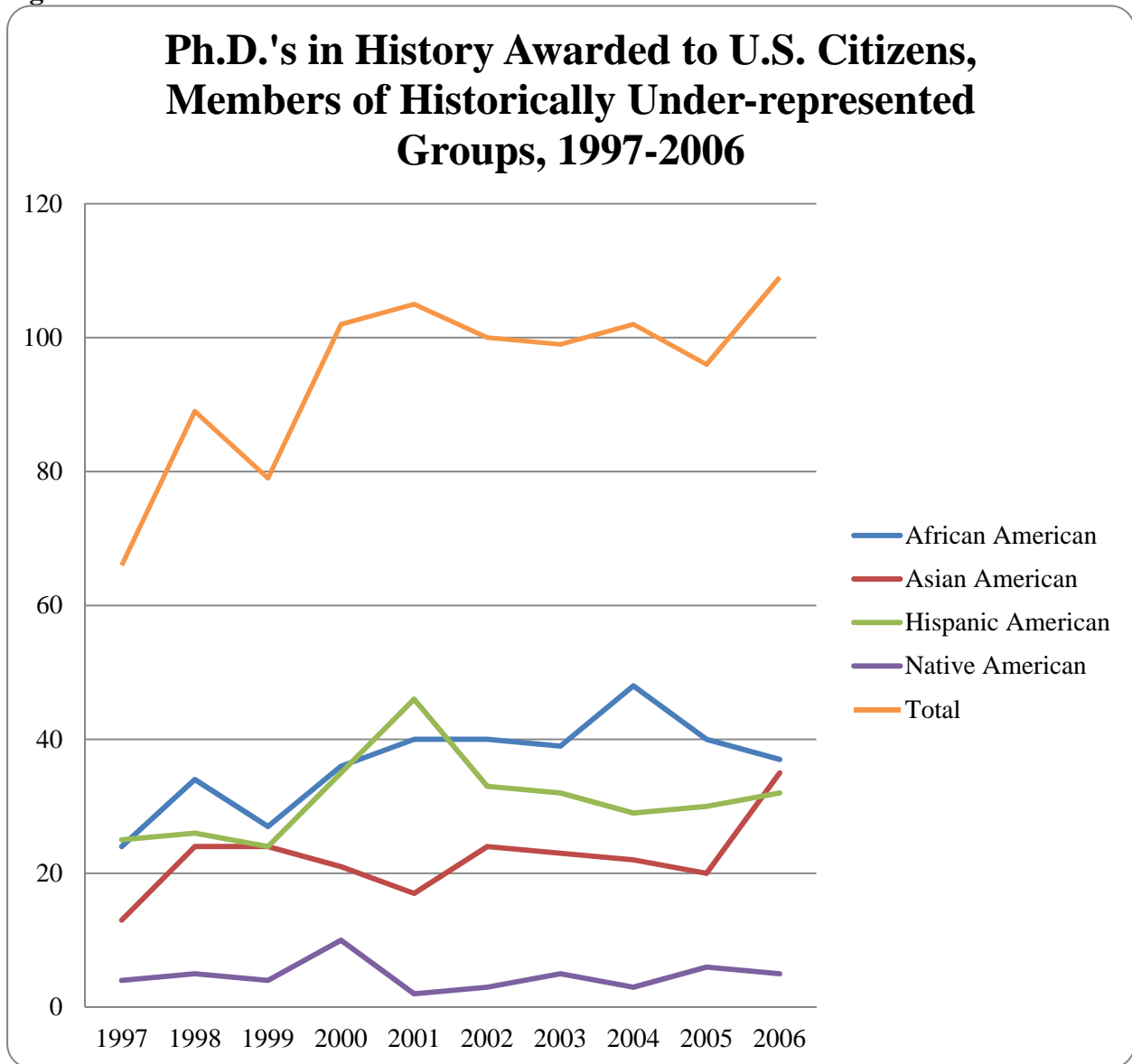
Figure 80 shows the percentage change of Ph.D.'s in History for U.S. citizens awarded to graduates of historically under-represented groups, comparing 1997 to 2006. The percentage has increased to 14.3% of the total in 2006 as compared to 8.3% of the total 10 years earlier. During these 10 years, African Americans increased from 3.0% of the total to 4.8%, Asian Americans increased from 1.6%% of the total to 4.6%, Hispanic Americans increased from 3.2% of the total to 4.2%, and Native Americans increased from 0.5% of the total to 0.7%.

Figure 80
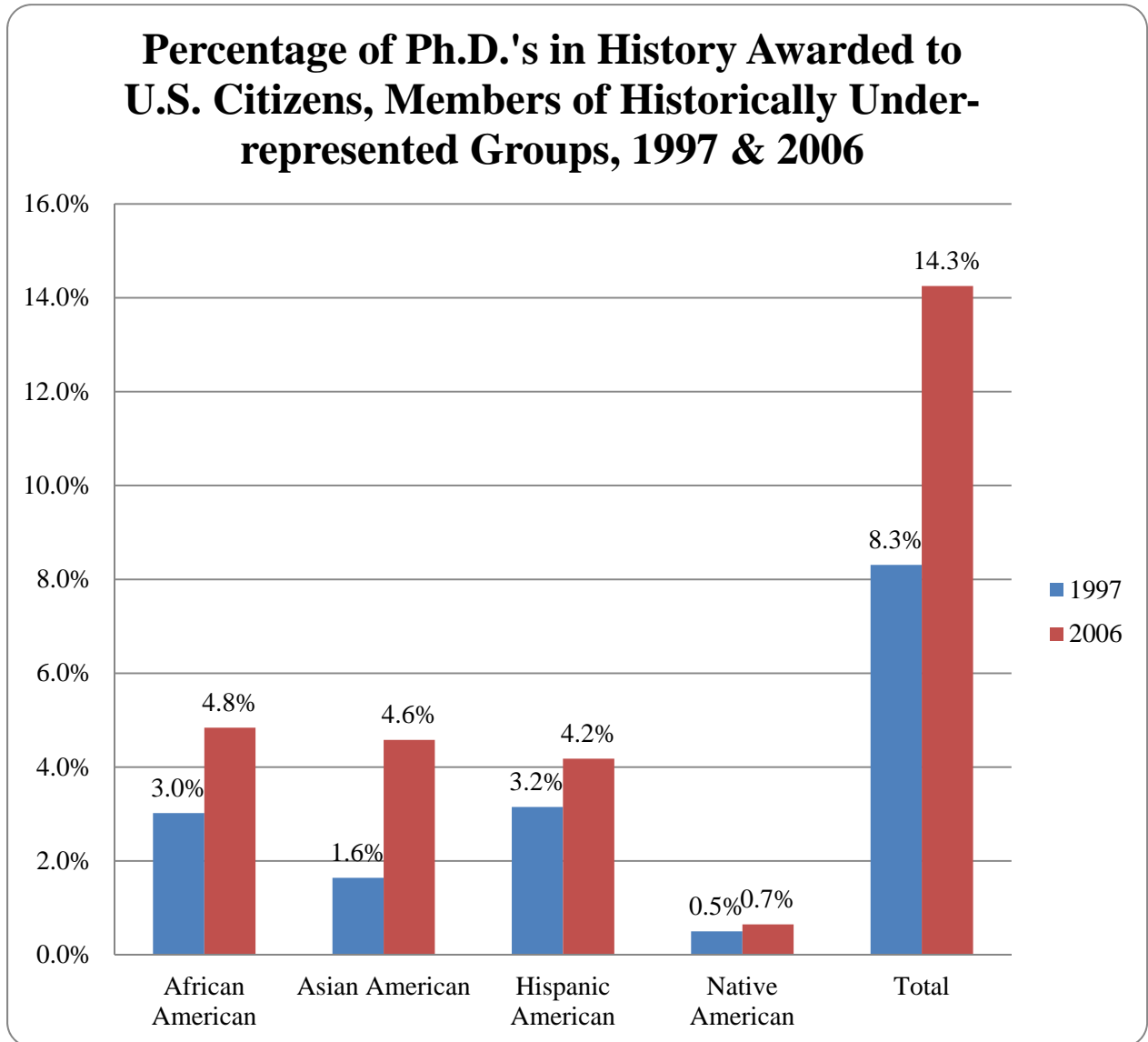
Percentage of Ph.D.'s in History Awarded to U.S. Citizens, Members of Historically Under-represented Groups, 1997 & 2006

The following tables identify the top 10 institutions for each under-represented minority group in the terms of numbers of History Ph.D.'s awarded to U.S. citizens for the most recent 10 year period (1997-2006) for which data are available.

Table 158 Top 10 institutions for African American Ph.D's in History

Institution	City, State	# of Graduates
Howard University	Washington, D.C.	26
Ohio State University	Columbus, Ohio	18
Duke University	Durham, North Carolina	17
Princeton University	Princeton, New Jersey	14
Temple University	Philadelphia, Pennsylvania	14
University of Pennsylvania	Philadelphia, Pennsylvania	14
Michigan State University	East Lansing, Michigan	13
University of Michigan	Ann Arbor, Michigan	13
Florida State University	Tallahassee, Florida	11
University of California	Los Angeles, California	11

Table 159 Top 10 institutions for Asian American Ph.D's in History

Institution	City, State	# of Graduates
University of California	Los Angeles, California	28
University of California	Berkeley, California	22
Harvard University	Cambridge, Massachusetts	20
Columbia University	New York City, New York	15
University of Chicago	Chicago, Illinois	11
Cornell University	Ithaca, New York	7
Stanford University	Palo Alto, California	7
University of Wisconsin	Madison, Wisconsin	7
University of Hawaii	Manoa, Hawaii	7
University of Washington	Seattle, Washington	6

Table 160 Top 10 institutions for Hispanic American Ph.D's in History

Institutions	City, State	# of Graduates
University of Puerto Rico	San Juan, Puerto Rico	27
University of California	Los Angeles, California	26
University of California	Berkeley, California	18
University of Michigan	Ann Arbor, Michigan	13
Stanford University	Palo Alto, California	10
University of California	San Diego, California	9
Arizona State University	Tempe, Arizona	8
Columbia University	New York City, New York	8
University of Chicago	Chicago, Illinois	8
University of New Mexico	Albuquerque, New Mexico	8

Table 161 Top 10 institutions for Native American Ph.D's in History

Institutions	City, State	# of Graduates
Arizona State University	Tempe, Arizona	4
University of California	Riverside, California	4
Northern Arizona University	Flagstaff, Arizona	2
Northern Illinois University	DeKalb, Illinois	2
University of California	Berkeley, California	2
University of California	Santa Cruz, California	2
University of Minnesota	St. Paul/ Minneapolis, Minnesota	2
University of North Carolina	Chapel Hill, North Carolina	2
University of Washington	Seattle, Washington	2

The following table identifies the top 20 institutions in terms of the number of History Ph.D.'s awarded to U.S. citizens, overall, for the most-recent 10-year period for which data are available.

Table 162 Top 20 institutions in terms of number of Ph.D.'s in History for all U.S. citizens and to citizens from historically under-represented groups

Institution	City, State	All US Citizens
University of California	Los Angeles, California	258
Columbia University	New York City, New York	247
University of California	Berkeley, California	240
University of Chicago	Chicago, Illinois	217
Harvard University	Cambridge, Massachusetts	207
Yale University	New Haven, Connecticut	192
University of Wisconsin	Madison, Wisconsin	183
University of Virginia	Charlottesville, Virginia	164
University of Michigan	Ann Arbor, Michigan	159
Ohio State University	Columbus, Ohio	157
University of North Carolina	Chapel Hill, North Carolina	142
Indiana University	Bloomington, Indiana	141
Princeton University	Princeton, New Jersey	136
New York University	New York City, New York	130
University of Pennsylvania	Philadelphia, Pennsylvania	125
Stanford University	Palo Alto, California	124
University of Minnesota	St. Paul/ Minneapolis, Minnesota	122
University of Texas	Austin, Texas	122
Rutgers University	New Brunswick, New Jersey	113
Florida State University	Tallahassee, Florida	107

The following table identifies the top 20 institutions in terms of the number of History Ph.D.'s awarded to those citizens from all historically under-represented groups for the most recent 10-year period for which data are available.

Table 163 Top 20 institutions in terms of number of Ph.D.'s in History awarded to citizens from historically under-represented groups

Institution	City, State	US Citizens from Under-Represented Groups
University of California	Los Angeles, California	66
University of California	Berkeley, California	45
University of Michigan	Ann Arbor, Michigan	33
Columbia University	New York City, New York	32
Harvard University	Cambridge, Massachusetts	32
Northwestern University	Chicago, Illinois	32
University of Puerto Rico	San Juan, Puerto Rico	27
Howard University	Washington, D.C.	26
Stanford University	Palo Alto, California	25
Yale University	New Haven, Connecticut	25
University of Pennsylvania	Philadelphia, Pennsylvania	23
Princeton University	Princeton, New Jersey	22
University of Chicago	Chicago, Illinois	21
Temple University	Philadelphia, Pennsylvania	20
Duke University	Durham, North Carolina	19
Arizona State University	Tempe, Arizona	16
Florida State University	Tallahassee, Florida	16
Indiana University	Bloomington, Indiana	15
Michigan State University	East Lansing, Michigan	15
New York University	New York City, New York	15

Table 164 Data from 1997 through 2006 from the Surveys of Earned Doctorates for History

	Degree Received: Doctorates in History											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US Citizen)	Total All Doctorates Granted
	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen		
2006	37	4.8%	35	4.6%	656	85.8%	32	4.2%	5	0.7%	765	917
2005	40	5.5%	20	2.7%	634	86.9%	30	4.1%	6	0.8%	730	881
2004	48	6.1%	22	2.8%	686	87.1%	29	3.7%	3	0.4%	788	928
2003	39	5.1%	23	3.0%	674	87.2%	32	4.1%	5	0.7%	773	895
2002	40	4.9%	24	2.9%	724	87.9%	33	4.0%	3	0.4%	824	984
2001	40	4.7%	17	2.0%	746	87.7%	46	5.4%	2	0.2%	851	991
2000	36	4.1%	21	2.4%	778	88.4%	35	4.0%	10	1.1%	880	1019
1999	27	3.3%	24	3.0%	735	90.3%	24	3.0%	4	0.5%	814	960
1998	34	4.2%	24	3.0%	723	89.0%	26	3.2%	5	0.6%	812	946
1997	24	3.0%	13	1.6%	728	91.7%	25	3.2%	4	0.5%	794	930
Source: NSF Survey of Earned Doctorates/Doctorate Records File												
Web Site: http://webcaspar.nsf.gov												
Date Table Created (month/year): January 2010												

Table 165 Data from 2007 and 2008 from the Surveys of Earned Doctorates for History

This is the newest available data provided by the National Science Foundation; however, this data includes Permanent Residents as well as U.S. Citizens.

	*Degree Received: Doctorates in History*											
Year	African American		Asian American		Caucasian & Other		Hispanic American		Native American		Total (US Citizen and Permanent Residents)	Total All Doctorates Granted
	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen	Count	% Total US Citizen		
2008	53	6.6%	29	3.6%	670	83.9%	43	5.4%	4	0.5%	799	969
2007	48	6.1%	27	3.4%	668	84.2%	47	5.9%	3	0.4%	793	940

Subsection B
Mid-careerist

Mid-Careerists

Based on instruction from CRS, the present report defines a "mid-careerist" as someone with a graduate degree who has public policy analytic skills and who has spent ten to fifteen years in the workforce. Unfortunately, despite extensive bibliographic research, the capstone team was unable to identify any comprehensive data source that provided information about the location and current occupational status of mid-careerists in fields of interest to CRS.

Information was found, however, about two topics that may prove useful to CRS. These are (1) estimates of the total number of mid-careerists potentially in the workforce and (2) an inventory of mid-career MPA's and related degrees. Each topic is discussed in turn.

Estimates of the Total Number of Mid-Careerists

Analyses of the total number of mid-careerists were conducted using the same disciplines and level of degree as well as the same databases described earlier in the Methods section (see pages 17-20). The number of mid-careerists was compared to the number of "early-careerists" and "senior-careerists."

An "early-careerist" was defined as one who has acquired a doctoral degree (or a master's degree in select fields) in one of the disciplines of interest and who has been in the workforce fewer than ten years. This category includes those graduating between the years 2000 and either 2006 or 2007. (For an explanation of why data are available through 2007 for some fields, but only through 2006 for others see the discussion of the SED and IPEDS databases on pages 20-21).

A "mid-careerist" is one who has acquired a doctoral degree (or a master's degree in select fields) in one of the disciplines of interest and who has been in the workforce for ten to fifteen years. The mid-career category includes all those receiving degrees in the years between 1994 and 1999, inclusive. (Analyses of master's degrees required using the IPEDS data base, for which data were not reported for the year 1999. Also, the breakdown of graduates by ethnicity goes back only to 1995.)

A "senior-careerist" is one who has acquired a doctoral degree (or a master's degree in select fields) in one of the disciplines of interest and who has been in the workforce for more than fifteen years. The senior-career category includes all those receiving degrees in 1993 and earlier.

Agricultural Sciences[26]

The number of doctorates in Agricultural Sciences awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 81. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 81

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Agricultural Sciences
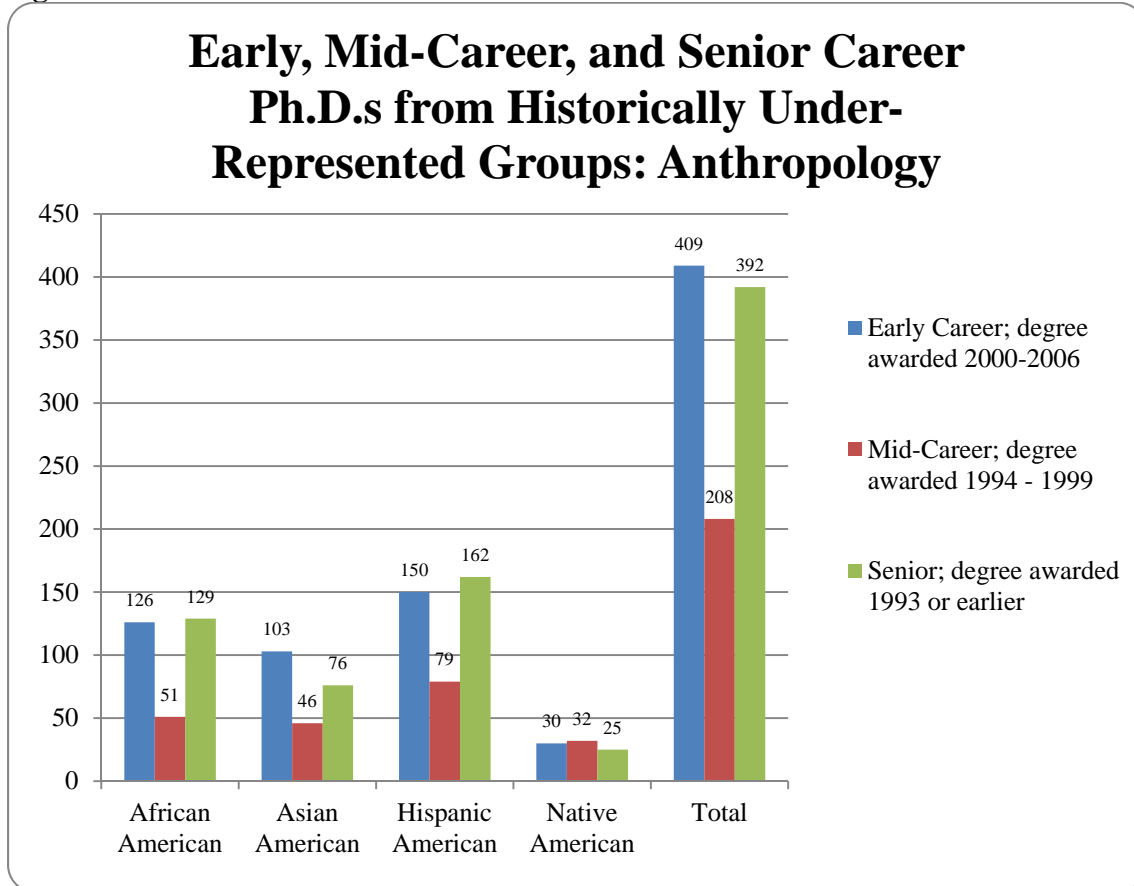
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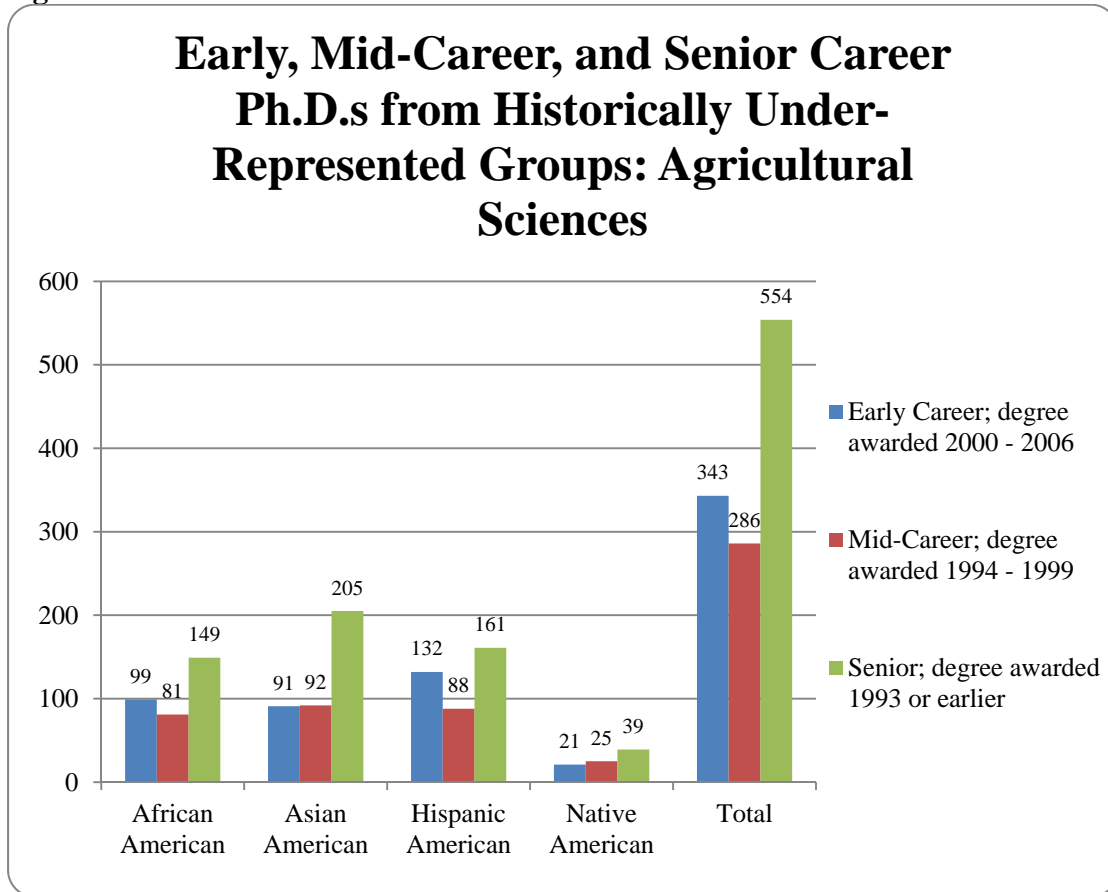
[26] For a complete listing of sub-fields included within Agricultural Sciences please refer to the appendix 1 entitled "Fine Field of Study" under Agricultural Science and Natural Resource.

Anthropology[27]

The number of doctorates in Anthropology awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 82. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 82

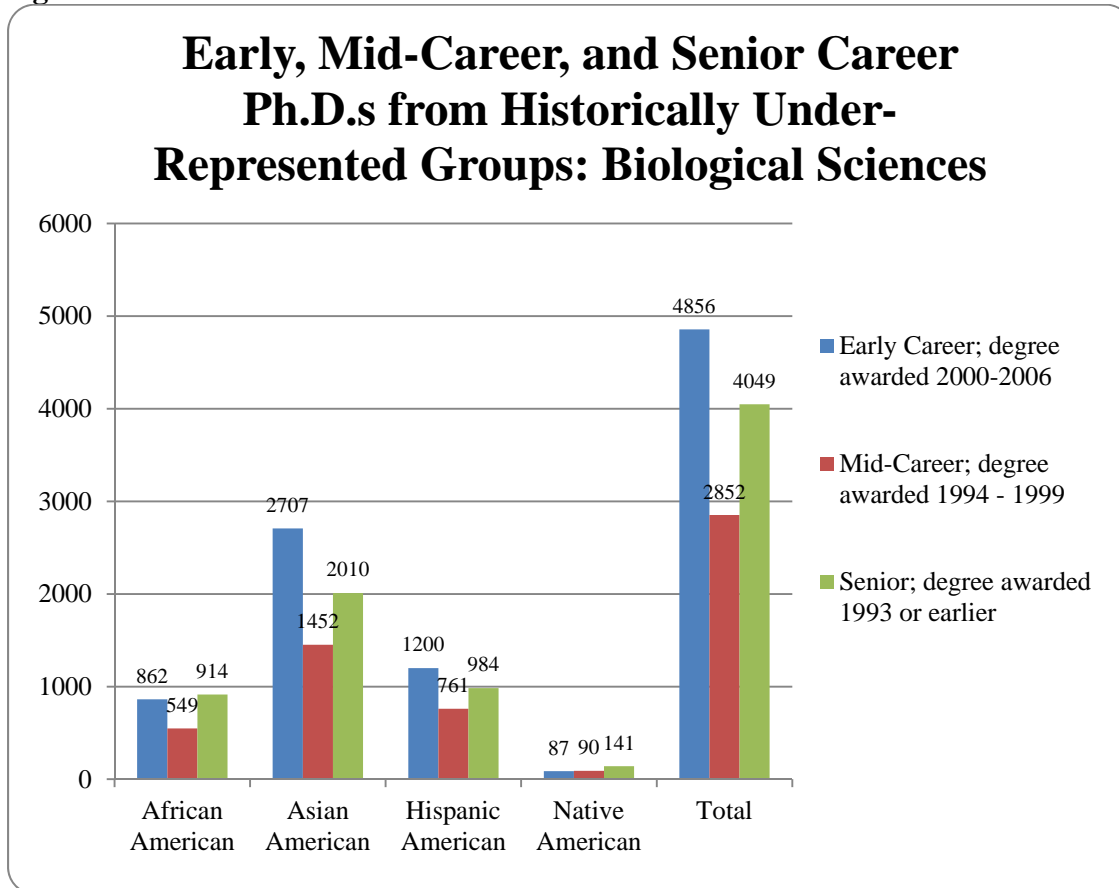Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Anthropology

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27 For a complete listing of sub-fields included within Anthropology please refer to the appendix 1 entitled "Fine Field of Study" under Anthropology.

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Biological Sciences[28]

The number of doctorates in Biological Sciences awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 83. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 83

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Biological Sciences

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Master of Business Administration[29]

The number of masters in Business Administration awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 84. Data is provided according to the length of time elapsed since the degree was awarded. Master of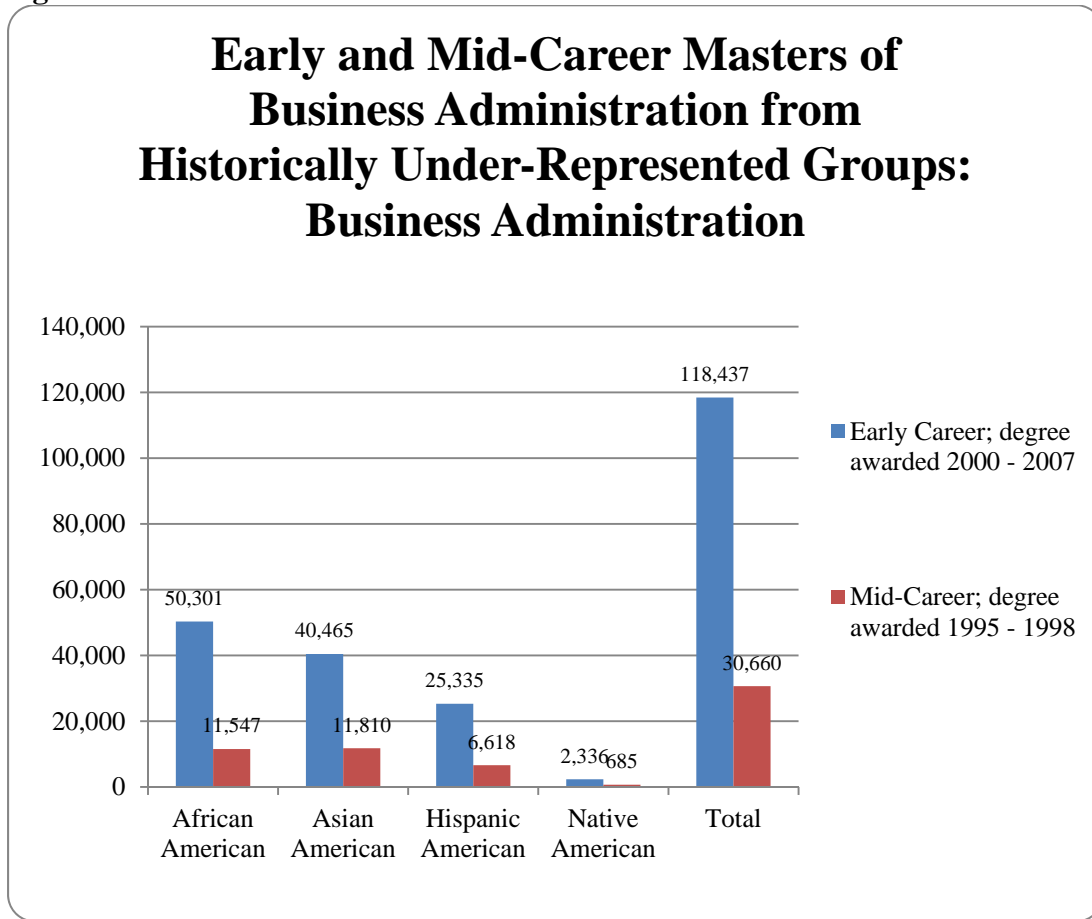 Business Administration does not contain data on senior career level professionals because the database (IPEDS) did not provide the data further back than 1995.

Figure 84

Early and Mid-Career Masters of Business Administration from Historically Under-Represented Groups: Business Administration

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[29] Master of Business Administration is defined in the IPEDS Survey of Earned Masters as the following subfield:
    52.02.01 Master of Business Administration

Doctorates of Business Administration[30]

The number of doctorates in Business Administration awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 85. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 85

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Business Administration
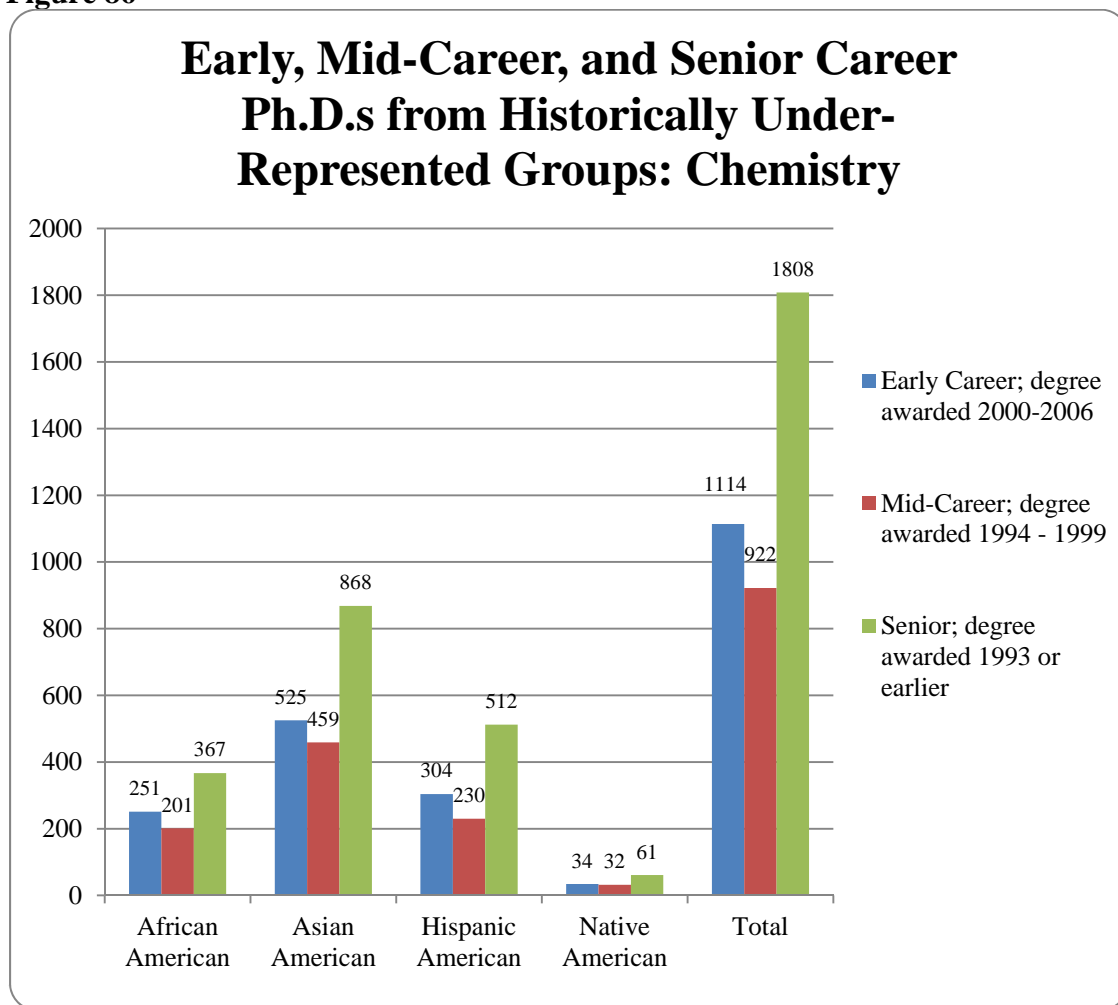
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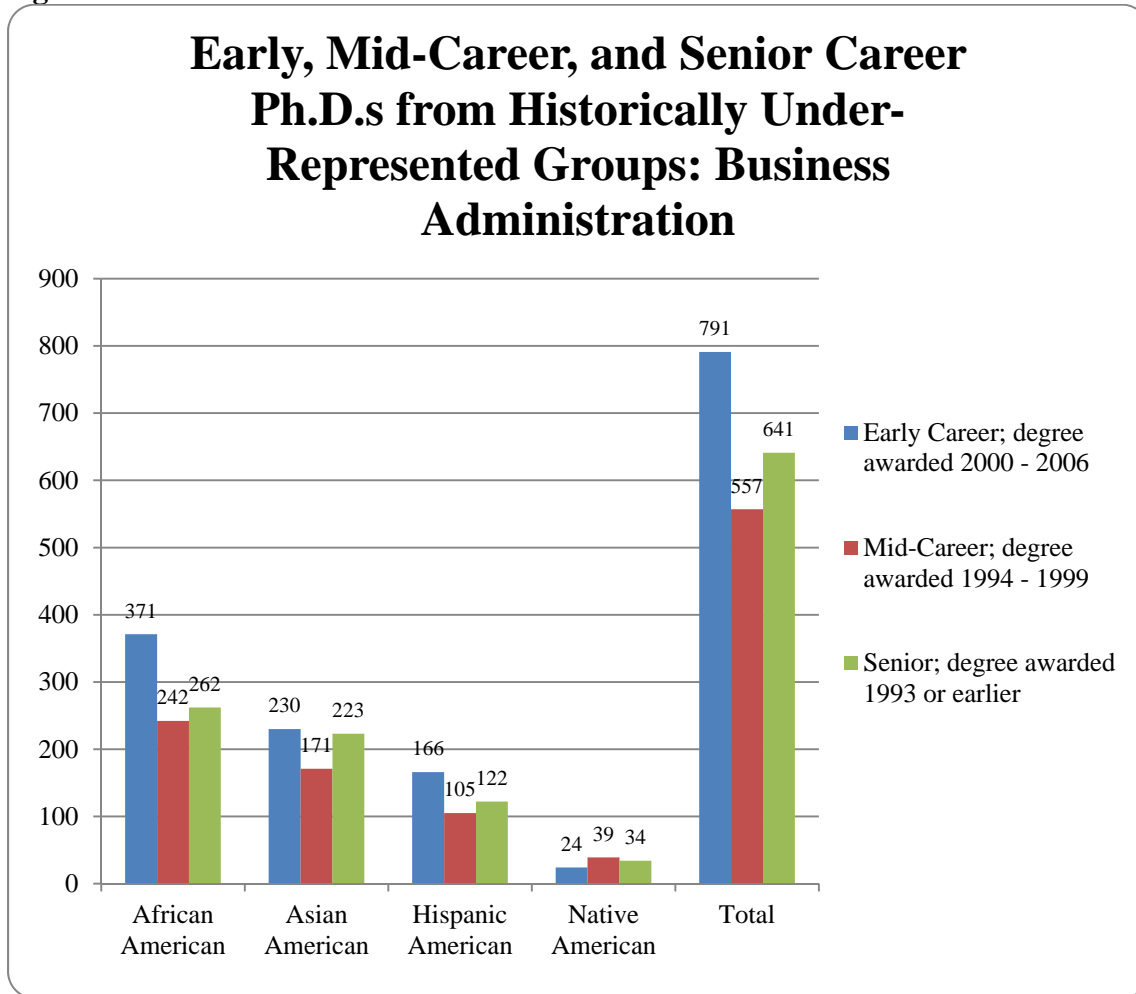
[30] For a complete listing of sub-fields included within Business Administration please refer to the appendix 1 entitled "Fine Field of Study" under Business Management and Administrative Services

Chemistry[31]

The number of doctorates in Chemistry awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 86. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 86

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Chemistry

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[31] For a complete listing of sub-fields included within Chemistry please refer to the appendix 1 entitled "Fine Field of Study" under Chemistry.

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The number of doctorates in Economics awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 87. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 87

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Economics

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[32] For a complete listing of sub-fields included within Economics please refer to the appendix 1 entitled "Fine Field of Study."

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Engineering[33]

The number of doctorates in Engineering awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 88. Data is provided according to the length of time elapsed since the degree was awarded.
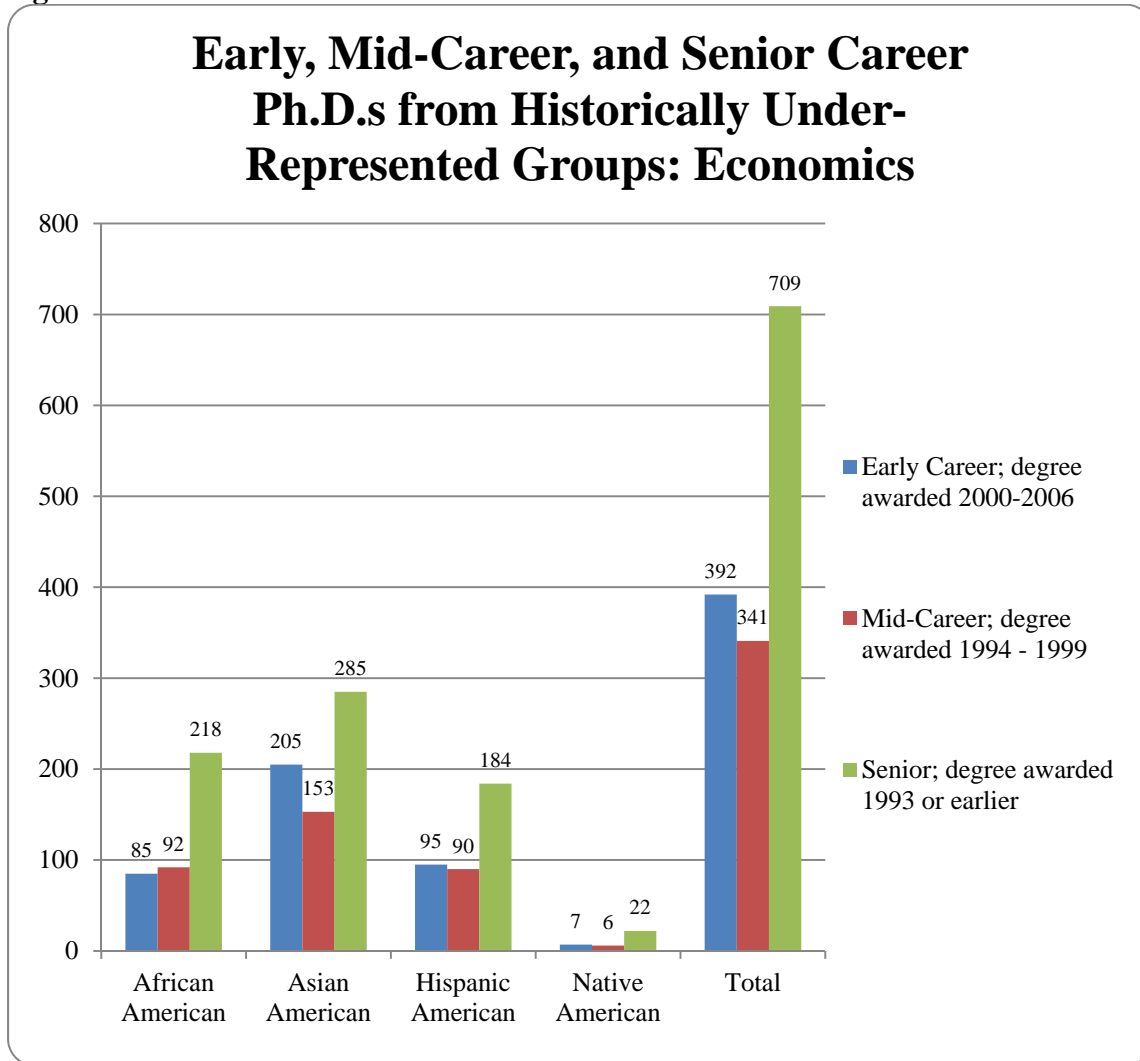
Figure 88

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Engineering

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[33] For a complete listing of sub-fields included within Engineering please refer to the appendix 1 entitled "Fine Field of Study" under Engineering.

The number of doctorates in Geosciences awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 89. Data is provided according to the length of time elapsed since the degree was awarded.
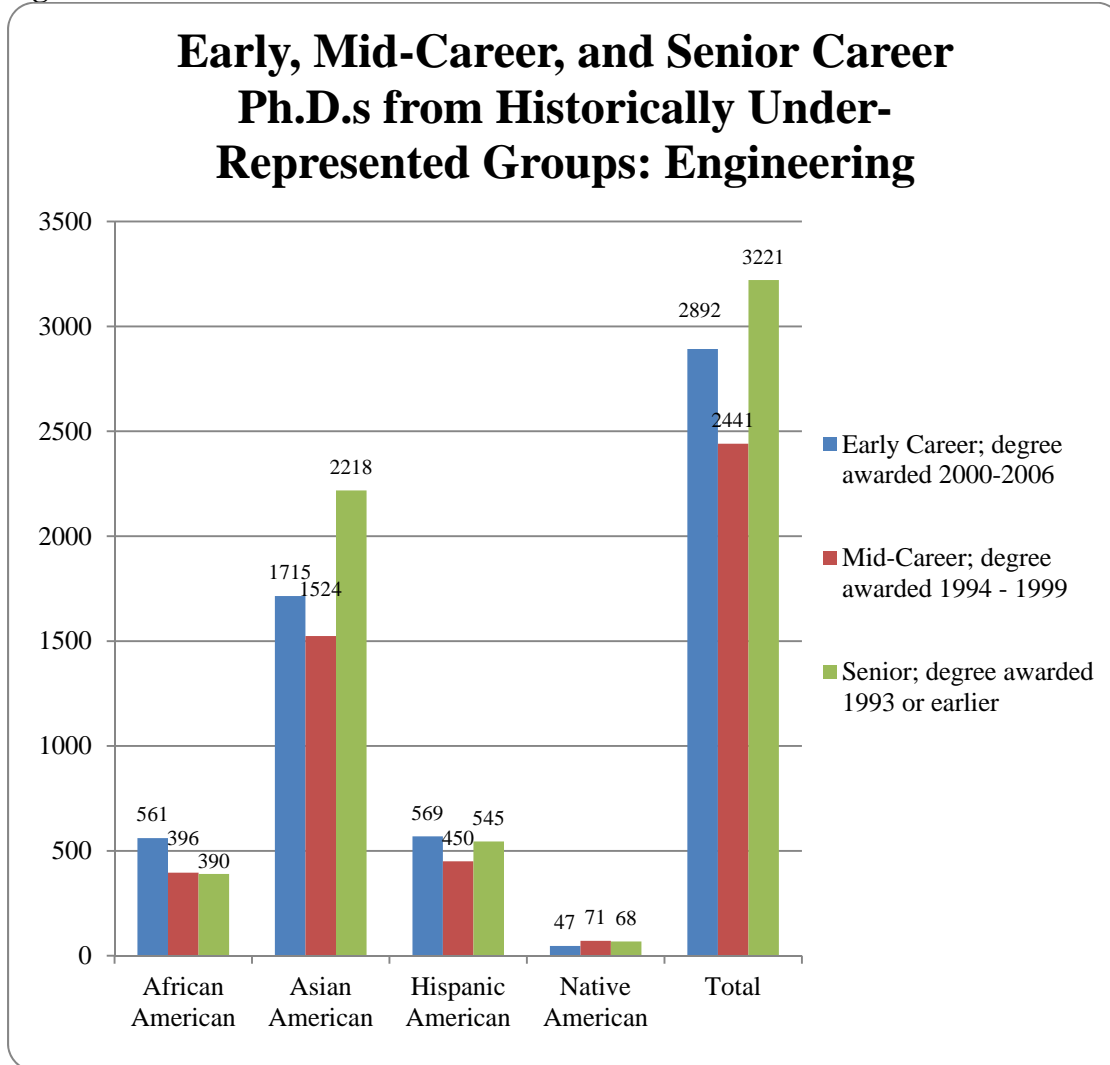
Figure 89

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Geosciences

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[34] For a complete listing of sub-fields included within Geosciences please refer to the appendix 1 entitled "Fine Field of Study" under Geological & Earth Sciences

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The number of doctorates in History awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 90. Data is provided according to the length of time elapsed since the degree was awarded.
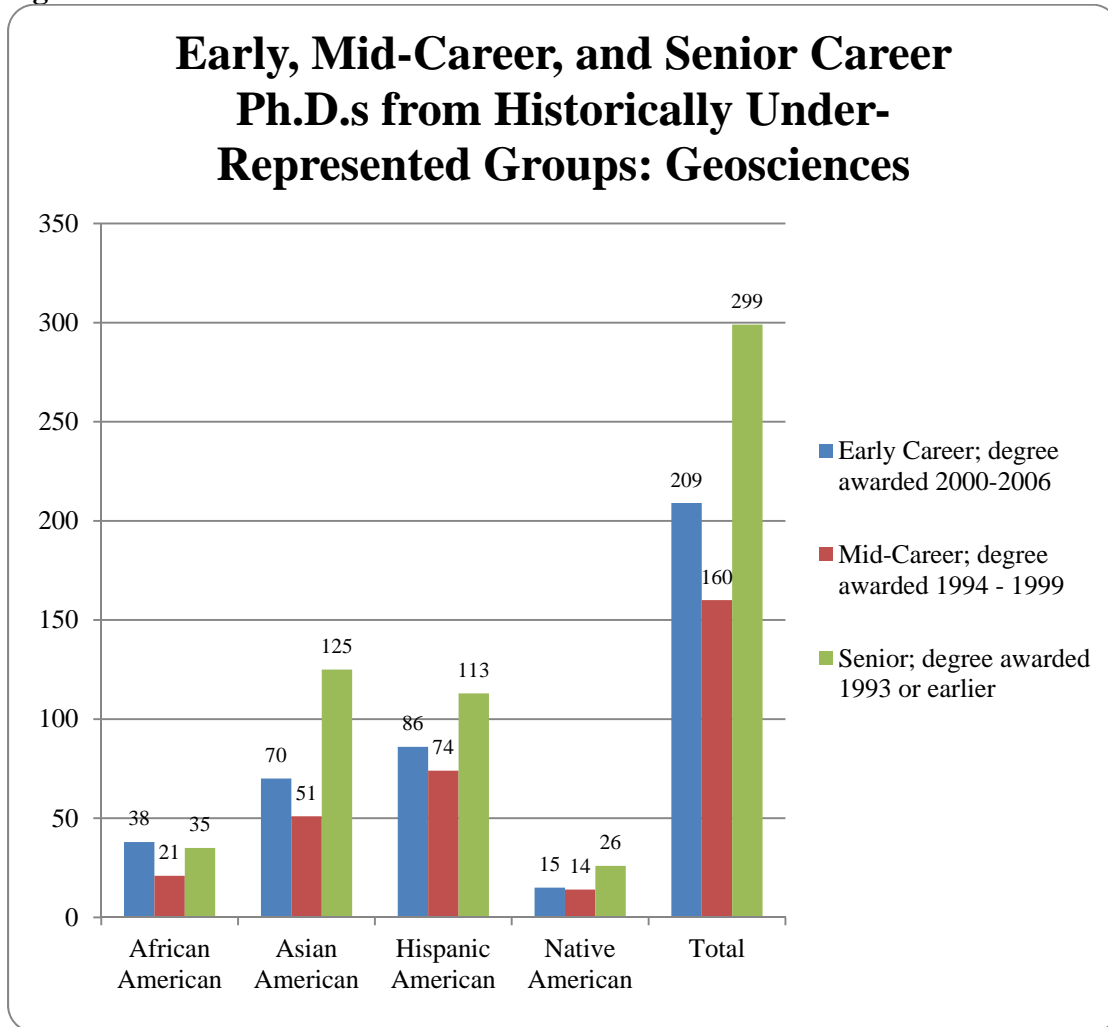
Figure 90

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: History

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[35] For a complete listing of sub-fields included within History please refer to the appendix 1 entitled "Fine Field of Study" under History.

Master of International Relations/Affairs and Area Studies[36]

The number of masters in International Relations/Affairs and Area Studies awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 91. Data is provided according t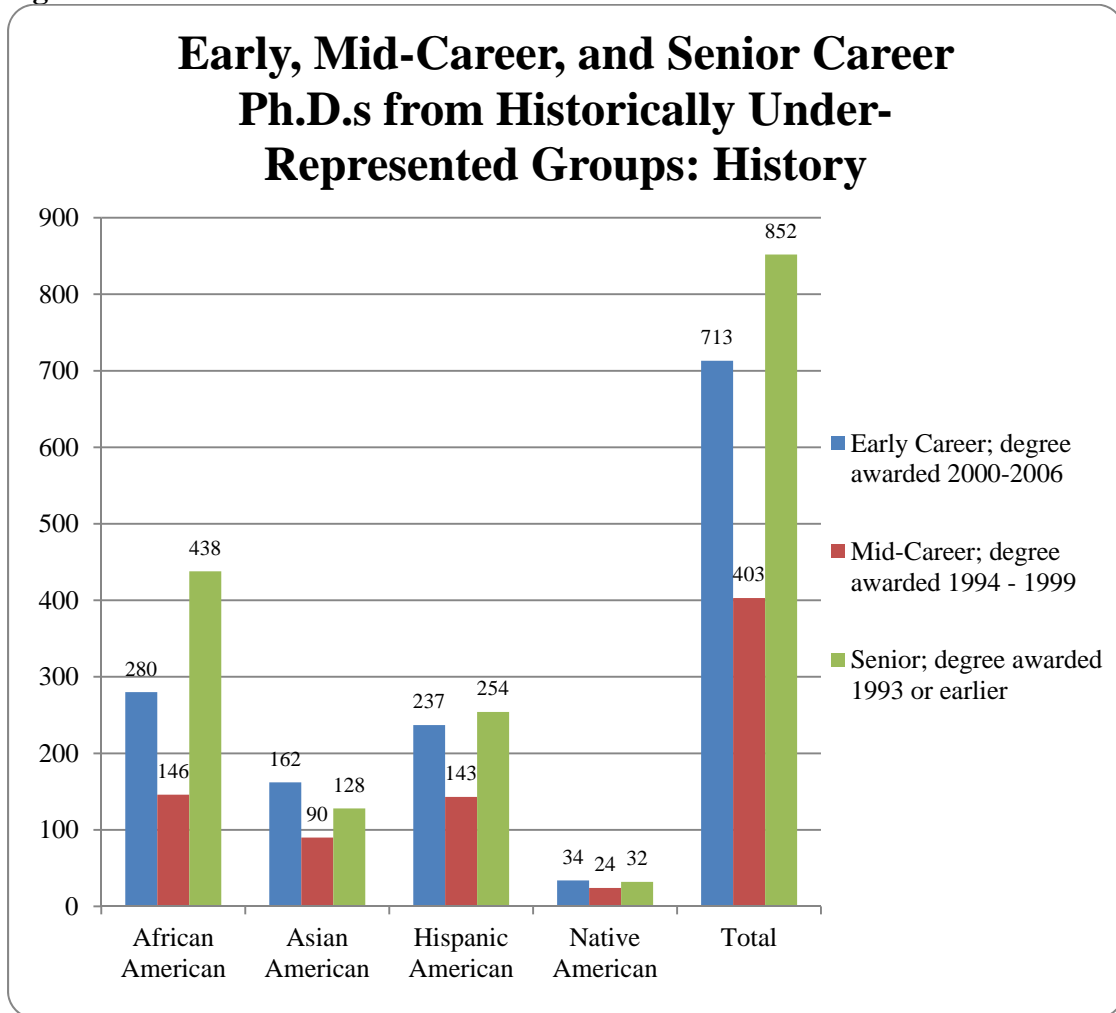o the length of time elapsed since the degree was awarded. Master of Relations/Affairs and Area Studies does not contain data on senior career level professionals because the database (IPEDS) did not provide the data further back than 1995.

Figure 91

Early and Mid-Career Masters from Historically Under-Represented Groups: International Relations/Affairs and Area Studies

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The number of doctorates in International Relations/Affairs and Area Studies awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 92. Data is provided according t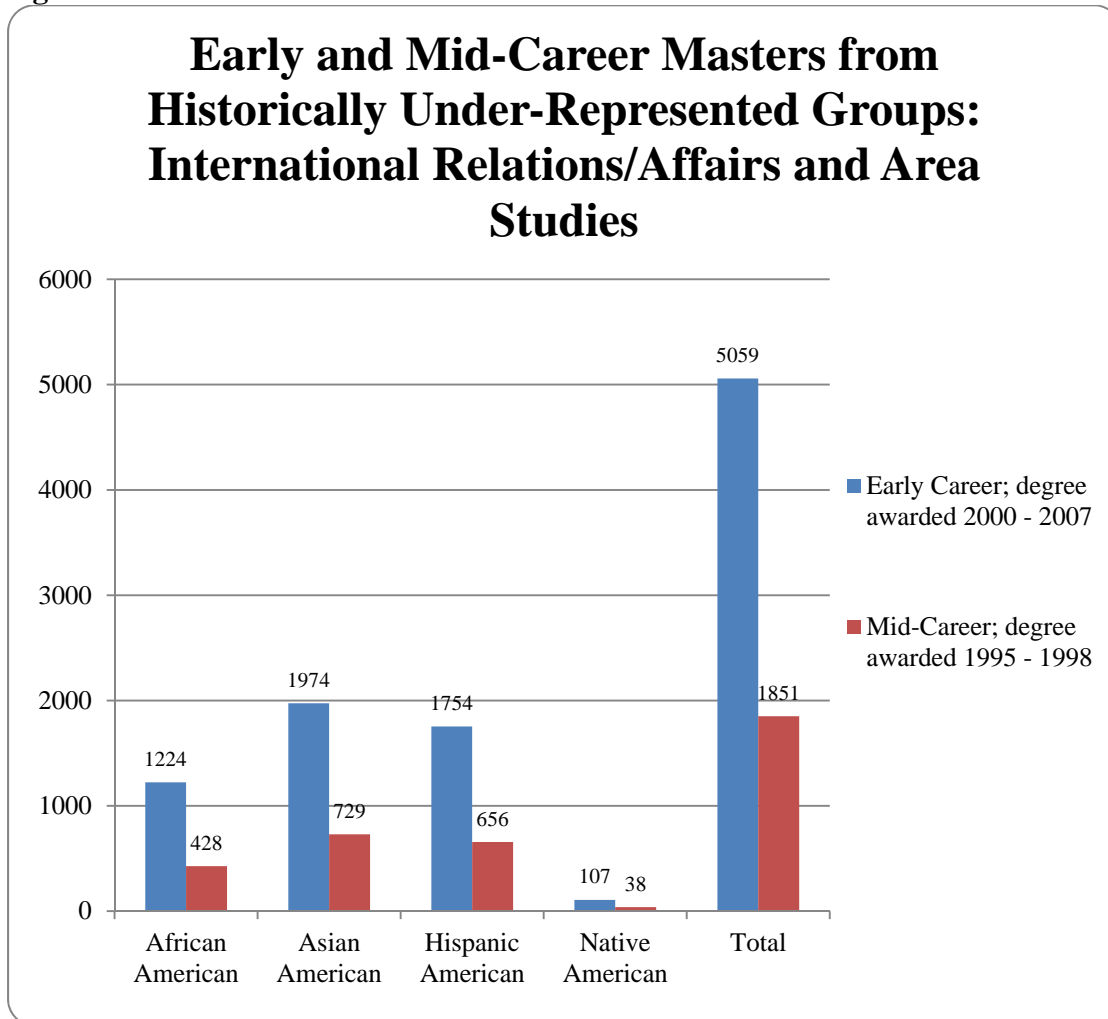o the length of time elapsed since the degree was awarded. Doctorate of Relations/Affairs and Area Studies does not contain data on senior career level professionals because the database (IPEDS) did not provide the data further back than 1995.

Figure 92

Early and Mid-Career Ph.D.s from Historically Under-Represented Groups: International Relations/Affairs and Area Studies

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[37] International Relations/ Area Studies are a sub-field within Political Science and Administration. Please refer to the appendix 1 entitled "Fine Field of Study" under Political Science and Public Administration.
*For listing of universities, please see section titled "Political Science and Public Administration"

Physics[38]

The number of doctorates in Physics awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 93. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 93

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Physics

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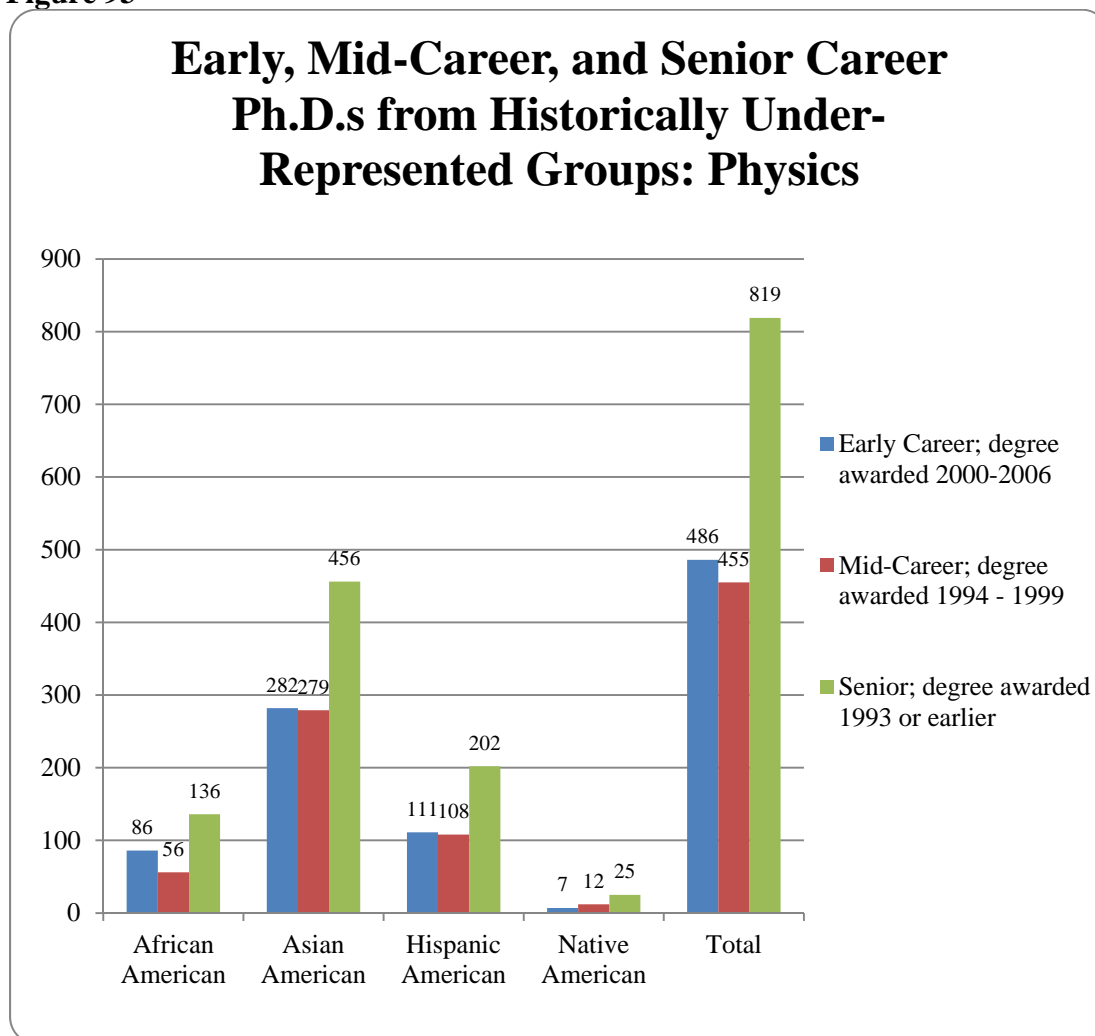
[38] For a complete listing of sub-fields included within Physics please refer to the appendix 1 entitled "Fine Field of Study" under Physics.

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Political Science and Administration[39]

The number of doctorates in Political Science and Administration awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 94. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 94
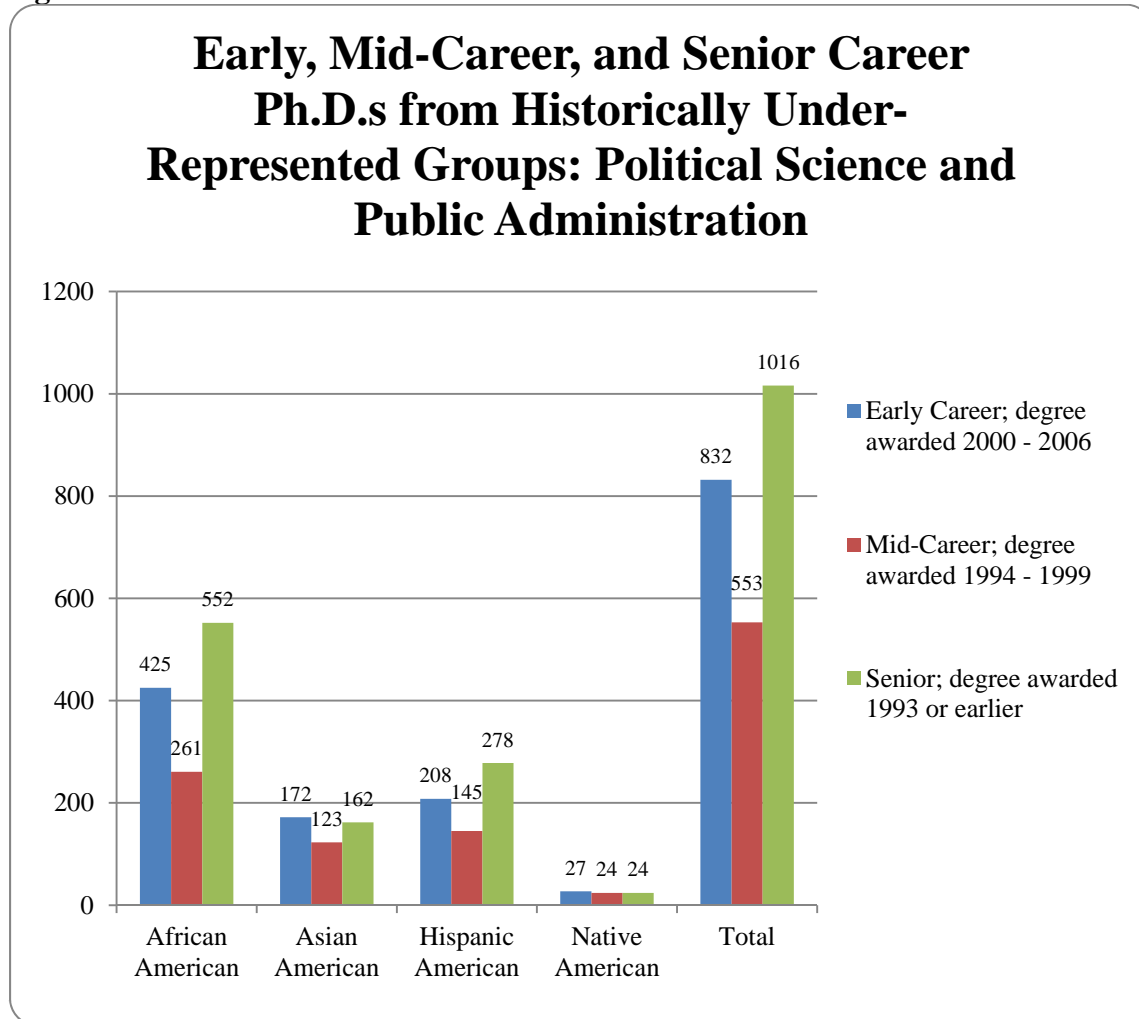
Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Political Science and Public Administration

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Psychology[40]

The number of doctorates in Psychology awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 95. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 95

Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Psychology

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[40] For a complete listing of sub-fields included within Psychology please refer to the appendix 1 entitled "Fine Field of Study" under Psychology.

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Master of Public Administration[41]

The number of masters in Public Administration awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 96. Data is provided according to the length of time elapsed since the degree was awarded. Master of Public Administration does not contain data on senior career level professionals because the database (IPEDS) did not provide the data further back than 1995.

Figure 96

Early and Mid-Career Masters from Historically Under-Represented Groups: Public Administration

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[41] Public Administration is defined in the IPEDS Survey of Earned Masters to include the following subfields:
   44.04. Public Administration

Doctorate of Public Administration[42]

The number of doctorates in Public Administration awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 97. Data is provided according to the length of time elapsed since the degree was awarded. Doctorate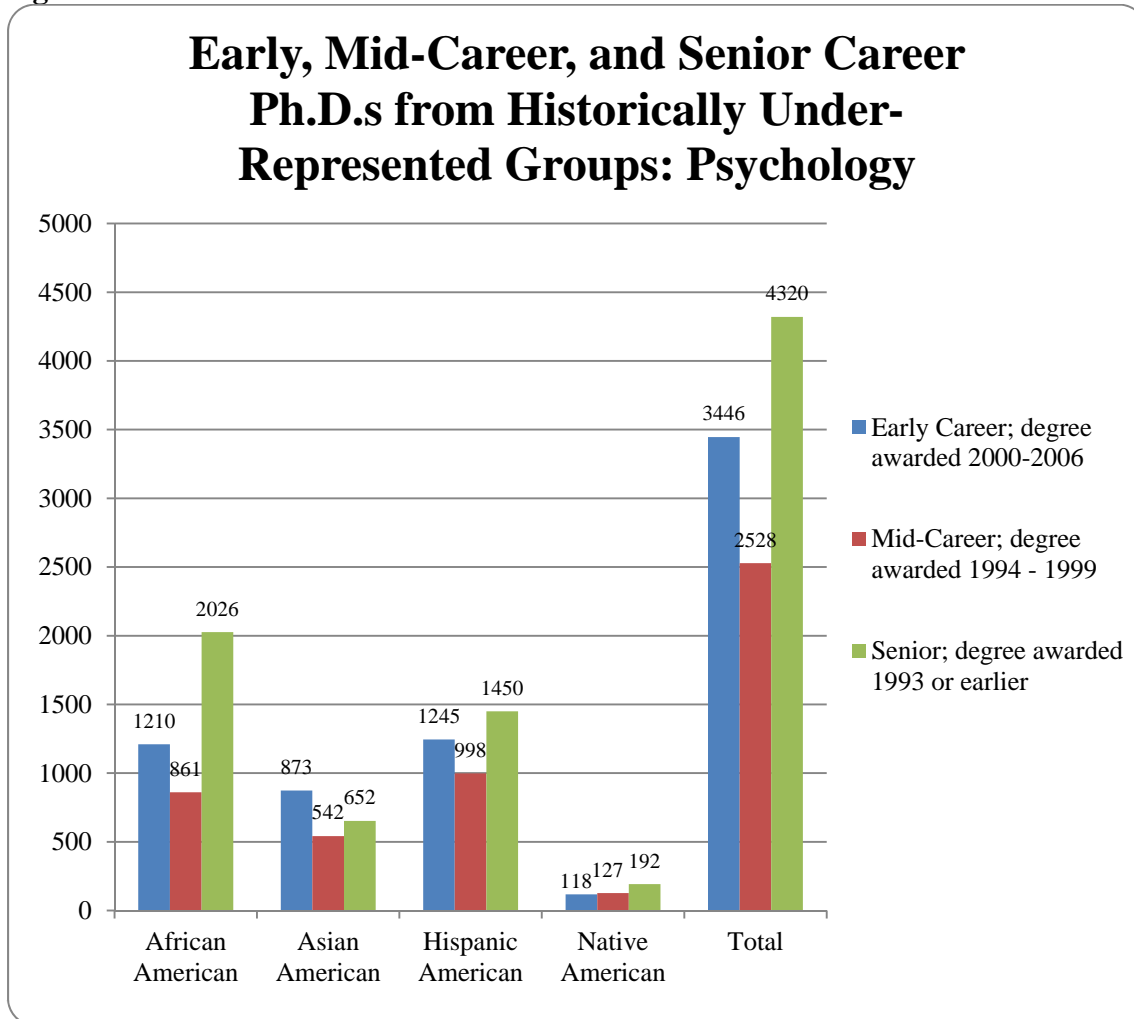 of Public Administration does not contain data on senior career level professionals because the database (IPEDS) did not provide the data further back than 1995.

Figure 97

Early and Mid-Career Ph.D.s from Historically Under-Represented Groups: Public Administration

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[42] Public Administration is defined in the IPEDS database to include the following subfields:
    44.04. Public Administration

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Masters of Public Policy Analysis[43]

The number of masters in Public Policy Analysis awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 98. Data is provided according to the length of time elapsed since the degree was awarded. Master of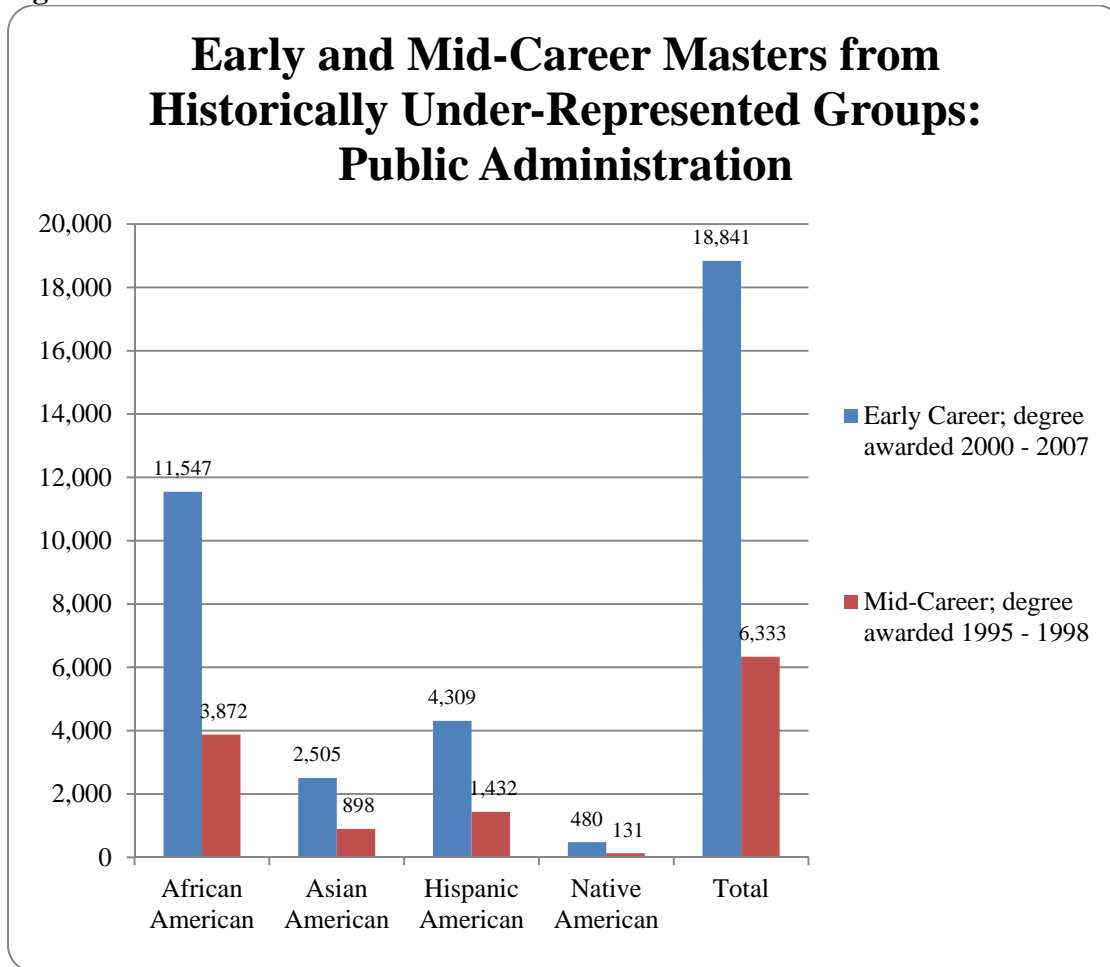 Public Policy Analysis does not contain data on senior career level professionals because the database (IPEDS) did not provide the data further back than 1995.

Figure 98

Early and Mid-Career Masters from Historically Under-Represented Groups: Public Policy Analysis

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Doctorate of Public Policy Analysis[44]

The number of doctorates in Public Policy Analysis awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 99. Data is provided according to the length of time elapsed since the degree was awarded. Doctorate of Public Policy Analysis does not contain data on senior career level professionals because the database (IPEDS) did not provide the data further back than 1995.
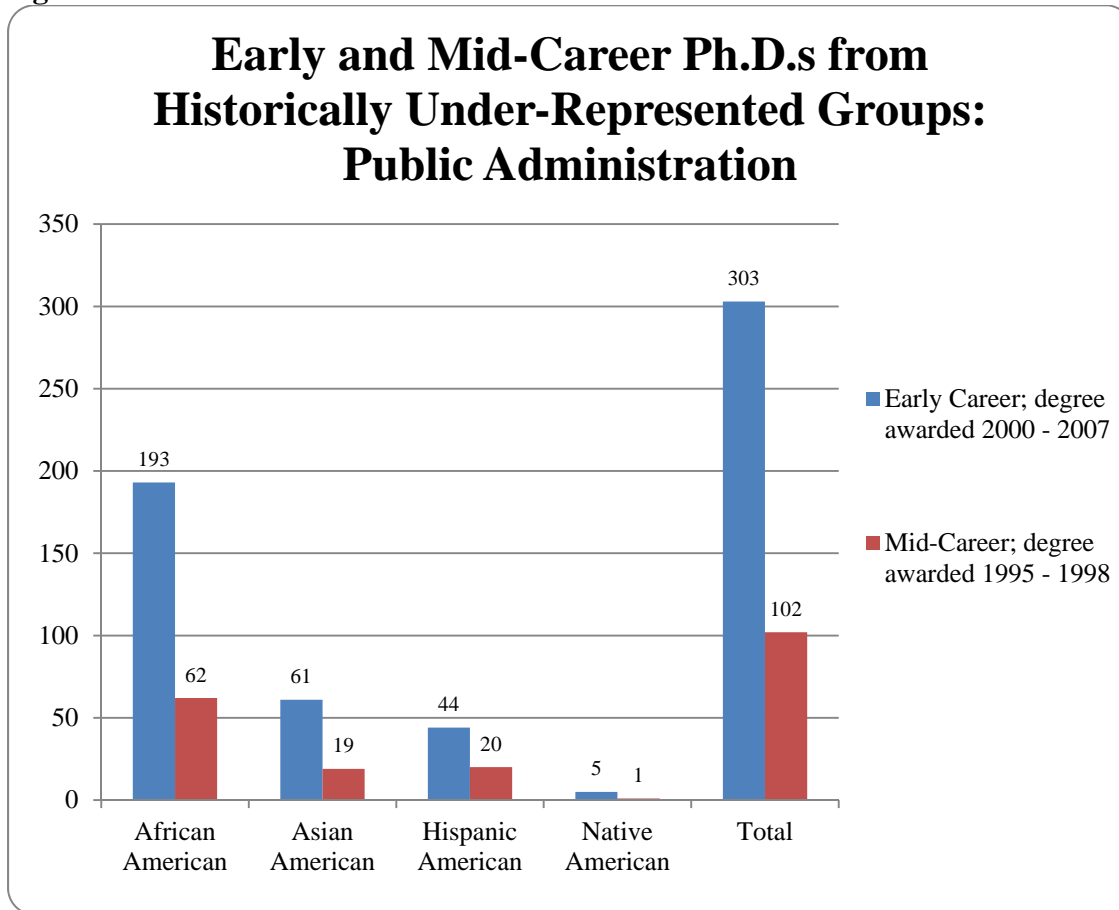
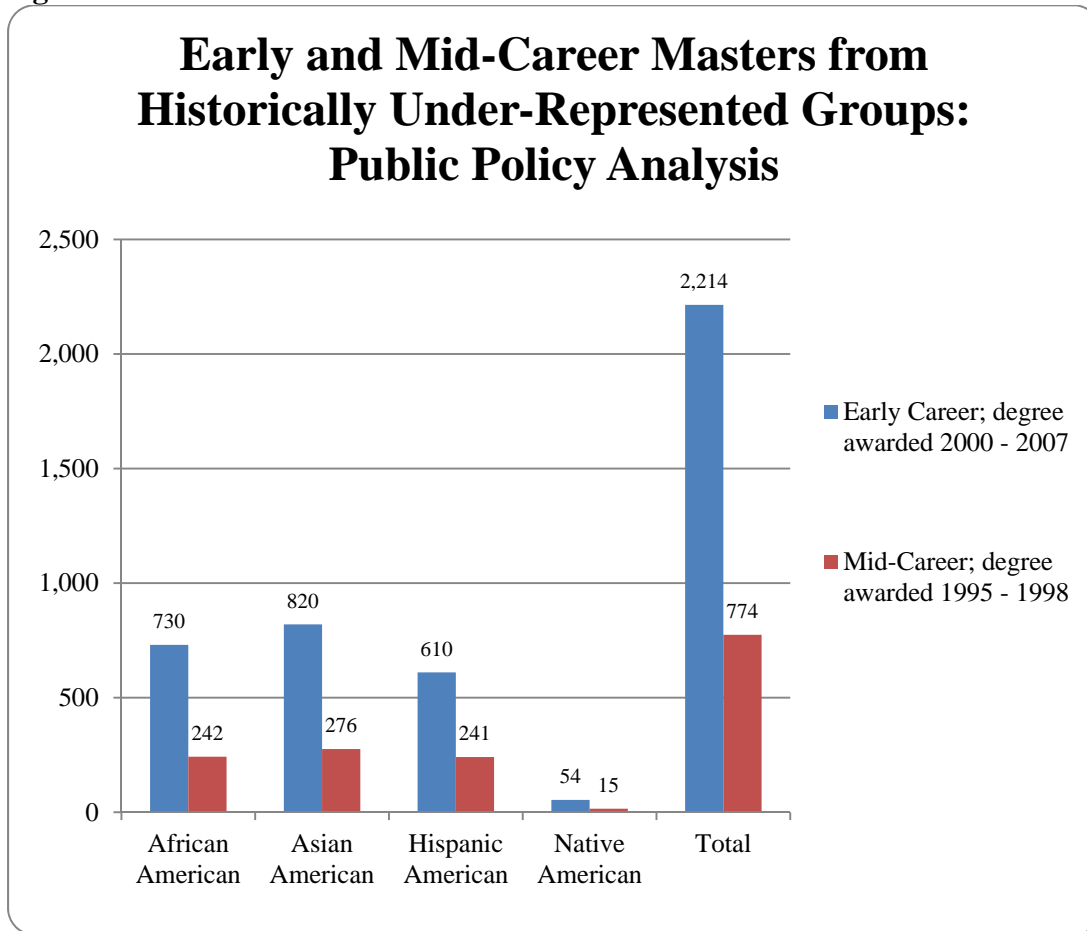**Figure 99**

Early and Mid-Career Ph.D.s from Historically Under-Represented Groups: Public Policy Analysis

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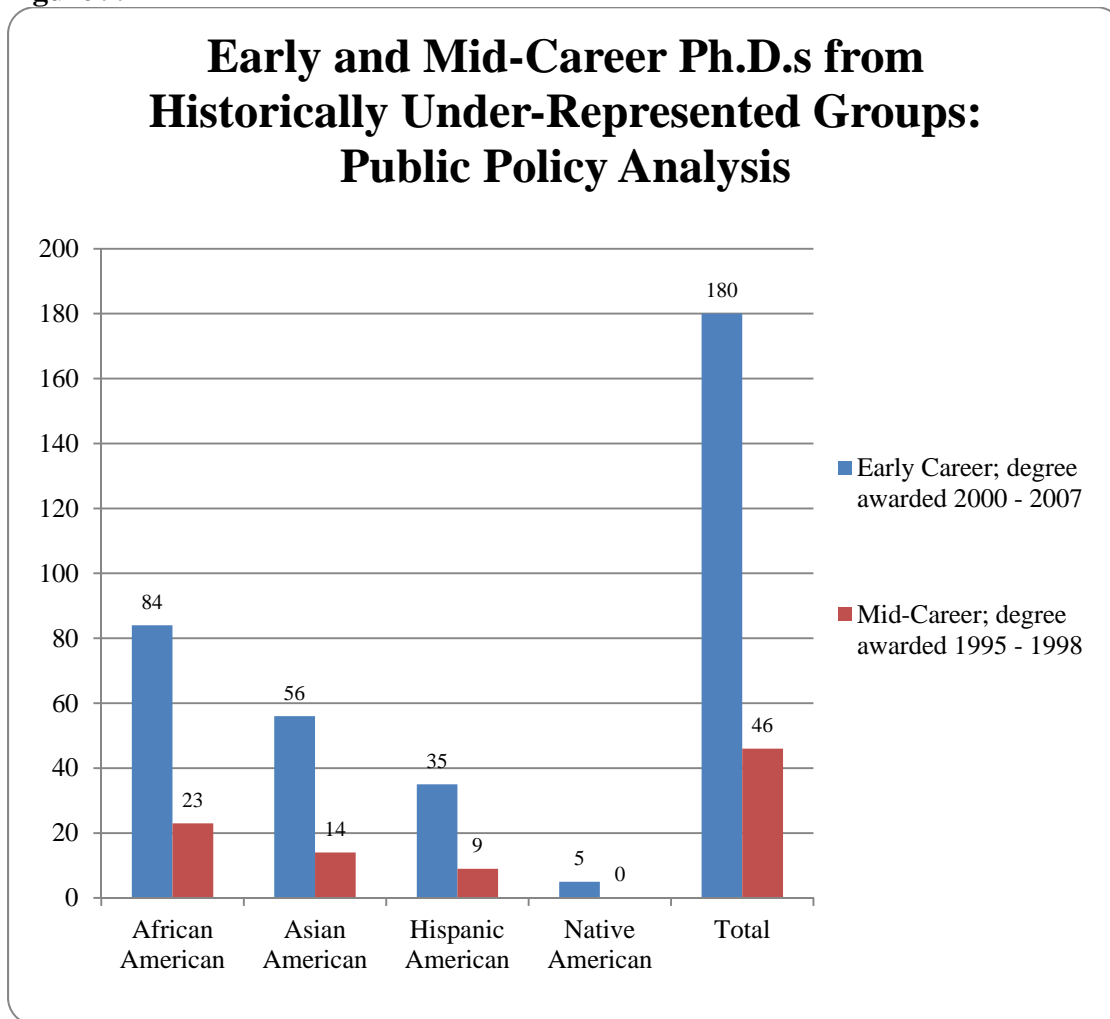
[44] Public Policy Analysis is defined in the IPEDS database to include the following subfields:
   44.05. Public Policy Analysis

The number of doctorates in Sociology awarded to U.S. citizens who are members of historically under-represented groups is shown in Figure 100. Data is provided according to the length of time elapsed since the degree was awarded.

Figure 100
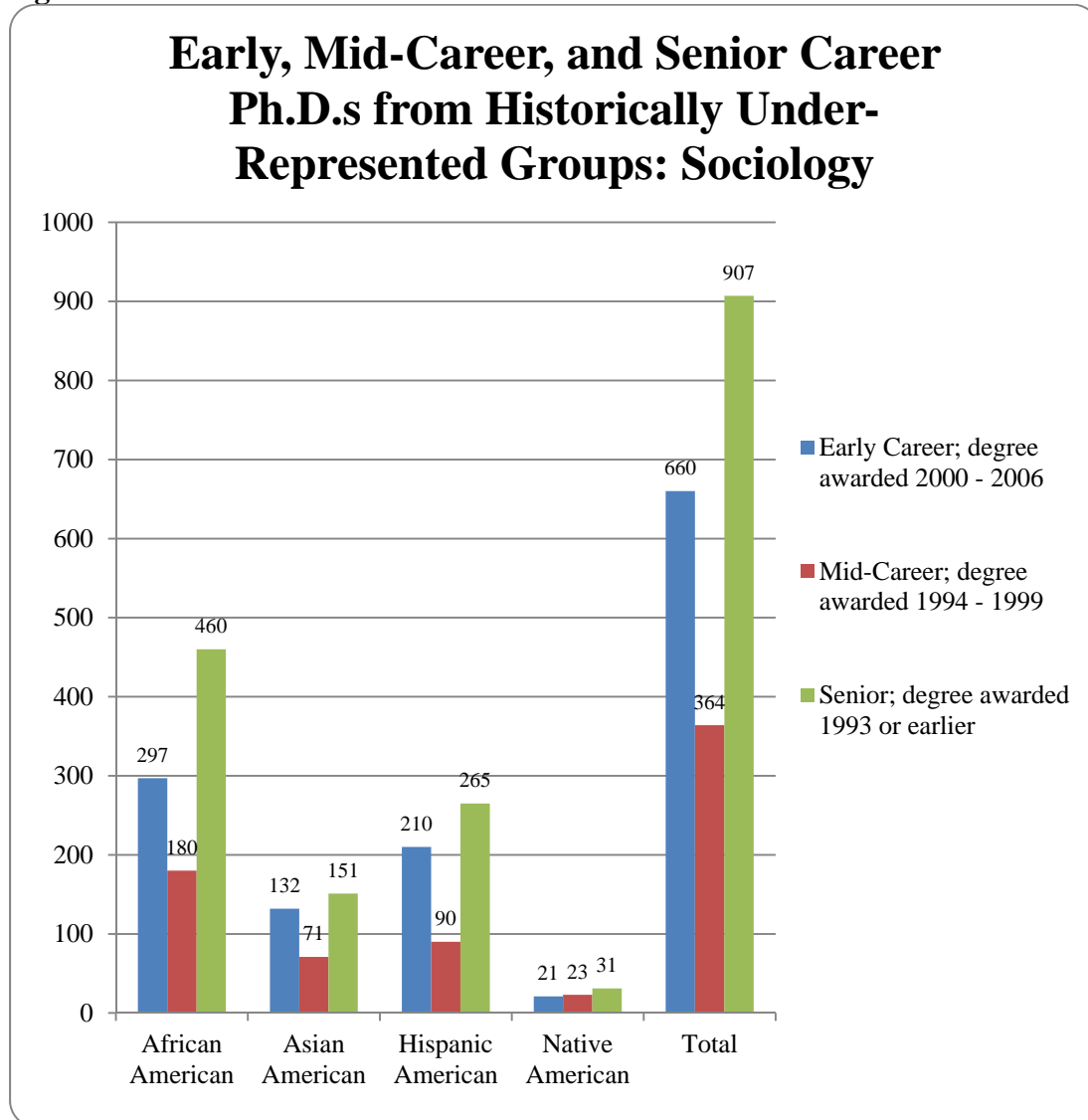
Early, Mid-Career, and Senior Career Ph.D.s from Historically Under-Represented Groups: Sociology

Mid-career MPA's and Related Degrees

According to the National Association of Schools of Public Affairs and Administration (NASPAA), a number of universities offer mid-career or executive MPA degrees. Graduates from those mid-career programs may qualify for certain positions in CRS. However, there are some important qualifications concerning such programs.

First, the label "mid-career program" in this context refers to "a master's degree designed for individuals who work with or for public sector organizations, possess significant professional achievements and are interested in advancing their careers" (NASPAA, 2010). A typical mid-career student is a college graduate (who may be from any major) who has five to ten years of cumulative experience with public or non-profit organizations and at least three years of middle-to-upper level managerial experience. For many positions, such mid-careerists are unlikely to possess the set of knowledge, skills, and abilities that would qualify them for CRS positions. Graduates will acquire public policy analytical skills through mid-career MPA programs, but this is clearly not the same population as those who earned Master's or Ph.D. degrees and have gained experience in public policy analysis since graduation.

Second, among 35 mid-career programs, 24 programs provide public management tracks, 6 programs provide public policy tracks, and 5 programs provide public affairs tracks. The majority of programs, then, are likely to produce graduates in management tracks who are interested in managerial and administrative positions in government agencies or non-profits, rather than graduates with analytical research skills and interests.

Third, information about the ethnic diversity of the graduates of such mid-career programs is not available.

Finally, there is no data source that gives the total number of graduates of executive MPA or similar programs. A list of such programs appears in Table 166.

Table 166 Executive MPA/MPP or Similar Degrees

Name of Program	Web address
American University – The Key Executive Master of Public Administration	http://www.american.edu/spa//key/
Arizona State University – Master of Public Administration Executive Track	http://spa.asu.edu/new/mpa/default.htm
Baruch CUNY – Executive Master of Public Administration	http://www.baruch.cuny.edu/spa/academics/executiveprograms/executivempa.php
Brigham Young University – Executive Master of Public Administration	http://marriottschool.byu.edu/empa/
Carnegie Mellon University – Master of Public Management	http://www.heinz.cmu.edu/school-of-public-policy-management/public-management-mpm/index.aspx
University of Colorado Denver – Executive Master of Public Administration	http://www.ucdenver.edu/academics/colleges/SPA/Pages/index.aspx
Columbia University – Executive Master of Public Policy and Administration	http://www.sipa.columbia.edu/academics/degree_programs/empa/index.html
University of Delaware – Masters of Public Administration	http://suapp.udel.edu/
Drake University Quad Cities - Master of Public Administration	http://www.cbpa.drake.edu/aspx/Programs/ProgramDetail.aspx?id=26
George Mason University –Executive Master's in Public Policy	http://policy.gmu.edu/Home/AcademicProfessionalPrograms/ExecutiveEducation/ExecutiveMastersEMPPCIP/tabid/332/Default.aspx
George Mason University – Masters of Public Administration	http://chss.gmu.edu/programs/show/LA-BS-PUAD
Georgetown University – Executive Masters of Policy Management	http://gppi.georgetown.edu/academics/mpm/11970.html
Golden Gate University - Executive Master of Public Administration	http://www.ggu.edu/academic_programs/public_administration/executive_mpa
Harvard University – Mid-Career Master in Public Administration	http://www.hks.harvard.edu/degrees/masters/mc-mpa
Indiana University – Master of Public Affairs	http://execedspea.iu.edu/programs/MPA.asp
University of Maryland College Park - Executive Master of Public Management	http://www.publicpolicy.umd.edu/degree-programs/executive-master-of-public-management
University of Minnesota – Master of Public Affairs	http://www.hhh.umn.edu/degrees/mpa/index.html
University of Missouri Columbia – Mid-Career Master of Public Affairs	http://www.truman.missouri.edu/prospectivestudents/specialization.asp?GCID=32
New York University – Executive Master of Public Administration	http://wagner.nyu.edu/executivempa/

Ohio State University – In-Career Master of Arts in Public Policy and Management	http://glennschool.osu.edu
Ohio University – Executive Master of Public Administration	http://www.ouwb.ohiou.edu/mpa/
University of Pennsylvania – Master of Government Administration	http://www.sp2.upenn.edu/programs/dual/mga.html
University of Pittsburgh – Master of Public Policy and Management	http://www.gspia.pitt.edu/Academics/Programs/MasterofPublicPolicyManagement/tabid/101/Default.aspx
Portland State University – Executive Master of Public Administration	http://www.pdx.edu/eli/
Princeton University – Master in Public Policy	http://wws.princeton.edu/grad/mpp/
Rutgers University New Brunswick – Master of Public Affairs and Public Policy	http://policy.rutgers.edu/academics/
Rutgers University Newark (Trenton) – Executive Master in Public Administration	http://spaa.newark.rutgers.edu/index.php/home/academic-programs/trenton-executive-mpa-program.html
Southern University – Executive Master in Public Administration	http://www.subr.edu/publicpolicy/programs/mpa/index.htm
University of Southern California – Master of International Public Policy and Management	http://www.usc.edu/schools/sppd/programs/masters/ippam/index.html
Syracuse University – Executive Master of Public Administration	http://www.maxwell.syr.edu/exed/empa/
University of Texas Austin – Mid-Career Master of Public Affairs	http://www.utexas.edu/lbj/degreeprograms/mpaff/midcareer
University of Texas Dallas – Master of Public Affairs Executive Track	http://www.utdallas.edu/epps/pa/mpa.html
Upper Iowa University – Master of Public Administration Executive Track	http://www.uiu.edu/eu_students/programs/mpa.html
University of Utah – Executive Master of Public Administration	http://www.imakenews.com/cppa/e_article001132081.cfm
University of Washington – Executive Master of Public Administration	http://evans.washington.edu/executive-education/mpa

(Source: http://www.naspaa.org/execmpa/find.asp)

Part 2
Recruitment and Retention Strategies for Potential Candidates from Historically Under-represented Groups

I. Introduction

A. Definitions of diversity

Twenty years ago, some private sector organizations defined diversity based on the hiring and retention of African-Americans (Shackelford 2005). Today, national demographics have shifted towards a more diverse population with ethnic minorities making up 34% of the population as of a July 2008 estimate (US Census Bureau 2009). The Census Bureau (2009) defines ethnic minorities in the United States as "any group other than single-race, non-Hispanic white" and noted a 2.3% increase from 2007 to 2008.

For some government agencies and the private sector, the definition of diversity encompasses an individual's race, age, and gender amongst other characteristics. Other public organizations choose to define diversity in terms of broadening the set of skills and abilities that allow the organization to improve its performance. The Department of Commerce's definition of diversity (USDC 2005) is closer to the latter, which reinforces their objectives for diversity.

To be most effective, CRS must not only define diversity but also link long-term strategy with tactics and practices to take advantage of the knowledge, skills and abilities of a diverse workforce (Marquis et. al, 2008, 1).

B. Models for the Support of Hiring and Retention Strategies

Selden & Selden (2001) have identified four models that public agencies often use to execute recruitment and retention strategies for minorities:

1. Discrimination & Fairness
   Public agencies pursuing diversity under this paradigm are mainly concerned that access and equal opportunity for minorities comply with the requirements of the Equal Employment Opportunity Act. Success is largely defined by the number of minorities employed compared to the national average.

2. Access-Legitimacy
   This model stems from the idea of representative bureaucracy: a workforce that is ethnically representative to the clients it serves will better meet the needs of its clients. In other words, agencies with a representative staff are more likely to generate outputs and outcomes that will meet the needs of its clients (Meier 1993; Selden & Selden 2001).

3. Learning-and-Effectiveness
   The learning-and-effectiveness model links the two previous paradigms. Agencies following this model view diversity as a way to improve their processes and decision-making by tapping into the creativity, breadth of solutions and different approaches and perspectives a diverse workforce promotes. The US Department of Commerce uses this approach for its diversity recruitment and retention strategies, contending that a

commitment to diversity "translates into effective delivery of essential services to communities with diverse needs" (USDC 2005, 3). Diversity plays an important role in the agency's long-term strategy and a commitment to diversity is part of the strategic planning and mission focus.

4. Valuing-and-Integrating
   This model brings the other models together and emphasizes multiculturalism. It focuses on the individual's culture, which is the sum of a person's beliefs, history, values and customs. In this paradigm, individuals' cultures are not just representative of their group, rather they are affected by their environment and personal experiences (Selden & Selden 2001, 318). Those experiences bring value and creativity to the organization.

According to Selden & Selden, staff will have a higher level of motivation and commitment to the organization when "their worldviews are reflected in the strategy to implement the mission and vision" (2001, 318). Therefore, CRS should identify which paradigm matches its organizational goals. These paradigms will help CRS put in place hiring and recruitment strategies that are appropriate for the organization.

In addition, the paradigms will be affected by contextual factors. The Rand Corporation found that organizations that link strategy with context are on *Fortune*'s lists of firms excelling in diversity (Marquis et. al, 2008, 21-22). Context is important, yet often overlooked in contributing to success in ethnic diversity planning and management within an organization. The Rand Corporation (Marquis et. al, 2008, 23) lists these organizational contextual factors:

- The age of the organization
  The older the organization, the more difficult it is to alter the make-up of the labor force.

- The location of the organization
  An organization located in a non-diverse geographic area may find it difficult to increase its recruitment pool. In recognition of this potential difficulty, some government agencies such as the Social Security Administration utilize an internet and intranet strategy to recruit (EEOC 2008, 11).

- The organization's experience with diversity issues
  An organization may have encountered diversity management-related challenges or problems that have led them to analyze and deal with diversity issues.

- National demographic trends
  As the ethnic make-up of the nation changes, and the number of minority groups increases, qualified and diverse individuals will emerge.

To be successful, CRS needs to go beyond best practices towards understanding the context in which the organization operates, as well as use one of the frameworks above to execute its practices. In addition, staff and management participation and commitment are crucial to success (Marquis et. al, 2008, 24).

In that regard, it is important that management and staff share an understanding of organizational goals and long-term strategies for ethnic diversity within the organization. The Social Security Administration (SSA) agency developed a mission for their national recruitment efforts in the 1990s:

> Social Security is investing its energies into building a workforce which reflects the American public we serve; young and old, male and female, African-American, Caucasian, Hispanic, Asian Pacific Islander, Native American, those with disabilities and those without. We're looking for highly skilled, innovative, people-oriented individuals.

The EEOC cites the SSA as one of the most innovative and successful government agencies in terms of diversity recruitment, management and retention of Hispanic Americans since 1990. Hispanic-Americans made up 10.1% of minorities in 2000. In 2001, the percentage increased to 11.0% and to 13.1% in 2007 (GAO 2008, 4). The SSA achieved success by first hiring a National Recruitment Coordinator to work with management and Human Resources Directors on the creation of a strategic plan as well as performance measures (EEOC 2008, 11). The SSA developed a marketing campaign, with recruitment materials and exhibits to attract a diverse pool; for example, posters and brochures were printed in Spanish for Hispanic Americans. A recruitment representative managed recruiting operations in each region of the country and helped build partnerships with universities in his or her area. SSA also worked with OPM to reinforce recruitment initiatives (See Appendix 5 for SSA's Best Practices).

II. Diversity in Government

Having a diverse workforce used to be a matter of meeting an agency's civic responsibility, but at present, it has become a matter of survival (Starks 2009, 80). This is because "federal agencies serve customers who are diverse and who are sensitive about who provides services to them" (Starks 2009, 80). At the same time, minorities are expected to form a higher percentage of the total population in the near future and thus "agencies must have diverse employees at all levels to serve their ever increasingly diverse constituencies" (Starks 2009, 80).

Table 167 presents the percentage of the U.S. population by race according to the 2000 Census and as it compares to the composition of the 2009 CRS workforce, both service-wide and in the analytical workforce. CRS's service-wide workforce composition compares favorably when looking at all groups with the exception of Hispanic Americans (3.1%) and Native Americans/Alaskan Natives (0.3%). CRS's analytical workforce composition compares favorably when looking at Caucasians and Asian Americans/Pacific Islanders and falls short when looking at African Americans (5.9%), Hispanic Americans (2.1%) and Native Americans/Alaskan Natives (0.3%). Caucasians constituted 69.1% of the population and they had a representation of 71.4% at CRS in the service-wide workforce and 86.4% composition in the analytical workforce, African Americans were 12.1% of the population and 18.9% of CRS in the service-wide workforce and only 5.9% composition in the analytical workforce, Hispanic Americans were 12.6% of the population, but only 3.1% of CRS in the service-wide workforce and 2.1% composition in the analytical workforce, American Indians and Alaskan Natives were 0.7% of the population and 0.3% of CRS employees and Asian Americans, Native Hawaiians

and Pacific Islanders were 3.7% of the population and 6.3% of CRS employees in the service-wide workforce and 5.2% composition in the analytical workforce.

Table 167 Racial Composition of U.S. Population, CRS Workforce and Private Sector

	African American	Hispanic American	Asian American / Pacific Islander	Native American / Alaskan Native	Caucasian
Racial Composition of U.S. Population in 2000[a]	12.1%	12.6%	3.7%	0.7%	69.1%
CRS SERVICE-WIDE[b]	18.9%	3.1%	6.3%	0.3%	71.4%
CRS Analytical Work Force[b]	5.9%	2.1%	5.2%	0.3%	86.4%
General Schedule Federal Employment[c]	17.1%	7.2%	4.8%	2.0%	68.9% (approx.)
Total Private Sector Employment[c]	13.8%	11.1%	4.6%	0.6%	69.9% (approx.)
Private Sector Professional Employment[c]	7.2%	4.1%	8.9%	0.4%	79.4% (approx.)

Note: a- From Census 2000 by U.S. Bureau of Census
b- From CRS 2009 workforce composition
c- From *Occupational employment in private industry by race/ethnicity group/sex and by industry, 2003*

Table 167 also shows the percentage of private sector jobs held by the different ethnicities in 2003, as well as private sector professional positions and federal General Schedule (GS) positions. Glenn L. Starks states that "private sector professional occupations are comparable to public sector GS positions because the majority of both types require incumbents to hold bachelor's degrees as a minimum qualification" (Starks 2009, 81). Hispanics were the most underrepresented minority in CRS (3.1%), the government (7.2%) and the private sector professional employment (4.1%) because they made up 12.6% of the general population. All other groups are well represented when considering the percentage that they make up of the general population.

Starks (2009, 85) has identified the top 15 federal agencies with the greatest number of ethnic minorities at the GS-14 and GS-15 levels:
1. Equal Employment Opportunity Commission
2. Department of Housing & Urban Development
3. Department of Education
4. Department of Veterans Affairs
5. Small Business Administration
6. Social Security Administration
7. Army & Air Force Exchange Service
8. Department of Health & Human Services
9. Office of Personnel Management
10. Department of Labor

11. Department of Treasury
12. Department of Commerce
13. Department of Energy
14. Department of Transportation
15. Department of Interior

These agencies have all employed one or more of the recruitment and retention strategies discussed below.

III. Recruitment Strategies

According to the Equal Employment Opportunity Commission (EEOC), successful recruitment depends on employing managers or administrators who support recruitment efforts by having a results-oriented approach including measures to track performance and progress (2008, 8).

There are several well-known practices to attract minorities yet none have been proven successful on their own. Therefore it is crucial for CRS to use these strategies within a well-outlined plan.

A. Broadening the Applicant Pool

There are two parts to the recruitment process: broadening the applicant pool and attracting applicants.

1. Partnerships

To broaden the applicant pool, CRS could strengthen its partnerships with universities and historically black colleges. CRS currently has five programs in partnership with those institutions, two of which are geared towards graduate students:

- Asian Pacific American Institute for Congressional Studies (APAICS)–Summer Internships (for undergraduates)

- Congressional Black Caucus Foundation (CBCF)–Congressional Fellows Program (for graduate students)

- Hispanic Association of Colleges and Universities (HACU)–National Internship Program (for undergraduate and graduate students)

- The Washington Center–American Indian/Native Alaskan Leadership Initiative (for undergraduate students)

- United Negro College Fund (UNCF)–Institute for International Public Policy (IIPP) Fellowships (undergraduate students)

To take full advantage of these partnerships, it is recommended that CRS increases opportunities for graduate students considering graduate students are their target market. CRS can also evaluate graduate students currently involved in these programs and determine ways in which successful candidates can become permanent employees. The Federal Hispanic Workgroup—created in 2008 from a partnership between the SSA and the EEOC—recommends that agencies also partner with Hispanic Serving Institutions (HSIs) and other associations and non-profit organizations like the Hispanic Association of Colleges and Universities or HACU, the Hispanic Alliance for Enhancement of Careers, the National Society for Hispanics with MBAS, the Association for Latinos in Finance, and more (EEOC 2008, 9-10; See Appendix 6 for list for all minorities). Federal law defines Hispanic Serving Institutions as accredited and degree-granting public or private universities and colleges with 25% or more total undergraduate Hispanic students enrolled full-time (EEOC 2008, 9). Although, the goal of 25% figure has not yet been reached, *Excelencia in Education,* a research think-tank, compiles an annual list of emerging HSIs (See Annotated Bibliography). *Excelencia in Education* targets undergraduate students but the organization provides a good example of potential resources CRS could use in partnering with other associations.

B. Attracting Diverse Applicants

Internships & Fellowships

Some associations are experts in recruiting and placing students in federal agencies. The HACU reviews applications for the agency based on agency requirements, houses students and provides them with a stipend, funded by the federal agency. The organization reports 680 students placed in federal agencies in 2009 such as the Department of Interior, Department of Agriculture, Centers for Disease Control and Prevention and the Census Bureau (Dervarics 2009, 9). Due to those types of efforts, the Department of Agriculture is among the highest on the Lieberson[46] scale (0.3597) for employing the most diverse groups based on number of employees (Starks 2009, 85). The Department of Agriculture's GS 14 and GS15 grade employees also show a fairly high Lieberson index of 0.3006, close to that of the Department of Interior (Straks 2009, 85).

As mentioned above, success through internship programs is tied to agencies' strategic planning for diversity. Several federal agencies utilized internship programs based on OPM's Nine-Point-Plan as part of their efforts to increase the number of Hispanics[47].

The **Department of Agriculture** had a total of 35 students through HACU of which five were hired as Recruitment Program Managers (levels GS13 and GS14 positions).

Six percent of hired interns in the **Air Force** through the department's PALACE Acquire and COPPER CAP program hires HACU were Hispanic.

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[46] The Lieberson index measures diversity between and within groups based on characteristics that demonstrate diversity such as race, gender, religion. If most people in a group have the same characteristics, the index will have a value of zero. If everyone in the group has different characteristics, the index would be one. Therefore, the higher the index, the more diverse the organization.
[47] OPM's Hispanic Employment Initiative: Nine Point Plan

The **Commodity Futures Trading Commission** hired three students: two for attorney positions and one for an IT Specialist position. Five percent of student interns hired into the Student Employment Program were Hispanic.

The **Department of Labor** selected two Hispanic students for its Senior Executive Service Candidate Development Program as well as a National Coordinator for its Hispanic employment program.

Several federal agencies are using internship programs to attract African-American students through the National Association for Equal Opportunity in Higher Education (NAFEO). NAFEO provides paid internships to African-American students because many come from low income families (Dervarics 2009, 10). Like HACU, NAFEO is hired by federal agencies to provide them with graduate students and those funds are used to provide graduate students with a $500 per week allowance (Dervarics 2009, 10). In addition, student interns living outside of the Washington D.C. area are provided with a travel allowance and housing.

An unpaid internship is a barrier to ethnic minority students who are qualified to participate in internship programs. Low-income students are least likely to accept unpaid internships in addition to paying tuition and living costs, especially in an area like Washington, DC (Yagoda 2008, 36). Therefore, to successfully attract, recruit and retain minority graduate students, CRS may consider providing financial assistance whether through paid internship programs or loan repayment initiatives.

Loan Repayment

Student loan service payback programs provide financial incentives in exchange for a specific work commitment and could serve as a means for attracting minorities. The basic loan payback program allows agencies to repay a percentage of an employee's student loans after service commences. Since these programs have been created to encourage students to choose a particular field of study, to encourage them to remain in certain regions, or to encourage them to occupy certain positions, it could also encourage minorities to take certain work positions.

In its 2009 report to Congress, the Office of Personnel Management reported that the number of recipients of student loan repayment benefits has continued to increase along with agencies' financial investment in this particular incentive. In FY 2008, 4 percent more employees received student loan repayment benefits than in FY 2007. Compared to FY 2002, nearly 10 times as many employees received student loan repayment benefits in FY 2008 (Table 168).

Table 168 Loan Repayment Programs for Government Agencies

	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Participating Agencies	16	24	28	30	34	33	35
Number of Recipients	690	2,077	2,945	4,409	5,755	6,619	6,879
Total Amount Provided (In Millions)	$3.2	$9.2	$16.4	$28	$35.9	$42.2	$51.6
Average Amount Provided	$4,585	$4,421	$5,577	$6,347	$6,245	$6,377	$7,511

The program has been quite successful for agencies in general, but the success with minorities has not been proven or measured. The Office of Personnel Management (OPM) reported to Congress in 2003 that they had been able to recruit and retain three times as many employees in 2003 as in the previous fiscal year and invested nearly three times as much funding in "this valuable human capital management tool." Furthermore, several agencies that use the program for recruitment commented that "the student loan repayment incentive has allowed them to remain competitive with the private sector in recruiting top notch employees" (U.S. Office of Personnel Management 2009).

 At the same time, according to OPM "one of the biggest challenges of Federal agencies is to attract and retain well-qualified, high-performing employees" and they consider that the "student loan repayment authority is a valuable tool that enables agencies to entice potential candidates into Federal service and keep talented employees in the Federal workforce" (2009)[48].

IV. Retention Strategies

In addition to recruitment methods, retention strategies can increase the diversity of an organization. This is true in both the public as well as the private sector, therefore, it is important that an organization not only recruit under-represented employees, but retain these employees in order to increase the diverse makeup of the organization.

CRS currently employs retention strategies, like a mentorship program, that promote organizational cohesiveness and a learning environment. However, it is imperative that these strategies incorporate the goal of retaining a diverse workforce.

After an extensive review of retention literature from business, government, psychology, and human resources-related services, among others, three specific practices are repeatedly cited as improving retention for an organization.

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[48] See Appendix 5

These three strategies are:
- Mentorship Programs
- Succession Planning
- Exit Interviews

While CRS employs these strategies, it is necessary that diversity be a major focus and component of each of these strategies. These strategies can help CRS successfully retain a diverse workforce if diversity is made a focus of retention strategy.

A. Mentorship Programs

Successful mentoring programs are necessary in order to retain a diverse workforce. First and foremost, mentorship programs should be fostered or encouraged by the organization's leaders (Peel 2008, 1). The mentorship program should be seen as integral to achieving the goals of the organization (Chiogioji and Pritz 1992). This is especially true in the Department of Energy, whose intern mentorship program is regarded as crucial to the agency's success. This analysis of mentoring as a retention strategy details the necessity of a mentorship program, looks at mentorship best practices, and offers suggestions for incorporating a diversity component into mentor programs.

Necessity of a Mentorship Program

Though CRS currently utilizes mentoring relationships, mentoring is mentioned as a strategy for retaining a diverse workforce because it is essential that mentorship programs and mentors understand the additional challenges diverse employees may face (Friedman and Ryan 1983). For example, studies have shown that racial inequality can inadvertently occur through hiring and promotion within an organization because managers and those with hiring power tend to hire or promote people with a close resemblance to themselves (Peel 2008, 5). Therefore, CRS must employ an effective mentoring program that recognizes diversity as key to a strong workforce.

Incorporating Diversity into the Mentorship Program

According to OPM (2008, 7), there are several key components of a successful mentoring program including:

- Outcomes of the program are clearly understood by all involved
- Mentors and individuals being mentored understand the benefits and obligations of the mentoring program
- A successful and efficient matching process

Though OPM listed several components for a successful mentoring program, the three aforementioned are the most pertinent to CRS's goal of retaining a diverse workforce. In addition, a diversity component is easily added into an existing mentorship program through the four components below.

Diversity Retention as a Desired Outcome

Retaining a diverse workforce should be a desired outcome of CRS's mentor program. The mission of mentoring program should be clearly articulated, promoted, and understood by the entire organization. This being said, CRS should specifically identify the retention of a diverse workforce as a mission of the mentor program.

Diversity Retention by Understanding Diversity

Secondly, mentors and individuals should both understand their individual roles within the mentorship program and the benefits that can be derived from the program. Incorporating a diversity component into this objective is necessary, especially for the mentor. Mentors should understand the challenges faced by diverse employees in the organization. For example, in the Kansas Department of Human Services, mentors are required to gain a full understanding of the employees they mentor and should altruistically care about the success of the employee (Friedman and Ryan 1983, 5). A full understanding of the employee requires understanding of ethnicity-related challenges faced by the employee. At the same time, those being mentored should be aware of potential benefits of a mentor program.

The Department of Energy's (DOE) Mentoring Program provides the best example of a successful government agency mentoring program that promotes the culture and mission of the agency. The mentoring program is used for interns that are generally expected to work for the department in the future. However, the DOE Mentorship Program includes several practices that could easily be applied at CRS to retain a diverse workforce.

DOE's mentoring program focuses on strengthening the mentor in addition to acclimating the person being mentored with the culture and mission of the agency (Chiogioji and Pritz 1992, 10). Key factors of the DOE's Mentoring Program include:

- Outlining and ensuring the mentor understands his or her role
- Preparing supervisors/organization leaders for their role in the mentor program
- Ensuring the employee recognizes the benefits of participation in the program
- Developing individual goals for mentors and the employee being mentored

The DOE carries out these factors by conducting four separate workshops for mentors, supervisors or those in high leadership positions, employees being mentored, and for the collective group. It is recommended that CRS conduct workshops following the DOE's example for employees from historically under-represented ethnic groups. Special attention should be paid to the mentoring relationships between the mentor and mentees.

Diversity Retention by Successful Matching

Special attention should also be given to employees from historically under-represented ethnic groups during the matching process. The U.S. Office of Personnel Management (2008, 7) lists the matching process as a necessary component of a successful mentoring program. Failed mentor relationships are often attributed to a poor match between mentor and employee

(Harrington, Howard, and Smith 2005, 47). This being said, the matching process for a successful mentoring program must strategically match mentors with employees.

Though few studies have focused on mentor matching by ethnicity, some research shows positive relationship between same sex and same gender mentoring matches (Wharton 2009, 19-20). Research looking at mentoring within the Kansas Department of Human Resources found gender and age of mentors to also be important (Friedman and Ryan 1983, 3).

Matching mentors and employees according to gender can enhance the mentorship experience for the employee. To ensure a strategic matching process, the developer of DOE's Mentorship Program, Ohio State University's Center for Education Training and Employment (CETE), recommends having sound policies for matching in place before the mentor-employee selection process. This being said, CRS should designate matching mentors and employees from historically under-represented groups a priority.

B. Succession Planning

Succession planning ensures the continuity of an organization and can help CRS retain a diverse workforce. Poor succession can weaken internal leadership and result in increased turnover (Greer and Virick 2008, 352). CRS could mitigate the problems caused due to poor succession and by proactively planning for the future. This section examines the benefits of succession planning with respect to retaining diverse employees and outlines proper succession planning techniques.

Benefits of Succession Planning

Several studies link succession planning and organizational stability (Romejko 2008, 25). Proactive succession planning enhances leadership stability within the organization. In addition, succession planning strengthens recruitment prospects and, more importantly, develops talent within the organization (Ibarra 2007, 25).

Furthermore, succession planning can increase the diversity of an organization and aid in retaining diverse employees (Bruer, Leibman, and Maki 1996, 18). Several private companies, including PepsiCo, Allstate, and GE, recognize the link between succession planning and diversity. Planned succession for diversity can improve organizational development strategies and increase growth options (Greer and Virick 2008, 352).

Succession planning can particularly benefit organizations with large numbers of people nearing retirement age. Replacing positions due to retirement is reactive, whereas filling positions by proper succession planning is proactive (Romejko 2008, 25). Also, succession planning can ease the transition for people filling the positions of recent retirees.

Succession Planning Techniques

Organizations approach succession planning for different reasons and employ various strategies.

Every organization should develop a unique succession plan and utilize planning strategies that will be the most effective considering the organization's situation. For example, Harley-Davidson values diversity and strives to promote diversity through succession planning; the company currently has several female vice-presidents (Greer and Virick 2008, 352).

In addition, succession planning is not only applicable solely on the executive or higher leadership levels (Poduch and Rothwell 2004, 405). Implementing a succession plan is not necessarily expensive and does not have to be undertaken by the human resources department alone (Ibarra 2007, 25-27). This being said, several succession planning strategies would be useful for CRS to consider:

- Forecasting demand for positions
- Developing and identifying talent of diverse employees
- Enhancing mentoring relationships for diverse employees
- Training employees from under-represented groups to prepare for higher positions
- Creating a culture of inclusion

Proactive efforts define an organization's succession planning. Forecasting demand for new positions or positions that are soon to be vacant allows for advance notice. Forecasting can be done by department to determine what jobs may soon be available.

Talent identification and assessment is another method of proactive succession planning. It is recommended that CRS identify employees who enjoy new and continuous learning opportunities, respond positively to constructive criticism, and try to make a positive difference within the organization (Greer and Virick 2008, 357). Considering the goal of diversity retention, CRS should identify talented employees from historically underrepresented groups and consider additional training to eliminate professional challenges they may face. The American Red Cross trains minorities and women to make them stronger candidates for managerial or higher positions (Greer and Virick 2008, 360).

Identifying and training diverse employees is linked to both mentoring and creating a culture of inclusion, which are also succession planning strategies CRS should employ to retain a diverse workforce. Mentoring men and women from historically under-represented groups is crucial to their success within the organization, as is previously discussed.

Succession planning strategies increase the diversity of an organization and ensure the continuity of an organization (Bruer, Leibman, and Maki 1996, 18). Succession planning for those with specialized knowledge ensures that the organization will continue to be productive (Poduch and Rothwell 407). However, it is important that the organization be transparent in the selection and succession process, give guidance to employees, and listen to employee feedback (Bruer, Leibman, and Maki 1996, 26).

C. Exit Interviews

Exit interviews provide organizations with information concerning turnover, employee attitudes, and organizational processes (Doty 1999, 5). For CRS, exit interviews are especially crucial

because they can be used to determine why members of historically underrepresented groups choose to leave the organization.

Benefits of Exit Interviews

The exit interview facilitates feedback on diversity issues within the organization, and helps organizations determine why minorities exit. Training and development needs are also derived from exit interviews (Beard, Knouse, and Pollard 1996, 249). These benefits, particularly the positive improvements to organizational diversity strategy and the discovery of why minorities leave, are especially beneficial to the organization.

Exit Interview Techniques[49]

Research conducted for the United States military concerning diversity exit interviewing and surveying provides several insights into exit interview techniques and best practices. The exit interview is a tool that measures continuous improvement of the organization's diversity initiatives. Knouse, Smith, and Smith (2001) developed a Diversity Exit Survey and an accompanying Diversity Exit Interview that was adapted from the survey. The researchers drew upon exit survey or interview techniques from military organizations including the Air Force Careers Survey, Navy Argus, Coast Guard Career Intentions Survey, Federal Aviations Administration Survey, Air Force New Directions Survey, and the Military Exit Survey, to create a comprehensive exit survey/interview that can determine if diversity issues resulted in the exit (Knouse, Smith, and Smith 2001, 11-12). The five major categories of the comprehensive survey are job satisfaction, lost opportunities costs and reasons for leaving, fair working environment, and demographic data, which is used for recording purposes (Knouse, Smith, and Smith 2001, 11-12). Of these five categories, the fair working environment section determines whether or not employees are leaving due to diversity issues. Responses in this section can then be analyzed to determine if the felt problems with diversity negatively affected his or her experience in the organization.

D. Fair Working Environment

To further aid CRS in retaining a diverse workforce, this report analyzes the fair working environment as it relates to reasons for high attrition rates among minorities and women, which can hinder recruitment efforts.

Several studies have considered the impact of race and ethnicity on employee quit rates. In a studies conducted by Arizona State University on 20 corporations studying attrition at all employment levels found that African Americans, Hispanic Americans, and Asian Americans quit their jobs more frequently than Caucasians. Also, women belonging to a minority group quit their jobs at a higher rate than both Caucasians and men of their own ethnicities. Highest turnover rates were experienced by African American women since it was "32.8 percent higher than the [African American] male quit rate, 20.6 percent higher than the [Caucasian] female quit rate, and 85.3 percent higher than the [Caucasian] male quit rate" (Zeidner 2010). A 1981 study conducted by Blau and Kahn found that aggregate studies of private industry suggest that the

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[49] See Appendix 6

proportion of minority workers is positively associated with the industry's quit rates, but after controlling for personal and job characteristics the study showed that African Americans quit their jobs significantly less than Caucasians (Kellough 1995, 61). Finally, a study conducted by Kellough and Osuna showed that there is "no significant relationship between proportion of an agency's work force comprised of women or minorities and the agency quit rates when other agency characteristics are controlled" (Kellough 1995, 65-66). These results stand in contrast from aggregate studies that do not control for age, clerical positions, agency size and union strength (Kellough 1995, 65). While these studies did not look at the reasons for high attrition rates among minorities, they do show that attention should be placed on developing retention strategies because high attrition obstructs the progress towards a more diversified workforce.

Further research studies have shown that minorities and women leave in the first year of employment because of three critical issues: "stereotypes, discrimination and unsupported workplace" (Roper 2010, 1).

Attitudes about Diversity

Stereotypes and attitudes about diversity are one of the biggest challenges public organizations face. According to Roper, Harvey and Allard, the media plays an important role in shaping a culture and subculture of polarization based on stereotypes. Consequently, while there is no research concerning how to combat or change years of stereotypes in the workforce, one of the first steps is recognizing that "individuals are attuned to the influences of mass media; therefore, it may reinforce belief systems, attitudes, and perceptions" (Roper 2010).

In 1993, the Families and Work Institute conducted a national study that concluded that discrimination still exists in the workplace (Roper 2010). One of the main solutions to this problem is to make conscious efforts to listen to concerns, ideas and solutions presented by minority employees since creating a fair working environment can help reduce attrition rates.

Access to Resources & Knowledge

Finally, one of the main reasons for which minorities leave the workplace is because they feel that they are not "being granted access to resources, knowledge, and support to complete their roles in the organization" (Roper 2010, Morrison 1992). To exceed expectations, minority groups become high performing to disprove stereotypes. All these reasons have the capacity of "creating an umbrella of uncertainty, intense scrutiny, higher expectations for minorities and women, the unwillingness to reach out for assistance so as to not be seen as incompetent, and the need for perfection" (Roper 2010, 1). As a consequence of this, minorities often leave the workplace.

Employing the above mentioned strategies (i.e., support from senior leadership, mentorship programs, and succession plans) can help solve the problem of high turnover among minorities. Adopting a culture of change in which diversity is fostered, supported and encouraged is the only way to overcome these problems.

V. Summary of Strategies

The literature supports several strategies and tactics for recruitment and retention of personnel. Yet in order to be useful, the strategies must be embedded into organizational objectives and into the mission. In addition, diversity must be promoted as part of the culture of the organization from top management. A summary of the strategies are summarized below:

- Management clearly defines goals for diversity based on an agreed-upon framework (discrimination-fairness, access-legitimacy, learning-and-effectiveness, or valuing-and-integrating)   in accordance with the organization's context (age, location, experience with diversity, and national demographics).

- Management creates a diversity-oriented mission for Human Resources as well as strategic and measurable goals to achieve diversity.

- To broaden applicant pool, management and CRS Workforce department builds partnerships with Historically Black Colleges, emerging Hispanic Serving Institutions, and other selected institutions with high numbers of ethnic minorities. CRS can also develop partnerships with paraprofessional organizations, associations and non-profit organizations specializing in internship programs for ethnic minorities.

- To attract students from ethnic minority groups, CRS should provide paid internships and/or loan repayment options.

- CRS management should track data showing the number of minority students hired through internship programs for all level of positions to measure progress of its diversity goals.

- Staff and management establish mentorship programs and succession plan initiatives geared towards diverse employees. Management receives feedback from staff about the effectiveness of mentorship and succession program at a predetermined specified point in time.

- Management conducts exit interviews for feedback about employee turnover, attitudes, and organizational processes. With this information, management can adjust its programs and initiatives as it continues to create an environment contributing to a diverse workforce.

APPENDIX 1

FINE FIELDS OF STUDY

and

CROSSWALK OF SURVEY OF EARNED DOCTORATES SPECIALTY CODES TO CASPAR ACADEMIC DISCIPLINE CODES

FINE FIELDS OF STUDY

AGRICULTURAL SCIENCES/ NATURAL RESOURCES
000 Agri. Economics
005 Agricultural Animal Breeding
010 Animal Nutrition
014 Poultry Science
019 Animal Sci., Other
020 Agronomy & Crop Science
025 Agric. & Hort. Plant Breeding
030 Plant Pathology / Phytopathology
039 Plant Sciences, Other
043 Food Science
044 Food Science and Technology, Other
046 Soil Chemistry / Microbiology
049 Soil Sciences, Other
050 Horticulture Sciences
055 Fishing and Fisheries Sciences/Mgt.
066 Forest Sciences and Biology
070 Forest/Resources Mgt.
072 Wood Science & Pulp/Paper Tech.
074 Natural Resources/ Conservation
079 Forestry & Related Science, Other
080 Wildlife/Range Management
081 Environmental Science
098 Agriculture, General
099 Agricultural Sci., Other

BIOLOGICAL/ BIOMEDICAL SCIENCES
100 Biochemistry
103 Biomedical Sciences
105 Biophysics
107 Biotechnology
110 Bacteriology
115 Plant Genetics
120 Plant Pathology/ Phytopathology
125 Plant Physiology
129 Botany/Plant Biology
130 Anatomy
133 Biometrics & Biostatistics
136 Cell/Cellular Biology and Histology
139 Ecology
142 Developmental Biology/Embryology
145 Endocrinology
148 Entomology
151 Immunology
154 Molecular Biology
157 Microbiology
160 Neuroscience
163 Nutrition Sciences
166 Parasitology
169 Toxicology
170 Genetics, Human & Animal
175 Pathology, Human & Animal

180 Pharmacology, Human & Animal
185 Physiology, Human & Animal
189 Zoology, Other
198 Biology/Biological Sciences, General
199 Biology/Biomed Sci. Other

HEALTH SCIENCES
200 Speech-Lang. Pathology & Audiology
210 Environmental Health
211 Environmental Toxicology
212 Health Systems/ Service Administration
215 Public Health
220 Epidemiology
222 Kinesiology/Exercise Sci.
230 Nursing Science
240 Pharmacy
245 Rehabilitation/ Therapeutic Services
250 Veterinary Medicine
298 Health Sciences, General
299 Health Sciences, Other

ENGINEERING
300 Aerospace, Aeronautical & Astronautical
303 Agricultural
306 Bioengineering & Biomedical
309 Ceramic Sciences
312 Chemical
315 Civil
318 Communications
321 Computer
324 Electrical, Electronics and Communications
327 Engineering Mechanics
330 Engineering Physics
333 Engineering Science
336 Environmental Health Engineering
339 Industrial & Manufacturing
342 Materials Science
345 Mechanical
348 Metallurgical
351 Mining & Mineral
357 Nuclear
360 Ocean
363 Operations Research
366 Petroleum
369 Polymer & Plastics
372 Systems
398 Engineering, General
399 Engineering, Other

COMPUTER & INFORMATION SCIENCES
400 Computer Science
410 Information Science & Systems
419 Computer & Information Science, Other

MATHEMATICS

420 Applied Mathematics
425 Algebra
430 Analysis & Functional Analysis
435 Geometry/Geom. Anal.
440 Logic
445 Number Theory
450 Statistics
455 Topology/Found.
460 Computing Theory & Practice
465 Operations Research
498 Math/Stat, General
499 Math/Stat, Other

PHYSICAL SCIENCES
Astronomy
500 Astronomy
505 Astrophysics

Atmospheric Sci. & Meteorology
510 Atmospheric Chemistry and Climatology
512 Atmospheric Physics and Dynamics
514 Meteorology
518 Atmospheric Science/ Meteorology, General
519 Atmospheric Science/ Meteorology, Other

Chemistry
520 Analytical
522 Inorganic
526 Organic
528 Medicinal/ Pharmaceutical
530 Physical
532 Polymer
534 Theoretical
538 Chemistry, General
539 Chemistry, Other

Geological & Earth Sciences
540 Geology
542 Geochemistry
544 Geophysics & Seismology
546 Paleontology
548 Mineralogy & Petrology
550 Stratigraphy & Sedimentation
552 Geomorphology & Glacial Geology
558 Geological and Earth Sciences, General
559 Geological and Earth Sciences, Other

Physics
560 Acoustics
561 Atomic/Molec/Chem
564 Particle (Elem)
565 Biophysics
568 Nuclear Physics
569 Optics/Phototonics
570 Plasma/Fusion
572 Polymer
574 Condensed Matter/Low Temp
576 Applied Physics

578 Physics, General
579 Physics, Other

Ocean/Marine Sciences
585 Hydrology & Water Resources
590 Oceanography, Chemical and Physical
595 Marine Sciences
599 Ocean/Marine, Other

Psychology
600 Clinical
603 Cognitive & Psycholinguistics
606 Comparative
609 Counseling
612 Developmental & Child
613 Human Devlpmt. & Family Studies
615 Experimental
618 Educational
620 Family Psychology
621 Industrial & Organizational
624 Personality
627 Physiological/ Psychobiology
633 Psychometrics and Quantitative Psychology
636 School
639 Social
648 Psychology, General
649 Psychology, Other

SOCIAL SCIENCES
650 Anthropology
652 Area Studies
658 Criminology
662 Demography / Population Studies
666 Economics
668 Econometrics
670 Geography
674 International Relations / Affairs
678 Political Sciences & Government
682 Public Policy Analysis
686 Sociology
690 Statistics
694 Urban Affairs / Studies
698 Social Sciences, General
699 Social Sciences, Other

HUMANTIES
History
700 History, American
703 History, Asian
705 History, European
706 History, African
707 History, Latin American
710 History / Philosophy of Science & Technology
718 History, General
719 History, Other

Letters
720 Classics
723 Comparative Literature
724 Folklore

729 Linguistics
732 Literature, American
733 Literature, English
734 English Language
736 Speech & Rhetorical Studies
738 Letters, General
739 Letters, Other

Foreign Languages & Literature
740 French
743 German
746 Italian
749 Spanish
752 Russian
755 Slavic (other than Russian)
758 Chinese
762 Japanese
768 Arabic
769 Other Languages & Literature

Other Humanities
770 American / U.S. Studies
773 Archeology
776 Art History / Criticism/Conservation
780 Music
785 Philosophy
790 Religion / Religious Studies
795 Drama / Theater Arts
798 Humanities, General
799 Humanities, Other

EDUCATION
800 Curriculum & Instruction
805 Educ. Administration & Supervision
807 Educ. Leadership
810 Educ. Statistics / Research Methods
820 Educ. Assessment / Testing/Measure
822 Educ. Psychology
825 School Psychology
830 Social / Philosophical Foundation of Educ.
835 Special Educ.
840 Counseling Educ. / Counseling & Guidance
845 Higher Educ. / Evaluation & Research

Teacher Education
850 Pre-elementary / Early Childhood
852 Elementary
856 Secondary
858 Adult & Continuing

Teaching Fields
860 Agricultural Education
861 Art Education
862 Business Education
864 English Education
866 Foreign Languages Education
868 Health Education

870 Family & Consumer Sci./Home Economics
874 Math. Education
876 Music Education
878 Nursing Education
880 Physical Education & Coaching
882 Reading Education
884 Science Education
885 Social Science Education
887 Trade & Ind. Educ.
889 Teach Educ. & Prof. Dev.

Other Education
898 Education, General
899 Education, Other

PROFESSIONAL FIELDS
Business Mgmt. / Administration Services
900 Accounting
905 Banking / Financial Support Services
910 Business Admin. & Management
915 Business / Managerial Economics
916 International Business / Trade / Commerce
917 Mgmt. Information Systems/Business Data
920 Marketing Management & Research
921 Human Resources Development
930 Operations Research
935 Organiz. Behavior
938 Business Mgmt. / Administration Serv., General
939 Business Mgmt. / Administration Serv., Other

Communications
940 Communications Research
947 Mass Communication / Media Studies
957 Communication Theory
958 Communication, General
959 Communication, Other

Other Professional Fields
960 Architec. Environ. Design
964 Family / Consumer Sci. / Human Sci., General
968 Law
972 Library Science
974 Parks / Sports / Rec. / Leisure / Fitness
976 Public Administration
980 Social Work
984 Theo. / Religious Education
989 Prof. Fields, Other

Other Fields
999 Other Field

CROSSWALK OF SURVEY OF EARNED DOCTORATES SPECIALTY CODES TO CASPAR ACADEMIC DISCIPLINE CODES

AEROSPACE ENGINEERING
300 Aerospace, Aeronautical, Astronautical Engineering

CHEMICAL ENGINEERING
312 Chemical Engineering
366 Petroleum Engineering
369 Polymer and Plastics Engineering
547 Fuel Technology and Petroleum Engineering

CIVIL ENGINEERING
315 Civil Engineering
336 Environmental Health Engineering

ELECTRICAL ENGINEERING
318 Communications Engineering
321 Computer Engineering
322 Electrical Engineering
323 Electronics Engineering
324 Electrical and Electronics Engineering

MECHANICAL ENGINEERING
327 Engineering Mechanics
345 Mechanical Engineering

MATERIALS ENGINEERING
309 Ceramic Sciences
342 Materials Science
348 Metallurgical Engineering

INDUSTRIAL ENGINEERING
339 Industrial and Manufacturing Engineering

OTHER ENGINEERING
303 Agricultural Engineering
306 Bioengineering and Biomedical

330 Engineering Physics
333 Engineering Science
351 Mining and Mineral Engineering
354 Naval Architecture and Marine Engineering
357 Nuclear Engineering
360 Ocean Engineering
363 Operations Research
372 Systems Engineering
375 Textile Engineering
398 Engineering, General
399 Engineering, Other

ASTRONOMY
500 Astronomy
505 Astrophysics
506 Astronomy and Astrophysics

CHEMISTRY
520 Analytical Chemistry
521 Agricultural and Food Chemistry
522 Inorganic Chemistry
524 Nuclear Chemistry
526 Organic Chemistry
528 Medicinal/Pharmaceutical Chemistry
530 Physical Chemistry
532 Polymer Chemistry
534 Theoretical Chemistry
538 Chemistry, General
539 Chemistry, Other

PHYSICS
560 Acoustics
561 Chemical and Atomic/Molecular Physics
562 Electron Physics
563 Electromagnetism
564 Elementary Particle
566 Fluids
567 Mechanics
568 Nuclear Physics
569 Optics
570 Plasma and High-Temperature Physics
572 Polymer Physics
573 Thermal Physics
574 Solid State and Low-Temperature Physics
575 Theoretical Physics

578 Physics, General
579 Physics, Other

ATMOSPHERIC SCIENCES
510 Atmospheric Physics and Chemistry
512 Atmospheric Dynamics
514 Meteorology
518 Atmospheric Science/Meteorology, General
519 Atmospheric Science/Meteorology, Other

EARTH SCIENCES
540 Geology
542 Geochemistry
544 Geophysics and Seismology
545 Geophysics (Solid Earth)
546 Paleontology
548 Mineralogy and Petrology
549 Mineralogy, Petrology, and Geochemistry
550 Stratigraphy and Sedimentation
552 Geomorphology and Glacial Geology
554 Applied Geology
555 Applied Geology/Geological Engineering
558 Geology and Related Sciences, General
559 Geology and Related Sciences, Other
585 Hydrology and Water Resources

OCEANOGRAPHY
590 Oceanography
595 Marine Sciences
599 Ocean/Marine, Other

MATHEMATICS
420 Applied Mathematics
425 Algebra
430 Analysis and Functional Analysis
435 Geometry
440 Logic
445 Number Theory
450 Mathematical Statistics
455 Topology

460 Computing Theory and Practice
465 Operations Research
498 Mathematics, General
499 Mathematics, Other

COMPUTER SCIENCE
400 Computer Science
410 Information Science and Systems

AGRICULTURAL SCIENCES
005 Animal Breeding and Genetics
007 Animal Husbandry
010 Animal Nutrition
012 Dairy Science
014 Poultry Science
019 Animal Sciences, Other
020 Agronomy and Crop Science
025 Plant Breeding and Genetics
030 Plant Pathology
032 Plant Protection/Pest Management
039 Plant Sciences, Other
040 Food Sciences
042 Food Distribution
043 Food Engineering
044 Food Sciences, Other
045 Soil Sciences
046 Soil Chemistry/Microbiology
049 Soil Sciences, Other
050 Horticulture Science
054 Fish and Wildlife
055 Fisheries Sciences and Management
060 Wildlife Management
065 Forestry Science
066 Forest Biology
068 Forest Engineering
070 Forest Management
072 Wood Science and Pulp/Paper Technology
074 Conservation/ Renewable Natural Resources
079 Forestry and Related Sciences, Other
080 Wildlife/Range Management

081 Environmental Science
098 Agricultural Science, General
099 Agricultural Science, Other
580 Environmental Science

BIOLOGICAL SCIENCES
100 Biochemistry
103 Biomedical Sciences
105 Biophysics
107 Biotechnology Research
110 Bacteriology
115 Plant Genetics
120 Plant Pathology
125 Plant Physiology
129 Botany, Other
130 Anatomy
133 Biometrics and Biostatistics
136 Cell Biology
139 Ecology
140 Hydrobiology
142 Developmental Biology/Embryology
145 Endocrinology
148 Entomology
151 Biological Immunology
154 Molecular Biology
156 Microbiology and Bacteriology
157 Microbiology
160 Neuroscience
163 Nutritional Sciences
166 Parasitology
169 Toxicology
170 Genetics, Human and Animal
171 Genetics
175 Pathology, Human and Animal
180 Pharmacology, Human and Animal
185 Physiology, Human and Animal
186 Animal and Plant Physiology
189 Zoology, Other
198 Biological Sciences, General
199 Biological Sciences, Other

MEDICAL SCIENCES
205 Dentistry
210 Environmental Health

215 Public Health
219 Public Health and Epidemiology
220 Epidemiology
225 Medicine and Surgery
235 Optometry and Ophthalmology
240 Pharmacy
250 Veterinary Medicine

OTHER LIFE SCIENCES
200 Speech/ Language Pathology and Audiology
212 Health Systems/ Services Administration
222 Exercise Physiology/ Science, Kinesiology
224 Hospital Administration
230 Nursing
245 Rehabilitation/ Therapeutic Services
298 Health Sciences, General
299 Health Sciences, Other

PSYCHOLOGY
600 Clinical Psychology
603 Cognitive Psychology and Psycholinguistics
606 Comparative Psychology
609 Counseling Psychology
612 Developmental and Child Psychology
613 Human/ Individual and Family Development
615 Experimental Psychology
616 Experimental, Comparative, Physiological Psychology
618 Educational Psychology
619 Human Engineering
620 Family and Marriage Counseling
621 Industrial and Organizational Psychology
624 Personality Psychology

627 Physiological Psychology/ Psychobiology
630 Psychometrics
633 Quantitative Psychology
636 School Psychology
639 Social Psychology
648 Psychology, General
649 Psychology, Other

ECONOMICS
000 Agricultural Economics
666 Economics
668 Econometrics

POLITICAL SCIENCE AND PUBLIC ADMIN.
674 International Relations/Affairs
678 Political Science and Government
679 Political Science and Public Administration
682 Public Policy Analysis
976 Public Administration

SOCIOLOGY
662 Demography/ Population Studies
686 Sociology

ANTHROPOLOGY
650 Anthropology
773 Archeology

LINGUISTICS
729 Linguistics

HISTORY OF SCIENCE
710 History/Philosophy of Science and Technology

AREA AND ETHNIC STUDIES

652 Area Studies
770 American Studies

OTHER SOCIAL SCIENCES
658 Criminology
670 Geography
690 Statistics (Social)
694 Urban Affairs/Studies
698 General Social Sciences
699 Other Social Sciences

HISTORY
700 History, American
703 History, Asian
705 History, European
718 History, General
719 History, Other

ENGLISH AND LITERATURE
720 Classics
723 Comparative Literature
725 English and American Literature
726 English Language
732 Literature, American
733 Literature, English
734 English Language
736 Speech and Rhetorical Studies
738 Letters, General
739 Letters, Other

FOREIGN LANGUAGES
740 French
743 German
746 Italian
749 Spanish
752 Russian
755 Slavic
758 Chinese
762 Japanese
765 Hebrew
768 Arabic
769 Other Languages and Literature

OTHER HUMANITIES
785 Philosophy
798 Humanities, General
799 Humanities, Other

RELIGION AND THEOLOGY
790 Religion
791 Religion and Theology
984 Theology/ Religious Education

ARTS AND MUSIC
774 Art, Applied
775 Art, Fine/Applied
776 Art History/ Criticism/ Conservation
780 Music
795 Drama/Theater Arts

ARCHITECTURE AND ENVIRONMEN-TAL DESIGN
960 Architecture and Environmental Design

SCIENCE EDUCATION
884 Science Education

MATHEMATICS EDUCATION
874 Mathematics Education

SOCIAL SCIENCE EDUCATION
885 Social Science Education

OTHER SCIENCE/ TECHNICAL EDUCATION
860 Agricultural Education
868 Health Education

872 Technical and Industrial Arts Education
878 Nursing Education
887 Technical Education

NON-SCIENCE EDUCATION
800 Curriculum and Instruction
805 Education Administration and Supervision
807 Educational Leadership
810 Educational/ Instructional Media Design
812 Early Childhood Education
814 Education Measurement and Statistics
815 Education Statistics/ Research Methods
820 Education Assessment, Testing, and Measurement
822 Educational Psychology
825 School Psychology
830 Social/ Philosophical Foundations of Education
835 Special Education
840 Counseling Education/ Counseling and Guidance Services
845 Education Evaluation and Research/Higher Education
850 Pre-elementary/ Early Childhood Teacher Education
852 Elementary Teacher Education
854 Junior High Teacher Education

856 Secondary Teacher Education
858 Adult and Continuing Teacher Education
861 Art Education
862 Business Education
864 English Education
866 Foreign Languages Education
867 Physical Education, Health, and Recreation
870 Home Economics Education
876 Music Education
880 Physical Education and Coaching
882 Reading Education
886 Speech Education
888 Trade and Industrial Education
889 Teacher Education, Specific Academic and Vocational Programs, Other
898 Education, General
899 Education, Other

BUSINESS AND MANAGEMENT
002 Agricultural Business and Management
900 Accounting
905 Banking/ Financial Support Services
910 Business Administration and Management
915 Business/ Managerial Economics
916 International Business
917 Management Information Systems/ Business Data Processing
920 Marketing Management and Research
925 Business Statistics
930 Operations Research

935 Organizational Behavior
938 Business Management/ Administrative Services, General
939 Business Management/ Administrative Services, Other

COMMUNICA-TION AND LIBRARIANSHIP
940 Communications Research
945 Journalism
947 Mass Communications
950 Radio and Television
957 Communication Theory
958 Communications, General
959 Communications, Other
972 Library Science

LAW
968 Law

SOCIAL SERVICE PROFESSIONS
980 Social Work

VOCATIONAL STUDIES AND HOME ECONOMICS
964 Home Economics

OTHER NON-SCIENCES OR UNKNOWN DISCIPLINES
974 Parks/Recreation/ Leisure/Fitness
988 Professional Fields, General
989 Professional Fields, General
999 Other Fields

APPENDIX 2:

ANNOTATED BIBLIOGRAPHY

ANNOTATED BIBLIOGRAPHY

1998 Amendment to Title V of the Higher Education Act of 1965, **Public Law 244. 105**[th] **Cong., 2**[nd] **sess., 27 January 1998.**

The Amendment authorizes federal grants for ethnic minorities in underrepresented programs. It also calls for incentives for ethnic minorities by providing funds to institutions of higher education with 25% or more of enrolled ethnic minorities.

Value to CRS:

The amendment provides impetus for universities and government agencies to pay attention to ethnic minorities in underrepresented programs.

Babcock, Pamela. 2009. "Diversity Accountability Requires more than Numbers." *Society for Human Resource Management.* **<hhttp://www.shrm.org/hrdisciplines/Diversity/ Articles/Pages/MoreThanNumbers.aspx>**

Babcock argues that measurements and recruiting are not all that matter because qualitative measures are as important and focus should be placed on the climate of the organization. To support her argument, the author describes different approaches that companies use to enhance diversity. Sodexo Inc. has come to the realization that metrics without accountability are useless and thus they have directly liked their scorecard results to diversity and they give bonuses if said goals are accomplished. The article also states the ideas of Edward E. Hubbard, diversity return-on-investment expert, and he argues for three main goals; (1) assess entire cultural system of organization, (2) look beyond the percentage, and (3) ensure that "diversity is in alignment with the business mission or business strategy." The article also names the approaches that MDB Group Inc. (specializes in diversity and inclusion strategy), Georgia Power in Atlanta and John Hopkins Hospital have taken when approaching diversity.

Value to CRS:

This article provides a good summary of what other entities are doing to foster diversity and could serve as options for CRS. The key concept is to keep the process simple, clear and understandable and consider the expected and wanted behaviors that might arise.

Beard, Jon W., Stephen B. Knouse, and Hinda Geyser Pollard. 1996. "Willingness to Discuss Exit Interview Topics: The Impact of Attitudes toward Supervisor and Authority." *The Journal of Psychology* 130: 249-261.

The authors find that exit interviews are used to determine reasons for turnover and identify training and development needs. The report is useful because it discusses incorporating diversity into exit interviews. In addition, the authors discuss attitudes toward management and willingness of interviewees to discuss their supervisor and other sensitive topics. Attitudes toward authority affect exit interview information.

Value to CRS:

This article can help CRS prepare for exit interviews. The authors discuss techniques for producing unbiased responses in an interview.

Bruer, Ruth A., Michael Leibman, and Bill R. Maki. 1996. "Succession Management: The Next Generation of Succession Planning." *Human Resource Planning*. 19(3): 16-29.

Bruer and Leibman look at new methods of succession planning for organizations that are "flatter" and more transparent. The article concludes that succession planning provides benefits that will help to retain a diverse workforce. Furthermore, the article identifies requirements, such as clear lines of administration and a supportive culture, which are necessary for successful succession planning.

Value to CRS:

CRS can obtain information about best practices for succession planning from this article. In particular, the articles' discussion of the requirements for succession planning might help CRS in evaluating its own succession plan strategies.

Chiogioji, Eleanor N. and Sandra G. Pritz. 1992. "Mentoring to Support the Mission of a Government Agency." Presented at the Diversity in Mentoring Conference, Kalamazoo, MI.

This article is an excellent source that provides an example of a successful mentoring program in a government agency. The Department of Energy's Mentoring Program for interns focuses on educating mentors, interns, and program supervisors of their responsibilities and the benefits of the intern program. The intern mentoring program was developed by the Center for Education Training and Employment (CETE) at Ohio State University.

Value to CRS:
This article can help CRS develop or improve a mentorship program. CRS can use the series of four workshops detailed in the article to help to develop a successful mentor program.

Doty, Janet. 1999. "Exit interviews: state of the practice." *CUPA Journal*. **50(1-2): 9-12.**

Exit interviews provide information on why employees leave an organization, the attitudes of employees, and organizational processes and functions. Doty studies exit interviews conducted at a university. The interviews studied gave employees an opportunity to express thoughts on the organization, allowed for the collection of employee benefits, and helped the organization to detect turnover trends. The article is useful because it outlines exit interview best practices. These include having clear objectives for the exit interview program and an action plan for analyzing data gathered from exit interviews.

Value to CRS:
CRS can find information covering why organizations conduct exit interviews and different attitudes expressed by employees during exit interviews. CRS can reference this article if it wishes to develop or alter its objectives and goals for exit interviews.

Duhon, David and Robert A. Giacalone. 1991. "Assessing intended employee behavior in exit interviews." *The Journal of Psychology* **125: 83-90.**

This article discusses employee behaviors in exit interviews and touches upon interview formatting. Employee feelings toward a topic can affect his or her willingness to discuss the topic. Concerning interview formatting, all exit interviews should be conducted by a neutral interviewer. The article offers strategies for exit interviews and also stresses that exit interviews help to reduce an organization's voluntary turnover rate.

Value to CRS:

CRS can cite this article as evidence that exit interviews are beneficial for the organization because they help reduce employee turnover. Furthermore, CRS can reference this article to determine effective exit interview strategies.

Friedman, Paul G. and M. Colleen Ryan. 1983. "Career Mentoring in a State Government Agency." Presented at the Annual Speech Communication Association Convention, Washington, D.C.

Friedman and Ryan provide an example of mentorship in a state government agency. The researchers look at career mentoring within the Kansas Department of Human Resources. Ethnicity wasn't a focus of the study, however, the age and gender of mentors was important. The article postulates that it is important that mentors be in tune with the challenges faced by the people they mentor. From this, it is inferred that diverse employees may require more encouragement and support from the mentor. The article supports the idea that matching employees from historically under-represented groups with mentors of the same ethnicity is important.

Value to CRS:

CRS could contact the Kansas Department of Human Resources to further discuss the department's mentoring program. The article sets an example of mentoring in government.

Giacalone, Robert A., Stephen B. Knouse, and Amy Montagliani. 1997. "Motivation for and prevention of honest responding in exit interviews and surveys." *The Journal of Psychology* **131: 438-448.**

This article discusses some problems faced during exit interviews and also offers a variation on the exit interview strategy. The authors found that employees in exit interviews might not give unbiased answers. To mitigate this problem, exit interviews should all have a consistent format. Regardless of the possibility that interviews produce biased responses, exit interviews can help organizations detect trends. The report offers a useful strategy that will contribute to the

retention analysis for CRS. This strategy deals with compiling interview information into a database to assess organizational problems and detect diversity trends.

Value to CRS:

CRS can reference this article in order to improve the organization's exit interview techniques. In particular, should CRS begin compiling a database of information gathered from exit interviews, this article will provide invaluable information.

Greer, Charles A. and Meghna Virick. 2008. "Diverse Succession Planning, Lessons from the Industry Leaders." *Human Resource Management*. **47(2): 351-367.**

The importance of diversity within an organization is explained in this article. Succession planning increases the diversity of an organization's workforce. The researchers identify five categories that succession planning practices and competencies fall under, including business strategy, leadership, planning, development, and program management.

Value to CRS:

This article provides evidence that succession planning can aid diversity retention efforts. CRS can look at the five competencies to determine new succession planning strategies.

Harrington, Vernard K., Jerusalem T. Howard, and Wanda J. Smith. 2005. "Essential Formal Mentor Characteristics and Functions in Governmental and Non-Governmental Organizations from the Program Administrator's and the Mentor's Perspective." *Public Personnel Management*. **34(1): 31-58.**

This article focuses on the importance of the mentor matching process. Employee and mentor matches should be made according to similar characteristics. Failed mentor relationships are usually the result of poor matches. In addition to providing insight into the matching process, the article details the functions of mentors and the activities mentors should undertake.

Value to CRS:

CRS will find valuable information concerning mentor matching in this report. The article strongly suggests matching mentors and mentees who have similar characteristics.

"HR Succession Planning: Workforce Diversity." 2010. 27 January—last update.
   University of California-San Diego. Accessed: 6 April 2010.

The succession planning information presented online by the University of California-San Diego provides suggestions and supporting evidence for succession planning techniques used to retain a diverse workforce. The site outlines major initiatives undertaking by the university to improve diversity retention. Furthermore, the logic behind each initiative and the current status of the initiative are presented.

Value to CRS:
Critical initiatives for diversity succession planning are available to CRS on this website. Some of the seven initiatives for succession planning to improve workforce diversity retention might be adapted for use by CRS.

**Ibarra, Patrick. 2007. "The Myths and Realities of Succession Planning." *Public*
   Management. 89(1): 24-27.**

Ibarra's article focuses on succession planning in organizations with a large portion of their workforce nearing retirement age. The article addresses 10 myths of succession planning. For example, it is a myth that naturally talented people will ascend to top leadership positions within the organization, that succession planning is too costly, and that the organization is too small for succession planning.

Value to CRS:
This article will be useful if the CRS has concerns about the possibilities and implementation difficulties associated with succession planning.   The article addresses common myths of succession planning and offers evidence that these myths can be dispelled.

Kellough, Edward and Will Osuna. 1995. *Cross-Agency Comparisons of Quit Rates in the*
   ***Federal Service: Another Look at the Evidence*. Review of Public Personnel**
   Administration. V. 15.4: 58-68

The study examines reasons for which employees in the federal service quit. The variables that were significant at the time of the evaluation were the proportion of an agency's workforce that is young (i.e., 30 years of age or less), the proportion of the agency workforce comprised of clerical workers, the agency size (smaller agencies have higher quit rates) and the union strength. Interestingly, is contrast to previous results, there was no significant relationship between the proportion of an agency's work force comprised of women or minorities and the agency quit rate when occupational and other agency characteristics are controlled.

Value to CRS:
CRS may find it useful to review these results to assess their relevance for CRS' rather different circumstances.

Knouse, Stephen B., Alvin Smith, and Patricia Smith. 2001. "A Diversity Interview/Survey for the Military." Defense Equal Opportunity Management Institute.

The diversity exit survey and interview format provide information on how organizations should approach exit interviews in the hopes of discovering diversity issues within the organization. The diversity exit survey includes figures from several exit interview surveys conducted by military organizations. Furthermore, the researchers also look at the benefits and reasons military organizations conduct exit surveys and interviews.

Value to CRS:
CRS can gain new exit interviewing techniques that specifically address improving diversity retention efforts. The article presents questions that can determine whether or not employees leave due to diversity issues. This report is particularly useful because it provides an example of a best practices exit survey that addresses diversity issues.

Marquis, Jefferson P., Nelson Lim, Lynn M. Scott, Margaret C. Harrell, and Jennifer Kavanagh. 2008. "Managing Diversity in Corporate American: An Exploratory Analysis". Santa Monica, CA: RAND Corporation.

Based on their qualitative study of 14 US companies on *Fortune* magazine's most diverse companies, this research from the Rand Corporation found that neither a set of best practices, nor best practices in and of themselves can help a company be successful at diversity management. The diversity management literature study tends to simply list strategies for recruitment and retention, yet this approach, according to the authors, is ineffective and demonstrates a lack of understanding of the complexity of diversity management. The research also found that companies considered more diverse have four characteristics. Two of those characteristics are related to senior management's involvement in directly promoting diversity and a commitment to planning, implementation and evaluation.

Value to CRS

This research summarizes the diversity management literature and tests whether the literature is supported by current practices. The research introduces contextual factors that will affect diversity management for an organization. CRS can then make decisions by looking at those factors. In addition, the research shows CRS what the diversity management literature lacks and where further research can support organizations' practices.

Mazzei, John A. 2008. "Making the Most of Exit Surveys." *School Administrator* 65(8): 42-43.

This brief article does not significantly contribute to the report. The article simply reiterates that exit interviews are used to assess organizational trends. Mazzei stresses that looking at repeat answers on exit interview questions are particularly useful indicators of a trend.

Value to CRS:

CRS can cite this article as evidence that exit interviews are practical and helpful.

Morris, Steven. 2006. "Managing Cultural Diversity." *American Management Association.* <http://www.amanet.org/training/articles/Managing-Cultural-Diversity.aspx>

Steven Morris presents his ideas on what companies should adopt to foster diversity. Between them he mentions the need for a cultural inventory whose results are internally published, the need for creating a statement of intent regarding diversity and cultural positivity, the need to

provide mentors cross culturally in order to build relationships between the different groups, and the need to hold the leadership accountable for harnessing diversity and cultural positivity. He concludes by emphasizing the importance of dialogue around values and aspirations and the importance of choosing for talent and not quota.

Value to CRS:
CRS is already on the path to becoming the organization described above since it considers diversity as a primary focus.

National Academy of Public Administration, Panel of the National Academy of Public Administration. 2005. "Action Plan to Achieve a Diverse Workforce."

The report presents a well developed action plan for the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry that emphasizes the importance of the planning process and goal setting process before embarking on the journey of fostering diversity. The report emphasizes the importance of developing: (1) goals/missions that foster diversity, (2) a strategy to reach these goals, (3) a diagram of an actual action plan, (4) a breakdown of what to focus on: recruitment, work environment, culturally competent teams, (5) definitions of what it means to be a culturally competent organization, and (6) an analysis of the costs of implementing the program. The report also provides several direct recommendations; (1) diversity must be involved at every level, (2) diversity goals have to be distributed to all employees and they must be abided by, (3) implementation of an agency wide data collection and analysis system with regards to recruitment, placement and retention and communicate data to stakeholders, (4) creation of a framework that sets expectations and sets motivations, and (5) start with focus on one strategy and implement it on all aspects. Finally, the success of the plan is identified. In which the emphasis is on the need for communication to come from leadership, management, employees, and external stakeholders.

Value to CRS:
The report provides a very well thought out action plan crafted for a specific organization. The most important value to CRS is the actual process of diversifying the workforce and the commitments that are required and necessary to do so.

Peel, Dave. 2008. "What factors affect coaching in small and medium sized enterprises." *International Journal of Evidence Based Coaching and Mentoring.* **6(2): 1-18.**

This article is not essential to the report. However, some facts and information drawn from Peel's research provide support for mentoring or coaching. For example, racial inequality is manifested in hiring and promoting practices. This is because managers and those with hiring power often select people who are similar to themselves.

Value to CRS:
CRS can cite this article as evidence that mentoring and coaching is beneficial for the organization. Furthermore, CRS can learn areas where racial injustice occurs within an organization.

Poduch, Stan and William J. Rothwell. 2004. "Introducing Technical (Not Managerial) Succession Planning." *Public Personnel Management.* **33(4): 405-419.**

This article outlines the difference between technical succession planning and managerial succession planning. Technical succession plan deals more with organizational knowledge transfer. The article can contribute to a background explanation of succession planning. Concerning technical succession planning, an implementation roadmap is provided by the authors. In addition, the article will be useful because it details the problems with managerial succession planning.

Value to CRS:
CRS will find a more in depth view of two different types of succession planning from this article. The report looks at technical and managerial succession planning, and will be useful should CRS revise its succession planning processes.

Romejko, Mark A. 2008. "Key Characteristics of Succession Planning at a Government Research Center." *Dissertation Abstracts International Section A: Humanities and Social Sciences.* **69(1-A): 288.**

Succession planning is proactive and helps ensure the organization's continuity. This article outlines various categorical approaches to succession planning. These categories include direction, timing, planning, scope, degree of dissemination, and amount of individual discretion. The information presented in the article clarifies successful methods or approaches to succession planning and can be used to support the argument that succession planning increases retention.

Value to CRS:
The article provides CRS with succession planning techniques and addresses various categories of succession planning. CRS can gain more understanding of the direction, timing, and planning necessary for effective succession planning.

Roper, Greg. 2009. *External Talent: Why do Minorities and Women Leave in the First Year.* The Multicultural Advantage <http://www.multiculturaladvantage.com/recruit/retention/minorities-women-leave.asp>

The article provides reasons behind female and minority groups high retention rates. The author identifies based on the literature review available three main reasons: stereotypes, discrimination and unsupportive work environment.

Value to CRS:
The report is an objective and historic evaluation of reasons for which minorities and females leave the job in the first year.

Salzberg, Barry. 2006. "Diversity: It's Right, but that doesn't mean it's easy." *American Management Association.* <http://www.amanet.org/training/articles/Diversity-Its-Right-but-That-Doesnt-Mean-Its-Easy.aspx >

The article focuses on three main points that are the reason for Deloitte's success. First, there is a need to manage talent in the firm's pipeline by fostering and allowing the progress and growth of minorities within the company and not just at the hiring stage. Second, the corporate culture has to accept diversity this is accomplished by ensure that a diverse workforce is truly the aim and goal of the organization and by establishing an external Diversity Advisory Board to keep the

organization accountable to diversity mission and to help the organization answer hard question. Finally, there is a need to lead from the top by making diversity intentionally part of recruitment and organizational action and by making diversity and inclusion present on the agenda.

Value to CRS:
The article presents a new way of fostering and achieving diversity. Instead of focusing on just the hiring of diverse individuals, the focus is placed on the inside core of the firm.

Selden, Sally C. and Frank Selden. 2001. "Rethinking Diversity in Public Organizations for the 21ˢᵗ Century: Moving Toward a Multicultural Model". Administration & Society 33 (3): 303-321.

Selden & Selden argue that multiculturalism as a framework for diversity in government workforce is a process that better captures social and demographic changes and catapults them into public service organizations so that constituents are better served. Multiculturalism promotes an atmosphere where ethnic minorities' are encouraged to participate in organizational decision-making process.

Value to CRS
This article provides CRS with four different frameworks on which the organization can base its strategic plan for diversity. Using empirical research, the authors evaluate each framework in light of public organizations' strategies for diversity.

Shackelford, William. "The Changing Definition of Workforce Diversity". Black Collegian, Spring 2003. <http://www.black-collegian.com/issues/2ndsem03/changing2003 2nd.shtml>.

Shackelford discusses the implications of the changed definition of diversity, which now in addition to race and gender includes gender, religion, professional background, disabilities, and even certain skill sets. the author also provide

Value to CRS

This article presents the perspective of an African-American expert consultant in minority recruitment. The article also provides job seeking African-American college graduates with tips on resume building that enhance their qualifications and showcase how their diverse background can be of use to government agencies. This article can help CRS determine what to look for in resumes and cover-letters when building strategies.

U.S. Department of Commerce & National Partnership for Reinventing Government. *Best Practices in Achieving Workforce Diversity*. **Washington, DC: U.S. Dept. of Commerce, 1999.**

The Department of Commerce (USDC) states that leadership and staff involvement is necessary to have to have a successful diverse workforce in the federal government. USDC outlines the importance of diversity and of defining diversity as part of the strategic planning process.

Value to CRS

USDC evaluated best practices of 600 public and private organizations on the following criteria: leadership and management, commitment, employee involvement, strategic planning, sustained investment, diversity indicators, accountability/measurement/evaluation, and linkage to organizational goals and objectives. The USDC's key findings reveal that managerial and staff involvement is integral to the success of diversity management, supporting findings by the Rand Corporation mentioned above.

U.S. Equal Employment Opportunity Commission. *Report on The Hispanic Employment Challenge in the Federal Government*. **Washington, DC: Equal Employment Opportunity Commission, 2008.**

The Federal Hispanic Work Group was created out of a partnership with the EEOC and the Social Security Administration (SSA) to provide recommendations on recruitment and retention strategies as well as removal of barriers to employ Hispanic citizens in the federal government. The Work Group provides a historical perspective and bases recommendations on data of Hispanic citizens working in the federal government at different GS levels.

Value to CRS

CRS can use the list of SSA's best practices for recruitment and retention. This report includes recommendations for leadership development, accountability, and recognizes the role of the Hispanic Employment program manager in advising senior managers on related matters concerning Hispanic employees and applicants.

U.S. Government Accountability Office, Personnel Appeals Board. 2002. *Minority Recruitment at GAO.* <http://www.pab.gao.gov/oversigh.pdf>

The report provides an analysis and evaluation of the GAO's approach to recruit minorities. The review committee also provides some insight on what they would like to observe in the future.
One of the main things that the GAO does is going to recruit at particular universities. The main recommendation is to better disseminate job openings to minority group organizations; as well as, advertise part time positions to minorities and provide exit questionnaire for permanent employees and summer interns to help identify trends, patterns and problems. It is also recommended to expand the pool of candidates/applicants by evaluating the universities on which currently focus and by increasing the dissemination of job announcements and job information to minority group organizations - web based application and identify list of sites that will routinely receive info.

Value to CRS:

CRS might implement some of the methods that the GAO is using and learn from the recommendations the GAO got and apply them in their own recruitment efforts.

U.S. Office of Personnel Management. *Federal Equal Opportunity Annual Report: Hispanic Employment Initiative.* Washington, DC: Office of Personnel Management.

In response to Hispanic underrepresentation in the federal workforce, in 1997, the U.S. Office of Personnel Management crafted a nine point plan to assist federal agencies in increasing workforce diversity.

Value to CRS

This report includes data about underrepresented ethnic minorities as part of the federal workforce, as well as examples of successful hiring and retention strategies undertaken by federal agencies.

U.S. Office of Personnel Management. "Best Practices: Mentoring." 2008. <http://www.opm.gov/hrd/lead/BestPractices-Mentoring.pdf>.

The report looks at reasons organizations employ mentor programs, benefits of mentor programs, qualities of successful mentor programs, and different types of mentor programs. Basically, a mentor program involves understanding goals, planning the program, the implementation phase, and evaluation. The report provides useful best practice strategies for utilizing a mentorship program in an organization.

Value to CRS:

CRS can reference this article to determine best practices for mentoring programs. The benefits of mentoring, various mentoring program goals, practices and techniques, and nontraditional types of mentoring are discussed within the report.

U.S. Office of Personnel Management, 2009. *Federal Student Loan Repayment Program Calendar Year 2008 - Report to the Congress*. <http://www.opm.gov/OCA/pay/StudentLoan/html/CY2008StudentLoanRepayment Report.pdf>

The report was written for Congress and as such it provides data about every aspect of the Federal Student Loan Repayment Program. The report shows that more and more organizations are implementing the program and are finding it helpful as a recruitment and retention method. The report concludes by encouraging agencies to continue implementing this program and to tailor it to their specific needs.

Value to CRS:

The report is very informative and presents relevant and important information in the case CRS chooses to incorporate the loan repayment program as a means of retention and recruitment.

Wharton, Alliscia N, 2009. "Women in the Federal Government: Using networks and mentors to navigate the management hierarchy."   *Dissertation Abstracts International Section A: Humanities and Social Sciences*. **70(5-A): 1807.**

Though this article is geared towards women in the federal government, parallels can be drawn between gender and race. Wharton finds that same sex and same gender mentor relationships are important. However, cross sex and gender mentor relationships have also been found to be positive. These findings support the inclusion of a diversity component in the mentor matching process.

Value to CRS:

CRS can explore how mentor relationships have different effects regarding gender. The implications of the article are important when considering diversity and how mentoring affects those from diverse backgrounds differently.

Zeidner, Rita. 2010. *Quit Rates High Among Women, Minority Pros.* **HR Magazine. <http://findarticles.com/p/articles/mi_m3495/is_5_53/ai_n25455489/>**

The article provides a brief recap of a study conducted at the University of Arizona and it provides a summary of the findings which show that minorities and women from an underrepresented group in particular tend to quit their jobs at a higher rate than other groups.

Value to CRS:

This article will provide CRs with information on turnover to support initiatives for retention.

APPENDIX 3:

SOCIAL SECURITY ADMINISTRATION
BEST PRACTICES

SOCIAL SECURITY ADMINISTRATION
RECRUITMENT PRACTICES

(Extract from)

2008 Federal Hispanic Work Group Report

US Equal Employment Opportunity Commission
&
Social Security Administration

SSA's national recruitment efforts have evolved over the years. Following the downsizing of the 1980's, SSA began employing centralized and professional recruitment techniques in the 1990's. The agency established the National Recruitment Coordinator position to work with SSA Executives and Human Resources Directors to develop the Ten Point National Recruitment Strategy, which includes:

1) A Marketing Plan and Campaign – SSA developed a strategy focused on the slogan "Make a Difference in People's Lives and Your Own."

- SSA uses appealing recruitment materials at career fairs and information sessions nationwide. Some of these materials include exhibits, bookmarks, posters, brochures, CD-ROMs, and more.
- These materials emphasize attracting diverse candidates, including veterans and individuals with disabilities.

2) Coordination of Nationwide Recruitment

- The National Recruitment Coordinator has oversight for all recruitment activities.
- Each region has a Recruitment Lead who oversees the regional recruitment cadre.
- This structure allows SSA to recruit effectively throughout the nation with consistent messaging.

3) On-Campus College Recruitment

- Recruiters spend years building relationships with colleges and universities. As a result, SSA maintains a presence on hundreds of campuses throughout the year.

4) Internet Strategy

- SSA's public recruitment site provides comprehensive information on the agency, its mission, and career opportunities.
- http://www.socialsecurity.gov/careers/index.htm

5) Intranet Strategy

- SSA's internal recruitment site is used by employees and recruiters and acts as an important recruiting tool with tangible resources.

6) Automation of Staffing and Recruiting

- All Jobs are posted online through USA Jobs.

7) Work with OPM on Improvements in the Hiring Process

- SSA employees work in partnership with OPM to strengthen government-wide recruitment initiatives.

8) Maximum Use of Recruitment and Retention Flexibilities

9) Maximum Use of Hiring Authorities

10) Diversity

- SSA is committed to having a workforce that reflects the public they serve; therefore, its recruitment strategies are designed to build and maintain a diverse and highly qualified workforce.

SSA measures its success by the number of hires, the retention rates, and the increased diversity. Its retention rate is 93 percent, and it is one of the most diverse workforces in the government.

SOCIAL SECURITY ADMINISTRATION

BEST DEVELOPMENT PROGRAM PRACTICES

(Extract from)

2008 Federal Hispanic Work Group Report

US Equal Employment Opportunity Commission
&
Social Security Administration

SSA's National Leadership Development Programs (NLDP or Programs) are the primary agency mechanism for identifying, developing and placing into leadership/management positions employees who have high potential for becoming future agency leaders. The NLDP consist of four formal SSA leadership development programs that address the agency's need to identify and develop top-quality personnel for leadership and management careers. Participants can be recruited externally and internally depending upon the goals/objectives of the program.

Highlights of the NLDP include:

- The Programs are competency-based; provide potential for career path change; and consist of a variety of developmental activities including: training, rotational assignments, executive interviews, and shadow assignments.

- Some Programs offer a three-year certificate that affords one non-competitive promotion, while other Programs afford temporary or permanent promotions.

- The Program participants develop an Individual Development Plan covering the length of the program.

- The Program participants receive guidance through a Mentoring Program, made up of volunteer managers and senior analysts at the GS-14 level or higher.

SOCIAL SECURITY ADMINISTRATION
MISSION & ACCOUNTABILITY
BEST PRACTICES

(Extract from)

2008 Federal Hispanic Work Group Report

US Equal Employment Opportunity Commission
&
Social Security Administration

EEO/Diversity planning within the SSA provides a structure for planning and ensuring accountability for these programs. SSA values EEO/Diversity and has integrated these strategies into its organizational plan. Senior management values the contribution of all employees and strives to fulfill their potential to meet key business goals. Within SSA, the commitment to, and accountability for, EEO/Diversity is demonstrated from the top, beginning with the Commissioner, and filters down to encompass all senior management.

- EEO and Diversity are integrated into the agency's business plan.

- Inclusive values and a "diversity-friendly" culture are actively promoted throughout the organization.

- Accurate and comprehensive demographic data are collected to record EEO membership, plan strategies and monitor progress for employee representation.

- EEO data reports are produced monthly and quarterly and shared with agency executives.

- The Strategic Human Resource plan identifies and addresses gaps in existing staffing capability, with explicit links to EEO planning and representation.

- EEO measures are aligned with business outcomes and become an organizational responsibility, not just that of the human resources branch.

- Analyses are undertaken of all policies, practices, and procedures to identify areas of potential bias and discrimination that may have a disproportionate impact on EEO groups.

- SSA demonstrates through its human resource planning and practice that continual attention to the removal of barriers to the full participation of all staff is an integral part of business management.

- SSA sets measurable objectives which are clear and realistic in EEO plans and barrier identification.

- Senior management responsibility and accountability for EEO and diversity management is included in performance agreements.

- All managers receive periodic training on EEO and managing a diverse workforce.

APPENDIX 4:
LIST OF PROFESSIONAL ORGANIZATIONS
WITH UNIVERSITY PARTNERSHIPS
FOR ETHNIC MINORITY RECRUITMENT

LIST OF ORGANIZATIONS
WITH PROGRAMS FOR
ETHNIC MINORITIES

The following organizations actively work with federal agencies to increase the number of qualified ethnic minorities within government including but not limited to scholarship, fellowship and internship programs:

African Americans
African American Federal Employees Association
American Association of Blacks in Energy
Blacks in Government
Congressional Black Caucus Foundation
National Black MBA Association
National Forum for Black Public Administrators
National Association for Equal Opportunity in Higher Education
National Society of Black Engineers
National Society of Black Physicists

Asian Americans
Asian American Government Executive Network
Federal Asian Pacific American Council

Hispanic Americans
Association for Latinos in Finance
Excelencia in Education
Hispanic Alliance for Enhancement of Careers
Hispanic Association of Colleges and Universities
Hispanic Scholarship Fund Institute
National Council of Hispanic Employment Program Managers
National Association for Equal Opportunity in Higher Education
National Society for Hispanics with MBAS
Society of Hispanic Professional Engineers

United States Hispanic Chamber of Commerce

United States Hispanic Leadership Institute

<u>Native Americans, Alaska Natives & Pacific Islanders</u>

American Indian Science & Engineering Society

Morris K. Udall Foundation Native American Congressional Internships

Washington Internships for Native Students (American University)

CRS can recruit professionals from these organizations as well.

APPENDIX 5:

FEDERAL AGENCIES

WITH

STUDENT LOAN REPAYMENT PROGRAMS

LIST OF AGENCIES
USING STUDENT LOAN REPAYMENT PROGRAMS

Departments:

The Department of Agriculture reports that all components using student loan repayments reported it to be a valuable recruitment and retention tool.

The Department of Commerce has utilized the student loan repayments to attract and retain employees in professional, administrative, and support occupations.

The Department of Defense believes that student loan repayments are a useful and effective human capital management tool.

The Department of Education states that the student loan repayments have had a positive impact on recruitment and retention efforts.

The Department of Health and Human Services has continued to increase its usage of the student loan repayments as a human resources flexibility designed to improve both recruitment and retention of highly skilled and desirable applicants and employees.

The Department of State believes the student loan repayments are making a positive impact on both recruitment and retention efforts, based on the increase in participation and employee feedback. A survey completed at the end of last year indicated the student loan repayments were a factor in recruitment and retention, and influenced bid selection for recipients. Out of the 2,300 employees who have received student loan repayment benefits since 2002, only 127 (5.5 percent) have resigned while subject to the service requirement.

Independent Agencies:

The Defense Nuclear Facilities Safety Board reports that student loan repayments have improved its recruitment efforts. The agency competes with the private sector for top graduates, 10 (ten) graduates received numerous offers of employment along with substantial monetary incentives. The agency's success in remaining competitive with the private sector depends on using all available recruitment tools, such as student loan repayments

The Environmental Protection Agency (EPA) uses the student loan repayments to enhance its recruitment and retention initiatives. The program has made EPA's efforts to recruit individuals with master's degrees in environmental sciences or other disciplines such as program analysis and information technology, a more successful endeavor. Students carried substantial loans and the program was a definite consideration in their decision to join and remain with the EPA.

The Government Accountability Office uses the student loan repayments mainly for retention purposes.

The Nuclear Regulatory Commission has used the student loan repayments to recruit or retain employees in a variety of critical positions.

APPENDIX 6
DEPARTMENT OF DEFENSE
EXIT INTERVIEW TECHNIQUES

The Diversity Exit Survey

The purpose of this survey is to understand the perceptions of those who are leaving the Service. We believe that those leaving are in a unique position to comment on a number of aspects of the Services, the military environment, and the working environment. Your responses will be kept confidential. Please answer how you see the situation. There are no right answers.

I. Job Satisfaction

The following items have to do with your satisfaction with the military, your work environment, and your military job. Please answer using the scale at the right.

Items

Scale
1= Highly Dissatisfied
2=Dissatisfied
3=Neither Dissatisfied Nor Satisfied
4=Satisfied
5=Highly Satisfied
6=Not Applicable

Item						
Basic pay	1	2	3	4	5	6
Allowances	1	2	3	4	5	6
Health care	1	2	3	4	5	6
Retirement benefits	1	2	3	4	5	6
Opportunities for promotion	1	2	3	4	5	6
Training and professional development	1	2	3	4	5	6
Unit morale	1	2	3	4	5	6
Coworkers	1	2	3	4	5	6
Personal workload	1	2	3	4	5	6
Recognition for your accomplishments	1	2	3	4	5	6
Quality of leadership	1	2	3	4	5	6
Spouse career development	1	2	3	4	5	6
Youth activities on base	1	2	3	4	5	6
Schooling for children	1	2	3	4	5	6
Military family support programs	1	2	3	4	5	6
Childcare opportunities	1	2	3	4	5	6
Housing for single military persons	1	2	3	4	5	6

Comments:

II. Opportunities in the Military versus Civilian World

The following items compare opportunities in the military versus the civilian world. Rate each item according to the scale.

Items

<u>Scale</u>
1=Much better opportunity in the military
2=Better opportunity in the military
3=Same opportunities in military and civilian world
4=Better opportunity in the civilian world
5=Much better opportunity in the civilian world
6=Not applicable

Item						
Pay	1	2	3	4	5	6
Benefits	1	2	3	4	5	6
Training	1	2	3	4	5	6
Career development	1	2	3	4	5	6
Leadership	1	2	3	4	5	6
Sense of accomplishment in work	1	2	3	4	5	6
Pride in work	1	2	3	4	5	6
Unit cohesiveness	1	2	3	4	5	6
Support for family	1	2	3	4	5	6

Comments:

III. Reasons for Leaving the Service

The following items have to do with reasons that you might leave the Service. Rate each item according to the scale.

Items

<u>Scale</u>
1=Very Strong Influence to Stay
2=Strong Influence to Stay
3=Neither Influence to Stay nor Leave
4=Strong Influence to Leave
5=Very Strong Influence to Leave
6=Not applicable

Item						
Age	1	2	3	4	5	6
Overall job satisfaction	1	2	3	4	5	6
Pay and allowances	1	2	3	4	5	6
Promotion opportunities	1	2	3	4	5	6
Not getting desirable assignments	1	2	3	4	5	6
Lack of training opportunities	1	2	3	4	5	6
Continuation of education	1	2	3	4	5	6

Desire to start new career	1	2	3	4	5	6
Family wanting you to separate	1	2	3	4	5	6
Number of permanent change of station moves	1	2	3	4	5	6
Too many deployments	1	2	3	4	5	6
Uncertainty of future assignments	1	2	3	4	5	6
Duty on holidays	1	2	3	4	5	6
Problems with leadership	1	2	3	4	5	6

Comments:

IV. Relative Importance of Issues in Leaving

The following looks at the relative importance of issues in leaving. Rank the five categories of issues from 1 – Most important to 5 – Least important to your possible decision to leave.

Issue Category	Rank
Personal issues (job opportunities, education, lifestyle change)	___
Military issues (pay, benefits, health care, assignments)	___
Issues about the base/post (location, recreation, schools, off-duty employment, health care facilities, housing)	___
Issues within the unit (coworkers, supervisors, work schedule, resources)	___
Family issues (satisfaction with military, family health care, time with family)	___

V. Fair Work Environment

The following items have to do with the fairness of the military working environment you have encountered. Answer according to your agreement with the item.

Items

Scale
1=Strongly Disagree
2=Disagree
3=Neither Disagree nor Agree
4=Agree
5=Strongly Agree
6=Not Applicable

Fair performance evaluations	1	2	3	4	5	6
Fairness of supervision	1	2	3	4	5	6
Fair promotion opportunities	1	2	3	4	5	6
Fair assignments	1	2	3	4	5	6
Fair pay and benefits	1	2	3	4	5	6

Freedom from discrimination	1	2	3	4	5	6
Freedom from harassment	1	2	3	4	5	6

The following has to do with your experiences in the military in particular.

Items	Yes-No
Have you ever received an unfair performance evaluation in the military because of race, ethnicity, or gender?	_____
Have any of your supervisors every treated you unfairly because of race, ethnicity, or gender?	_____
Have you ever been unfairly denied a promotion in the military because of race, ethnicity, or gender?	_____
Have you every been unfairly assigned to a new job because of race, ethnicity ,or gender?	_____
Have you ever been denied an assignment because of race, ethnicity, or gender?	_____
Have you ever received unfair pay or benefits in the military because of race, ethnicity, or gender?	_____
Have you every been discriminated against in the military because of race, ethnicity, or gender?	_____
Have you every been sexually harassed in the military because of race, ethnicity, or gender?	_____

Comments:

VI.   Your Background

The following are necessary questions about your background required for analyses of the survey data.

Your age
Your race/ethnicity
Your gender
Your job specialization
Your grade
Your time in grade
Your time in service

Diversity Exit Interview

The purpose of this interview is to understand the perceptions of those who are leaving the Service. We believe that those leaving are in a unique position to comment on a number of aspects of the Services, the military environment, and the working environment. Your responses will be kept confidential. Please answer how you see the situation. There are no right answers.

I. Job Satisfaction

Are there one or more areas in the following list that strongly influenced your satisfaction or dissatisfaction with the military? Please explain.

Basic pay
Allowances
Health care
Retirement benefits
Opportunities for promotion
Training and professional development
Unit morale
Coworkers
Personal workload
Recognition for your accomplishments
Quality of leadership
Spouse career development
Youth activities on base
Schooling for children
Military family support programs
Childcare opportunities
Housing for single military

II. Opportunities in the Military Versus Civilian World

Do you feel that there are better opportunities in the military or civilian world for the following? Please explain.

Pay
Benefits
Training
Career development
Leadership
Sense of accomplishment in work
Pride in work
Support for family

III. Reasons for Leaving the Service

Are there one or more items in the following list that strongly influenced your decision to leave (or stay) in the Service? Please explain.

Age
Overall job satisfaction
Pay and allowances
Promotion opportunities
Not getting desirable assignments
Lack of training opportunities
Continuation of education
Desire to start new career
Family wanting separation
Number of permanent change of station moves
Too many deployments
Problems with leadership

IV. Relative Importance of Issues in Leaving

Which of the following are most important in your decision to leave? Please explain.

Personal issues (job opportunities, education, lifestyle change)
Military issues (pay, benefits, health care, assignments)
Issues about the base/post (location, recreation, schools, off-duty employment, health care facilities, housing)
Issues within the unit (coworkers, supervisors, work schedule, resources)
Family issues (satisfaction with military, family health care, time with family)

V. Fair Work Environment

Have you ever encountered any of the following? Please explain the situation.

Have you ever received an unfair performance evaluation in the military because of race, ethnicity, or gender?
Have any of your supervisors every treated you unfairly because of race, ethnicity, or gender?
Have you ever been unfairly denied a promotion in the military because of race, ethnicity, or gender?
Have you ever been unfairly assigned to a new job because of race, ethnicity or gender?
Have you ever been denied an assignment because of race, ethnicity, or gender?
Have you ever received unfair pay or benefits in the military because of race, ethnicity, or gender?
Have you ever been discriminated against in the military because of race, ethnicity, or gender?
Have you ever been sexually harassed in the military because of race, ethnicity, or gender?

VI.   Background Information

The following are necessary questions about your background required for interpretation of the interview results.

Your age
Your race/ethnicity
Your gender
Your job specialization
Your grade
Your time in grade
Your time in service

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