



# RACE AND ETHNICITY IN HIGHER EDUCATION

A Status Report





# **Race and Ethnicity in Higher Education**

## **A Status Report**

Lorelle L. Espinosa  
Jonathan M. Turk  
Morgan Taylor  
Hollie M. Chessman



ACE and the American Council on Education are registered marks of the American Council on Education and may not be used or reproduced without the express written permission of ACE.

American Council on Education  
One Dupont Circle NW  
Washington, DC 20036

© 2019. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

*Race and Ethnicity in Higher Education: A Status Report* and its accompanying microsite provide a data-informed foundation for those working to close persistent equity gaps by providing a comprehensive review of the educational pathways of today's college students and the educators who serve them. For more information, including downloadable figures and detailed data tables behind the figures presented in this report, please visit [www.equityinhighered.org](http://www.equityinhighered.org).

*Race and Ethnicity in Higher Education: A Status Report* and the microsite were made possible through the generous support of The Andrew W. Mellon Foundation.

## ABOUT THE AMERICAN COUNCIL ON EDUCATION

ACE is the major coordinating body for the nation's colleges and universities. Our strength lies in our diverse base of member institutions. We represent nearly 1,800 college and university presidents and the executives at related associations, and are the only major higher education association to represent all types of U.S. accredited, degree-granting institutions: two-year and four-year, public and private. For more information, visit [acenet.edu](http://acenet.edu).

### **Suggested citation:**

Espinosa, Lorelle L., Jonathan M. Turk, Morgan Taylor, and Hollie M. Chessman. 2019. *Race and Ethnicity in Higher Education: A Status Report*. Washington, DC: American Council on Education.



# CONTENTS

Acknowledgments .....	xi
Executive Summary .....	xiii
Chapter 1: Population Trends and Educational Attainment .....	1
Invited Essay: <i>The Problematic Nature of Racial and Ethnic Categories in Higher Education</i> by Walter Allen, Chantal Jones, and Channel McLewis .....	13
Chapter 2: Secondary School Completion .....	21
Chapter 3: Enrollment in Undergraduate Education .....	35
Chapter 4: Enrollment in Graduate Education .....	69
Chapter 5: Undergraduate Persistence and Completion .....	91
Invited Essay: <i>Taking History, Funding, and Current Challenges into Account When Discussing Race, Ethnicity, and Completion in Community Colleges</i> by Cecilia Rios-Aguilar and Regina Deil-Amen .....	125
Chapter 6: Graduate School Completion .....	133
Chapter 7: How Students Finance Undergraduate Study .....	155
Chapter 8: How Students Finance Graduate Study .....	185
Invited Essay: <i>Student Debt: The Unique Circumstances of African American Students</i> by Sandy Baum .....	201
Chapter 9: Spotlight on Minority Serving Institutions .....	211
Chapter 10: Postsecondary Faculty and Staff .....	245
Invited Essay: <i>Redoubling Our Efforts: How Institutions Can Affect Faculty Diversity</i> by Kimberly A. Griffin .....	271
Chapter 11: Employment and Earnings .....	281
Methods .....	307

# TABLES AND FIGURES

## CHAPTER 1

Figure 1.1: The U.S. Population, by Race and Ethnicity: 1997 to 2017 .....	4
Figure 1.2: Percentage Distribution of the U.S. Population, by Race and Ethnicity: 1997, 2003, 2017 .....	5
Figure 1.3: The Hispanic Population, by Hispanic Origin: 2017 .....	6
Figure 1.4: The Asian Population, by Asian Origin: 2017 .....	6
Table 1.1: Change of the U.S. Population, by Location and Race and Ethnicity: 1997 and 2017 .....	7
Table 1.2: Educational Attainment of Adults Ages 25 and Older, by Race and Ethnicity: 1997 and 2017 .....	8
Figure 1.5: Educational Attainment of Adults Ages 25 and Older, by Race and Ethnicity: 2017 .....	9
Table 1.3: Educational Attainment of Adults Ages 25 and Older, by Gender and Race and Ethnicity: 2017 .....	10
Figure 1.6: Percentage of Adults with a College Degree, by Age and Race and Ethnicity: 2017 .....	11

## INVITED ESSAY

Figure 1: Educational Attainment of Selected Groups in the U.S., Ages 25 and Over .....	17
---	----

## CHAPTER 2

Figure 2.1: The Number of Public High School Graduates, by Race and Ethnicity: 2000 to 2026 .....	24
Figure 2.2: Public High School Graduates, by Race and Ethnicity: 2000 to 2026 .....	25
Figure 2.3: Public High School Four-Year Adjusted Cohort Graduation Rate, by Race and Ethnicity: 2013 and 2016 .....	27
Figure 2.4: Public High School Four-Year Adjusted Cohort Graduation Rate, by Location and Race and Ethnicity: 2016 .....	28
Figure 2.5: High School Completion Rate of 18- to 24-Year-Olds Not Enrolled in High School (Status Completion Rate), by Race and Ethnicity: 1996 to 2016 .....	30
Table 2.1: High School Completion Rate of 18- to 24-Year-Olds Not Enrolled in High School (Status Completion Rate), by Gender and Race and Ethnicity: 2006 to 2016 .....	31
Figure 2.6: GED® Test Takers, by Race and Ethnicity: 2014 to 2018 .....	32
Figure 2.7: GED® Test Performance, by Race and Ethnicity: 2014 to 2018 .....	33

### CHAPTER 3

Figure 3.1: Immediate College Enrollment of Recent High School or Equivalent Graduates Ages 16 to 24, by Race and Ethnicity: 1996 to 2016.....	39
Figure 3.2: Percentage of 18- to 24-Year-Olds Enrolled in College, by Race and Ethnicity: 1996 to 2016.....	40
Figure 3.3: Percentage of 18- to 24-Year-Olds Enrolled in College, by Race and Ethnicity: 2016.....	41
Figure 3.4: Percentage of 18- to 24-Year-Olds Enrolled in College, by Hispanic Subpopulations: 2016.....	41
Figure 3.5: Percentage of 18- to 24-Year-Olds Enrolled in College, by Asian Subpopulations: 2016.....	42
Figure 3.6: Undergraduate Enrollment, by Race and Ethnicity: 1995–96 and 2015–16.....	43
Table 3.1: Undergraduate Enrollment, by Gender and Race and Ethnicity: 1995–96 and 2015–16.....	44
Figure 3.7: Undergraduate Enrollment, by Race and Ethnicity: 2015–16.....	45
Figure 3.8: Undergraduate Enrollment, by Gender and Race and Ethnicity: 2015–16.....	45
Figure 3.9: Undergraduate Enrollment, by Age and Race and Ethnicity: 2015–16.....	46
Figure 3.10: Undergraduate Enrollment of Dependent Students, by Income and Race and Ethnicity: 2015–16.....	47
Figure 3.11: Undergraduate Enrollment, by Award Level and Race and Ethnicity: 2015–16.....	48
Figure 3.12: Undergraduate Enrollment Across Sectors, by Race and Ethnicity: 2015–16.....	49
Table 3.2: Undergraduate Enrollment Across Sectors, by Gender and Race and Ethnicity: 2015–16.....	50
Table 3.3: Undergraduate Enrollment Across Sectors, by Age and Race and Ethnicity: 2015–16.....	51
Table 3.4: Undergraduate Enrollment of Dependent Students Across Sectors, by Income and Race and Ethnicity: 2015–16.....	52
Figure 3.13: Undergraduate Enrollment Across Selectivity Bands, by Race and Ethnicity: 2015–16.....	54
Table 3.5: Undergraduate Enrollment of Dependent Students Across Selectivity Bands, by Income and Race and Ethnicity: 2015–16.....	55
Figure 3.14: Enrollment of Associate Degree-Seeking Students Across Sectors, by Race and Ethnicity: 2015–16.....	57
Table 3.6: Enrollment of Associate Degree-Seeking Students at Public Two-Year Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16.....	58
Table 3.7: Enrollment of Associate Degree-Seeking Students at For-Profit Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16.....	59
Figure 3.15: Enrollment of Bachelor’s Degree-Seeking Students Across Sectors, by Race and Ethnicity: 2015–16.....	61
Table 3.8: Enrollment of Bachelor’s Degree-Seeking Students at Public Four-Year Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16.....	62
Table 3.9: Enrollment of Bachelor’s Degree-Seeking Students at Private Nonprofit Four-Year Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16.....	63
Table 3.10: Enrollment of Bachelor’s Degree-Seeking Students at For-Profit Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16.....	65

### CHAPTER 4

Figure 4.1: Graduate Enrollment Rates of 2007–08 Bachelor’s Degree Recipients, by Race and Ethnicity: 2012.....	73
Figure 4.2: Graduate Enrollment Rates of 2007–08 Bachelor’s Degree Recipients, by Gender and Race and Ethnicity: 2012.....	74
Figure 4.3: Graduate Enrollment Rates of 2007–08 Bachelor’s Degree Recipients, by Age and Race and Ethnicity: 2012.....	74
Figure 4.4: Graduate Enrollment Rates of 2007–08 Bachelor’s Degree Recipients (Dependent Students), by Income and Race and Ethnicity: 2012.....	75
Figure 4.5: Graduate Enrollment, by Race and Ethnicity, Select Years: 1995–96 to 2015–16.....	76
Table 4.1: Graduate Enrollment, by Gender and Race and Ethnicity: 1995–96 and 2015–16.....	77
Figure 4.6: Graduate Enrollment, by Race and Ethnicity: 2015–16.....	78
Figure 4.7: Graduate Enrollment, by Gender and Race and Ethnicity: 2015–16.....	78
Figure 4.8: Graduate Enrollment, by Age and Race and Ethnicity: 2015–16.....	79
Figure 4.9: Graduate Enrollment, by Program Level and Race and Ethnicity: 2015–16.....	80
Figure 4.10: Graduate Enrollment Across Sectors, by Race and Ethnicity: 2015–16.....	81
Table 4.2: Graduate Enrollment Across Sectors, by Gender and Race and Ethnicity: 2015–16.....	82
Table 4.3: Graduate Enrollment Across Sectors, by Age and Race and Ethnicity: 2015–16.....	83
Figure 4.11: Graduate Enrollment in Master’s Degree Programs Across Sectors, by Race and Ethnicity: 2015–16.....	84
Table 4.4: Graduate Enrollment in Master’s Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16.....	85
Figure 4.12: Graduate Enrollment in Professional Degree Programs Across Sectors, by Race and Ethnicity: 2015–16.....	86



Table 4.5: Graduate Enrollment in Professional Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16.....	87
Figure 4.13: Graduate Enrollment in Doctoral Degree Programs Across Sectors, by Race and Ethnicity: 2015–16.....	88
Table 4.6: Graduate Enrollment in Doctoral Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16 .....	89

**CHAPTER 5**

Figure 5.1: First-Year Persistence Rates of Bachelor’s Degree-Seeking Students, by Race and Ethnicity: Fall 2011 Cohort.....	95
Figure 5.2: First-Year Persistence Rates of Bachelor’s Degree-Seeking Students, by Gender and Race and Ethnicity: Fall 2011 Cohort .....	96
Figure 5.3: First-Year Persistence Rates of Bachelor’s Degree-Seeking Students, by Sector and Race and Ethnicity: Fall 2011 Cohort.....	97
Table 5.1: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year Institutions: Fall 2011 Cohort .....	99
Table 5.2: Six-Year Outcomes (300% of Normal Time) for Exclusively Full-Time Students Who Started at Public Two-Year Institutions: Fall 2011 Cohort .....	100
Table 5.3: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year Institutions: Fall 2011 Cohort.....	101
Table 5.4: Six-Year Outcomes (150% of Normal Time) for Exclusively Full-Time Students Who Started at Public Four-Year Institutions: Fall 2011 Cohort .....	102
Table 5.5: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year Institutions: Fall 2011 Cohort.....	103
Table 5.6: Six-Year Outcomes (150% of Normal Time) for Exclusively Full-Time Students Who Started at Private Nonprofit Four-Year Institutions: Fall 2011 Cohort .....	104
Figure 5.4: Undergraduate Completions, by Award Level, Select Years: 1996, 2000, 2004, 2008, 2012, 2016.....	105
Table 5.7: Undergraduate Completions, by Award Level and Race and Ethnicity: 1996 and 2016.....	106
Figure 5.5: Undergraduate Completions, by Award Level: 2016 .....	107
Figure 5.6: Bachelor’s Degrees and Sub-baccalaureate Credentials, by Race and Ethnicity: 2016.....	107
Figure 5.7: Undergraduate Completions, by Award Level and Race and Ethnicity: 2016.....	108
Figure 5.8: Total Undergraduate Completions, by Sector and Race and Ethnicity: 2016 .....	109
Figure 5.9: Total Sub-baccalaureate Credentials Completed at Public Two-Year Institutions, by Field and Race and Ethnicity: 2016 .....	110
Figure 5.10: Bachelor’s Degrees Completed at Public Four-Year Institutions, by Field and Race and Ethnicity: 2016 .....	111
Figure 5.11: Bachelor’s Degrees Completed at Private Nonprofit Four-Year Institutions, by Field and Race and Ethnicity: 2016 .....	112
Table 5.8: Sub-baccalaureate Credentials and Bachelor’s Degrees Completed at For-Profit Institutions, by Field and Race and Ethnicity: 2016.....	113
Figure 5.12: Short-Term Certificates, by Race and Ethnicity: 2016.....	114
Figure 5.13: Short-Term Certificates, by Sector and Race and Ethnicity: 2016.....	115
Figure 5.14: Field of Study for Short-Term Certificate Recipients, by Race and Ethnicity: 2016 .....	116
Figure 5.15: Long-Term Certificates, by Race and Ethnicity: 2016 .....	117
Figure 5.16: Long-Term Certificates, by Sector and Race and Ethnicity: 2016 .....	117
Figure 5.17: Field of Study for Long-Term Certificate Recipients, by Race and Ethnicity: 2016.....	118
Figure 5.18: Associate Degrees, by Race and Ethnicity: 2016.....	119
Figure 5.19: Associate Degrees, by Sector and Race and Ethnicity: 2016 .....	119
Figure 5.20: Field of Study for Associate Degree Recipients, by Race and Ethnicity: 2016 .....	120
Figure 5.21: Bachelor’s Degrees, by Race and Ethnicity: 2016.....	121
Figure 5.22: Bachelor’s Degrees, by Sector and Race and Ethnicity: 2016.....	121
Figure 5.23: Field of Study for Bachelor’s Degree Recipients, by Race and Ethnicity: 2016 .....	122

**INVITED ESSAY**

Table 1: Demographic Characteristics of High School Students by Track: Academic, Occupational, and Neither (Underserved) .....	127
--	-----

**CHAPTER 6**

Figure 6.1: Graduate Student Completions, by Award Level: Select Years, 1996 to 2016.....	137
Table 6.1: Graduate Student Completions, by Award Level and Race and Ethnicity: 1996 and 2016.....	138
Figure 6.2: Graduate Student Completions, by Award Level: 2016.....	139
Figure 6.3: Graduate Student Completions, by Race and Ethnicity: 2016 .....	139
Figure 6.4: Graduate Student Completions, by Award Level and Race and Ethnicity: 2016 .....	140
Figure 6.5: Graduate Student Completions Across Sectors, by Race and Ethnicity: 2016 .....	141

Figure 6.6: Total Graduate Credentials Completed at Public Four-Year Institutions, by Field of Study and Race and Ethnicity: 2016.....	142
Figure 6.7: Total Graduate Credentials Completed at Private Nonprofit Four-Year Institutions, by Field of Study and Race and Ethnicity: 2016.....	143
Figure 6.8: Total Graduate Credentials Completed at For-Profit Institutions, by Field and Race and Ethnicity: 2016.....	144
Figure 6.9: Post-baccalaureate Certificates, by Race and Ethnicity: 2016.....	145
Figure 6.10: Post-baccalaureate Certificates, by Sector and Race and Ethnicity: 2016.....	146
Figure 6.11: Field of Study for Post-baccalaureate Certificate Recipients, by Race and Ethnicity: 2016.....	147
Figure 6.12: Master's Degrees, by Race and Ethnicity: 2016.....	148
Figure 6.13: Master's Degrees, by Sector and Race and Ethnicity: 2016.....	148
Figure 6.14: Field of Study for Master's Degree Recipients, by Race and Ethnicity: 2016.....	149
Figure 6.15: Professional Degrees, by Race and Ethnicity: 2016.....	150
Figure 6.16: Professional Degrees, by Sector and Race and Ethnicity: 2016.....	150
Figure 6.17: Field of Study for Professional Degree Recipients, by Race and Ethnicity: 2016.....	151
Figure 6.18: Doctoral Degrees, by Race and Ethnicity: 2016.....	152
Figure 6.19: Doctoral Degrees, by Sector and Race and Ethnicity: 2016.....	152
Figure 6.20: Field of Study for Doctoral Degree Recipients, by Race and Ethnicity: 2016.....	153

## CHAPTER 7

Figure 7.1: FAFSA Completion Rates, by Race and Ethnicity: 2015–16.....	158
Figure 7.2: FAFSA Completion Rates of Dependent Students, by Family Income and Race and Ethnicity: 2015–16.....	159
Figure 7.3: FAFSA Completion Rates, by Sector and Race and Ethnicity: 2015–16.....	160
Figure 7.4: Expected Family Contribution, by Race and Ethnicity: 2015–16.....	161
Table 7.1: Types of Financial Aid for All Full-Time Undergraduates and Full-Time Undergraduates at Public Four-Year Institutions, by Race and Ethnicity: 2015–16.....	162
Figure 7.5: Share of Full-Time Students Receiving Grant Aid, by Sector and Race and Ethnicity: 2015–16.....	163
Table 7.2: Grant Aid per Student by Source: Full-Time Undergraduate Students, by Race and Ethnicity: 2015–16.....	164
Table 7.3: Share of Grant Aid for Full-Time Dependent Undergraduate Students, by Source, Income, and Race and Ethnicity: 2015–16.....	166
Table 7.4: Types of Loans: Undergraduate Students, by Race and Ethnicity: 2015–16.....	168
Table 7.5: Total Loans per Student, by Race and Ethnicity: 2015–16.....	169
Table 7.6: Total Annual Borrowing, by Dependency Status and Race and Ethnicity: 2015–16.....	170
Table 7.7: Average Annual Borrowing for Dependent Undergraduate Students, by Family Income and Race and Ethnicity: 2015–16.....	171
Table 7.8: Total Borrowing: Associate Degree Recipients, by Race and Ethnicity: 2015–16.....	173
Table 7.9: Total Borrowing: Associate Degree Recipients, by Sector and Race and Ethnicity: 2015–16.....	174
Table 7.10: Total Borrowing per Borrower and per Student: Associate Degree Recipients, by Dependency Status and Race and Ethnicity: 2015–16.....	175
Table 7.11: Total Borrowing: Associate Degree Recipients, by Family Income and Race and Ethnicity: 2015–16.....	176
Table 7.12: Total Borrowing: Bachelor's Degree Recipients, by Race and Ethnicity: 2015–16.....	177
Table 7.13: Total Borrowing upon Completion of a Bachelor's Degree, by Sector and Race and Ethnicity: 2015–16.....	178
Table 7.14: Total Borrowing: Bachelor's Degree Recipients, by Dependency Status and Race and Ethnicity: 2015–16.....	179
Table 7.15: Total Borrowing: Bachelor's Degree Recipients, by Income and Race and Ethnicity: 2015–16.....	180
Table 7.16: Total Borrowing upon Completion of a Bachelor's Degree for Dependent Students in the Second Income Quartile, by Sector and Race and Ethnicity: 2015–16.....	181

## CHAPTER 8

Figure 8.1: Share of Graduate Students Receiving Any Grant Aid, by Degree Program and Race and Ethnicity: 2015–16.....	189
Table 8.1: Shares of Graduate Students Receiving Grant Aid from Institutions, Employers, and Other Private Sources, by Degree Program and Race and Ethnicity: 2015–16.....	190
Table 8.2: Average Grant Aid per Recipient, by Degree Program, Source, and Race and Ethnicity: 2015–16.....	191
Table 8.3: Annual Borrowing, by Type of Loan, Degree Program, and Race and Ethnicity: 2015–16.....	192
Table 8.4: Cumulative Debt for Graduate Study: Master's Degree Recipients, by Race and Ethnicity: 2015–16.....	194

Table 8.5: Cumulative Debt for Graduate Study: Master’s Degree Recipients, by Sector and Race and Ethnicity: 2015–16 .....	195
Table 8.6: Undergraduate and Graduate Debt: Master’s Degree Recipients, by Race and Ethnicity: 2015–16.....	196
Table 8.7: Cumulative Debt for Graduate Study: Professional Degree Recipients, by Race and Ethnicity: 2015–16 .....	197
Table 8.8: Undergraduate and Graduate Debt: Professional Degree Recipients, by Race and Ethnicity: 2015–16.....	197
Table 8.9: Cumulative Debt for Graduate Study: Doctoral Degree Recipients, by Race and Ethnicity: 2015–16.....	198
Table 8.10: Cumulative Debt for Graduate Study: Doctoral Degree Recipients, by Sector and Race and Ethnicity: 2015–16 .....	198
Table 8.11: Undergraduate and Graduate Debt: Doctoral Degree Recipients, by Race and Ethnicity: 2015–16 .....	199

**INVITED ESSAY**

Table 1: Total Borrowed for Undergraduate Education, by Type of Credential and Race and Ethnicity: 2015–16 Graduates.....	203
Table 2: Debt Levels of Bachelor’s Degree Recipients, by Race and Ethnicity and Sector: 2015–16.....	204
Table 3: Median Income: 2016.....	205
Table 4: Parents’ Income for Dependent Bachelor’s Degree Recipients: 2015–16.....	206
Table 5: Average Family Wealth, by Race and Ethnicity: 2016 .....	206
Table 6: Academic Preparation of 2015–16 Undergraduates .....	207
Table 7: Characteristics of 2015–16 Bachelor’s Degree Recipients, by Race and Ethnicity .....	207
Table 8: Median Earnings, Ages 25 to 34, by Race and Ethnicity and Educational Attainment: 2016.....	208
Table 9: Share of Borrowers Reporting Assistance Repaying Their Student Loans.....	208

**CHAPTER 9**

Table 9.1: MSIs at a Glance .....	215
Table 9.2: Total Number of MSIs, by Sector and MSI Type .....	216
Figure 9.1: Undergraduate Student Enrollment at HBCUs, by Sector and Race and Ethnicity: 2016 .....	218
Figure 9.2: Undergraduate Student Enrollment at HBCUs Across Sectors, by Race and Ethnicity: 2016.....	219
Table 9.3: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year HBCUs: Fall 2010 Cohort .....	220
Table 9.4: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year HBCUs: Fall 2010 Cohort .....	220
Table 9.5: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year HBCUs: Fall 2010 Cohort .....	221
Figure 9.3: Undergraduate Student Enrollment at TCUs, by Sector and Race and Ethnicity: 2016.....	222
Figure 9.4: Undergraduate Student Enrollment at TCUs Across Sector, by Race and Ethnicity: 2016.....	223
Figure 9.5: Undergraduate Student Enrollment at HSIs, by Sector and Race and Ethnicity: 2016 .....	224
Figure 9.6: Undergraduate Student Enrollment at HSIs Across Sector, by Race and Ethnicity: 2016.....	225
Table 9.6: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year HSIs: Fall 2010 Cohort .....	225
Table 9.7: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year HSIs: Fall 2010 Cohort.....	226
Table 9.8: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year HSIs: Fall 2010 Cohort...	227
Figure 9.7: Undergraduate Student Enrollment at ANNHs, by Sector and Race and Ethnicity: 2016.....	228
Figure 9.8: Undergraduate Student Enrollment at ANNHs Across Sector, by Race and Ethnicity: 2016.....	229
Table 9.9: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year ANNHs: Fall 2010 Cohort.....	230
Table 9.10: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year ANNHs: Fall 2010 Cohort .....	230
Figure 9.9: Undergraduate Student Enrollment at AANAPISIs, by Sector and Race and Ethnicity: 2016 .....	232
Figure 9.10: Undergraduate Student Enrollment at AANAPISIs Across Sectors, by Race and Ethnicity: 2016.....	233
Table 9.11: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year AANAPISIs: Fall 2010 Cohort .....	233
Table 9.12: Six-Year Outcomes (150% of Normal Time) for Students who Started at Public Four-Year AANAPISIs: Fall 2010 Cohort.....	234
Table 9.13: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year AANAPISIs: Fall 2010 Cohort.....	235
Figure 9.11: Undergraduate Student Enrollment at PBIs, by Sector and Race and Ethnicity: 2016.....	236
Figure 9.12: Undergraduate Student Enrollment at PBIs Across Sectors, by Race and Ethnicity: 2016.....	237
Table 9.14: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year PBIs: Fall 2010 Cohort .....	237
Table 9.15: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year PBIs: Fall 2010 Cohort .....	238
Table 9.16: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year PBIs: Fall 2010 Cohort.....	239

Figure 9.13: Undergraduate Student Enrollment at NASNTIs, by Sector and Race and Ethnicity: 2016.....	240
Figure 9.14: Undergraduate Student Enrollment at NASNTIs Across Sectors, by Race and Ethnicity: 2016.....	241
Table 9.17: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year NASNTIs: Fall 2010 Cohort.....	241
Table 9.18: Six-Year Outcomes (150% of Normal Time) at Public Four-Year NASNTIs: Fall 2010 Cohort.....	242

## CHAPTER 10

Figure 10.1: Total Full-Time Faculty, by Race and Ethnicity: Fall 2016.....	249
Figure 10.2: Full-Time Faculty, by Rank and Race and Ethnicity: Fall 2016.....	250
Figure 10.3: Full-Time Faculty Across Faculty Rank, by Race and Ethnicity: Fall 2016.....	251
Figure 10.4: Full-Time Faculty at Public Two-Year Institutions, by Race and Ethnicity: Fall 2016.....	252
Figure 10.5: Full-Time Faculty at Public Two-Year Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016.....	253
Table 10.1: Full-Time Faculty at Public Two-Year Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016.....	254
Figure 10.6: Full-Time Faculty at Public Four-Year Institutions, by Race and Ethnicity: Fall 2016.....	255
Figure 10.7: Full-Time Faculty at Public Four-Year Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016.....	255
Table 10.2: Full-Time Faculty at Public Four-Year Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016.....	256
Figure 10.8: Full-Time Faculty at Private Nonprofit Four-Year Institutions, by Race and Ethnicity: Fall 2016.....	257
Figure 10.9: Full-Time Faculty at Private Nonprofit Four-Year Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016.....	258
Table 10.3: Full-Time Faculty at Private Nonprofit Four-Year Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016.....	259
Figure 10.10: Full-Time Faculty at For-Profit Institutions, by Race and Ethnicity: Fall 2016.....	260
Figure 10.11: Full-Time Faculty at For-Profit Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016.....	260
Table 10.4: Full-Time Faculty at For-Profit Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016.....	261
Figure 10.12: College and University Administrators, by Position and Race and Ethnicity: 2017.....	263
Figure 10.13: College and University Professionals, by Position and Race and Ethnicity: 2017.....	264
Figure 10.14: College and University Staff, by Position and Race and Ethnicity: 2017.....	265
Figure 10.15: College and University Presidents, by Race and Ethnicity, Select Years: 1986 to 2016.....	266
Figure 10.16: College and University Presidents, by Race and Ethnicity: 2016.....	267
Figure 10.17: College and University Presidents, by Gender and Race and Ethnicity: 2016.....	267
Figure 10.18: College and University Presidents Across Carnegie Classification, by Race and Ethnicity: 2016.....	268
Figure 10.19: College and University Presidents, by Carnegie Classification and Race and Ethnicity: 2016.....	269

## CHAPTER 11

Table 11.1: Employment Status of Adults Ages 25 to 34, by Educational Attainment and Race and Ethnicity: 2016.....	285
Table 11.2: Employment Status of Adults Ages 35 to 44, by Educational Attainment and Race and Ethnicity: 2016.....	288
Table 11.3: Employment Status of Adults Ages 45 to 54, by Educational Attainment and Race and Ethnicity: 2016.....	290
Table 11.4: Employment Status of Adults Ages 55 to 64, by Educational Attainment and Race and Ethnicity: 2016.....	292
Table 11.5: Employment Status of Adults Ages 65 and Older, by Educational Attainment and Race and Ethnicity: 2016.....	294
Table 11.6: Median Annual Earnings of Adults Ages 25 and Older, by Educational Attainment and Race and Ethnicity: 2016.....	297
Table 11.7: Median Annual Earnings of Adults Ages 25 to 34, by Educational Attainment and Race and Ethnicity: 2016.....	298
Table 11.8: Median Annual Earnings of Adults Ages 35 to 44, by Educational Attainment and Race and Ethnicity: 2016.....	298
Table 11.9: Median Annual Earnings of Adults Ages 45 to 54, by Educational Attainment and Race and Ethnicity: 2016.....	299
Table 11.10: Median Annual Earnings of Adults Ages 55 to 64, by Educational Attainment and Race and Ethnicity: 2016.....	300
Table 11.11: Median Annual Earnings of Adults Ages 65 and Older, by Educational Attainment and Race and Ethnicity: 2016.....	301
Table 11.12: Median Annual Earnings of Adults in Business, Management, and Financial Occupations, by Educational Attainment and Race and Ethnicity: 2016.....	302
Table 11.13: Median Annual Earnings of Adults in STEM Occupations, by Educational Attainment and Race and Ethnicity: 2016.....	302
Table 11.14: Median Annual Earnings of Adults in Education Occupations, by Educational Attainment and Race and Ethnicity: 2016.....	303
Table 11.15: Median Annual Earnings of Adults in Health Occupations, by Educational Attainment and Race and Ethnicity: 2016.....	304

## ACKNOWLEDGMENTS

The authors would like to thank the many individuals who contributed to *Race and Ethnicity in Higher Education: A Status Report* through discussions, review, and consultation.

Sandy Baum, chair of the advisory committee and senior advisor for the project, provided key thought partnership as well as unending support, guidance, and input. Advisory committee members Eugene L. Anderson, Charles T. Clotfelter, Kimberly A. Griffin, Cecilia Rios-Aguilar, Sarah E. Turner, and Robert T. Teranishi gave us thoughtful review and support.

Autumn A. Arnett, José A. Cabrales, David Croom, Jon Fansmith, Sissy Meredith, Amelia Parnell, Sumun L. Pendakur, and Christen Pollock, communications committee members, helped us with communication strategy and microsite concept design.

John W. Vavricka, Britta Hansen, Erin Dunlop Velez, Patrick Brown, and Josh Hattersley, the team at RTI International, were great partners in project conception, data, and microsite construction development and review.

We are incredibly grateful for the insights provided by the many stakeholders who spoke to us about their ideas for the project, including Carrie L. Billy, Mariama Boney, Betsy Brand, Brian K. Bridges, Katherine Cardell, Katherine E. Castellano, Tabbye M. Chavous, Melissa Clinedinst, Archie W. Ervin, Tanya I. Garcia, Loretta Goodwin, David A. Hawkins, Kim Hunter Reed, Jerlando F.L. Jackson, Martin Kehe, Adrianna J. Kezar, Becky Klein-Collins, Kevin McDonald, Catherine M. Millett, Jere J. Mock, Tia Brown McNair, Chris A. Nelson, Michael T. Nettles, Hironao Okahana, Ken Pepion, Gerard Robinson, Angela Rochar, Molly Sarubbi, Timothy P. Scott, Amy Sherman, Brian A. Sponsler, Jeff Strohl, and Pamela J. Tate.

Elizabeth Howard played an indispensable role in chapter review. Brice Struthers was a key player in analysis and synthesis. Philip Wilkinson and Zainab Okolo provided essential support for data. Ben Schaap, Sam Imlay, Jinann Bitar, Georgiana Mihut, and Nico Evers provided significant assistance with summaries, data review, and final review. This report would not be possible without the incredible effort of ACE's Design and Editorial team: Sarah Zogby, Ally Hammond, Vanessa Resler, Lindsay Macdonald, and Jordan Best. We are also grateful to Laurie Arnston, J'Nai Baylor, John Bono, David Cleveland, Gailda Pitre Davis, April Fehling, Audrey Hamilton, Jason Pier, Jon Riskind, and Bill Setzer for their input and support on the report and microsite.

ACE extends a special thanks to The Andrew W. Mellon Foundation for their generous support of this project.





## EXECUTIVE SUMMARY

The racial and ethnic makeup of the United States has changed substantially since the country's founding, with dramatic changes occurring in just the last 20 years. It is well known that the over 50 percent of students from communities of color in public K–12 schools will, in the very near future, be the majority of the U.S. adult population. Racial and ethnic diversity comes with a host of benefits at all levels of education and in the workforce—greater productivity, innovation, and cultural competency, to name a few. Moreover, the current and future health of our nation—economic and otherwise—requires that the whole of our population have equitable access to sources of opportunity.

Chief among such sources of opportunity is higher education. It is therefore imperative that educators, policymakers, community leaders, members of the media, and others have access to timely data on one of the most salient predictors of higher education access and success in this country: race and ethnicity. To be clear, there are myriad factors that inform educational access and success, such as income, wealth, geography, and age. Yet it remains the case—as the data in this and other studies show—that race is a prevailing factor in many educational outcomes.

This report examines over 200 indicators, looking at who gains access to a variety of educational environments and experiences, and how these trajectories and their outcomes differ by race and ethnicity. These data provide a foundation from which the higher education community and its many stakeholders can draw insights, raise new questions, and make the case for why race still matters in American higher education.

When considering the data on the whole, we offer the following key takeaways.

**Over the past two decades, the U.S. population has grown not only more educated but also more racially and ethnically diverse, thanks in large part to a growing Hispanic population that is seeking higher education at levels not before seen.**

As the U.S. population has grown more racially and ethnically diverse, so too have students across all levels of higher education. The Hispanic population's growing numbers and rising postsecondary enrollment rates figured centrally in both trends. While much progress has been made for nearly all groups, we nonetheless see stagnant and low levels of secondary school completion, college participation, and educational attainment for many communities of color.

- In 2017, 44.5 percent of the total population ages 25 and older had attained an associate degree or higher, an increase from 31.1 percent in 1997. For Hispanics in 2017, each 10-year age cohort had higher rates of college attainment than the next-oldest group.
- Asian adults had the highest levels of educational attainment in 2017, with 30.7 percent holding a bachelor's degree and another 24.7 percent holding an advanced degree. By contrast and despite steadily rising attainment, Hispanic men and women and American Indian or Alaska Native men had the lowest levels of educational attainment, with most holding a high school credential or less (ranging from 54.5 percent among American Indian or Alaska Native men to 63.4 percent among Hispanic men).
- African American,<sup>1</sup> American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander populations each exhibited low college enrollment rates among secondary school completers of traditional college-going age and were a disproportionately older population of undergraduates.
- On an encouraging note, students of color who received a bachelor's degree in 2007–08 were more likely than their White peers to enter graduate education within four years. Specifically, 43.8 percent of White bachelor's degree recipients enrolled in graduate school, compared with 61.3 percent of Native Hawaiians or other Pacific Islanders, 57.7 percent of African Americans, and 57.2 percent of bachelor's degree recipients of more than one race.

---

<sup>1</sup> The terms Black and African American are used interchangeably.

**Too many Black students fare poorly in America's postsecondary education system. At both the undergraduate and graduate levels, advances in Black students' enrollment and attainment have been accompanied by some of the lowest persistence rates, highest undergraduate dropout rates, highest borrowing rates, and largest debt burdens of any group.**

In 2016, Black students accounted for a larger share of secondary school completers, undergraduate and graduate students, and graduate completers than was the case 20 years prior. Yet these encouraging gains are too often overshadowed by outcomes that reflect the effects of systemic and structural barriers that can limit or eliminate opportunity for Black students, families, and communities, as well as for our nation at large.

- Black students enrolled in bachelor's degree programs exhibited lower rates of first-year persistence and higher rates of dropping out than any other racial or ethnic group. Moreover, the gender gap in enrollment for Black students remained the widest of any group. In 2016, 62.2 percent of Black undergraduates and 70.2 percent of Black graduate students were women.
- Black undergraduates were more likely than others to receive federal grants and loans, but graduated with the greatest student loan debt of any group. The 86.4 percent of Black 2016 bachelor's degree recipients who borrowed owed an average of \$34,010 by graduation, compared with \$29,669 for all bachelor's degree recipients. The 67.2 percent of Black associate degree recipients who borrowed owed an average of \$22,303, compared with \$18,501 for students overall.
- Patterns of borrowing among African American graduate students are deeply concerning, especially among those at the nation's for-profit colleges, which enrolled approximately 50 percent of Black doctoral students in 2016. The vast majority (95.2 percent) of Black doctoral recipients who attended these schools borrowed an average amount of \$128,359 for graduate study.
- Even with a bachelor's degree in hand, African Americans ages 25 to 34 earned 15 percent less and had an unemployment rate two-thirds higher than the typical bachelor's degree holder of similar age.

**We still lack precise, national data on many educational outcomes for American Indians or Alaska Natives and Native Hawaiians or other Pacific Islanders; but what the available data do show is troubling.**

While some important information is available, federal data preclude precise estimates of many key benchmarks for a relatively small and heterogeneous Native population. As a result, we still don't know enough about indigenous students' secondary school completion rates or graduate enrollment, or how they fund their college education. The data we can observe show troubling, persistent equity gaps in educational and labor-market outcomes for American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students when compared with other groups.

- In 2016, high school graduates of American Indian or Alaska Native and Native Hawaiian or other Pacific Islander descent enrolled in college at less than half the average rate. Only 18.8 percent and 20.4 percent, respectively, were enrolled in college, as compared with 40.9 percent of all high school completers ages 18 to 24.
- American Indian or Alaska Native and Native Hawaiian or other Pacific Islander undergraduates were less likely than undergraduates of any other group to attend a four-year institution, attend a very selective college, or pursue a bachelor's degree.
- At the graduate level, a higher share of American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students than of all graduate students completed degrees at for-profit institutions. Among graduates of for-profit institutions, 74.4 percent of 2016 master's degree recipients who borrowed accrued an average debt of \$48,829, and the 87.9 percent of 2016 doctoral degree recipients who borrowed accrued an average debt of \$120,110. These debt levels were higher than those of students who completed graduate degrees at public and private nonprofit four-year institutions.
- American Indian or Alaska Native adults earned substantially less than adults with comparable levels of educational attainment. Within every level of postsecondary attainment, the median annual earnings of American Indian or Alaska Native adults were between 16.2 percent and 28.5 percent less than the national median in 2016.



## **Great differences exist by race, ethnicity, and gender in where students go to college and what they study, signaling an uneven playing field in the labor market and a threat to the opportunity for intergenerational upward mobility.**

Where and how students go to school matters, as does what they study. While it is understandable that students experience our country's diverse set of colleges and universities differently given college readiness, family background, and life stage, we should be concerned when educational opportunities are distributed along racial and ethnic lines.

- With the exception of Asian students, larger shares of undergraduate and graduate students of color enrolled in, and completed degrees at, for-profit institutions. This was particularly true of Black, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander students.
- In every income quartile, Black undergraduates were less likely than members of any other racial or ethnic group to attend a very selective institution, and Black undergraduates were among the least likely to enroll in and complete an associate degree or bachelor's degree in the lucrative STEM fields, at any institution.
- As a group, Hispanic undergraduates were among the most likely to pursue and complete an associate degree. However, they were the least likely to complete their degree in health care fields. Among select occupational fields, health care fields have the largest observed earnings gap between high school and associate degree completers (\$19,240).
- Larger shares of American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, and Hispanic undergraduates than of other groups were enrolled in public two-year and open-admission four-year institutions.

## **How students pay for higher education varied considerably by race and ethnicity, especially in terms of who borrows and who leaves college with high levels of student loan debt.**

In 2016, 70.3 percent of undergraduates completed the Free Application for Federal Student Aid, and 37.3 percent borrowed federal direct loans to pay for college. Yet patterns of financing postsecondary education varied markedly by race and ethnicity. The most notable and consistent finding that emerged from the data was that Black students were most likely to borrow and accrue larger debts than other students, with Asian and Hispanic students the least likely to borrow. These patterns held within types of institutions, dependent student status, and family income quartile.

- Asian undergraduates were consistently among the least likely of any group to take out loans: 67.5 percent applied for aid and only 26.0 percent borrowed in 2016. Hispanic undergraduates also borrowed at lower-than-average rates and accrued lower-than-average debts, whereas Black students were more likely to borrow and left college with higher-than-average debts, regardless of income.
- As one would suspect, lower-income undergraduates were more likely than their upper-income peers to borrow to pay for college, but lower-income borrowers took on nearly as much debt as more affluent ones. Among dependent bachelor's recipients, 57.3 percent of upper-income students borrowed an average amount of \$27,515, while 74.1 percent of low-income students borrowed an average amount of \$24,836.
- At every degree level and within almost every racial and ethnic group, those who received degrees from for-profit institutions borrowed at higher rates and accumulated larger debts than completers who enrolled in other sectors. For instance, 87.4 percent of associate degree completers at for-profit institutions borrowed an average amount of \$26,231 to pay for college, compared with 40.4 percent of associate degree completers at public two-year institutions, who borrowed an average amount of \$15,486.

## **Racial and ethnic diversity among college faculty, staff, and administrators still doesn't reflect that of today's college students.**

People of color make up a larger share of postsecondary students than ever before. Between 1996 and 2016, the non-White share of undergraduates grew from 29.6 percent to 45.2 percent, while the non-White share of graduate students grew from 20.8 percent to 32.0 percent. Even so, college faculty, staff, and administrators remain predominantly White.

- In 2016, people of color held only 21.1 percent of full-time faculty positions, and faculty of color were less likely than White faculty to hold full professorships.
- Although the non-White share of college and university presidents more than doubled between 1986 and 2016, people of color still held only 16.8 percent of all presidencies in 2016. Women of color held only 5.1 percent of all presidencies.
- Students were more likely to encounter people of color in service roles than in faculty or leadership positions. While people of color represented less than one-fifth of senior executives, 42.2 percent of service and maintenance staff and one-third of campus safety personnel were people of color.
- Among college and university administrators, chief student affairs and student life officers were the most diverse positions on campus, with a little more than one-quarter of individuals in these positions identifying as a racial or ethnic group other than White.
- Among college and university professional staff, more than one in four student affairs professionals and slightly more than one in five academic affairs professionals identified as non-White.

# CHAPTER 1



## **Population Trends and Educational Attainment**







# INTRODUCTION

In the 20 years spanning 1997 to 2017, the United States experienced great changes in both the racial and ethnic makeup and the educational attainment of its citizenry. During this time, the population grew by more than 50 million people, many of whom were people of color. The racial and ethnic group to experience the most growth was the Hispanic population, followed by Asians. Looking into the near future, these demographic trends will continue. There are currently more non-White than White children at every age from infant to nine years, producing the first minority-White generation at 49.6 percent (Frey 2018).

Over this 20-year period, the U.S. population also became more educated, as more adults completed postsecondary education than ever before. In 2017, roughly 44 percent of the population ages 25 and older had attained a postsecondary degree, an increase from about 31 percent in 1997. Yet despite this encouraging increase in educational attainment, disparities by race and ethnicity remain high. This is a troubling trend given what we know from research, namely, that those with a postsecondary education are more likely to be employed, earn higher salaries, own homes, vote, live healthier lifestyles, and volunteer in their communities (McMahon 2009; Ma, Pender, and Welch 2016; Turk 2019). These disparities suggest that large groups of Americans are left out of opportunities to improve their lives and to maximize their contributions to society.

## KEY FINDINGS

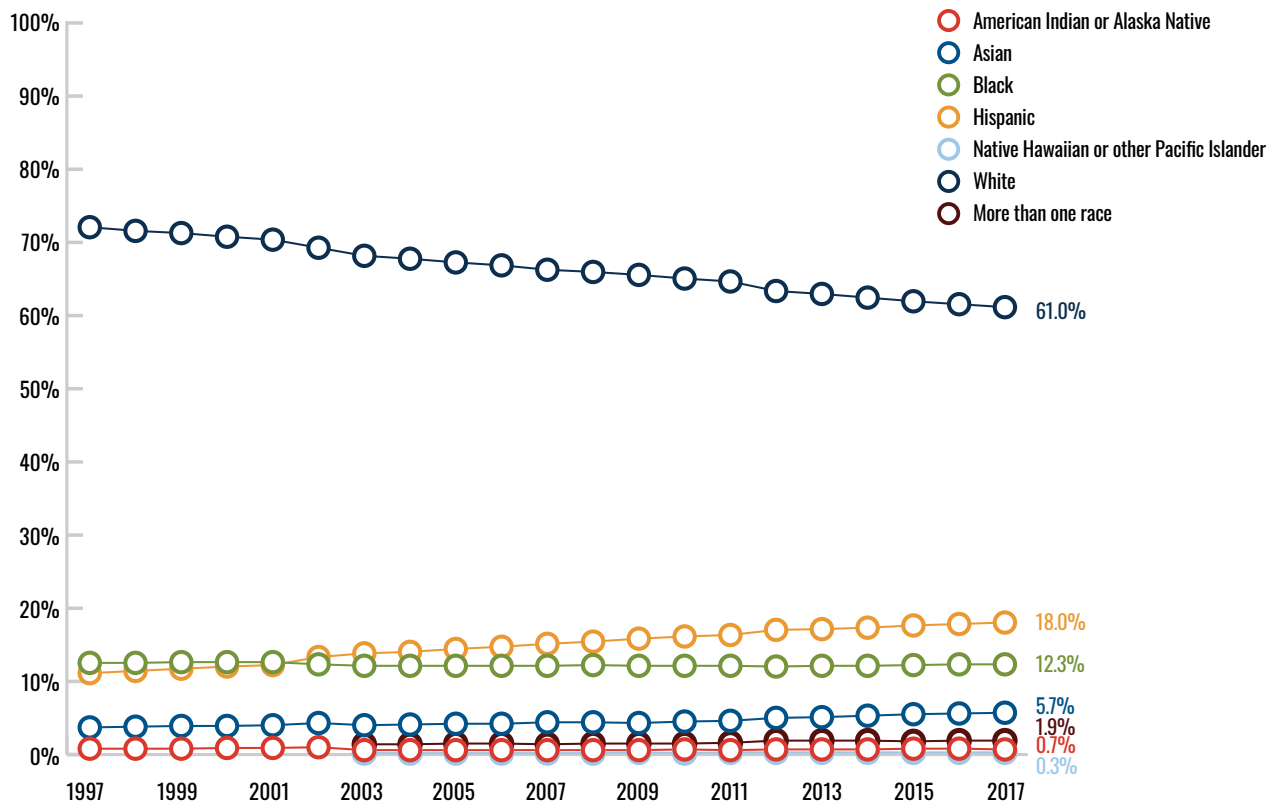
- As the U.S. population increased, the nation became more racially and ethnically diverse. Overall, Hispanics had the largest increase in their total share of the population, increasing from 11.1 percent in 1997 to 18.0 percent in 2017, followed by Asians, whose share increased from 3.7 percent to 5.7 percent.
- Although Whites continued to represent the largest racial and ethnic group in the U.S., their share of the overall population decreased from 71.9 percent in 1997 to 61.0 percent in 2017.
- Some areas across the country experienced greater demographic changes than others. For example, the share of Whites decreased in all but two states (Mississippi and Montana) and the District of Columbia. The greatest increases by any one racial and ethnic group occurred in the Hispanic populations in Florida, Nevada, Oklahoma, and Washington.
- The overall educational attainment of adults ages 25 and older increased, as more of the population enrolled in and completed some level of postsecondary education. In 2017, Asians were the racial and ethnic group with the highest levels of postsecondary attainment.
- Hispanic men and women and American Indian or Alaska Native men had the lowest levels of educational attainment, with more than half having attained a high school credential or less.
- Across all racial and ethnic groups, adults ages 35 to 44 had the highest levels of educational attainment. However, Hispanics followed a different pattern than any other racial and ethnic group, with each 10-year age cohort having higher rates of college attainment than the next-oldest group.

This chapter analyzes data from the U.S. Census Bureau's Current Population Survey (CPS). Prior to 2003, the CPS reported only on Hispanic; White; Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander groups. In 2003, the Census Bureau changed the CPS to include new categories for Native Hawaiians or other Pacific Islanders and individuals of more than one race, aligning CPS data with the outcomes of Census 2000. Because these changes provide individuals the opportunity to select the racial and ethnic groups with which they most identify, they present a more complete picture of the evolving demographics of the U.S. population (Bowler et al. 2003).

# THE U.S. POPULATION BY RACE: 1997 TO 2017

Between 1997 and 2017, the U.S. population grew from almost 267 million to 320 million, an increase of almost 54 million people, or 20 percent. Although Whites continued to represent the largest racial and ethnic group in the U.S., their share of the overall population decreased as the country became more diverse. Hispanics experienced the largest growth in their total share of the overall population, while the share of Asians grew slightly, and the share of Blacks<sup>1</sup> and American Indians or Alaska Natives declined slightly.

**Figure 1.1: The U.S. Population, by Race and Ethnicity: 1997 to 2017**

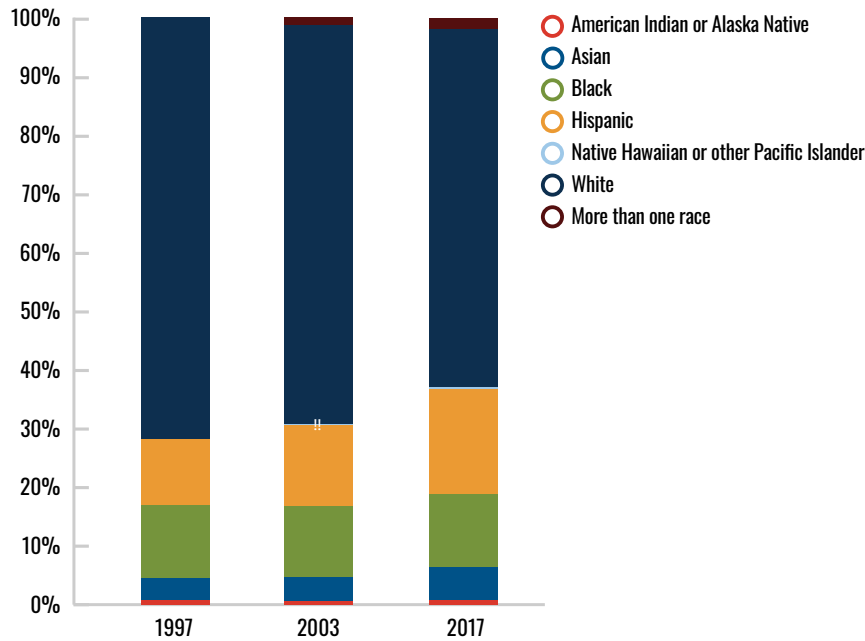


Source: U.S. Census Bureau, Current Population Survey, 1997–2017

Notes: Years prior to 2003 only report the following racial demographic categories: Hispanic; White; Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander. | Interpret data for Native Hawaiians or other Pacific Islanders between 2003 and 2013 with caution. Ratio of standard error is >30%.

<sup>1</sup> The terms Black and African American are used interchangeably.

**Figure 1.2: Percentage Distribution of the U.S. Population, by Race and Ethnicity: 1997, 2003, 2017**



Source: U.S. Census Bureau, Current Population Survey, 1997, 2003, and 2017

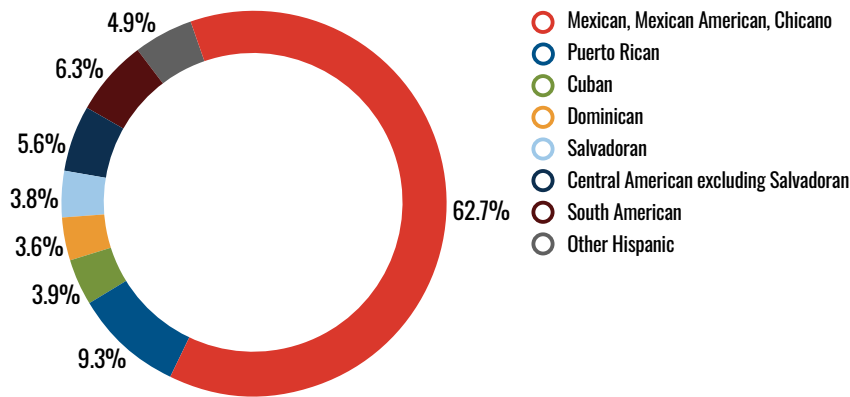
Notes: In 1997, the only racial demographic categories reported were: Hispanic; White; Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander. | !! Interpret with caution. Ratio of standard error is >50%.

- Whites remain the largest racial and ethnic group in the United States, but their total share of the population has decreased. In 1997, Whites represented 71.9 percent of the total population, compared with 61.0 percent in 2017.
- The overall share of Hispanics grew from 11.1 percent in 1997 to 18.0 percent in 2017—the largest growth among all racial and ethnic groups.
- The overall share of Asians grew slightly, from 3.7 percent in 1997 to 5.7 percent in 2017.
- Blacks remained relatively constant as a share of the total population, declining slightly from 12.5 percent to 12.3 percent.
- As a share of the total population, the share of American Indians or Alaska Natives held fairly constant, declining from 0.8 percent in 1997 to 0.7 percent in 2017.
- Native Hawaiians or other Pacific Islanders represented 0.2 percent of the total population in 2003 and 0.3 percent in 2017.
- The share of the total population who were of more than one race increased slightly from 1.4 percent in 2003 to 1.9 percent in 2017.

# HISPANIC ORIGIN AND ASIAN ORIGIN SUBGROUPS: 2017

The country’s Hispanic and Asian populations are often portrayed as monolithic racial and ethnic groups, when in fact they consist of many different subgroups. A closer look reveals great diversity, including their own majority subgroups.

**Figure 1.3: The Hispanic Population, by Hispanic Origin: 2017**

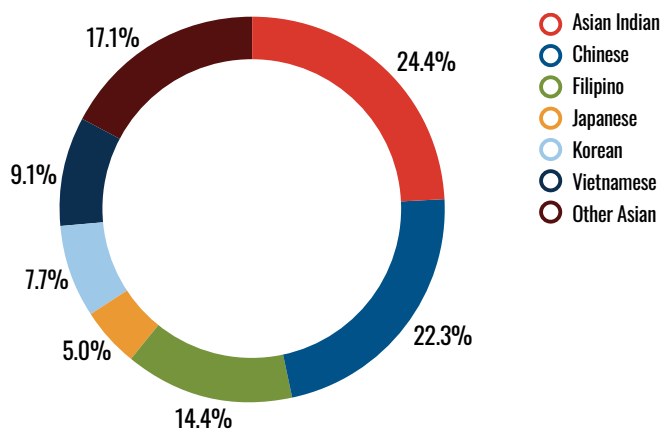


Source: U.S. Census Bureau, Current Population Survey, 2017

Notes: “Central American excluding Salvadoran” includes respondents of Central American, Central American Indian, Costa Rican, Guatemalan, Honduran, Nicaraguan, or Panamanian origin. | “South American” includes respondents of Argentinian, Bolivian, Chilean, Colombian, Ecuadorian, Paraguayan, Peruvian, South American, South American Indian, Uruguayan, or Venezuelan origin. | “Other Hispanic” includes respondents who reported “Hispanic, Latino, or Spanish origin,” and who subsequently indicated that they belong to one of 24 Hispanic-origin subgroups (e.g., Castilian) that fall outside the other seven Hispanic origin groups listed in this figure.

- Within the Hispanic population in 2017, the largest subgroup was Mexican, Mexican American, and/or Chicano (62.7 percent), followed by Puerto Rican (9.3 percent), South American<sup>2</sup> (6.3 percent), Central American excluding Salvadoran<sup>3</sup> (5.6 percent), other Hispanic<sup>4</sup> (4.9 percent), Cuban (3.9 percent), Salvadoran (3.8 percent), and Dominican (3.6 percent).

**Figure 1.4: The Asian Population, by Asian Origin: 2017**



Source: U.S. Census Bureau, Current Population Survey, 2017

Note: “Other Asian” includes all CPS respondents who reported they were “Asian” but who did not identify as a member of any of the six Asian origin groups listed in this figure.

2 “South American” includes respondents of Argentinian, Bolivian, Chilean, Colombian, Ecuadorian, Paraguayan, Peruvian, South American, South American Indian, Uruguayan, or Venezuelan origin.  
 3 “Central American excluding Salvadoran” includes respondents of Central American, Central American Indian, Costa Rican, Guatemalan, Honduran, Nicaraguan, or Panamanian origin.  
 4 “Other Hispanic” includes respondents who reported they were of “Hispanic, Latino, or Spanish origin,” and who subsequently indicated that they belong to one of 24 Hispanic origin subgroups (e.g., Castilian) that fall outside the other seven Hispanic origin groups listed in this chapter.



- Within the Asian population in 2017, the largest subgroup was Asian Indian (24.4 percent), followed by Chinese (22.3 percent), other Asian<sup>5</sup> (17.1 percent), Filipino (14.4 percent), Vietnamese (9.1 percent), Korean (7.7 percent), and Japanese (5.0 percent).

## WHERE POPULATIONS ARE GROWING

While the U.S. population has become more diverse over time, some states have experienced greater demographic change than others. Comparing the distribution of racial and ethnic groups<sup>6</sup> in each state and the District of Columbia between 1997 and 2017 shows where each racial and ethnic group has experienced the largest change.

**Table 1.1: Change of the U.S. Population, by Location and Race and Ethnicity: 1997 and 2017**

American Indian or Alaska Native	Asian	Black	Hispanic	White
Alaska (3.2 pp)	New Jersey (5.2 pp)	Maryland (3.1 pp)	Nevada (15.6 pp)	District of Columbia (13.3 pp)
South Dakota (2.1 pp)	New York (5.1 pp)	North Dakota (3.0 pp)	Washington (10.3 pp)	Mississippi (1.0 pp)
New Mexico (1.8 pp)	Massachusetts (4.4 pp)	Indiana (2.7 pp)	Oklahoma (10.1 pp)	Montana (0.4 pp)
			Florida (10.0 pp)	

Source: U.S. Census Bureau, Current Population Survey, 1997 and 2017

Note: Table depicts states where each racial and ethnic group experienced the largest percentage point (pp) growth in their share of the population.

- The total share of American Indians or Alaska Natives rose in Alaska (3.2 percentage points), South Dakota (2.1 percentage points), and New Mexico (1.8 percentage points).
- The total share of Asians grew by 4 percentage points or more in New Jersey (5.2 percentage points), New York (5.1 percentage points), and Massachusetts (4.4 percentage points).
- The share of Blacks grew by about 3 percentage points in Maryland (3.1 percentage points), North Dakota (3.0 percentage points), and Indiana (2.7 percentage points).
- The total share of Hispanics grew in all 50 states and the District of Columbia, but grew the most in Nevada (15.6 percentage points), Washington (10.3 percentage points), Oklahoma (10.1 percentage points), and Florida (10.0 percentage points).
- Between 1997 and 2017, the total share of the White population decreased throughout the nation, with the exception of the District of Columbia (13.3 percentage point increase), Mississippi (1.0 percentage point increase), and Montana (0.4 percentage point increase).

5 “Other Asian” includes respondents who reported they were “Asian” but who did not identify as a member of any of the six Asian origin groups listed in this chapter.

6 “Native Hawaiian or other Pacific Islander” and “more than one race” were not official classifications until 2003. As a result, a 20-year comparison is not possible.

# EDUCATIONAL ATTAINMENT OF THE TOTAL U.S. POPULATION: 1997 TO 2017

Educational attainment measures the highest credential earned by an individual, at a specific point in time (e.g., a given year). Between 1997 and 2017, overall educational attainment for the U.S. population ages 25 and older increased as more of the population enrolled in and completed some level of postsecondary education.

**Table 1.2: Educational Attainment of Adults Ages 25 and Older, by Race and Ethnicity: 1997 and 2017**

		Less than High School	High School Graduate	Some College, No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Professional Degree	Doctoral Degree
1997	All racial and ethnic groups	17.9%	33.8%	17.2%	7.3%	16.0%	5.4%	1.4%	1.0%
	American Indian or Alaska Native	25.8%	35.8%	18.1%	8.1%	7.8%	3.7%	0.2%!!	0.5%!!
	Asian	14.8%	23.1%	12.8%	6.7%	27.5%	9.6%	3.2%	2.4%
	Black	24.7%	36.1%	19.1%	6.7%	9.5%	3.0%	0.5%	0.3%
	Hispanic	45.3%	25.9%	13.3%	5.2%	7.4%	1.8%	0.6%	0.5%
	Native Hawaiian or other Pacific Islander	-	-	-	-	-	-	-	-
	White	13.7%	34.8%	17.6%	7.6%	17.5%	5.9%	1.6%	1.1%
	More than one race	-	-	-	-	-	-	-	-
2017	All racial and ethnic groups	10.4%	28.8%	16.3%	10.3%	21.3%	9.5%	1.5%	1.9%
	American Indian or Alaska Native	14.7%	35.2%	17.6%	11.9%	13.4%	5.1%	1.4%!	0.6%!
	Asian	9.1%	19.9%	9.3%	6.4%	30.7%	17.9%	2.1%	4.7%
	Black	11.9%	33.0%	20.4%	10.3%	15.3%	7.1%	0.7%	1.1%
	Hispanic	29.5%	31.0%	14.4%	8.0%	12.2%	3.9%	0.5%	0.7%
	Native Hawaiian or other Pacific Islander	10.7%	35.1%	19.2%	9.9%	18.5%	5.3%	0.8%!!	0.6%!!
	White	5.9%	28.3%	16.6%	11.2%	23.7%	10.5%	1.8%	2.0%
	More than one race	6.6%	27.9%	22.4%	10.4%	20.9%	8.5%	1.6%	1.6%

Source: U.S. Census Bureau, Current Population Survey, 1997 and 2017

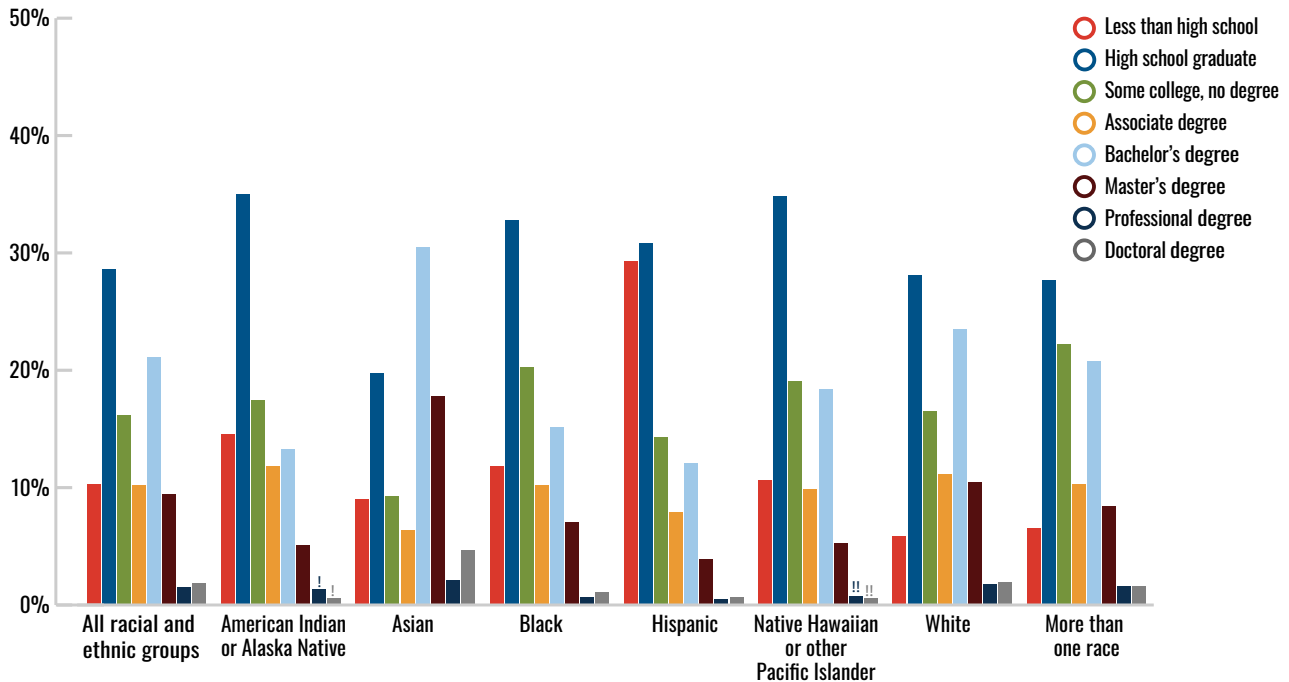
Notes: In 1997, the only racial demographic categories reported were: Hispanic; White; Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander. | ! Interpret with caution. Ratio of standard error to estimate >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- In 2017, 44.4 percent of the total population ages 25 and older had attained an associate degree or higher, an increase from 31.1 percent in 1997.
- The percentage of the total population who had some college education but had not completed a credential decreased slightly from 17.2 percent in 1997 to 16.3 percent in 2017.
- In 2017, 28.8 percent of the total population had completed a high school diploma or equivalent as their highest level of educational attainment, a decrease from 33.8 percent in 1997. The percentage of the total population who had less than a high school education fell from 17.9 percent in 1997 to 10.4 percent in 2017.
- Bachelor's degree attainment increased from 16.0 percent of adults ages 25 and older in 1997 to 21.3 percent in 2017. Among racial and ethnic groups, Whites saw the largest increase (17.5 percent in 1997 to 23.7 percent in 2017), followed by Blacks (9.5 percent in 1997 to 15.3 percent in 2017) and American Indians or Alaska Natives (7.8 percent in 1997 to 13.4 percent in 2017).

## EDUCATIONAL ATTAINMENT BY RACE AND ETHNICITY: 2017

In 2017, more than four in 10 adults in the U.S. ages 25 and older had attained an associate degree or higher (44.4 percent), followed by 28.8 percent whose highest level of education was completing high school, 16.3 percent who had some college but no degree, and 10.4 percent who had less than a high school education. However, large differences in attainment exist at all levels by racial and ethnic groups.

**Figure 1.5: Educational Attainment of Adults Ages 25 and Older, by Race and Ethnicity: 2017**



Source: U.S. Census Bureau, Current Population Survey, 2017

Notes: ! Interpret with caution. Ratio of standard error to estimate >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- Asians had higher levels of degree attainment than other racial and ethnic groups. A little less than one-third of all Asians had attained a bachelor's degree (30.7 percent), 17.9 percent had attained a master's degree, and 6.8 percent had attained a professional<sup>7</sup> or doctoral degree.<sup>8</sup>
- Hispanics had the lowest level of degree attainment among racial and ethnic groups. The majority of Hispanics (60.5 percent) had attained only a high school credential or less, compared with 49.9 percent of American Indians or Alaska Natives, 45.8 percent of Native Hawaiians or other Pacific Islanders, 45.0 percent of Blacks, 34.5 percent of individuals of more than one race, 34.2 percent of Whites, and 29.0 percent of Asians.

<sup>7</sup> Professional degrees reflect those classified as doctorate-professional practice, including chiropractic, dentistry, law, medicine, pharmacy, veterinary medicine, and other degrees for which a credential or license is required for professional practice.

<sup>8</sup> Doctoral degrees reflect those classified as doctorate-research/scholarship degrees, including PhD, EdD, DMA, and other research-based degrees.

## EDUCATIONAL ATTAINMENT BY GENDER: 2017

Data from 2017 show that gender differences in educational attainment exist at each education level when examined among all racial and ethnic groups, usually showing greater percentages of attainment for women. Overall, a larger share of women than men had an associate degree or higher (45.9 percent versus 42.9 percent). The gaps were largest among American Indians or Alaska Natives (36.9 percent of women versus 27.2 percent of men) and those of more than one race (45.5 percent of women versus 40.1 percent of men). However, the pattern was reversed among Asians, with 62.9 percent of men and 60.8 percent of women holding an associate degree or higher, and among Native Hawaiians or other Pacific Islanders, among whom 35.4 percent of men and 34.7 percent of women had at least an associate degree.

**Table 1.3: Educational Attainment of Adults Ages 25 and Older, by Gender and Race and Ethnicity: 2017**

		Less than High School	High School Graduate	Some College, No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Professional Degree	Doctoral Degree
Men	All racial and ethnic groups	10.9%	30.0%	16.2%	9.3%	21.0%	8.7%	1.7%	2.3%
	American Indian or Alaska Native	17.0%	37.5%	18.3%	9.5%	12.4%	3.7%	0.9%!!	0.7%!!
	Asian	7.3%	19.3%	10.5%	5.7%	28.9%	19.6%	2.3%	6.3%
	Black	12.6%	35.9%	19.7%	9.2%	15.2%	5.8%	0.6%	1.1%
	Hispanic	30.5%	32.9%	13.9%	6.9%	11.4%	3.3%	0.5%	0.7%
	Native Hawaiian or other Pacific Islander	10.9%	31.8%	21.9%	9.2%	19.8%	5.3%!	#	1.1%!!
	White	6.3%	29.2%	16.6%	10.1%	23.6%	9.5%	2.1%	2.5%
	More than one race	6.8%	31.9%	21.2%	9.8%	19.9%	7.2%	1.0%!	2.1%!
Women	All racial and ethnic groups	10.0%	27.7%	16.5%	11.2%	21.6%	10.3%	1.2%	1.5%
	American Indian or Alaska Native	12.8%	33.2%	17.0%	14.0%	14.4%	6.2%	1.7%!	0.5%!!
	Asian	10.6%	20.4%	8.2%	7.0%	32.2%	16.3%	1.9%	3.3%
	Black	11.4%	30.6%	21.0%	11.2%	15.4%	8.3%	0.9%	1.1%
	Hispanic	28.4%	29.2%	14.9%	9.0%	12.9%	4.5%	0.4%	0.7%
	Native Hawaiian or other Pacific Islander	10.5%	37.8%	17.0%	10.5%	17.4%	5.2%!	1.5%!!	0.1%!!
	White	5.5%	27.5%	16.6%	12.1%	23.9%	11.4%	1.4%	1.6%
	More than one race	6.4%	24.4%	23.6%	11.0%	21.7%	9.6%	2.1%!	1.1%!

Source: U.S. Census Bureau, Current Population Survey, 2017

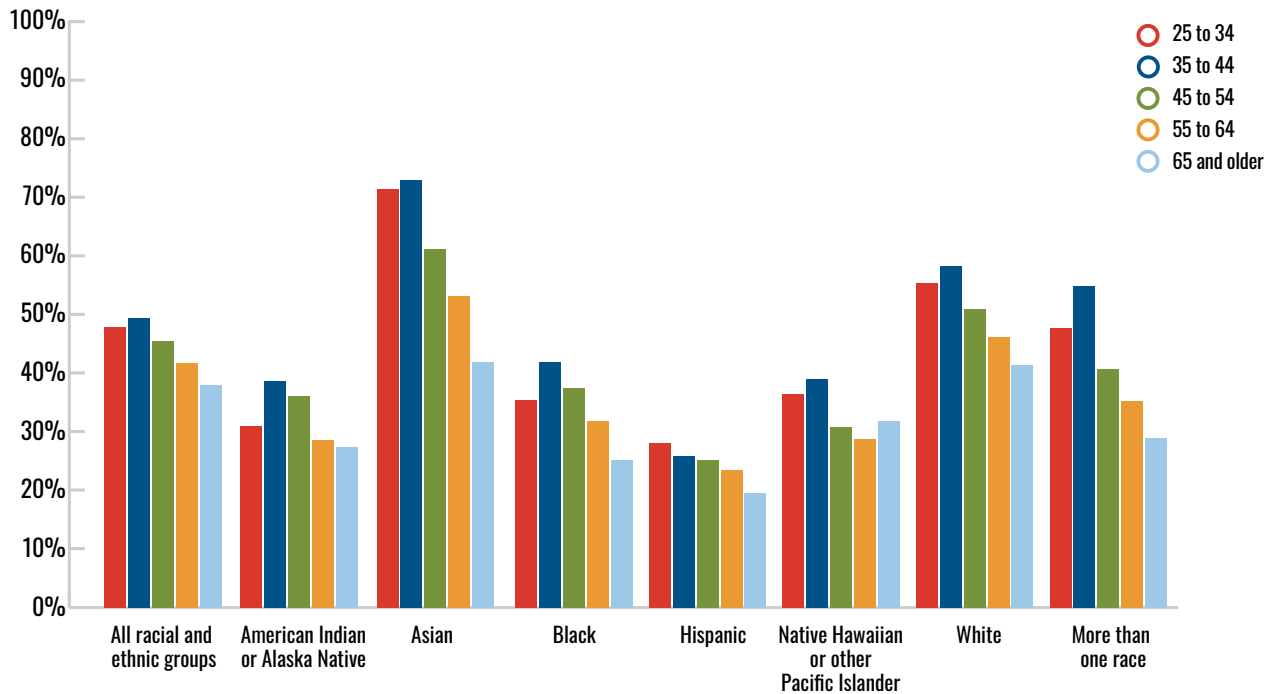
Notes: ! Interpret with caution. Ratio of standard error to estimate >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%. # Zero observations.

- The gender gap in bachelor's degree attainment was smallest among White and Black individuals. For Whites, roughly 24 percent of men and women attained bachelor's degrees. For Blacks, roughly 15 percent of men and women attained bachelor's degrees.
- American Indian or Alaska Native women, Asian women, Hispanic women, and women of more than one race were slightly more likely than men within these same racial and ethnic groups to have attained a bachelor's degree, with gender differences within these racial and ethnic groups ranging from approximately 1 to 3 percentage points.
- Native Hawaiian or other Pacific Islander men were more likely than women to have attained a bachelor's degree as their highest level of educational attainment (19.8 percent and 17.4 percent, respectively).
- Hispanic men and women and American Indian or Alaska Native men had the lowest levels of educational attainment, with more than half of these groups having attained a high school credential or less.

## EDUCATIONAL ATTAINMENT BY AGE: 2017

Educational attainment varied by age. Across all racial and ethnic groups, adults ages 35 to 44 had higher levels of educational attainment than other age groups in 2017. Hispanics followed a different pattern than other racial and ethnic groups in that each 10-year age cohort had higher rates of college attainment than the next-oldest group. Regardless of age, Asians had the highest level of educational attainment when compared with other racial and ethnic groups.

**Figure 1.6: Percentage of Adults with a College Degree, by Age and Race and Ethnicity: 2017**



Source: U.S. Census Bureau, Current Population Survey, 2017

- Across all racial and ethnic groups, adults ages 35 to 44 were the most likely to have attained an associate degree or higher (49.3 percent), while adults ages 65 and older were the least likely to have attained an associate degree or higher (37.9 percent).
- More than half of Asians had attained a college degree in every age group, with the exception of adults ages 65 and older.
- Hispanics were the only group where educational attainment of a college degree gradually increased as age decreased, with 25- to 34-year-olds the most likely to have attained a college degree (28.0 percent), compared with 35- to 44-year-olds (25.8 percent), 45- to 54-year-olds (25.1 percent), 55- to 64-year-olds (23.5 percent), and adults ages 65 and older (19.5 percent).

## REFERENCES

- Bowler, Mary, Randy E. Ilg, Stephen Miller, Ed Robison, and Anne Polivka. 2003. *Revisions to the Current Population Survey Effective in January 2003*. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. <https://www.bls.gov/cps/rvcps03.pdf>.
- Frey, William H. 2018. "US White Population Declines and Generation 'Z-Plus' is Minority White, Census Shows." Washington, DC: Brookings Institute. <https://www.brookings.edu/blog/the-avenue/2018/06/21/us-white-population-declines-and-generation-z-plus-is-minority-white-census-shows>.
- Ma, Jennifer, Matea Pender, and Meredith Welch. 2016. *Education Pays 2016: The Benefits of Higher Education for Individuals and Society*. Washington, DC: College Board.
- McMahon, Walter W. 2009. *Higher Learning, Greater Good: The Private and Social Benefits of Higher Education*. Baltimore: Johns Hopkins University Press.
- Turk, Jonathan M. 2019. *A Look at Five Key Outcomes in Early Adulthood for Associate Degree Earners*. Washington, DC: American Council on Education; Arlington, VA: Hobsons.

## INVITED ESSAY



### **The Problematic Nature of Racial and Ethnic Categories in Higher Education**

Walter Allen, Chantal Jones, and Channel McLewis





# The Problematic Nature of Racial and Ethnic Categories in Higher Education

Walter Allen, Distinguished Professor of Education and of Sociology and Allan Murray Cartter Chair in Higher Education, University of California, Los Angeles

Chantal Jones, Doctoral Candidate in Higher Education and Organizational Change, Graduate School of Education and Information Studies, University of California, Los Angeles

Channel McLewis, Doctoral Candidate in Higher Education and Organizational Change, Graduate School of Education and Information Studies, University of California, Los Angeles

## Background and Formation of Racial and Ethnic Categories

Racial and ethnic categorizations in society (and at higher education institutions) are not neutral, but rather they are informed by historical, social, political, and economic contexts. Such classification of individuals and groups dates to the founding of the United States, with racial classifications tracing back to preconceptions of biological and cultural differences that today are understood as tools to uphold majority control and power. Omi and Winant (2015) define race as a social construction used to create, organize, and validate a social order. Race and ethnicity operate as tools to distinguish between who is “the norm” and who is “the other” and outside the norm—a perspective also known as racial formation. Further, these authors contend that “*race is a master category*—a fundamental concept that has profoundly shaped, and continues to shape, the history, polity, economic structure, and culture of the United States” (Omi and Winant 2015, 106). In other words, how racial and ethnic categories are defined holds immense significance, helping to validate social hierarchies, distribute power, and uphold discrimination. For these and other reasons, scholars of race have long acknowledged that racial and ethnic categories are largely arbitrary and dependent on those with the power to create them.

How racial and ethnic categories are defined holds immense significance, helping to validate social hierarchies, distribute power, and uphold discrimination.

In the United States, the most salient of these classification systems is the U.S. Census—it is both a federal bureau and a constitutionally mandated process. Data derived from the Census is significant; it is used in federal and state policymaking, political redistricting, and disaster response, to name a few examples. Also significant (but less discussed) are the descriptive classifications themselves, including the racial and ethnic categories. For higher education, these categories are paramount given the mandate of postsecondary institutions to use them to report data to the federal government. Yet taking these categories at face value obscures their own discriminatory history.

Race scholar Gloria Ladson-Billings (1998) notes that “although racial categories in the U.S. Census have fluctuated over time, two categories have remained stable—Black and White.” The categories, she continues, “create for us a sense of polar opposites that posits a cultural ranking designed to tell us who is White or, perhaps more pointedly, who is not White” (8). The first Census classifications in 1790 illustrate this divide: free white men (both over and under 16 years of age), free white women, all other free persons, and [Black] slaves (Charles 2014).

Even today, the characteristics to prescribe who suitably “fits” within each racial category are mutable. For example, at different moments in time, the Census has categorized Mexican Americans as racially “white” or ethnically “Hispanic.” In her seminal text, *Why Are All the Black Kids Sitting Together in the Cafeteria? And Other Conversations About Race*, Beverly Daniel Tatum (2017) provides an important discussion of the changing language for common racial classifications. Tatum explores examples of Black rather than African American, Latinx rather than Hispanic, and regional variation in the use of terms American Indian and Native people rather than Native American, or Asian/Pacific Islanders rather than Asian Pacific Americans. Ultimately, Tatum advises to follow the examples of how people *describe themselves*.

## Racial and Ethnic Categories in Higher Education

Just as in society, racial and ethnic categorization is common practice in higher education; it is most frequently used by administrators and higher education policymakers to guide decisions. In higher education, racial and ethnic categorization includes not only the categorization of students as “minority” but also the categorization of institutions as “minority serving.” Yet rarely are these racial and ethnic categories critiqued for being misrepresentative of the diverse characteristics and experiences of students (and others) sorted into the different boxes.

There is significant aggregation, for example, in how groups are classified as “underrepresented minority” or URM—labels that are often used to confer benefits such as financial aid and student support services (Park 2018). As an illustration, the University of California system includes in its URM definition African American, Hispanic/Latino(a), or American Indian students (University of California, n.d.). These categories do not take into account the historical and sociocultural diversity among Asian American and Pacific Islander students (especially so in California), including those populations that are disproportionately underrepresented in higher education, such as Hmong, Vietnamese, and Filipino/a students.

Extending the example to faculty classification, the City University of New York (CUNY) defines URM faculty as Asian, Black/African American, and Hispanic/Latino(a), and separately defines underrepresented groups as Asian, Black/African American, Hispanic/Latino(a), Italian Americans, and women (CUNY 2012). While we are not criticizing institutions for creating (additional) categories, it is important to articulate their history and meaning to institutional stakeholders and to revisit such categories on a regular basis in a way that includes the named populations in such decision-making.

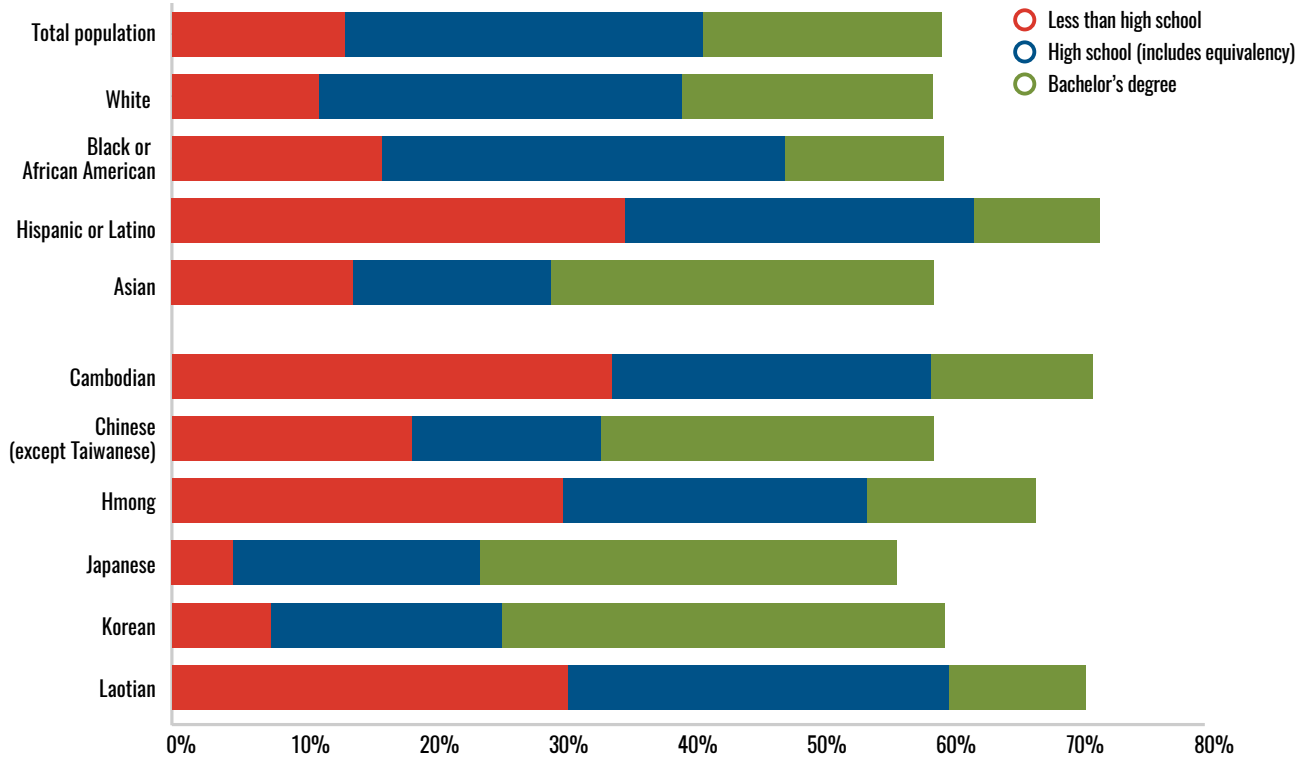
Turning to educational research, the common practice of aggregating racial and ethnic data often results in misrepresentative categories. Groupings such as Black, Hispanic, and Asian—categories used throughout this very report—ultimately obscure who is within these large categories. Generally, research design, data analysis, and interpretation of findings rely on overarching categories that reduce rich diversity to simple categories or units of analysis. However, as many scholars note, the aggregation of students, particularly students of color, can distort observed results and lead to incorrect conclusions (Allen et al. 2008). Such aggregation of students can lead to the adoption of policies that further marginalize and penalize disadvantaged groups. For instance, rural, low-income whites or those who attended underperforming schools can be denied necessary academic support services by policies that ignore within-group diversity. Equally as problematic are policy blind spots that often omit Native Hawaiian students because of the tendency to dismiss some populations as insignificant due to small sample sizes (Chang, Nguyen, and Chandler 2015). This practice leads to statistically erasing populations, as they literally do not appear in the data.

As a result, many scholars call for greater disaggregation of racial and ethnic categories, especially at the institutional level, leading to greater nuance and thoughtful, granular narratives about student outcomes, experiences, and backgrounds (Chang, et al. 2015; Harper 2012; Teranishi 2007). As an example, when Asian American students are disaggregated, the myth of this group as a “model minority”<sup>1</sup> collapses since significant differences (e.g., in educational achievement and socioeconomic status) among subgroups are revealed (Teranishi 2007). The accompanying figure illustrates how relying on aggregate data ignores educational-attainment disparities within the pan-Asian group.

---

1 For a discussion of the model minority myth.

## Educational Attainment of Selected Groups in the U.S., Ages 25 and Over



Source: Crandall 2017  
 Note: Missing are figures for "some college" and "graduate/professional degree."

Finally, when it comes to higher education law and policy, many narratives around affirmative action or race-conscious policies use and misuse racial categories and their meaning, especially when advancing a political agenda. Opponents of these policies frame race-conscious decision-making as “racial preferential treatment” in a supposed color-blind society and “reverse discrimination” against white Americans (Crenshaw 2006). These opponents uphold that admissions should be based on color-blind merit (Bonilla-Silva 2017). Yet, many of these narratives rely on racial stereotypes—again, based on racial classifications—to discount the achievements of Black, indigenous, and Latinx students (Crenshaw 2006) and to misrepresent Asian Americans as the model minority in order to justify dismissal of race conscious policies (Chang 2011; Moses et al. 2019). A recent court case charging Harvard University (MA) with racial discrimination against Asian American students highlights how racial classifications can be misused, obscuring how race-conscious policies have benefited Southeast Asians and Pacific Islanders (Harmon 2018).

## Looking Ahead

The use and often-misunderstood use of racial and ethnic classifications have serious implications for higher education institutions. Increased racial and ethnic diversity requires that higher education reflect our dynamic society, and yet perspectives rooted in a white majority often result in inadequate attention to the needs of increasingly diverse students. As higher education expands, diversifies, and seeks to serve a broader, more complex constituency, we must understand “that educational institutions operate in contradictory ways, with their potential to oppress and marginalize coexisting with their potential to emancipate and empower” (Solórzano and Yosso 2002, 26).

At the same time, the history of racial and ethnic categorization in society, and in higher education, demands systematic examination of how these categories are created and deployed. It is necessary to acknowledge the historical and contemporary relationship between racial categories and racial hierarchies as we seek to disrupt notions that race does not matter in higher education. Substantial evidence in research, theoretical framing, practice, and policies make it clear that American higher education is not color-blind, nor is larger society.

It is our observation that conversations on race and racism in higher education are necessary and valuable. We must bring greater energy and nuance to challenge outdated ideas, such as the notion of racial and ethnic categories as absolute. Among the scholarly resources to help college administrators better understand the influence and implications of such categories and their perceived meaning is Beverly Daniel Tatum's second edition of *Why Are All the Black Kids Sitting Together in the Cafeteria? And Other Conversations About Race* (2017). Another important source is Julie J. Park's 2018 book, *Race on Campus: Debunking Myths with Data*. The work of Schoem et al. (2001) on intergroup dialogue demonstrates the important process of face-to-face relationship building "in which different groups come together to discuss issues of community and conflict" (15). Additionally, the documentary *Race: The Power of an Illusion* critically examines what race is and offers useful tools for questioning beliefs and assumptions (Adelman 2003).

To close, we must not lose sight of the paradox that race is an ephemeral, elusive, imaginary construct. At the same time, race has real, profound, and lived consequences for students who are sorted across the different boxes. We are right to challenge the purpose and consequences of racial and ethnic categories, including their applicability to the students we serve. Going a step further, the field should seek to better understand how these categories intersect with other identities, such as class, gender, sexuality, country of origin, religion, and the differently abled (Crenshaw 1989). To achieve the goals of inclusive diversity and academic excellence, higher education institutions must of necessity compile the most reliable, comprehensive, informative data possible. When used critically and judiciously, data categorized by race and ethnicity can provide valuable information to help guide efforts to address persistent inequities in higher education.

## References

- Adelman, Larry. 2003. *Race: The Power of an Illusion*. San Francisco: California Newsreel.
- Allen, Walter R., Susan A. Suh, Gloria González, and Joshua Yang. 2008. "Qui Bono? Explaining—or Defending—Winners and Losers in the Competition for Educational Achievement." In *White Logic, White Methods: Racism and Methodology*, edited by Tukufu Zuberi and Eduardo Bonilla-Silva, 217–238. Lanham, MD: Rowman & Littlefield Publishers.
- Bonilla-Silva, Eduardo. 2017. *Racism Without Racists: Color-Blind Racism and the Persistence of Racial Inequality in America*. 3rd ed. Lanham, MD: Rowman & Littlefield Publishers.
- Chang, Mitchell J. 2011. "Battle Hymn of the Model Minority Myth." *Amerasia Journal* 37 (2): 137–143.
- Chang, Mitchell J., Mike Hoa Nguyen, and Kapua L. Chandler. 2015. "Can Data Disaggregation Resolve Blind Spots in Policy Making? Examining a Case for Native Hawaiians." *APPI Nexus: Policy, Practice, and Community* 13 (1–2): 295–320.
- Charles, Christopher. 2014. "The Representations of Race in the Decennial Censuses of the United States from 1970–2010." Working paper, last modified July 25, 2015. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2529562](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2529562).
- Crandall, Jennifer. 2017. "Pan-Asian Student Classifications in Higher Education: What the Data Do and Don't Tell Us." *Higher Education Today* (blog), American Council on Education. December 13, 2017. <https://www.higheredtoday.org/2017/12/13/pan-asian-student-classifications-higher-education-data-dont-tell-us/>.
- Crenshaw, Kimberlé. 1989. "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory, and Antiracist Politics." *The University of Chicago Legal Forum* 1989 (1): 139–167.
- Crenshaw, Kimberlé. 2006. "Framing Affirmative Action." *Michigan Law Review First Impressions* 105 (1): 123–133.

- CUNY (The City University of New York). 2012. *Building on a Strong Foundation: A Strategy of Enhancing CUNY's Leadership in the Areas of Faculty Diversity and Inclusion*. New York: CUNY. [https://www.cuny.edu/about/administration/offices/ohrm/diversity/DiversityActionPlan/DiversityActionPlan\\_Revised.pdf](https://www.cuny.edu/about/administration/offices/ohrm/diversity/DiversityActionPlan/DiversityActionPlan_Revised.pdf).
- Harmon, Noel. 2018. "The Reality of Asians and Higher Education Access." *Inside Higher Ed*, November 26, 2018. <https://www.insidehighered.com/admissions/views/2018/11/26/harvard-case-has-given-false-impression-access-issues-faced-asians>.
- Harper, Shaun R. 2012. "Race Without Racism: How Higher Education Researchers Minimize Racist Institutional Norms." *The Review of Higher Education* 36 (1): 9–29
- Ladson-Billings, Gloria. 1998. "Just What Is Critical Race Theory and What's It Doing in a Nice Field Like Education?" *International Journal of Qualitative Studies in Education* 11 (1): 7–24.
- Moses, Michele S., Daryl J. Maeda, and Christina H. Paguyo. 2019. "Racial Politics, Resentment, and Affirmative Action: Asian Americans as 'Model' College Applicants." *The Journal of Higher Education* 90 (1): 1-26.
- Omi, Michael, and Howard Winant. 2015. *Racial Formation in the United States*. 3rd ed. New York: Routledge.
- Park, Julie J. 2018. *Race on Campus: Debunking Myths with Data*. Cambridge, MA: Harvard Education Press.
- Schoem, David, Sylvia Hurtado, Todd Sevig, Mark Chesler, and Stephen H. Sumida. 2001. "Intergroup Dialogue: Democracy at Work in Theory and Practice." In *Intergroup Dialogue: Deliberative Democracy in School, College, Community, and Workplace*, edited by David Schoem and Sylvia Hurtado, 1–21. Ann Arbor, MI: University of Michigan Press.
- Solórzano, Daniel G., and Tara J. Yosso. 2002. "Critical Race Methodology: Counter-Storytelling as an Analytical Framework for Education Research." *Qualitative Inquiry* 8 (1): 23–44.
- Tatum, Beverly Daniel. 2017. *Why Are All the Black Kids Sitting Together in the Cafeteria? And Other Conversations About Race*. Revised and updated. New York: Basic Books.
- Teranishi, Robert T. 2007. "Race, Ethnicity, and Higher Education Policy: The Use of Critical Quantitative Research." *New Directions for Institutional Research* 2007 (133): 37–49.
- University of California. n.d. "CA's Freshman Diversity Pipeline to UC." <https://www.universityofcalifornia.edu/infocenter/ca-hs-pipeline>.





## CHAPTER 2



# Secondary School Completion







# INTRODUCTION

The country's demographic shifts explored in Chapter 1 of this report, "Population Trends and Educational Attainment," have had great bearing on the makeup of the nation's high schools. Between 2000 and 2012, the total number of public high school graduates grew by 23.3 percent, increasing from 2.5 million to over 3.1 million. The greatest growth during this time occurred for non-White students, including a 110.5 percent increase for Hispanic students and a 42.1 percent increase for Asian or Pacific Islander students. Although the overall number of high school graduates will soon plateau, enrollment growth by students of color will nonetheless continue (Bransberger and Michelau 2016). By 2026, non-White students will represent 51.0 percent of public secondary school graduates.

While postsecondary credentials are on the rise and often required for a growing number of jobs in America, the high school diploma remains a prevailing signal of individual educational achievement. Therefore, measuring the success of individual groups in securing a diploma provides a picture of educational opportunity realized or missed that has lasting implications for individuals and families. Multiple measures aimed at describing high school completion rates exist, each with their own strengths and limitations (Murnane 2013; Heckman and LaFontaine 2010). In this chapter, we look to the high school status completion rate and four-year adjusted cohort graduation rate metrics to explore high school completion in the United States. Overall, the percentage of individuals completing high school credentials—both diplomas and alternative credentials such as the GED® credential—has increased over time. Yet longstanding gaps in completion remain. For example, in 2016 the high school graduation rate gap between White and American Indian or Alaska Native students was 16 percentage points—the highest gap between White students and any group of non-White students. And given the aforementioned demographic shifts, these gaps have tremendous consequence for our country's economic and social progress.

## KEY FINDINGS

- In 2000, about seven in 10 students graduating from high school were White. By 2012, that share had fallen to nearly six in 10, as the share who were Hispanic increased substantially. Projections predict this trend will continue, with Whites representing just under half of all public high school graduates in 2026.
- Between 2013 and 2016, public high school graduation rates<sup>1</sup> increased for all racial and ethnic groups, with those of Black<sup>2</sup> students increasing by nearly 6 percentage points, compared with around 2 percentage points for American Indian or Alaska Native, Asian or Pacific Islander, and White students.
- Between 1996 and 2016, the total share of all 18- to 24-year-olds who had completed a high school diploma or alternative credential increased. By race and ethnicity, Hispanics and African Americans experienced the largest growth. The status completion rate of Black students increased from 83.0 percent to about 92 percent, while that of Hispanic students increased from about 62 percent to 89.1 percent.
- The share of 18- to 24-year-old American Indian or Alaska Native men and women who had completed a high school education or alternative credential declined between 2006 and 2016—the only racial and ethnic group to do so.
- Between 2014 and 2018, the pass rate of all GED® test takers varied greatly by race and ethnicity. About seven in 10 White test takers passed the exam, the highest of any group. African Americans were the only group for whom less than half of all test takers passed the exam.

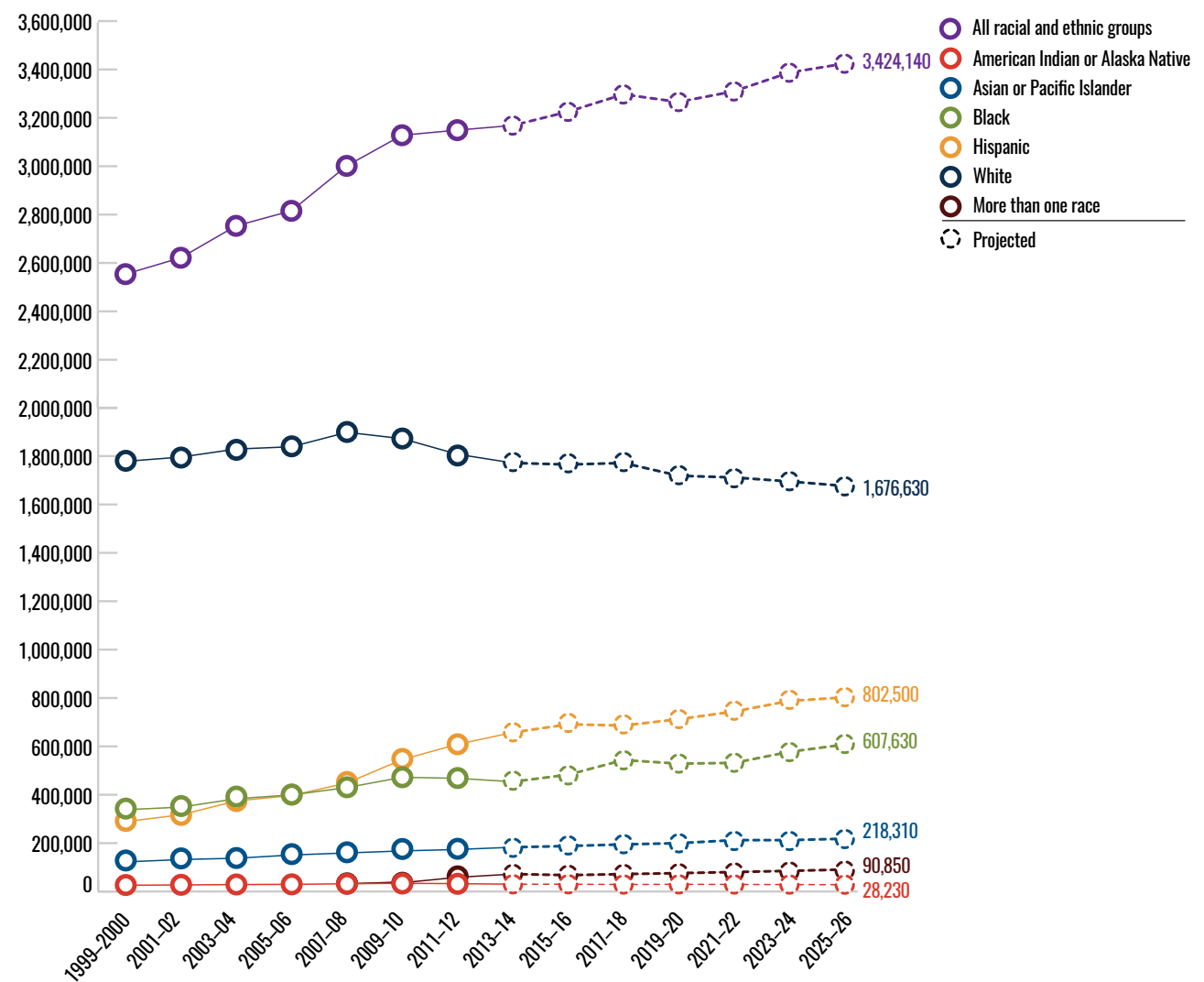
1 Data reflect adjusted cohort graduation rate, which measures the percentage of students within a given cohort who graduate within four years of enrolling in ninth grade.

2 The terms Black and African American are used interchangeably.

# PUBLIC HIGH SCHOOL GRADUATES: 2000 TO 2026

Over 90 percent of high school students in the United States attend public high schools, thus offering researchers the most robust trend lines and projections of demographic change (Bransberger and Michelau 2016). The total number of public high school graduates grew from 2.5 million in 1999–2000 to over 3.1 million in 2011–12,<sup>3</sup> an increase of 23.3 percent. Hispanics experienced the greatest growth among all racial and ethnic groups over these years, followed by Asians or Pacific Islanders. Projections indicate that the growth in the number of high school graduates will slow. Between 2011–12 and 2025–26, projections show the total number of public high school graduates will increase by a little more than 274,000 students, or 8.7 percent, 14.6 percentage points less than over the earlier 12-year period.

**Figure 2.1: The Number of Public High School Graduates, by Race and Ethnicity: 2000 to 2026**



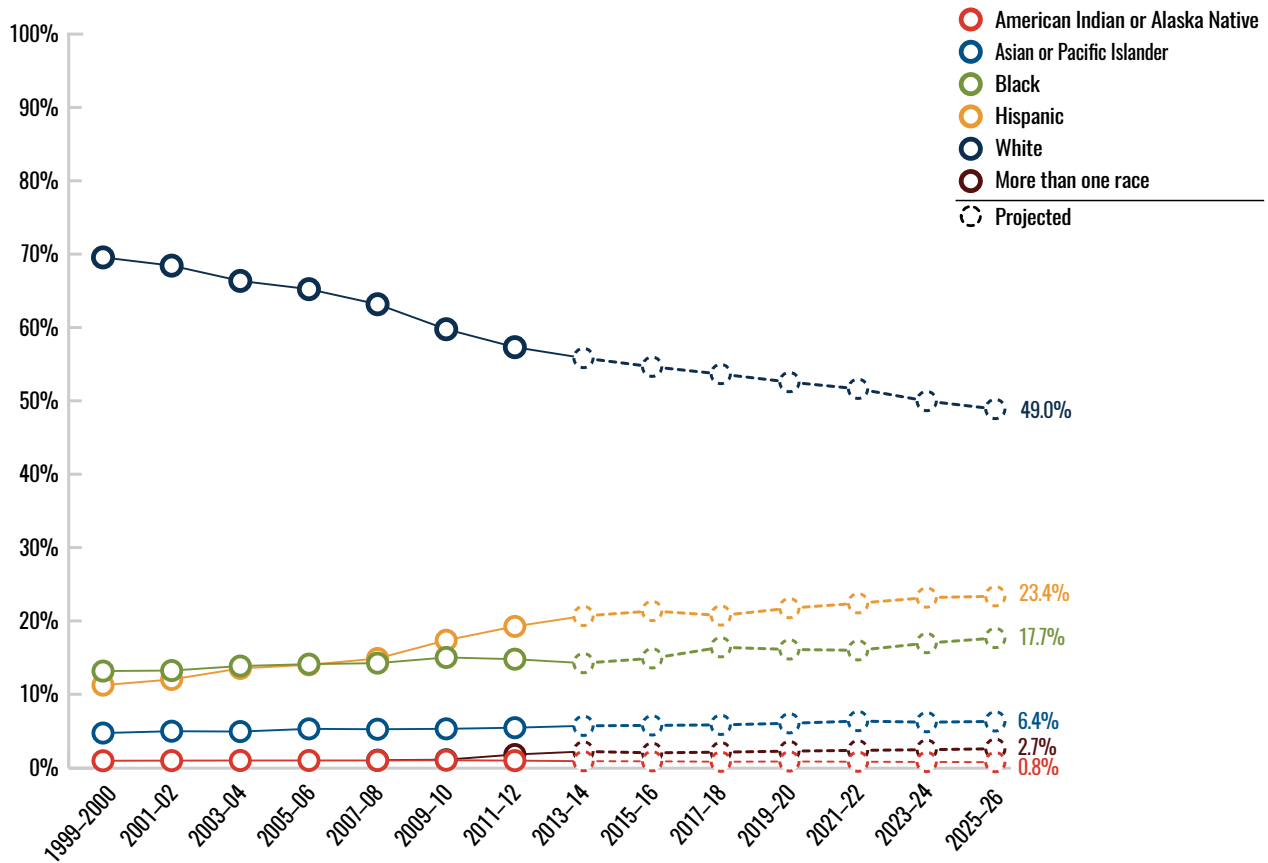
Source: U.S. Department of Education, Digest of Education Statistics, 2017, Table 219.30  
 Notes: Data for 1999–2000 to 2011–12 reflect actual values; data for 2013–14 to 2025–26 reflect projected values. | Prior to 2007–08, data on students of more than one race were not collected separately. | Data on students of more than one race were not reported by all states; therefore, the data are not comparable to figures for 2010–11 and later years. | Data on students of more than one race were not available prior to 2007–08.

3 Data in this section reflect actual public high school graduation rates for 2000–2012 and projected rates for 2014–2026. The data presented were the most recent publicly available data at the time of analysis.

- Between 1999–2000 and 2011–12, the total number of Hispanic public high school graduates grew by 110.5 percent, the highest percentage change among all racial and ethnic groups. This growth involved an increase of over 319,000 public high school graduates.
- Asian or Pacific Islander students had the second highest rate of growth between 1999–2000 and 2011–12, growing by nearly 51,500 graduates or 42.1 percent.
- The total number of Black public high school graduates grew by more than 129,000 students, an increase of 38.4 percent.
- Among all racial and ethnic groups, Whites experienced the lowest rate of growth, increasing by just 1.6 percent.
- Projections show that the total number of high school graduates will grow across all racial and ethnic groups between 2011–12 and 2025–26, with the exception of American Indians or Alaska Natives and Whites, where the total number of graduates is expected to decline by 13.0 percent and 7.2 percent, respectively.
- The groups predicted to see the most growth by 2025–26 are Hispanic and Black students. The number of Hispanic graduates will grow by nearly 194,000 students and Blacks by nearly 140,000 students, by 2025–26, representing growth of 31.8 percent and 29.9 percent, respectively.

In 1999–2000, Whites represented 69.6 percent of all high school graduates. While Whites remained the majority in 2011–12, their total share of all public high school graduates decreased to 57.4 percent. Projections predict this trend will continue, with Whites representing 49.0 percent of all public high school graduates in 2025–26.

**Figure 2.2: Public High School Graduates, by Race and Ethnicity: 2000 to 2026**



Source: U.S. Department of Education, Digest of Education Statistics, 2017, Table 219.30

Notes: Data for 1999–2000 to 2011–12 reflect actual values; data for 2013–14 to 2025–26 reflect projected values. | Prior to 2007–08, data on students of more than one race were not collected separately. | Data on students of more than one race were not reported by all states; therefore, the data are not comparable to figures for 2010–11 and later years.

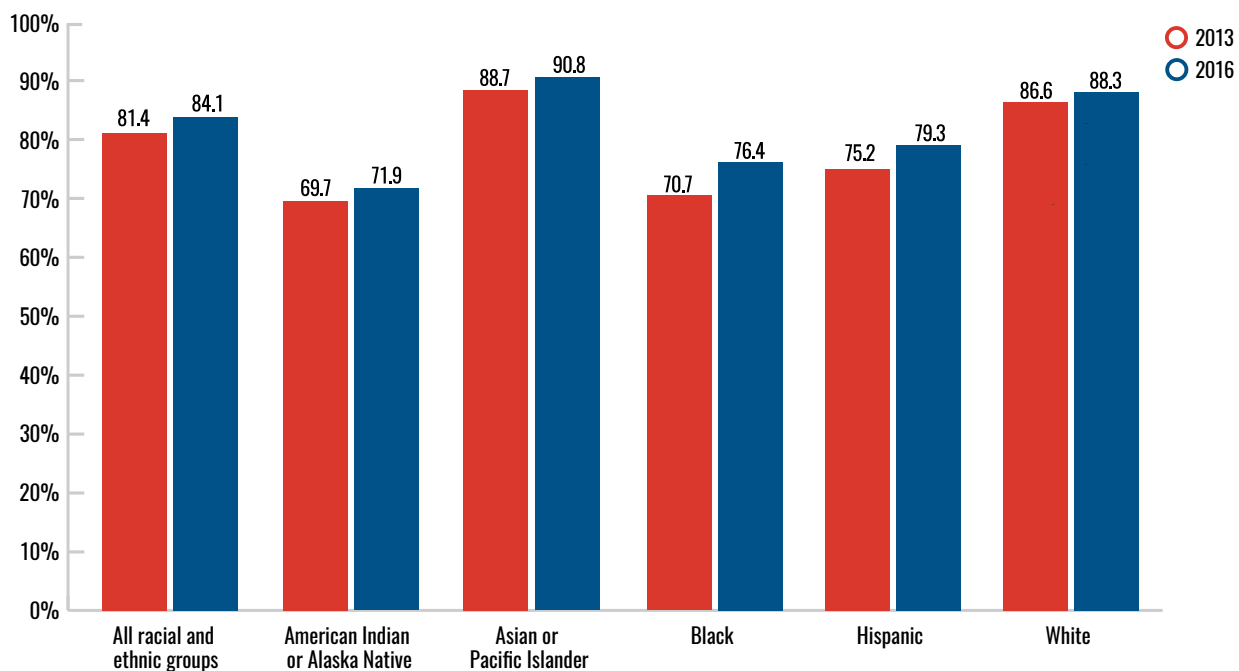
- The total share of Hispanics among all public high school graduates increased from 11.3 percent in 1999–2000 to 19.3 percent in 2011–12—the largest growth of any racial and ethnic group. Projections predict Hispanics will represent slightly less than a quarter of all public high school graduates by 2025–26.
- The total share of Asian or Pacific Islander graduates is expected to increase from 5.5 percent in 2011–12 to 6.4 percent by 2025–26, and the total share of Black graduates is expected to increase from 14.9 percent to 17.7 percent.
- The share of American Indians or Alaska Natives is expected to decrease slightly from 1.0 percent in 2011–12 to 0.8 percent in 2025–26.

# HIGH SCHOOL GRADUATION RATE

The adjusted cohort graduation rate (ACGR) for public high schools was first collected in 2010–11. The ACGR measures the percentage of students within a defined cohort who graduate with a high school diploma within four years of enrolling in ninth grade. The cohort is defined as first-time ninth graders in a specified academic year and is adjusted to include any new students who transfer into the cohort and to exclude any students who transfer out, leave the United States, or pass away. States calculate ACGRs at the school, district, and state levels.

Across the nation, the graduation rate of public high school students increased gradually from 81.4 percent in 2013 to 84.1 percent in 2016. Black students had the largest increase, from 70.7 percent in 2013 to 76.4 percent in 2016 (a 5.7 percentage point increase). The public high school graduation rate for Hispanic students increased 4.1 percentage points, from 75.2 percent to 79.3 percent. The graduation rate for American Indian or Alaska Native, Asian or Pacific Islander, and White students all increased about 2 percentage points.

**Figure 2.3: Public High School Four-Year Adjusted Cohort Graduation Rate, by Race and Ethnicity: 2013 and 2016**



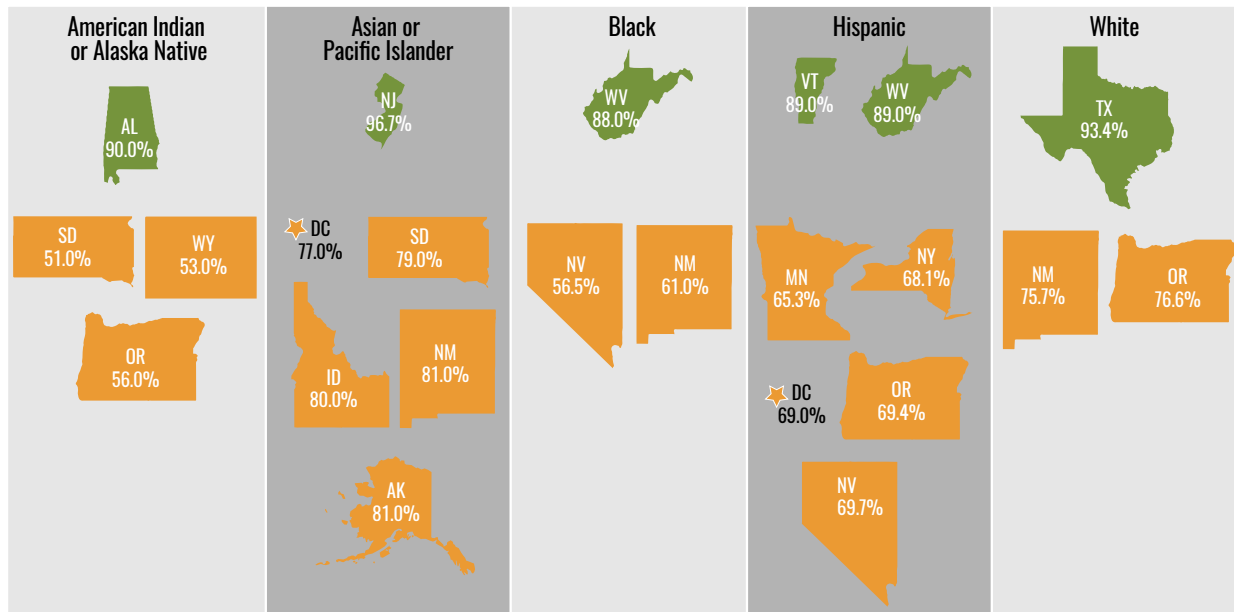
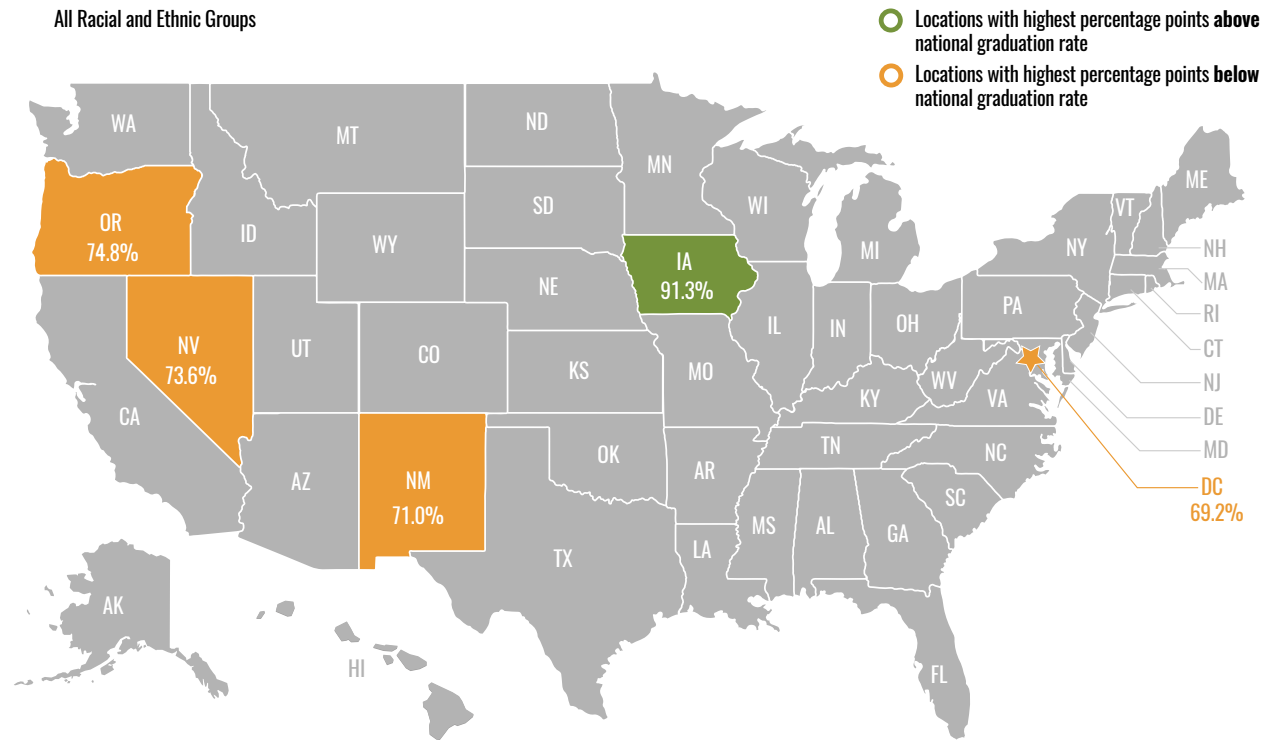
Source: U.S. Department of Education, EDData Groups 695 and 696, School Year (SY) 2015–16; October 25, 2017: U.S. Department of Education, EDData/Consolidated State Performance Report, SY 2012–13

Notes: Implementation of requirements for the Adjusted Cohort Graduation Rate (ACGR) varied by state. As a result, calculation of the ACGR may vary by state. Year-over-year variation of +/- 5% for any group for which cohort size was over 50 was reviewed through the U.S. Department of Education's Coordinated Data Quality Review. All states, with the exception of West Virginia, provided explanations for these variations. The data steward did not accept state comments for California, Illinois, Louisiana, New Mexico, Texas, Utah, and the District of Columbia. These states and the District of Columbia, along with West Virginia, received notification of concerns around data quality that are expected to be resolved in the submission of future data. | Data for Idaho were not available for the 2012–13 academic year due to an approved reporting extension from the U.S. Department of Education's Office of Elementary and Secondary Education.

Although there was an increase in public high school graduation rates across all groups, differences remained in 2016 by race and ethnicity and location. In 2016, the national graduation rate of Asians or Pacific Islanders was 90.8 percent, compared with 88.3 percent for Whites, 79.3 percent for Hispanics, 76.4 percent for Blacks, and 71.9 percent for American Indians or Alaska Natives.

**Figure 2.4: Public High School Four-Year Adjusted Cohort Graduation Rate, by Location and Race and Ethnicity: 2016**

	All racial and ethnic groups	American Indian or Alaska Native	Asian or Pacific Islander	Black	Hispanic	White
National graduation rate	84.1%	71.9%	90.8%	76.4%	79.3%	88.3%



Source: U.S. Department of Education, Common Core of Data: America's Public Schools, 2016

Notes: For full state comparisons, please visit [www.equityinhighered.org](http://www.equityinhighered.org). Implementation of requirements for the Adjusted Cohort Graduation Rate (ACGR) varied by state. As a result, calculation of the ACGR may vary by state. Year-over-year variation of +/- 5% for any group for which cohort size was over 50 was reviewed through the U.S. Department of Education's Coordinated Data Quality Review. All states, with the exception of West Virginia, provided explanations for these variations. The data steward did not accept state comments for California, Illinois, Louisiana, New Mexico, Texas, Utah, and the District of Columbia. These states and the District of Columbia, along with West Virginia, received notification of concerns around data quality that are expected to be resolved in the submission of future data.

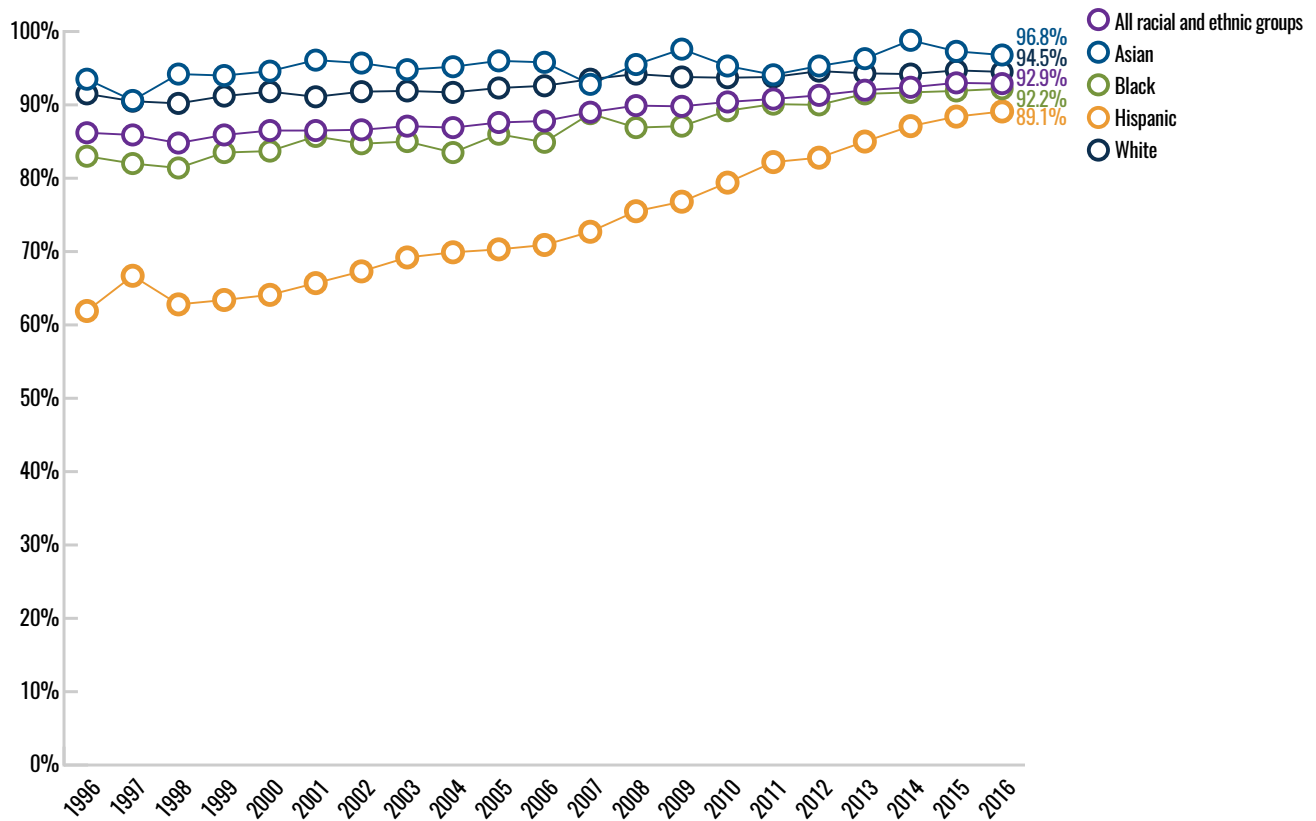
- In 2016, the public high school graduation rate for all students in Iowa was 7.2 percentage points higher than the national graduation rate (91.3 percent compared with 84.1 percent). The District of Columbia, New Mexico, and Nevada all had public high school graduation rates 9.3 percentage points or more below the national graduation rate.
- The public high school graduation rate of American Indians or Alaska Natives was highest in the state of Alabama (90.0 percent)—18.1 percentage points above the national rate of 71.9 percent for that group. South Dakota, Wyoming, and Oregon were 15.9 percentage points or more below the national graduation rate for these students.
- Asians or Pacific Islanders had the highest public high school graduation rates in New Jersey (96.7 percent)—5.9 percentage points higher than the national rate of 90.8 percent for these students. The District of Columbia, South Dakota, Idaho, Alaska, and New Mexico all had graduation rates 9.8 percentage points or more below the national public high school graduation rate for these students.
- Black students in West Virginia had the highest public high school graduation rate (88.0 percent). This rate was 11.6 percentage points higher than the national rate of 76.4 percent. Both Nevada and New Mexico were below the national rate for this group by more than 15 percentage points.
- The public high school graduation rates of Hispanic students in Vermont and West Virginia were almost 10 percentage points higher than the national rate of 79.3 percent for this group. Comparatively, Minnesota, New York, the District of Columbia, Oregon, and Nevada had high school graduation rates of almost 10 percentage points or more below the national rate for Hispanic students.
- The public high school graduation rate of White students in Texas was 5.1 percentage points higher than the national rate of 88.3 percent for this group. Both New Mexico and Oregon had graduation rates of more than 11 percentage points below the national rate for Whites.

# HIGH SCHOOL STATUS COMPLETION RATE

Another metric of high school completion is the high school status completion rate. The high school status completion rate measures the percentage of 18- to 24-year-olds in the United States who have completed a high school diploma or alternative credential, such as a GED® credential. This rate excludes non-civilian and institutionalized members of the population and those still enrolled in K–12 education (NCES 2017). The high school status completion rate is calculated using data from the U.S. Census Bureau’s Current Population Survey (CPS), which allows for a look at long-term trends. Prior to 2003, the CPS reported only on Hispanic; White; Black; American Indian, Eskimo, or Aleut; and Asian or Pacific Islander groups. In 2003, the Census Bureau changed the CPS to include new categories for Native Hawaiians or other Pacific Islanders and individuals of more than one race, aligning CPS data with the outcomes of Census 2000. Because these changes provide individuals the opportunity to select the racial and ethnic groups with which they most identify, they present a more complete picture of the evolving demographics of the U.S. population (Bowler et al. 2003).

The high school status completion rate of adults ages 18 to 24 years old increased gradually from 86.2 percent in 1996 to 92.9 percent in 2016. Over these 20 years, completion by most racial and ethnic groups increased, although some groups saw greater increases than others.

**Figure 2.5: High School Completion Rate of 18- to 24-Year-Olds Not Enrolled in High School (Status Completion Rate), by Race and Ethnicity: 1996 to 2016**



Source: U.S. Department of Education, Digest of Education Statistics, 2017, Table 219.65

Notes: The status completion rate is the number of 18- to 24-year-olds who are high school completers as a percentage of the total number of 18- to 24-year-olds who are not enrolled in high school or a lower level of education. High school completers include those with a high school diploma, as well as those with an alternative credential, such as a GED®. | Prior to 2003, Asian included Pacific Islander. | Current Population Survey data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in the military and persons living in institutions (e.g., prisons or nursing facilities). | Totals include other racial/ethnic groups not separately shown.



- Hispanic adults experienced the greatest growth in high school status completion rate, increasing from 61.9 percent in 1996 to 89.1 percent in 2016.
- The status completion rate of Black adults increased about 9 percentage points, from 83.0 percent in 1996 to 92.2 percent in 2016.
- Whites and Asians had the highest high school status completion rates in 1996, with slight increases of around 3 percentage points by 2016.

In 2006, women had a slightly higher high school status completion rate than men (89.2 percent and 86.5 percent, respectively). While the status completion rate for both groups increased over time, this gender gap remained. In 2016, women had a status completion rate of 94.3 percent, compared with 91.6 percent for men.

**Table 2.1: High School Completion Rate of 18- to 24-Year-Olds Not Enrolled in High School (Status Completion Rate), by Gender and Race and Ethnicity: 2006 to 2016**

		2006	2016
Men	All racial and ethnic groups	86.5%	91.6%
	American Indian or Alaska Native	78.8%	70.3%
	Asian	95.2%	97.4%
	Black	86.1%	88.7%
	Hispanic	65.7%	86.8%
	Native Hawaiian or other Pacific Islander	‡	‡
	White	92.0%	93.8%
	More than one race	90.8%	95.3%
Women	All racial and ethnic groups	89.2%	94.3%
	American Indian or Alaska Native	84.7%	79.8%
	Asian	96.4%	96.2%
	Black	83.9%	95.5%
	Hispanic	76.6%	91.3%
	Native Hawaiian or other Pacific Islander	‡	‡
	White	93.2%	95.1%
	More than one race	88.7%	97.1%

Source: U.S. Department of Education, Digest of Education Statistics, 2017, Table 219.67

Notes: The status completion rate is the number of 18- to 24-year-olds who are high school completers as a percentage of the total number of 18- to 24-year-olds who are not enrolled in high school or a lower level of education. High school completers include those with a high school diploma, as well as those with an alternative credential, such as a GED®. | Current Population Survey data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in the military and persons living in institutions (e.g., prisons or nursing facilities). | ‡ Reporting standards not met (too few cases for a reliable estimate).

- In 2016, American Indians or Alaska Natives had the largest gender gap, with 79.8 percent of women having completed a high school diploma or alternative credential, compared with 70.3 percent of men. Blacks had the second highest gender gap, with 95.5 percent of Black women having completed a high school diploma or alternative credential, compared with 88.7 percent of Black men.
- The status completion rate of Black women edged out that of White women by 0.4 percentage points (95.5 percent for Black women and 95.1 percent for White women).

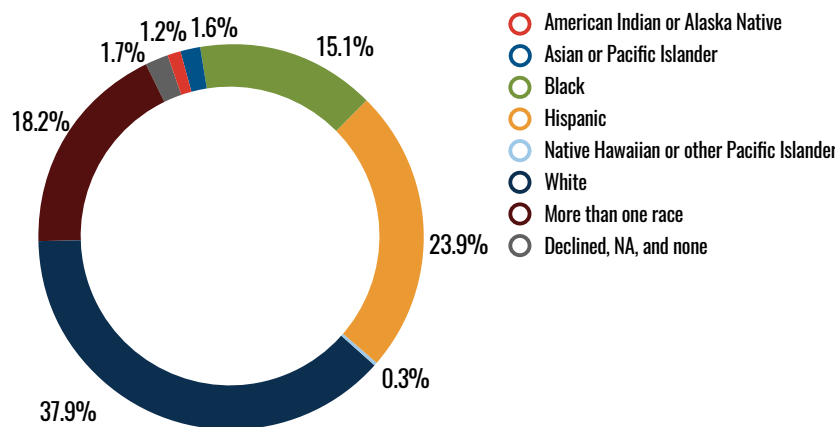
# GED® TEST

The GED® test is a high school equivalency exam founded in 1942 by the American Council on Education (ACE). It is now administered by the GED Testing Service (GEDTS), which is a joint venture between ACE and Pearson. The GED® test focuses on four different subject areas: Mathematical Reasoning, Reasoning Through Language Arts, Social Studies, and Science (GED Testing Service 2018).

Between 2014 and 2018, over 965,000 people took one or more subject-area modules of the GED® test, one of the country’s most well-known high school equivalency exams. Whites represented the largest share (37.9 percent), followed by Hispanics (23.9 percent), individuals of more than one race (18.2 percent), Blacks (15.1 percent), individuals who did not provide race and ethnicity information (1.7 percent), Asians (1.6 percent), American Indians or Alaska Natives (1.2 percent), and Native Hawaiians or other Pacific Islanders (0.3 percent).<sup>4</sup>

The majority of GED® test takers between 2014 and 2018 completed the exam (70.2 percent), which means that they took all four subject-area modules of the test. Among those who completed, 85.3 percent passed the exam and received their GED® credential. The pass rate of all test takers, including those who did not complete the exam,<sup>5</sup> was 59.9 percent. However, there was considerable variation across racial and ethnic groups in completion and pass rates.

**Figure 2.6: GED® Test Takers, by Race and Ethnicity: 2014 to 2018**



Source: GED® Testing Service

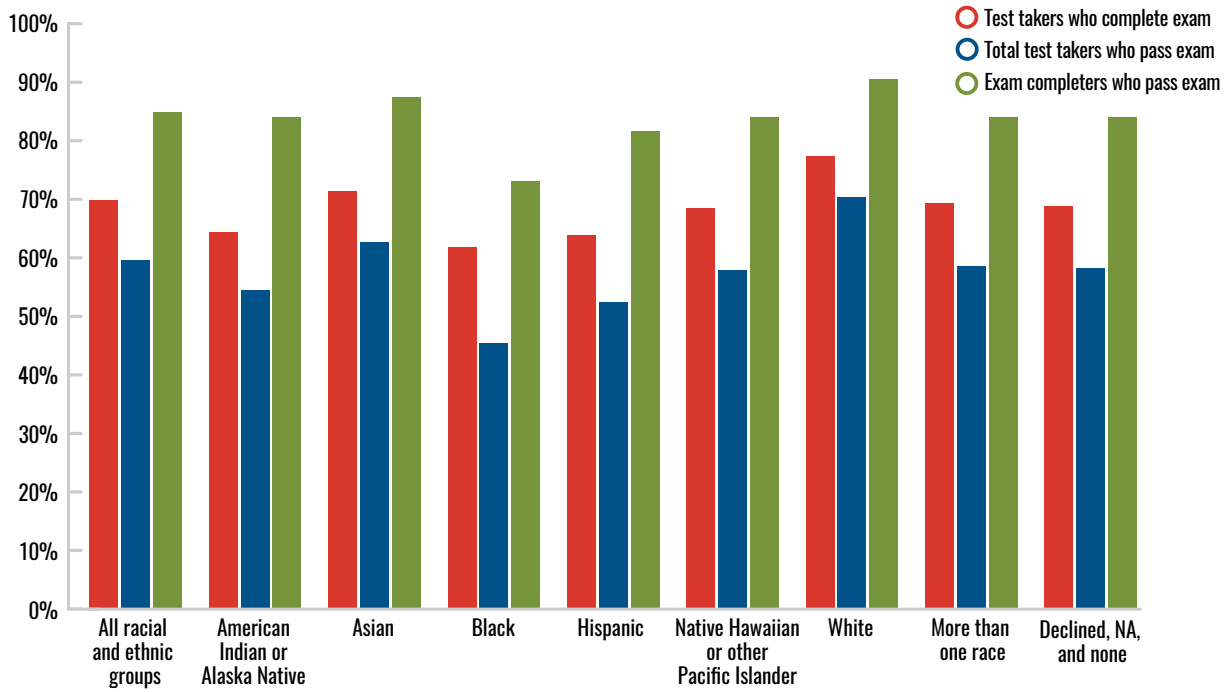
Note: Figure includes people who took at least one GED® operational test between 2014 and 2018.

- Whites and Asians had the highest completion rates (77.7 percent and 71.7 percent, respectively), while Hispanic and Black test takers had the lowest completion rates (64.2 percent and 62.2 percent, respectively).
- Among all test takers, including both completers and non-completers, Whites had the highest pass rate (70.7 percent), followed by Asians (63.0 percent). Blacks were the only group among whom less than half of all test takers passed the exam (45.7 percent).
- More than nine in 10 White test takers who completed the exam passed (91.0 percent)—the highest of any group. The greatest gap in pass rate among completers was between White and Black test takers, at nearly 18 percentage points.

4 Information on GED® test takers are updated regularly through GEDTS. Therefore, the data presented in this chapter reflect an estimation of the racial and ethnic backgrounds of GED® test takers as of the time of analysis.

5 The GED® test is structured in a way that allows test takers to take the four sections of the exam in any sequence or combination. Reasons for why students do not complete the exam vary, and may include but are not limited to family and work obligations, change in employment, and financial reasons.

**Figure 2.7: GED® Test Performance, by Race and Ethnicity: 2014 to 2018**



Source: GED® Testing Service

Note: Figure includes individuals who completed all four sections of the GED® exam between 2014 and 2018.

## REFERENCES

- Bowler, Mary, Randy E. Ilg, Stephen Miller, Ed Robison, and Anne Polivka. 2003. *Revisions to the Current Population Survey Effective in January 2003*. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. <https://www.bls.gov/cps/rvcps03.pdf>.
- Bransberger, Peace, and Demarée K. Michelau. 2016. *Knocking at the College Door: Projections of High School Graduates, 9th ed.* Boulder, CO: Western Interstate Commission for Higher Education.
- GEDTS (GED Testing Service). 2018. "Test Subjects." [https://ged.com/about\\_test/test\\_subjects](https://ged.com/about_test/test_subjects).
- Heckman, James J., and Paul A. LaFontaine. 2010. "The American High School Graduation Rate: Trends and Levels." *Review of Economics and Statistics* 92 (2): 244–262.
- Murnane, Richard J. 2013. "U.S. High School Graduation Rates: Patterns and Explanations." *Journal of Economic Literature* 51 (2): 370–422.
- NCES (National Center for Education Statistics). 2017. *Digest of Education Statistics 2017*, Table 219.65. Washington, DC: U.S. Department of Education, NCES. [https://nces.ed.gov/programs/digest/d17/tables/dt17\\_219.65.asp](https://nces.ed.gov/programs/digest/d17/tables/dt17_219.65.asp).

## CHAPTER 3



# Enrollment in Undergraduate Education





# INTRODUCTION

The importance of postsecondary credentials for the twenty-first century workforce—and indeed for societal health and progress at large—cannot be overstated. Most jobs that provide a living wage, employment security, and the possibility of a promising career path require some level of postsecondary education. In addition to having higher earnings and more stable and rewarding work opportunities, adults with college credentials are more likely than others to be active citizens, to be healthier (McMahon 2009; Ma, Pender, and Welch 2016; Turk 2019), and to be able to provide opportunities for their children. Without participation of the whole of our society in postsecondary education, missed opportunities abound—for closing equity gaps, certainly, as well as for ensuring the health and vitality of our democracy.

Fortunately, the past two decades have seen an increase in college enrollment by those who have not traditionally sought undergraduate credentials, including students of color. Yet significant barriers to access remain. Both enrollment rates and the types of institutions where students enrolled in 2015–16 varied greatly by racial and ethnic group, by international status, and by income level. Field of study, which is an important indicator of post-college income and opportunity, also varied by race and gender. Such gaps in postsecondary participation and success both emerge from and exacerbate inequality across demographic groups. Improving access to and success in college is thus a prerequisite for addressing the barriers facing underrepresented racial and ethnic groups in American society.

## KEY FINDINGS

- Between 1995–96 and 2015–16, the share of students of color among all undergraduate students increased from about 30 percent to approximately 45 percent. This increase was largely driven by the increase in Hispanic undergraduate enrollment.
- Across all racial and ethnic groups, women represented the majority of undergraduate students. The largest gender gap occurred for African American<sup>1</sup> students, where women represented about 62 percent and men nearly 38 percent.
- Overall, more undergraduate students were enrolled in public two-year institutions<sup>2</sup> than any other sector. This is especially true for American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, Black, and Hispanic students.
- Larger shares of Black and Native Hawaiian or other Pacific Islander students than of other student groups were enrolled at for-profit institutions.
- One-quarter of undergraduates at public four-year institutions were majoring in STEM fields;<sup>3</sup> however, the total share of men who enrolled in STEM fields was more than double that of women.

1 The terms Black and African American are used interchangeably.

2 Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section.

3 STEM programs include biological and physical science, science technology, math, agriculture, computer and information sciences, and engineering and engineering technology.

- More than 20 percent of White and Black students seeking an associate degree at public two-year institutions were in general studies programs,<sup>4</sup> which enrolled smaller shares of students from other student groups. Larger shares of Asian and international students<sup>5</sup> than of other groups chose STEM fields. American Indian or Alaska Native students, Hispanic students, and students of more than one race had the highest representation in manufacturing, military technology, and other applied fields.<sup>6</sup>
- The share of low-income Asian students who were enrolled in very selective institutions was four times the share of low-income Black students enrolled at these institutions. Among students from the highest income families, Asian students were more than twice as likely as Black students to enroll in very selective institutions.
- Within each income quartile, larger shares of dependent Hispanic students than of those from any other racial or ethnic group were enrolled in open admissions institutions.

---

4 General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others.

5 The National Center for Education Statistics (NCES) defines a nonresident alien as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.” In this report, nonresident aliens are labeled as international students.

6 Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

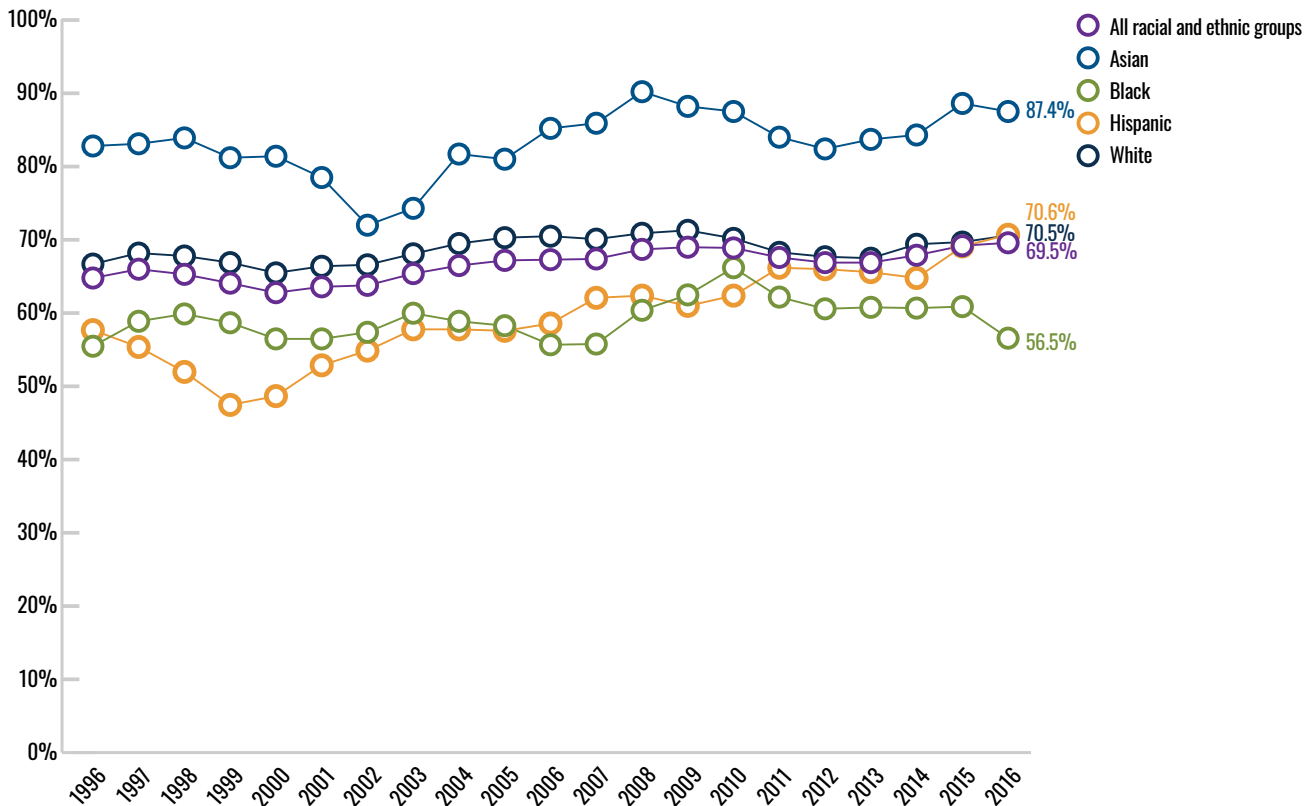


# COLLEGE ENROLLMENT AFTER HIGH SCHOOL

The U.S. Census commonly measures college enrollment rates in two ways. The first is an immediate college enrollment rate, or the percentage of recent high school or equivalent completers, ages 16 to 24 years old, who enroll in college by the October immediately following high school completion. The second measures the percentage of high school equivalent completers, ages 18 to 24 years old, who are enrolled in college.

In 2016, 69.5 percent of all recent high school or equivalent graduates ages 16 to 24 enrolled in an undergraduate program of study. The shares of recent high school or equivalent graduates who enrolled in college ranged from 87.4 percent of Asians to 56.5 percent of Blacks. Between 1996 and 2016, the share of Whites, Blacks, Hispanics, and Asians who enrolled in college increased, although differences emerged by racial and ethnic group.

**Figure 3.1: Immediate College Enrollment of Recent High School or Equivalent Graduates Ages 16 to 24, by Race and Ethnicity: 1996 to 2016**



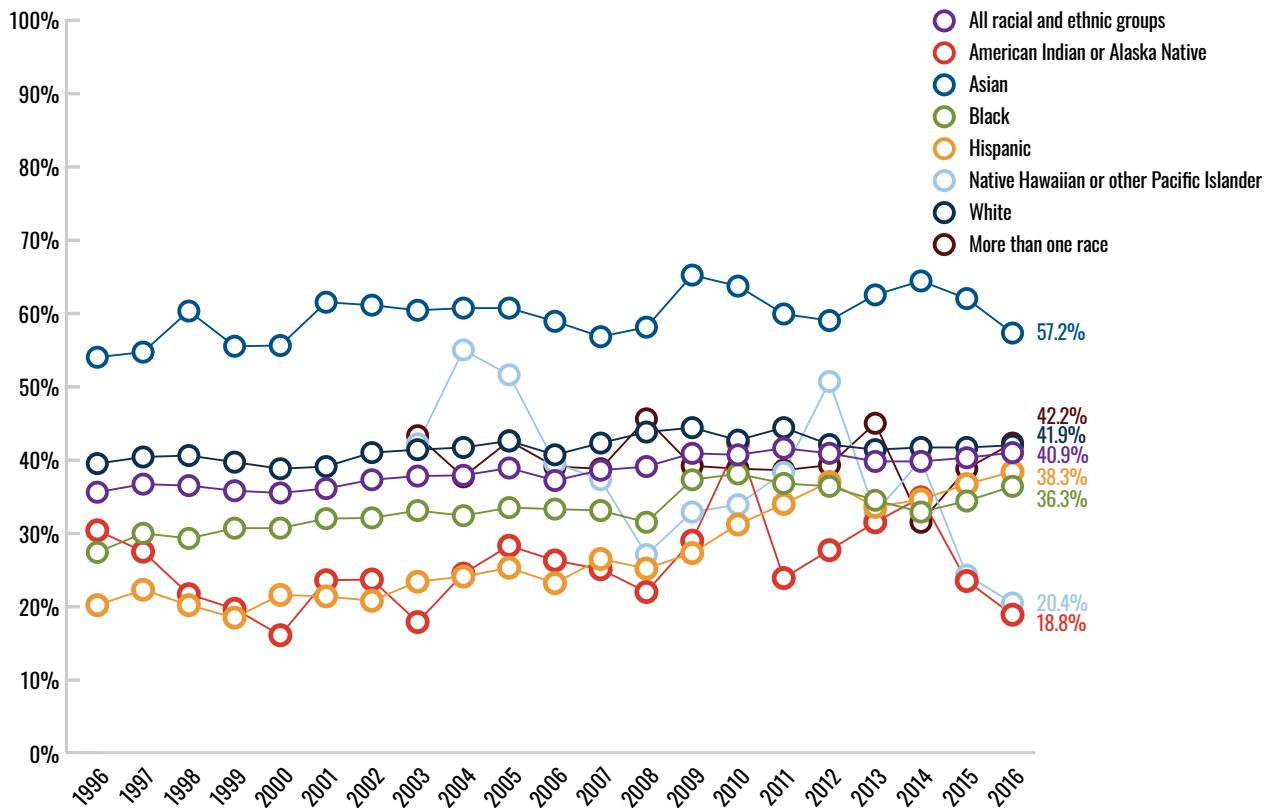
Source: U.S. Department of Education, Digest of Education Statistics, 2017, Table 302.20  
 Notes: This figure uses a three-year moving average, which is a weighted average of the year indicated, the year immediately preceding, and the year immediately following. For the final year, a two-year moving average is used. Moving averages are used to produce more stable estimates. | "All racial and ethnic groups" includes persons of other racial and ethnic groups not separately shown. | Prior to 2003, Asian included Pacific Islanders. | After 2002, White, Black, and Asian data exclude persons of more than one race.

- The total share of recent high school graduates ages 16 to 24 who enrolled in college increased from 64.7 percent in 1996 to 69.5 percent in 2016—a 4.8 percentage point increase.
- Hispanic recent high school or equivalent graduates experienced the largest increase in college enrollment from 57.6 percent in 1996 to 70.6 percent in 2016—a 13.0 percentage point increase.

- Between 1996 and 2016, the total share of Asian recent high school or equivalent graduates who enrolled in college increased from 82.7 percent to 87.4 percent.
- The total share of White recent high school or equivalent graduates who enrolled in college increased 3.9 percentage points, from 66.6 percent in 1996 to 70.5 percent in 2016.
- Black recent high school or equivalent graduates experienced a slight increase in the total share who enrolled in college, from 55.4 percent in 1996 to 56.5 percent in 2016. While the total share of Blacks who enrolled in college increased over this 20-year period, the total share enrolled in college decreased 4.4 percentage points between 2015 and 2016.

In 2016, 40.9 percent of high school or equivalent graduates ages 18 to 24 were enrolled in an undergraduate program of study. The shares of adults who were enrolled ranged from 18.8 percent of American Indians or Alaska Natives and 20.4 percent of Native Hawaiians or other Pacific Islanders to 42.2 percent of those of more than one race and 57.2 percent of Asians. Between 1996 and 2016, the share enrolled in college increased for Hispanics, African Americans, Asians, and Whites, but decreased for American Indians or Alaska Natives. The share of Native Hawaiians or other Pacific Islanders and individuals of more than one race who were enrolled in college also decreased between 2003<sup>7</sup> and 2016.

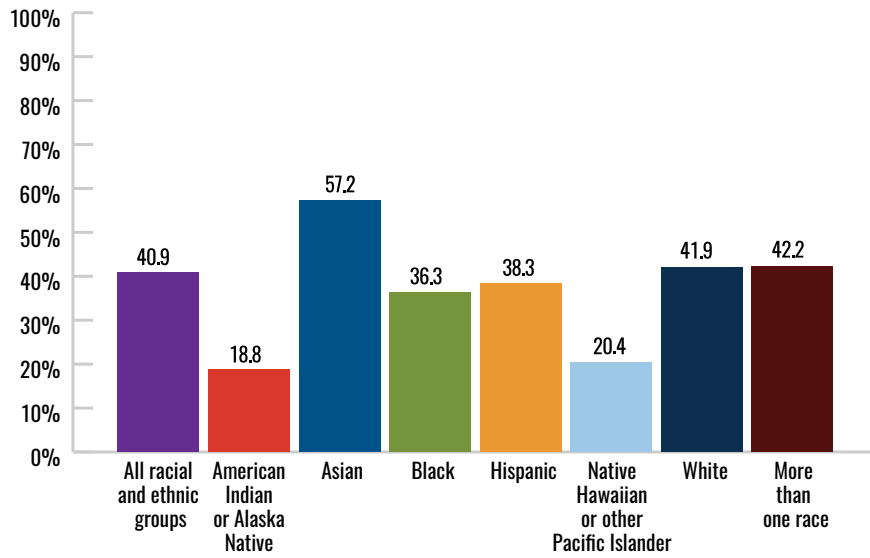
**Figure 3.2: Percentage of 18- to 24-Year-Olds Enrolled in College, by Race and Ethnicity: 1996 to 2016**



Source: U.S. Census Bureau, Current Population Survey, 1996–2016  
 Note: Prior to 2003, the Current Population Survey did not include more than one race or Native Hawaiian or other Pacific Islander.

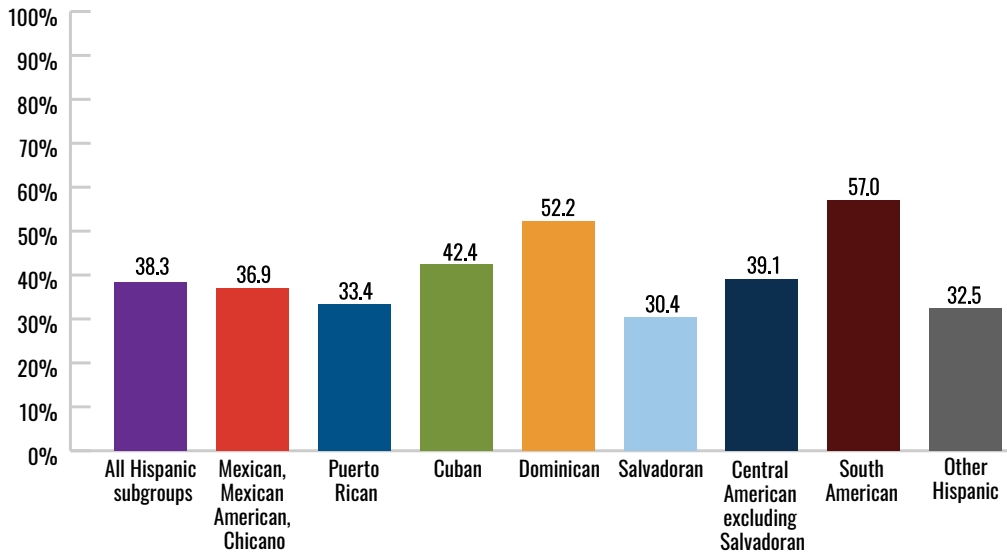
7 Prior to 2003, the U.S. Census Bureau’s Current Population Survey did not include the racial and ethnic categories of more than one race or Native Hawaiian or other Pacific Islander.

**Figure 3.3: Percentage of 18- to 24-Year-Olds Enrolled in College, by Race and Ethnicity: 2016**



Source: U.S. Census Bureau, Current Population Survey, 2016

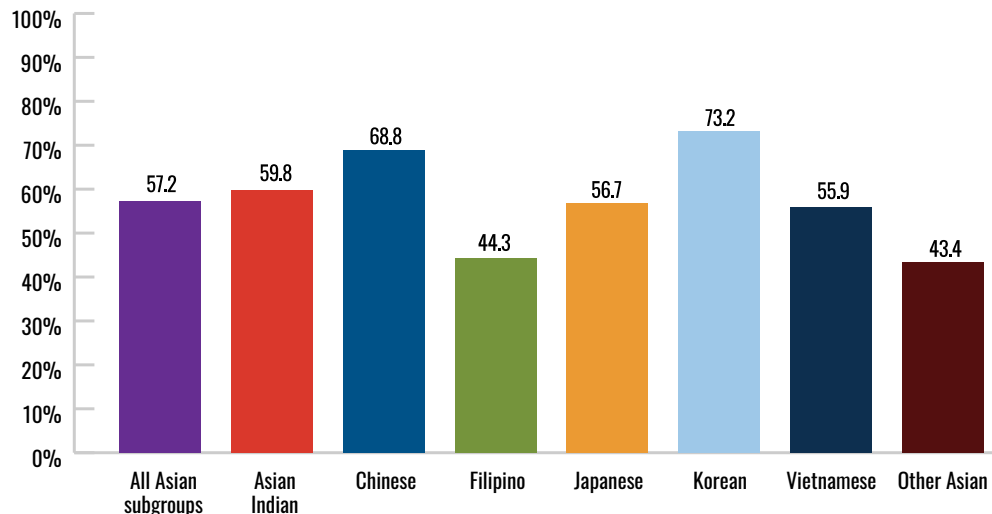
**Figure 3.4: Percentage of 18- to 24-Year-Olds Enrolled in College, by Hispanic Subpopulations: 2016**



Source: U.S. Census Bureau, Current Population Survey, 2016

Notes: "Central American excluding Salvadoran" includes respondents of Central American, Central American Indian, Costa Rican, Guatemalan, Honduran, Nicaraguan, or Panamanian origin. | "South American" includes respondents who indicate that they are of Argentinian, Bolivian, Chilean, Colombian, Ecuadorian, Paraguayan, Peruvian, South American, South American Indian, Uruguayan, or Venezuelan origin. | "Other Hispanic" includes all CPS respondents who reported they were of "Hispanic, Latino, or Spanish origin," and who subsequently indicated that they belong to one of 24 Hispanic-origin subgroups (e.g., Castilian) that fall outside the other seven Hispanic origin groups listed in this figure.

**Figure 3.5: Percentage of 18- to 24-Year-Olds Enrolled in College, by Asian Subpopulations: 2016**



Source: U.S. Census Bureau, Current Population Survey, 2016

Note: "Other Asian" includes all CPS respondents who reported they were "Asian" but who did not identify as a member of any of the six Asian origin groups listed in this figure.

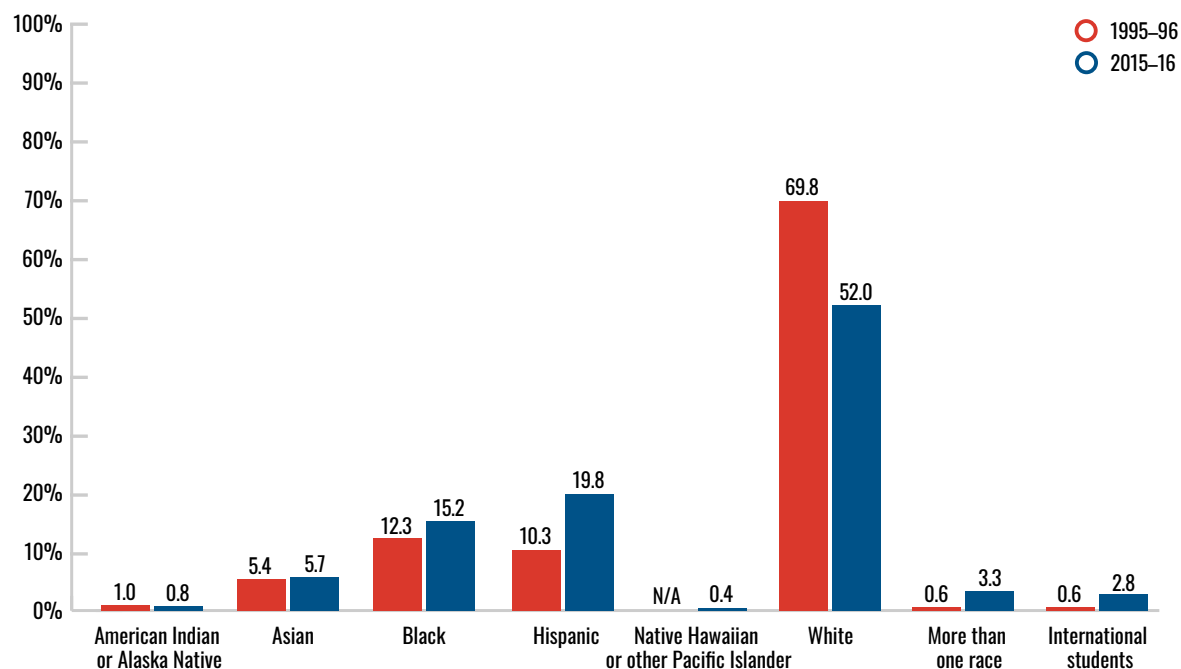
- The share of young adults enrolled in college increased from 35.5 percent in 1996 to 40.9 percent in 2016—a 5.4 percentage point increase.
- Hispanic young adults experienced the largest increase in college enrollment from 20.1 percent in 1996 to 38.3 percent in 2016—an 18.2 percentage point increase.
- In 2016, 38.3 percent of Hispanic young adults enrolled in college. Of Hispanics, those of South American<sup>8</sup> backgrounds (57.0 percent) and Dominican backgrounds (52.2 percent) enrolled at the highest rates.
- Between 1996 and 2016, the share of Asian young adults enrolled in college increased slightly, from 53.9 percent to 57.2 percent.
- Among Asian young adults, a larger share of those of Korean descent were enrolled in college (73.2 percent) in 2016, followed by Chinese (68.8 percent) and Japanese high school graduates (56.7 percent).
- In 2016, more than one-third (36.3 percent) of Black young adults were enrolled in college, with their enrollment having increased 9.0 percentage points between 1996 and 2016.
- The share of American Indian or Alaska Native young adults enrolled in college declined 11.5 percentage points, from 30.3 percent in 1996 to 18.8 percent in 2016.

8 "South American" includes respondents who indicated that they were of Argentinian, Bolivian, Chilean, Colombian, Ecuadorian, Paraguayan, Peruvian, South American, South American Indian, Uruguayan, or Venezuelan origin.

## UNDERGRADUATE ENROLLMENT: 1995–96 TO 2015–16

As the undergraduate student body has become more diverse over time, the share of White students as a proportion of total undergraduate enrollment has declined. In 2015–16, approximately 45 percent of all undergraduate students identified as being a race or ethnicity other than White, compared with 29.6 percent in 1995–96. Much of the growth in the student of color population can be attributed to the growth of Hispanic enrollment.

**Figure 3.6: Undergraduate Enrollment, by Race and Ethnicity: 1995–96 and 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 1996 and 2016

Note: In 1995–96, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category “Asian.”

- The representation of Hispanic students increased from 10.3 percent of all undergraduates in 1995–96 to 19.8 percent in 2015–16—the largest percentage point increase of any racial or ethnic group.
- As a group, Black undergraduates saw the second largest growth in representation. The share of undergraduates who were Black increased from 12.3 percent in 1995–96 to 15.2 percent in 2015–16.
- The proportion of all undergraduate students who identified as White decreased from approximately 70 percent in 1995–96 to 52.0 percent in 2015–16.

Throughout the years between 1995–96 and 2015–16, the consistent majority of undergraduate students were women. Over time, the gender gap was largest among Black students. The exception was international students, among whom there was no gender gap in undergraduate enrollment in 2015–16.

**Table 3.1: Undergraduate Enrollment, by Gender and Race and Ethnicity: 1995–96 and 2015–16**

		<b>Men</b>	<b>Women</b>
1995–96	All racial and ethnic groups	43.2%	56.8%
	American Indian or Alaska Native	35.6%	64.4%
	Asian	48.0%	52.0%
	Black	36.6%	63.4%
	Hispanic	43.2%	56.8%
	Native Hawaiian or other Pacific Islander	N/A	N/A
	White	43.9%	56.1%
	More than one race	50.9%	49.1%
	International students	52.6%	47.4%
2015–16	All racial and ethnic groups	43.5%	56.5%
	American Indian or Alaska Native	47.0%	53.0%
	Asian	48.0%	52.0%
	Black	37.8%	62.2%
	Hispanic	42.1%	57.9%
	Native Hawaiian or other Pacific Islander	41.7%	58.3%
	White	45.0%	55.0%
	More than one race	40.6%	59.4%
	International students	50.0%	50.0%

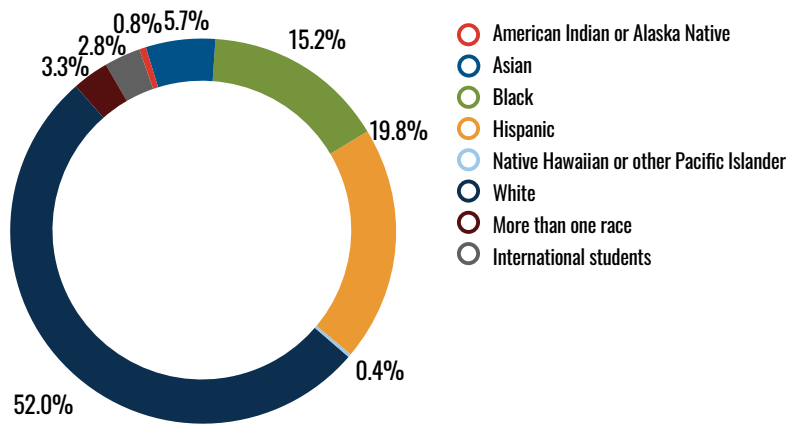
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 1996 and 2016

Note: In 1995–96, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category "Asian."

# UNDERGRADUATE ENROLLMENT: 2015–16

In 2015–16, 52.0 percent of undergraduate students were White, 45.2 percent were students of color, and 2.8 percent were international students.

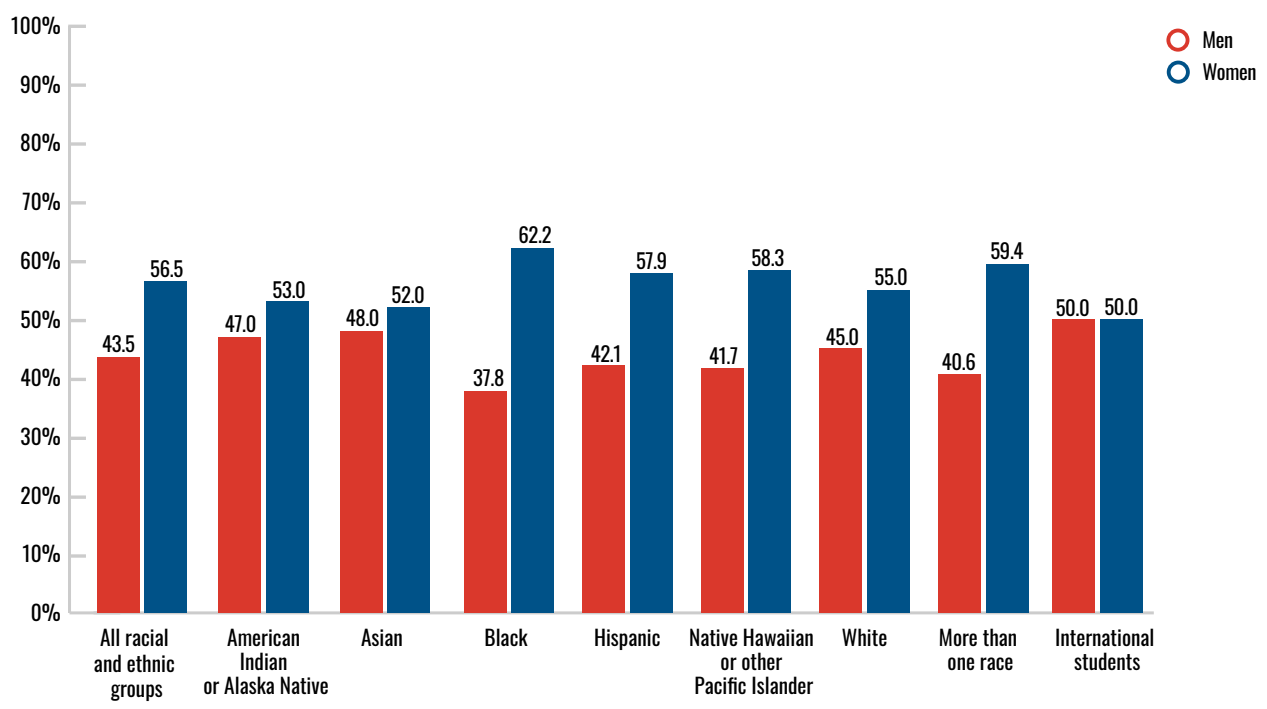
**Figure 3.7: Undergraduate Enrollment, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Overall, women made up a larger proportion of undergraduate student enrollment than did men in 2015–16 (56.5 percent and 43.5 percent, respectively). The only demographic group for which this pattern did not hold was international students, among whom equal shares were men and women.

**Figure 3.8: Undergraduate Enrollment, by Gender and Race and Ethnicity: 2015–16**



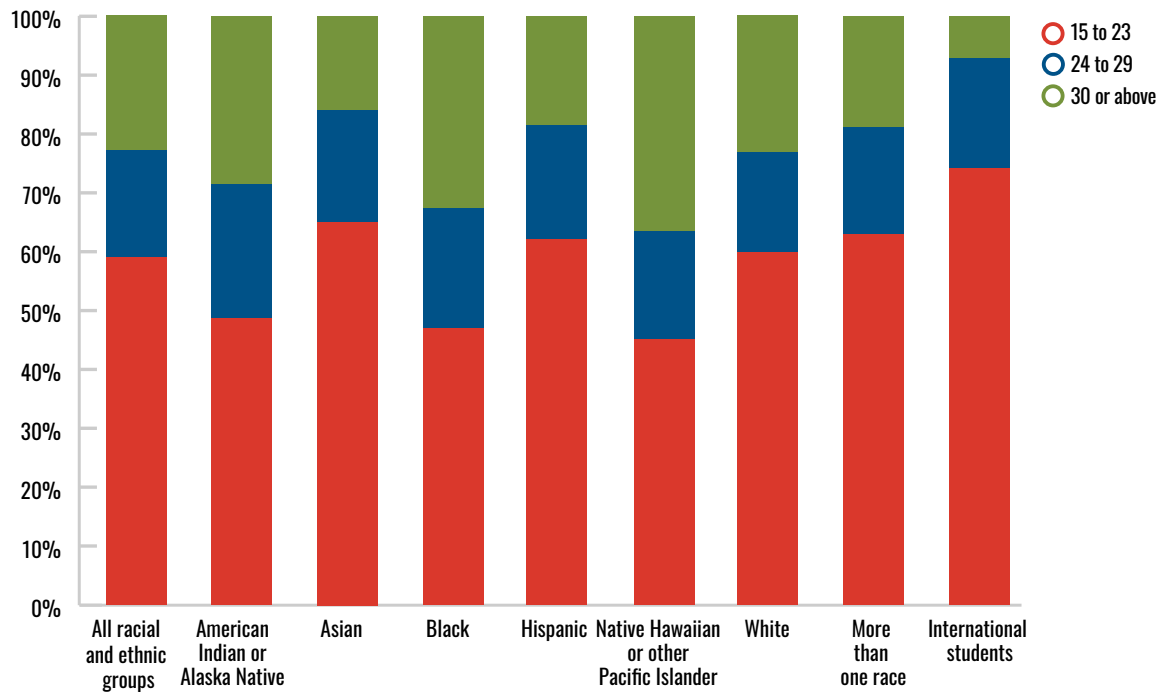
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016



- In 2015–16, the largest gender gap was observed among Black undergraduates. Women made up 62.2 percent of Black undergraduates, compared with 37.8 percent who were men.
- The smallest gender gap among domestic students was among Asian undergraduates. Women made up 52.0 percent of Asian undergraduates, compared with 48.0 percent who were men.

Nearly 60 percent of all undergraduate students enrolled in 2015–16 were between the ages of 15 and 23. A little over 40 percent of all undergraduate students were ages 24 and older, with 18.3 percent between the ages of 24 and 29, and 22.8 percent ages 30 and older.

**Figure 3.9: Undergraduate Enrollment, by Age and Race and Ethnicity: 2015–16**

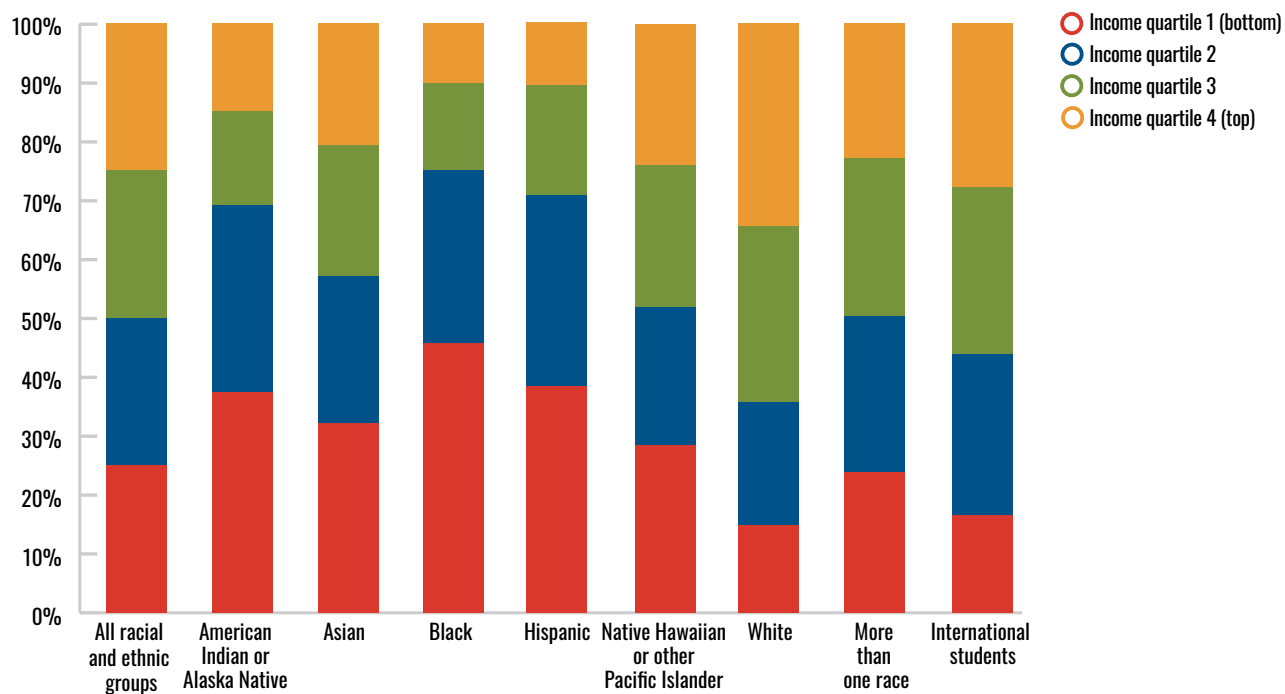


Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

- International (74.1 percent) and Asian (65.0 percent) undergraduates were the most likely to be between the ages of 15 and 23. The majority of undergraduates who identified as being of more than one race (62.9 percent), Hispanic undergraduates (62.0 percent), and White undergraduates (59.8 percent) were also between the ages of 15 and 23.
- Over 50 percent of Native Hawaiian or other Pacific Islander undergraduates (54.9 percent), Black undergraduates (53.0 percent), and American Indian or Alaska Native (51.4 percent) undergraduates were ages 24 and older.
- A larger share of Native Hawaiian or other Pacific Islander (36.6 percent) and Black (32.7 percent) undergraduate students were ages 30 or older than that of other groups.

Half of all undergraduate students enrolled in 2015–16 were classified as dependents.<sup>9</sup> More than half of dependent Blacks, Hispanics, American Indians or Alaska Natives, Asians, Native Hawaiians or other Pacific Islanders, and undergraduates of more than one race came from families in the bottom two income quartiles. Conversely, more than half of dependent White and international undergraduates came from families in the top two income quartiles.

**Figure 3.10: Undergraduate Enrollment of Dependent Students, by Income and Race and Ethnicity: 2015–16**



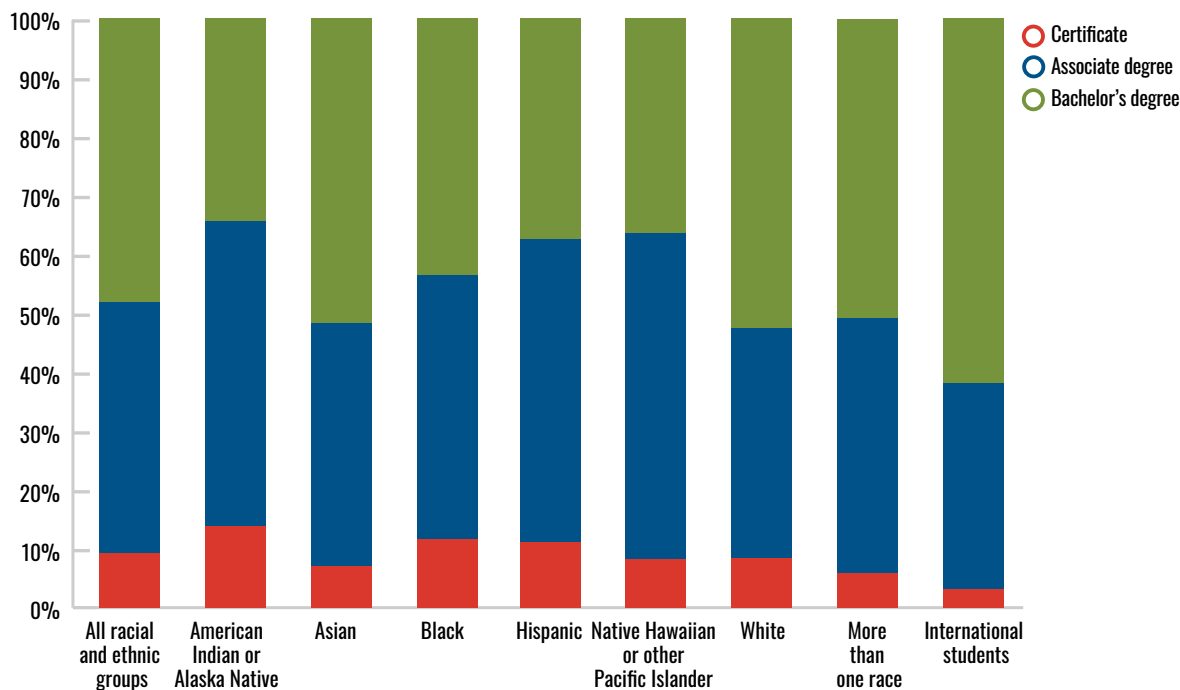
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

- Slightly more than one-third of White dependent undergraduates came from families in the top income quartile (34.4 percent), the most of any racial or ethnic group.
- Among dependent undergraduates, 75.1 percent of Blacks and 70.8 percent of Hispanics came from families in the bottom two income quartiles, the most of any racial or ethnic group.
- Approximately 46 percent of Black dependent undergraduates came from families in the bottom income quartile, the most of any racial or ethnic group.

<sup>9</sup> Students in the National Postsecondary Student Aid Study (NPSAS) are considered dependent if they are “under 24 years of age who are unmarried, do not have dependents, are not veterans or on active military duty, are not orphans or wards of the court, are not homeless or at risk of homelessness, and have not been deemed independent by a financial aid officer” (Radwin et al. 2018).

Nearly half (48.1 percent) of all undergraduate students were enrolled in bachelor’s degree programs, 42.7 percent were enrolled in associate degree programs, and the remaining 9.2 percent were enrolled in certificate programs.

**Figure 3.11: Undergraduate Enrollment, by Award Level and Race and Ethnicity: 2015–16**



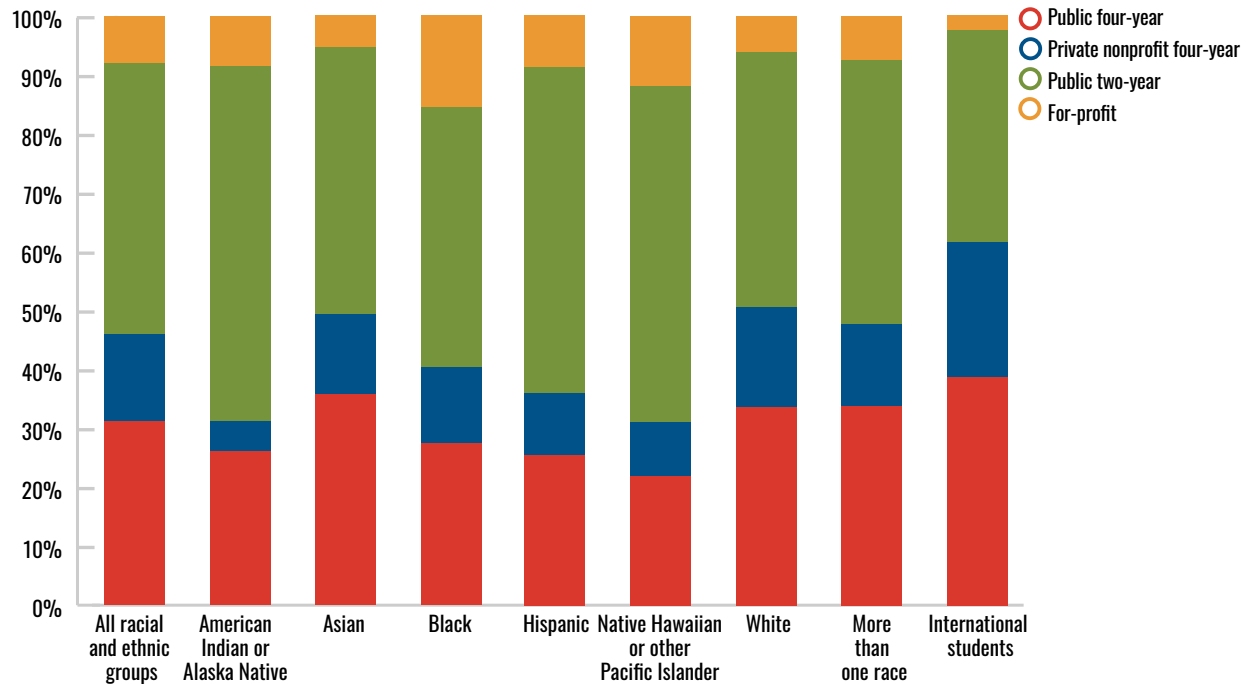
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

- More than half of international (61.9 percent), White (52.6 percent), and Asian (51.8 percent) undergraduates, and undergraduates of more than one race (50.8 percent) were enrolled in bachelor’s degree programs.
- More than half of Native Hawaiian or other Pacific Islander (55.2 percent), American Indian or Alaska Native (51.8 percent), and Hispanic (51.4 percent) undergraduates were enrolled in associate degree programs.
- The share of students enrolled in certificate programs was highest among American Indian or Alaska Native (13.8 percent), Black (11.7 percent), and Hispanic (11.1 percent) undergraduates.

## UNDERGRADUATE ENROLLMENT ACROSS INSTITUTIONAL SECTOR

The plurality of undergraduate students in 2015–16 (45.9 percent) were enrolled in a public two-year institution. White undergraduates, Asian undergraduates, and undergraduates of more than one race were more likely than students of other races and ethnicities to be enrolled in a public or private nonprofit four-year institution; international students were also more likely to be enrolled in these institutions.

**Figure 3.12: Undergraduate Enrollment Across Sectors, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Over half of all White (50.5 percent) and international (61.5 percent) undergraduates and almost half of Asian undergraduates (49.3 percent) were enrolled in public or private nonprofit four-year institutions.
- American Indian or Alaska Native (60.1 percent), Native Hawaiian or other Pacific Islander (56.9 percent), Hispanic (55.4 percent), and Black (44.0 percent) undergraduates were more likely to be enrolled at public two-year institutions than in any other sector.
- Nearly 16 percent of Black and 12.0 percent of Native Hawaiian or other Pacific Islander undergraduates were enrolled at for-profit institutions—the highest of all racial or ethnic groups. Black students made up 15.2 percent of all undergraduates enrolled in higher education compared to Native Hawaiians or other Pacific Islanders, who made up less than 1 percent.

Overall, there was little difference in enrollment by sector between men and women undergraduates. However, there were gender differences among Native Hawaiians or other Pacific Islanders, American Indians or Alaska Natives, Blacks, and undergraduates of more than one race.

**Table 3.2: Undergraduate Enrollment Across Sectors, by Gender and Race and Ethnicity: 2015–16**

		Public Four-Year	Private Nonprofit Four-Year	Public Two-Year	For-Profit
Men	Men Total	32.9%	14.4%	46.2%	6.5%
	American Indian or Alaska Native	26.5%	3.6%!	63.7%	6.1%
	Asian	36.5%	12.1%	46.8%	4.6%
	Black	26.8%	13.7%	46.9%	12.6%
	Hispanic	25.8%	9.7%	56.6%	7.9%
	Native Hawaiian or other Pacific Islander	34.7%	7.7%!	46.6%	11.1%
	White	35.7%	16.3%	42.9%	5.1%
	More than one race	37.2%	11.1%	44.9%	6.8%
	International students	40.9%	23.3%	34.3%	1.5%
Women	Women Total	30.0%	15.1%	45.7%	9.2%
	American Indian or Alaska Native	25.8%	6.6%!	56.9%	10.8%
	Asian	35.0%	15.0%	44.0%	6.0%
	Black	27.7%	12.5%	42.3%	17.6%
	Hispanic	25.2%	10.9%	54.5%	9.4%
	Native Hawaiian or other Pacific Islander	12.9%	10.3%!	64.1%	12.6%
	White	31.8%	17.4%	43.7%	7.1%
	More than one race	31.5%	15.7%	44.8%	8.0%
	International students	36.4%	22.4%	37.8%	3.3%!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Native Hawaiian or other Pacific Islander men were more than twice as likely to be enrolled at public four-year institutions as Native Hawaiian or other Pacific Islander women (34.7 percent compared with 12.9 percent).
- American Indian or Alaska Native men were nearly 7 percentage points more likely to be enrolled in public two-year institutions than American Indian or Alaska Native women (63.7 percent and 56.9 percent, respectively).
- A larger proportion of Black women (17.6 percent) than of Black men (12.6 percent) were enrolled in for-profit institutions.
- A larger share of undergraduate men than of undergraduate women who identified as more than one race were enrolled in public four-year institutions (37.2 percent and 31.5 percent, respectively).

Among all groups, a larger share of undergraduates ages 15 to 23 were enrolled in public and private nonprofit four-year institutions (56.0 percent) than students of other ages. More than half of all students 24 to 29 years old (52.3 percent) and students ages 30 and older (55.9 percent) were enrolled in public two-year institutions. A larger share of older students (ages 30 years or older) than of younger students were enrolled in for-profit institutions (15.6 percent).

**Table 3.3: Undergraduate Enrollment Across Sectors, by Age and Race and Ethnicity: 2015–16**

		Public Four-Year	Private Nonprofit Four-Year	Public Two-Year	For-Profit
15 to 23	15 to 23 Total	38.8%	17.2%	40.2%	3.7%
	American Indian or Alaska Native	32.8%	6.0%!	57.8%	3.4%
	Asian	42.9%	16.9%	38.1%	2.1%
	Black	38.8%	14.8%	39.5%	6.8%
	Hispanic	29.9%	10.9%	53.6%	5.6%
	Native Hawaiian or other Pacific Islander	24.9%	8.2%	62.2%	4.7%!
	White	41.8%	20.0%	35.6%	2.6%
	More than one race	40.4%	14.8%	41.2%	3.5%
	International students	40.0%	26.1%	32.1%	1.9%
24 to 29	24 to 29 Total	25.3%	9.5%	52.3%	12.9%
	American Indian or Alaska Native	22.7%	2.3%!	62.9%	12.0%
	Asian	29.5%	8.2%	53.7%	8.5%
	Black	22.6%	8.9%	45.5%	23.1%
	Hispanic	21.9%	8.0%	58.0%	12.1%
	Native Hawaiian or other Pacific Islander	25.3%!	‡	51.0%	22.9%!
	White	26.3%	10.2%	52.6%	10.8%
	More than one race	22.7%	12.7%	49.7%	14.8%
	International students	41.5%	14.5%	41.3%	2.7%!
30 or Above	30 or Above Total	15.8%	12.7%	55.9%	15.6%
	American Indian or Alaska Native	17.0%	6.2%!	61.7%	15.0%
	Asian	13.1%	6.4%!	65.8%	14.8%
	Black	13.5%	12.7%	49.7%	24.2%
	Hispanic	14.0%	11.1%	58.9%	16.0%
	Native Hawaiian or other Pacific Islander	16.6%!	14.5%!	53.0%	16.0%
	White	17.1%	13.8%	56.8%	12.2%
	More than one race	21.8%	11.4%	52.7%	14.1%
	International students	17.8%!	11.0%!	63.5%	7.6%!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

Dependent undergraduates from families in the top income quartiles were more likely to be enrolled in public or private nonprofit four-year institutions (76.0 percent) than public two-year (23.0 percent) and for-profit (1.0 percent) institutions. In contrast, nearly half of all dependent undergraduates from families in the bottom quartile were enrolled in public two-year institutions (48.3 percent). Undergraduates in the two lowest income quartiles were more likely than students in the top two income quartiles to be enrolled in for-profit institutions.

**Table 3.4: Undergraduate Enrollment of Dependent Students Across Sectors, by Income and Race and Ethnicity: 2015–16**

		Public Four-Year	Private Nonprofit Four-Year	Public Two-Year	For-Profit
Income Quartile 1 (Bottom)	Income Quartile 1 Total	33.8%	12.4%	48.3%	5.4%
	American Indian or Alaska Native	17.4%!	9.4%!!	68.7%	4.5%!
	Asian	44.9%	11.3%	41.3%	2.4%
	Black	36.5%	13.6%	43.4%	6.4%
	Hispanic	28.6%	10.0%	54.4%	7.0%
	Native Hawaiian or other Pacific Islander	17.2%!	‡	73.2%	4.8%!
	White	33.7%	13.4%	48.2%	4.6%
	More than one race	37.8%	13.8%	44.7%	3.7%
	International students	44.0%	25.4%	29.9%	0.6%!!
Income Quartile 2	Income Quartile 2 Total	39.6%	14.7%	42.5%	3.3%
	American Indian or Alaska Native	30.9%	‡	66.9%	2.2%!!
	Asian	44.3%	12.3%	41.1%	2.3%
	Black	44.7%	15.9%	35.8%	3.7%
	Hispanic	31.9%	11.0%	52.6%	4.5%
	Native Hawaiian or other Pacific Islander	24.0%!	‡	66.0%	5.7%!
	White	41.4%	17.0%	39.0%	2.6%
	More than one race	43.5%	10.2%	43.6%	2.7%!
	International students	44.2%	21.7%	31.0%	3.1%!
Income Quartile 3	Income Quartile 3 Total	43.0%	17.2%	38.1%	1.7%
	American Indian or Alaska Native	48.1%	10.6%!!	39.0%	2.4%!!
	Asian	47.1%	17.2%	34.7%	1.0%!
	Black	45.6%	16.6%	34.9%	3.0%
	Hispanic	34.5%	8.7%	54.0%	2.8%
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	44.1%	19.2%	35.3%	1.4%
	More than one race	47.8%	14.3%	36.7%	1.2%
	International students	40.4%	24.7%	33.4%	1.5%!
Income Quartile 4 (Top)	Income Quartile 4 Total	49.0%	27.0%	23.0%	1.0%
	American Indian or Alaska Native	46.0%	9.1%!!	44.2%!	‡
	Asian	42.9%	32.9%	23.6%	0.6%!
	Black	49.8%	20.3%	28.6%	1.4%
	Hispanic	44.8%	23.1%	30.1%	2.1%
	Native Hawaiian or other Pacific Islander	26.5%!	15.5%!!	56.6%	‡
	White	50.4%	27.1%	21.6%	0.9%
	More than one race	47.9%	26.8%	23.3%	1.9%
	International students	42.9%	37.2%	19.4%	0.5%!!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

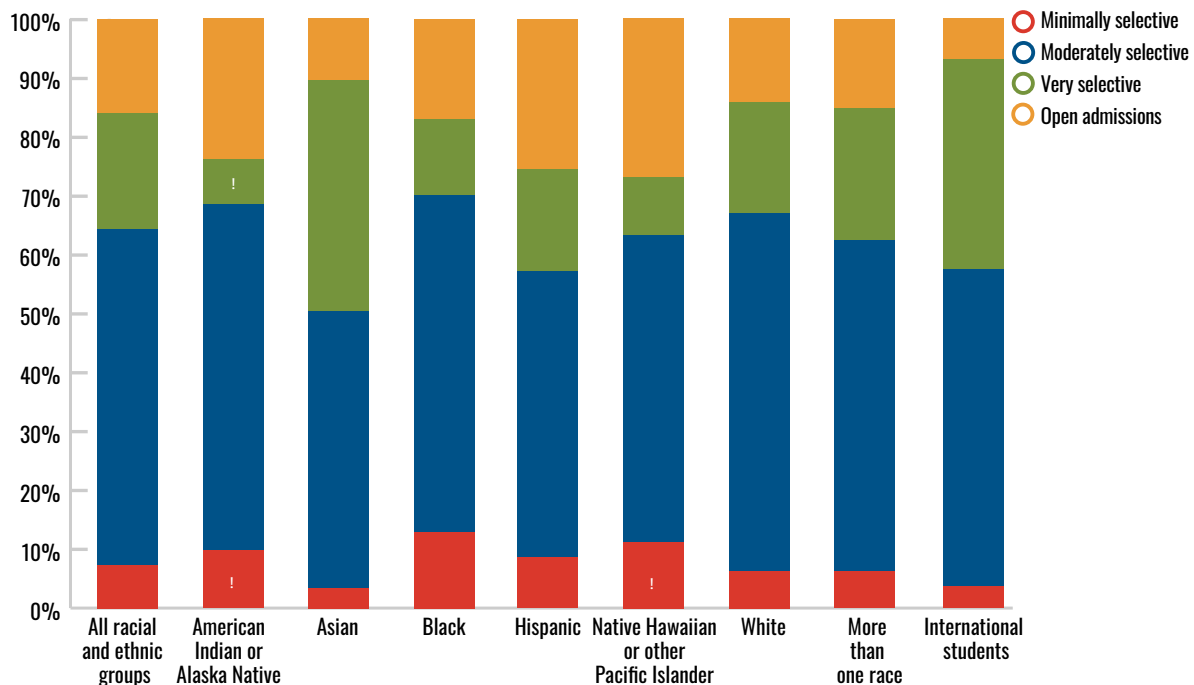


- Among dependent undergraduates in the top income quartile, approximately half of Whites (50.4 percent), Blacks (49.8 percent), and undergraduates of more than one race (47.9 percent) were enrolled in public four-year institutions.
- Among dependent undergraduates in the bottom income quartile, more than half of international undergraduates (69.5 percent), Asian undergraduates (56.3 percent), Black undergraduates (50.1 percent), and undergraduates of more than one race (51.6 percent) were enrolled in a public or private nonprofit four-year college or university.
- Across each income quartile, Black and Hispanic dependent undergraduates were more likely to be enrolled in a for-profit institution than undergraduates of other races and ethnicities.

## UNDERGRADUATE ENROLLMENT BY INSTITUTIONAL SELECTIVITY

In 2015–16, over half of all undergraduate students who attended public and private nonprofit colleges and universities were enrolled at moderately selective institutions (56.9 percent).<sup>10</sup> At very selective institutions, large differences emerged by race and ethnicity, with 39.3 percent of Asian undergraduates, 35.7 percent of international undergraduates, and 22.5 percent of undergraduates of more than one race enrolled in these institutions. Only 17.2 percent of Hispanic, 12.9 percent of Black, and 9.7 percent of Native Hawaiian or other Pacific Islander students enrolled in these sectors attended very selective institutions. About one-quarter of all Native Hawaiian or other Pacific Islander (27.0 percent), Hispanic (25.5 percent), and American Indian or Alaska Native (23.8 percent) undergraduates were enrolled in open admissions public and private nonprofit four-year institutions.

**Figure 3.13: Undergraduate Enrollment Across Selectivity Bands, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Data reflect only public and private nonprofit four-year institutions. Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

The majority of dependent college students from all income quartiles attending public and private nonprofit four-year institutions were enrolled in moderately selective institutions. For all racial and ethnic groups, as well as among international students, a higher proportion of students from the top income quartile than from other income groups attended a very selective institution. Nearly one-third of students from families in the top income quartile were enrolled in very selective institutions (31.6 percent), compared with only 19.1 percent of students from the lowest-income families.

10 The measure of institutional selectivity used in this chapter was created by NCES to classify public and private nonprofit four-year institutions only. The measure uses three criteria derived from the Integrated Postsecondary Education Data System (IPEDS): (1) whether an institution was open admission, (2) the undergraduate admission rate, and (3) the 25th and 75th percentiles of ACT and/or SAT scores. For non-open admission institutions, an index was created from the admission rate and ACT/SAT data (weighted equally). Institutions were classified as very selective if they were among the top quartile of the index, moderately selective if they were in the middle two quartiles, and minimally selective if they were in the bottom quartile.

**Table 3.5: Undergraduate Enrollment of Dependent Students Across Selectivity Bands, by Income and Race and Ethnicity: 2015–16**

		<b>Minimally Selective</b>	<b>Moderately Selective</b>	<b>Very Selective</b>	<b>Open Admissions</b>
<b>Income Quartile 1 (Bottom)</b>	<b>Income Quartile 1 Total</b>	8.4%	56.1%	19.1%	16.4%
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	2.1%	49.9%	41.9%	6.1%!
	Black	12.4%	65.3%	10.0%	12.4%
	Hispanic	9.0%	46.1%	18.0%	26.9%
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	7.1%	60.4%	18.3%	14.2%
	More than one race	9.8%!	57.5%	20.5%	12.2%!
	International students	6.8%!	53.3%	33.5%	6.4%!
<b>Income Quartile 2</b>	<b>Income Quartile 2 Total</b>	5.9%	62.8%	19.6%	11.7%
	American Indian or Alaska Native	16.4%!	61.0%	‡	18.6%!
	Asian	1.5%!	47.6%	43.6%	7.3%
	Black	9.5%	65.4%	15.4%	9.7%
	Hispanic	6.6%	56.3%	19.2%	18.0%
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	5.1%	68.1%	16.6%	10.2%
	More than one race	5.9%!	59.4%	19.9%	14.9%!
	International students	1.5%!	54.6%	37.5%	6.4%!
<b>Income Quartile 3</b>	<b>Income Quartile 3 Total</b>	5.0%	63.7%	21.6%	9.7%
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	2.5%!	53.7%	39.0%	4.8%!
	Black	9.0%	65.5%	15.8%	9.8%
	Hispanic	6.1%	54.3%	20.5%	19.1%
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	4.7%	67.4%	19.3%	8.6%
	More than one race	4.7%!	64.0%	26.7%	4.6%!
	International students	1.6%!	41.8%	44.9%	11.7%!
<b>Income Quartile 4 (Top)</b>	<b>Income Quartile 4 Total</b>	3.3%	60.3%	31.6%	4.7%
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	2.2%!	34.6%	58.6%	4.6%!
	Black	5.0%!	66.4%	23.5%	5.1%!
	Hispanic	3.9%	52.4%	34.5%	9.1%
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	3.3%	63.7%	28.7%	4.3%
	More than one race	1.5%!	49.4%	45.1%	4.0%!
	International students	3.0%!	50.5%	45.1%	1.4%!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

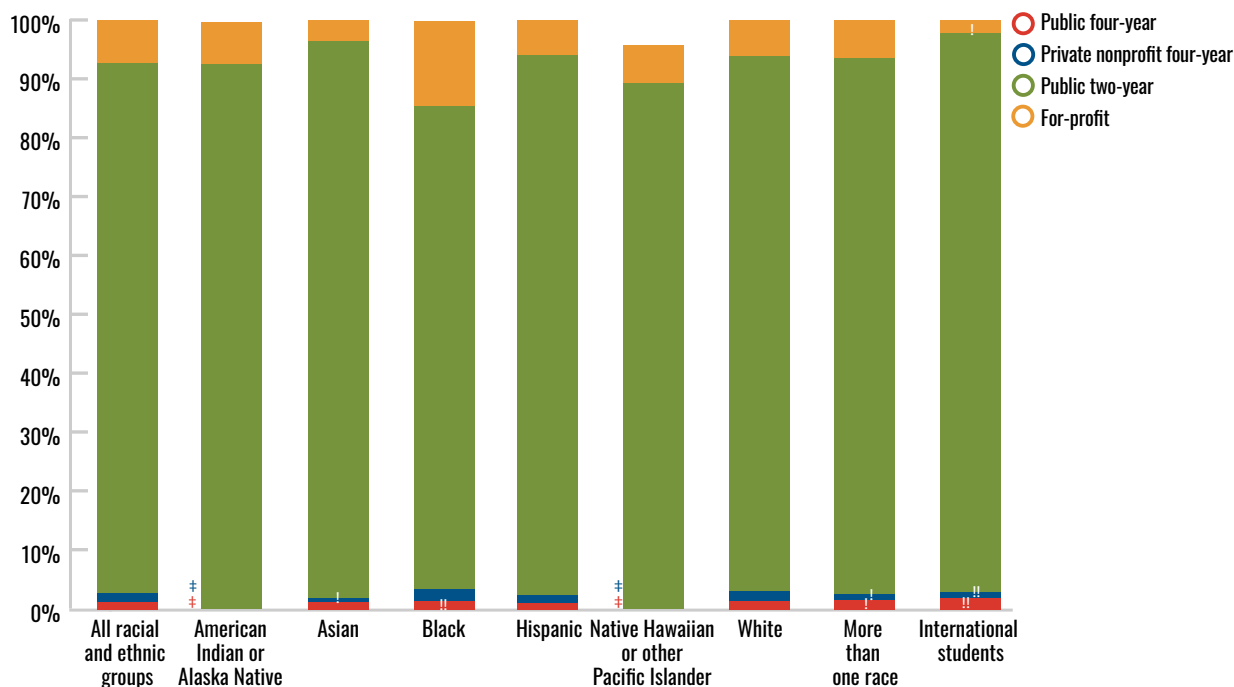
Notes: Data reflect only public and private nonprofit four-year institutions. Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Nearly 59 percent of Asian dependent undergraduates from families in the top income quartile attending public and private nonprofit four-year institutions were enrolled in very selective institutions—the highest of any race or ethnicity and twice the share of either Black (23.5 percent) or White (28.7 percent) undergraduates in the top income quartile.
- Across all income quartiles, a larger share of Asian students than of domestic students from other groups were enrolled in very selective institutions. Among students in the bottom two income quartiles, Asians were at least 20 percentage points more likely than others to be enrolled in very selective institutions.
- Within each income quartile, a larger share of Hispanic students than of those from other groups attending public and private nonprofit four-year institutions were enrolled in open admissions institutions. In the lowest income quartile, 26.9 percent of Hispanic students were at open admissions institutions, compared with 16.4 percent of students overall.

## UNDERGRADUATE FIELD OF STUDY FOR ASSOCIATE DEGREE-SEEKING STUDENTS, BY SECTOR

The majority of students enrolled in associate degree programs attended a public two-year institution (89.9 percent), followed by for-profit (7.2 percent), private nonprofit four-year (1.6 percent), and public four-year (1.3 percent) institutions.

**Figure 3.14: Enrollment of Associate Degree-Seeking Students Across Sectors, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | † Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

At public two-year institutions, 20.7 percent of undergraduate students seeking associate degrees were enrolled in general studies, and 19.2 percent were in health care programs. Fields of study differed across demographic groups. Asian and international students were the most likely to enroll in STEM programs (23.2 percent and 24.8 percent, respectively). Compared with other groups, Hispanic undergraduates were the most likely to be enrolled in manufacturing, military technology, and other applied fields (20.6 percent), while White undergraduates chose general studies programs (23.5 percent) more than other groups. There were large gender differences in fields of study among students pursuing associate degrees at public two-year colleges. Almost one-quarter of men (23.9 percent) were in STEM fields, compared with just 8.5 percent of women. The other large gap was in health care fields, where 27.6 percent of women and 8.4 percent of men concentrated.

**Table 3.6: Enrollment of Associate Degree-Seeking Students at Public Two-Year Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16**

		STEM Fields	Business and Personal and Consumer Services	Health Care Fields	Social Sciences and Humanities	General Studies and Other Fields	Manufacturing, Military Technology, and Other Applied Fields	Undecided
All Students	All racial and ethnic groups	15.2%	15.6%	19.2%	8.2%	20.7%	17.0%	4.0%
	American Indian or Alaska Native	19.9%	13.7%	18.1%	7.0%	18.5%	19.9%	2.8%!
	Asian	23.2%	20.7%	15.8%	6.6%	17.4%	13.2%	3.1%
	Black	12.0%	17.1%	20.9%	7.8%	21.8%	17.0%	3.4%
	Hispanic	14.0%	16.0%	17.8%	11.1%	16.3%	20.6%	4.3%
	Native Hawaiian or other Pacific Islander	16.9%!	10.9%!	25.6%	10.5%!	14.0%!	13.3%!	8.9%!
	White	15.3%	13.8%	20.4%	6.9%	23.5%	16.1%	4.1%
	More than one race	15.5%	16.1%	17.9%	10.5%	18.0%	19.0%	3.0%
	International students	24.8%	26.8%	9.2%	9.0%	17.3%	7.0%	5.9%!
Men	Men Total	23.9%	17.2%	8.4%	7.3%	20.7%	18.3%	4.0%
	American Indian or Alaska Native	33.3%	10.8%!	‡	‡	22.4%	26.8%	‡
	Asian	32.7%	20.5%	11.5%	4.8%	15.8%	12.0%	2.7%!
	Black	19.7%	20.4%	8.8%	8.8%	21.4%	17.7%	3.1%
	Hispanic	20.9%	17.7%	9.5%	9.8%	16.8%	21.2%	4.1%
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡
	White	24.4%	15.1%	7.8%	5.9%	23.9%	18.6%	4.3%
	More than one race	27.3%	18.4%	8.9%!	8.6%!	16.5%	16.6%	3.8%!
	International students	35.7%	30.1%	‡	8.4%!	13.5%	5.1%!	6.1%!
Women	Women Total	8.5%	14.3%	27.6%	8.9%	20.7%	16.1%	4.0%
	American Indian or Alaska Native	8.5%!	16.2%!	32.3%	10.9%!	15.2%	14.1%	‡
	Asian	13.9%	20.9%	20.1%	8.3%	18.9%	14.4%	3.4%!
	Black	6.7%	14.9%	29.0%	7.2%	22.0%	16.5%	3.6%
	Hispanic	8.7%	14.7%	24.1%	12.0%	15.9%	20.1%	4.4%
	Native Hawaiian or other Pacific Islander	15.8%!	12.2%!	32.1%!	7.2%!	15.6%!	14.3%!	‡
	White	8.0%	12.7%	30.4%	7.7%	23.2%	14.0%	3.9%
	More than one race	7.5%	14.6%	23.9%	11.7%	19.0%	20.7%	2.5%!
	International students	15.4%	24.0%	16.2%	9.5%!	20.5%	8.5%!	5.8%!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM programs include biological and physical science, science technology, math, agriculture, computer and information sciences, and engineering and engineering technology. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- About one-third of American Indian or Alaska Native men (33.3 percent), Asian men (32.7 percent), and international men (35.7 percent) pursuing associate degrees at public two-year colleges were in programs in STEM fields. In contrast, 19.7 percent of Black men and 20.9 percent of Hispanic men chose these fields.
- The highest representation in general studies programs was among White men (23.9 percent), American Indian or Alaska Native men (22.4 percent), and Black men (21.4 percent).
- Manufacturing, military technology, and other applied fields accounted for the enrollment of more than 20 percent of Hispanic and American Indian or Alaska Native men, but smaller shares of other groups.
- Among women pursuing associate degrees at public two-year colleges, 30 percent or more of American Indian or Alaska Native (32.3 percent) and White (30.4 percent) students were enrolled in a health care program.
- More international women than women from other groups were enrolled in STEM (15.4 percent versus 8.5 percent of all women) and business-related programs (24.0 percent versus 14.3 percent of all women).

The distribution of fields of study was quite different among students pursuing associate degrees at for-profit institutions than among those enrolled at public two-year colleges. In particular, in 2015–16 40.7 percent were in health care fields (compared with 19.2 percent at public two-year colleges). In the for-profit sector, 38.9 percent of men in associate degree programs were in STEM fields, compared with just 5.0 percent of women; 54.2 percent of women were in health care fields, compared with 14.9 percent of men.

**Table 3.7: Enrollment of Associate Degree-Seeking Students at For-Profit Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16**

		STEM Fields	Business and Personal and Consumer Services	Health Care Fields	Social Sciences and Humanities	General Studies and Other Fields	Manufacturing, Military Technology, and Other Applied Fields	Undecided
All Students	All racial and ethnic groups	16.6%	20.5%	40.7%	4.0%	0.3%!!	17.2%	0.7%!
	American Indian or Alaska Native	14.7%!	42.5%!	20.1%!	9.8%!!	‡	12.8%!	‡
	Asian	25.2%	17.0%	46.9%	‡	‡	8.9%!	‡
	Black	14.3%	26.2%	39.5%	3.2%	‡	15.6%	1.1%!!
	Hispanic	17.4%	15.6%	42.9%	4.0%!	‡	18.9%	‡
	Native Hawaiian or other Pacific Islander	12.1%!!	32.8%!	39.1%	‡	‡	13.2%!	‡
	White	17.8%	17.9%	41.6%	3.9%	0.5%!!	17.7%	0.4%!!
	More than one race	17.7%	18.4%	32.2%	5.9%!	‡	25.7%	‡
	International students	6.0%!!	21.5%!	22.2%!!	29.8%!!	‡	20.5%!!	‡
Men	Men Total	38.9%	20.3%	14.9%	4.5%!	0.7%!!	20.1%	0.5%!!
	American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡
	Asian	47.4%	12.3%!	28.3%!	‡	‡	10.6%!	‡
	Black	38.2%	30.2%	12.0%	4.5%!	‡	15.1%	‡
	Hispanic	34.5%	14.9%	20.2%	3.5%!	‡	25.4%	‡
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡
	White	41.4%	17.5%	13.7%	4.1%!	1.4%!!	20.9%	‡
	More than one race	38.5%	22.0%	7.4%!	7.3%!!	‡	24.8%	‡
	International students	‡	‡	‡	‡	‡	‡	‡

		STEM Fields	Business and Personal and Consumer Services	Health Care Fields	Social Sciences and Humanities	General Studies and Other Fields	Manufacturing, Military Technology, and Other Applied Fields	Undecided
Women	Women Total	5.0%	20.5%	54.2%	3.7%	‡	15.7%	0.8%!
	American Indian or Alaska Native	‡	55.4%!	28.5%!	11.5%!!	‡	‡	‡
	Asian	‡	22.0%	66.7%	‡	‡	7.1%!!	‡
	Black	4.3%	24.5%	51.0%	2.7%	‡	15.8%	1.6%!!
	Hispanic	6.4%!	16.0%	57.6%	4.3%!	‡	14.7%	‡
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡
	White	5.1%	18.2%	56.6%	3.8%	‡	16.0%	‡
	More than one race	5.5%!!	16.4%!	46.8%	5.1%!	‡	26.2%!	‡
International students	‡	‡	‡	‡	‡	‡	‡	

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM programs include biological and physical science, science technology, math, agriculture, computer and information sciences, and engineering and engineering technology. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- Over one-third of Native Hawaiians or other Pacific Islanders (39.1 percent), Blacks (39.5 percent), Whites (41.6 percent), Hispanics (42.9 percent), and Asians (46.9 percent) seeking an associate degree at a for-profit institution were enrolled in health care fields.
- Men were more than 33 percentage points more likely to be enrolled in STEM programs than women, while women were more than 40 percentage points more likely than men to be enrolled in health care programs.
- A similar share of Hispanic men enrolled in manufacturing, military technology, and other applied fields at for-profit institutions (25.4 percent) as at public two-year institutions (21.2 percent).



## UNDERGRADUATE FIELD OF STUDY FOR BACHELOR'S DEGREE-SEEKING STUDENTS, BY SECTOR

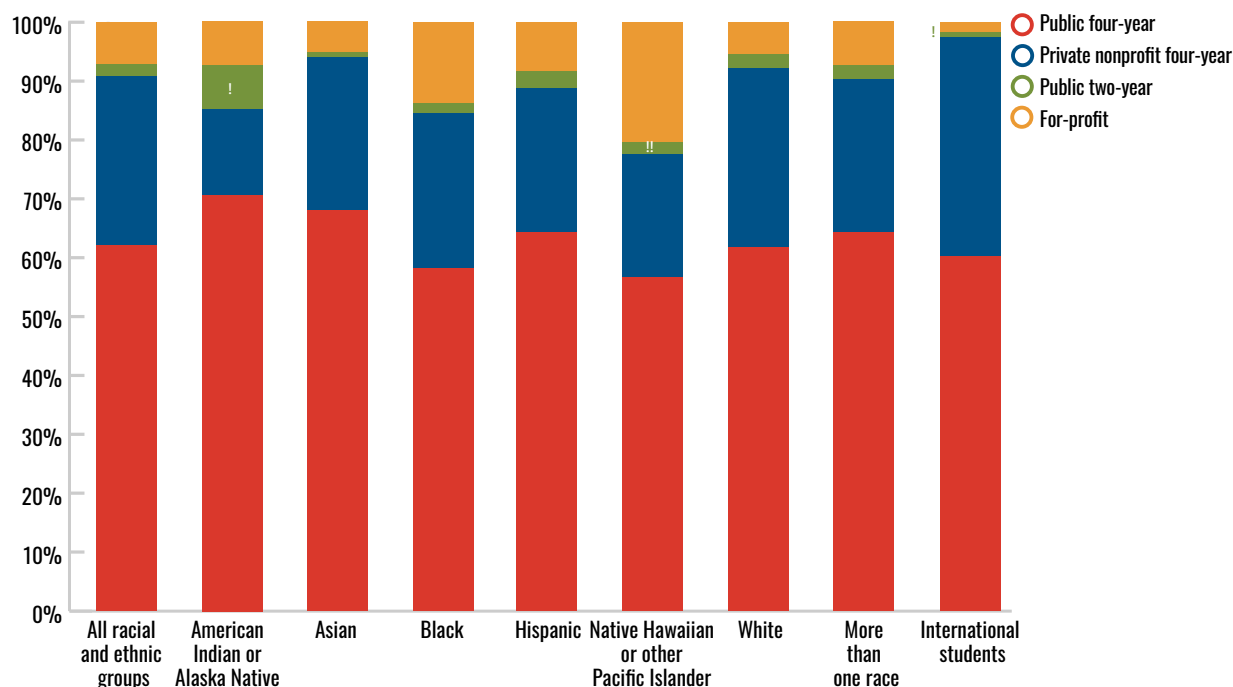
**SNAPSHOT OF UNDERGRADUATES MAJORING IN HUMANITIES DISCIPLINES:** As a domain, the humanities (e.g., history, literature, and cultural studies) are central to undergraduate education, the cornerstone of a liberal arts education, and foundational for students no matter their major or career path. According to the American Academy of Arts and Sciences (2014), more than one-fifth of the total credits earned by undergraduates are in the humanities. While the proportion of students who concentrate or major in the humanities is small, the importance of these fields cannot be overstated given their role in American higher education.

In 2015–16, in the public four-year sector, 7.0 percent of bachelor's degree-seeking students concentrated in the humanities; in the private nonprofit four-year sector, the number was 9.2 percent. Of students seeking credentials at for-profit institutions, 6.4 percent did so in the humanities. Within distinct racial and ethnic groups, those who seek humanities bachelor's degrees at public four-year institutions ranged from 4.3 percent of Asian students to 8.6 percent of Hispanic students. At private nonprofit four-year institutions, the range spread from 6.6 percent of Black students to 14.2 percent of students of more than one race. International students enrolled at private nonprofit four-year institutions were much more likely to major in the humanities than were international students enrolled at public four-year institutions—11.9 percent compared with 3.2 percent.

Women and men enrolled in humanities bachelor's degrees at roughly the same rates at public and private nonprofit four-year institutions. However, at for-profit institutions, 10.0 percent of men enrolled in humanities, roughly 6 percentage points more than women.

The majority of students enrolled in bachelor's degree programs attended a public four-year institution (62.1 percent), followed by private nonprofit four-year (28.6 percent), for-profit (7.1 percent), and public two-year (2.2 percent) institutions.

**Figure 3.15: Enrollment of Bachelor's Degree-Seeking Students Across Sectors, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

Undergraduate students seeking bachelor's degrees at public four-year institutions were more likely than those in other sectors to be enrolled in STEM fields (25.6 percent), and less likely than those in other sectors to be in business (18.0 percent) or health care (10.5 percent) programs. Differences by gender and race and ethnicity were present, including a large gender gap for STEM fields, with 35.5 percent of men and 17.0 percent of women enrolled in these programs.

**Table 3.8: Enrollment of Bachelor's Degree-Seeking Students at Public Four-Year Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16**

		STEM Fields	Business	Education	Health Care Fields	Humanities	Social Sciences	General Studies and Other Fields	Other Applied Fields	Undecided
All Students	All racial and ethnic groups	25.6%	18.0%	5.5%	10.5%	12.4%	7.0%	4.8%	15.0%	1.2%
	American Indian or Alaska Native	12.4%!	13.5%!	15.3%!	6.8%!	17.0%	5.5%!!	1.7%!	27.8%	‡
	Asian	40.7%	18.3%	2.2%	10.7%	8.9%	4.3%	4.3%	8.8%	1.8%!
	Black	17.7%	17.4%	5.2%	13.3%	15.5%	4.4%	4.7%	20.9%	1.0%
	Hispanic	22.4%	16.4%	4.5%	9.0%	15.0%	8.6%	5.0%	17.6%	1.5%
	Native Hawaiian or other Pacific Islander	21.7%!	11.5%!	‡	16.2%!	17.2%!	8.9%!	‡	21.1%!	‡
	White	25.8%	18.3%	6.4%	10.9%	11.0%	7.7%	5.0%	13.8%	1.1%
	More than one race	29.1%	14.7%	5.4%	7.7%	13.8%	8.0%	4.0%	16.1%	1.1%
	International students	35.6%	28.4%	2.0%!	4.5%	14.2%	3.2%	4.2%	7.4%	‡
Men	Men Total	35.5%	21.4%	2.8%	4.4%	8.9%	6.7%	4.8%	14.5%	1.1%
	American Indian or Alaska Native	17.4%!	12.1%!	10.9%!!	6.8!!	‡	5.7!!	1.5!!	38.7!	‡
	Asian	52.1%	18.9%	1.0%	4.3%	6.2%	3.0%	5.3%	7.9%	1.3%!!
	Black	25.6%	21.2%	3.3%	7.4%	11.4%	5.0%	5.4%	19.9%	0.7%!
	Hispanic	31.1%	19.9%	2.6%	4.4%	9.8%	8.7%	4.4%	17.7%	1.4%
	Native Hawaiian or other Pacific Islander	28.7%!	13.0%!	‡	‡	14.8%!!	10.8%!!	‡	23.1%!	‡
	White	35.8%	22.1%	3.0%	3.8%	8.4%	7.2%	5.0%	13.6%	1.1%
	More than one race	36.2%	19.9%	2.1!	4.3%!	10.0%	7.7%	3.4%!	15.1%	1.3%!
	International students	46.5%	24.9%	2.2!!	3.6%!	9.7%	2.4%!	2.8%!	7.9%	‡
Women	Women Total	17.0%	15.2%	7.8%	15.8%	15.4%	7.3%	4.8%	15.4%	1.3%
	American Indian or Alaska Native	8.0%!	14.6%!	19.3%!	6.8%!!	26.0%!	5.3%!!	‡	18.1%!	‡
	Asian	29.7%	17.8%	3.4%	16.9%	11.5%	5.5%	3.4%	9.7%	2.2%!
	Black	12.9%	15.1%	6.3%	16.8%	18.0%	4.0%	4.3%	21.4%	1.2%
	Hispanic	15.8%	13.9%	5.9%	12.5%	18.9%	8.6%	5.4%	17.5%	1.6%!
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡	‡
	White	16.5%	14.7%	9.6%	17.5%	13.5%	8.2%	5.0%	14.0%	1.1%
	More than one race	23.5%	10.5%	8.1%	10.4%	16.9%	8.3%	4.6%!	17.0%	‡
	International students	23.3%	32.4%	1.8%!!	5.6%!	19.4%	4.2%	5.7%!	6.8%	‡

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM programs include biological and physical science, science technology, math, agriculture, computer and information sciences, and engineering and engineering technology. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for bachelor's degrees include the following fields of study: personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- A greater proportion of Asian bachelor's degree-seeking students than of those from any other group enrolled in STEM programs (40.7 percent).
- Among all bachelor's degree-seeking students, Black students were the most likely to be enrolled in other applied fields<sup>11</sup> (20.9 percent).
- Asian women (29.7 percent), women of more than one race (23.5 percent), and international women (23.3 percent) were more likely than others to be enrolled in STEM fields. Black women (21.4 percent) were more likely than those from other groups to be enrolled in other applied fields.

At private nonprofit four-year institutions, undergraduate students seeking a bachelor's degree were less likely than those at public four-year institutions to be pursuing degrees in STEM fields (19.0 percent versus 25.6 percent); they were more likely to be pursuing degrees in business (20.5 percent versus 18.0 percent) and health care fields (13.1 percent versus 10.5 percent). The largest gender gaps at private nonprofit four-year institutions were in health care fields, which enrolled 19.1 percent of women and 5.0 percent of men, and STEM fields, which enrolled 13.8 percent of women and 25.8 percent of men.

**Table 3.9: Enrollment of Bachelor's Degree-Seeking Students at Private Nonprofit Four-Year Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16**

		STEM Fields	Business	Education	Health Care Fields	Humanities	Social Sciences	General Studies and Other Fields	Other Applied Fields	Undecided
All Students	All racial and ethnic groups	19.0%	20.5%	5.2%	13.1%	9.2%	12.2%	4.4%	14.9%	1.5%
	American Indian or Alaska Native	12.6%!!	31.2%!	1.2%!!	7.4%!!	21.9%!!	16.8%!!	‡	6.4%!!	‡
	Asian	34.9%	12.9%	3.0%	12.3%	7.5%	13.4%	3.5%	10.0%	2.5%!
	Black	12.0%	23.7%	4.0%	11.6%	6.6%	15.1%	5.3%	20.3%	1.3%!
	Hispanic	20.0%	21.2%	4.3%	13.2%	7.1%	12.5%	3.5%	17.4%	0.9%!
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡	‡
	White	18.6%	20.2%	6.4%	14.1%	9.8%	11.1%	4.3%	14.1%	1.4%
	More than one race	17.2%	20.5%	2.2%!	10.0%	14.2%	15.1%	4.8%!	13.2%	2.9%
	International students	23.1%	21.9%	0.8%!!	5.8%!	11.9%	13.6%	7.9%	11.6%	3.3%!
Men	Men Total	25.8%	25.5%	3.1%	5.0%	8.7%	9.2%	4.6%	16.3%	1.8%
	American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Asian	41.7%	17.7%	1.6%!!	4.7%!	7.6%!	10.3%	4.6%!	8.7%	3.0%!!
	Black	15.0%	27.6%	2.9%!	5.3%	9.4%	9.3%	4.3%!	23.9%	2.3%!
	Hispanic	28.6%	26.5%	2.6%!	5.5%	4.2%	8.9%	4.5%!	18.1%	1.2%!
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡	‡
	White	25.1%	25.8%	3.6%	4.9%	9.4%	9.2%	4.6%	15.9%	1.6%
	More than one race	30.2%	25.8%	0.9%!!	7.6%!	13.6%!	7.0%!	7.1%!!	7.3%!	‡
International students	33.4%	24.5%	‡	4.2%!!	9.7%!	9.4%!	4.9%!!	10.3%	2.7%!!	

<sup>11</sup> Other applied fields for bachelor's degrees include the following fields of study: personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

		STEM Fields	Business	Education	Health Care Fields	Humanities	Social Sciences	General Studies and Other Fields	Other Applied Fields	Undecided
Women	Women Total	13.8%	16.7%	6.9%	19.1%	9.5%	14.4%	4.3%	13.9%	1.3%
	American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Asian	29.7%	9.3%	4.0%	18.1%	7.4%	15.7%	2.7%!	10.9%	2.2%!!
	Black	9.9%	20.9%	4.8%	16.1%	4.6%	19.2%	5.9%	17.8%	0.7%!!
	Hispanic	14.2%	17.5%	5.4%	18.4%	9.1%	15.0%	2.9%!	16.9%	‡
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡	‡
	White	13.5%	16.0%	8.6%	21.3%	10.2%	12.6%	4.0%	12.7%	1.1%
	More than one race	10.9%	18.0%	2.8%!	11.2%	14.4%	19.0%	3.6%!	16.0%	4.1%!!
	International students	12.1%	19.1%	0.7%!!	7.5%!	14.3%	18.1%	11.1%!	13.1%	3.9%!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM programs include biological and physical science, science technology, math, agriculture, computer and information sciences, and engineering and engineering technology. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for bachelor's degrees include the following fields of study: personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Black undergraduates were more likely than any other group to be enrolled in either business programs (23.7 percent) or other applied fields (20.3 percent).
- Asian students (34.9 percent) were more likely than any other group to be enrolled in STEM programs, followed by international students (23.1 percent).
- A greater proportion of Asian men (41.7 percent) than of those from any other group were enrolled in STEM programs. Black men were more likely than others to be enrolled in programs in other applied fields (23.9 percent compared with 16.3 percent of all men).
- The share of women enrolled in STEM fields ranged from 9.9 percent of Black women to 29.7 percent of Asian women. The share enrolled in business programs ranged from 9.3 percent of Asian women to 20.9 percent of Black women. A larger share of White women (8.6 percent) than of women from any other group were pursuing degrees in education.

A larger share of undergraduate students seeking a bachelor's degree at for-profit institutions than in other sectors were studying business (27.5 percent), health care fields (20.5 percent), and other applied fields (22.6 percent). The shares pursuing degrees in STEM fields and education were smaller than in other sectors. The largest gender gaps were in STEM fields (26.3 percent of men and 5.3 percent of women) and health care (7.4 percent of men and 29.6 percent of women).

**Table 3.10: Enrollment of Bachelor’s Degree-Seeking Students at For-Profit Institutions Across Fields of Study, by Gender and Race and Ethnicity: 2015–16**

		STEM Fields	Business	Education	Health Care Fields	Humanities	Social Sciences	General Studies and Other Fields	Other Applied Fields	Undecided
All Students	All racial and ethnic groups	13.9%	27.5%	2.4%	20.5%	6.4%	6.0%	0.5%!	22.6%	0.3%!!
	American Indian or Alaska Native	21.7%!	14.2!	‡	20.2%!	8.6%!!	9.8%!!	‡	24.5%!	‡
	Asian	17.6%!	20.7%	0.4%!	43.6%	3.6%	0.6%!!	‡	13.5%	‡
	Black	13.0%	32.7%	2.9%!	20.5%	4.9%!	6.0%	0.6%!!	19.0%	‡
	Hispanic	13.5%	24.2%	0.8%!	22.2%	6.8%	6.5%	0.2%!!	25.6%	‡
	Native Hawaiian or other Pacific Islander	14.3%!!	45.7%	‡	15.7%!	2.6%!!	7.0%!!	‡	14.5%!	‡
	White	14.1%	26.7%	3.1%!	17.9%	7.1%	6.3%	0.3%!	24.1%	0.4%!!
	More than one race	14.3%	21.6%	0.8%!	18.8%	7.1%!	7.4%!	‡	26.8%	‡
	International students	14.6%!!	28.2%!	‡	2.1%!!	19.5%!!	‡	‡	34.4%!	‡
Men	Men Total	26.3%	26.7%	0.4!	7.4%	10.0%	2.7%	0.6%!	25.6%	‡
	American Indian or Alaska Native	50.7%	10.1%!!	‡	‡	‡	‡	‡	11.3%!	‡
	Asian	35.2%	21.7%	‡	25.7%	5.0%!	1.0%!!	‡	11.4%!	‡
	Black	25.9%	31.6%	0.8%!!	5.8%!	9.7%!	3.4%!!	1.3%!!	21.5%	‡
	Hispanic	23.5%	24.3%	‡	7.8%	10.7%	2.5%!!	‡	30.7%	‡
	Native Hawaiian or other Pacific Islander	16.6%!!	59.4%	‡	4.1%!!	‡	‡	‡	19.5%!!	‡
	White	26.9%	26.1%	0.5%!	5.8%	10.5%	2.7%!	0.3%!!	26.5%	‡
	More than one race	21.7%	17.7%!	‡	14.2%!	7.0%!!	‡	‡	39.2%	‡
	International students	31.0%!!	10.6%!!	‡	‡	30.0%!!	‡	‡	27.0%!!	‡
Women	Women Total	5.3%	28.1%	3.7%	29.6%	3.8%	8.4%	0.4%!!	20.4%	0.3%!!
	American Indian or Alaska Native	9.1%!!	16.0!	‡	26.2%!	8.7%!!	‡	‡	30.3%!	‡
	Asian	4.1%!	19.9%	0.7%!	57.3%	2.5%!	0.3%!!	‡	15.2%	‡
	Black	5.3%!	33.4%	4.2%!	29.2%	2.1%	7.6%	0.1%!!	17.5%	‡
	Hispanic	6.1%	24.1%	1.4%!	32.9%	3.9%	9.4%	0.1%	21.8%	‡
	Native Hawaiian or other Pacific Islander	12.4%!!	34.5%!	‡	25.1%!	4.5%!!	12.7%!!	‡	10.5%!	‡
	White	4.5%	27.1%	5.0%!	27.0%	4.6%	9.0%	0.3%!!	22.2%	‡
	More than one race	9.4%!	24.2%	1.3%!	21.7%	7.2%!!	12.1%!	‡	18.8%	‡
	International students	1.2%!	42.4%!	‡	2.9%!!	11.0%!!	‡	‡	40.4%	‡

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM programs include biological and physical science, science technology, math, agriculture, computer and information sciences, and engineering and engineering technology. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for bachelor’s degrees include the following fields of study: personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Native Hawaiian or other Pacific Islander undergraduates (45.7 percent) enrolled in business more than any other group.
- Asian undergraduates (43.6 percent) enrolled in health programs more than any other group.
- Nearly 51 percent of American Indian or Alaska Native men, 35.2 percent of Asian men, and 26.9 percent of White men at for-profit institutions enrolled in STEM programs.
- The groups with the highest shares of men enrolled in business programs were Black students (31.6 percent) and Native Hawaiian or other Pacific Islander students (59.4 percent).
- Larger shares of Hispanic men (30.7 percent) and men of more than one race (39.2 percent) were enrolled in other applied fields.
- The largest shares of women pursuing bachelor's degrees at for-profit institutions who were enrolled in health care programs were among Asian women (57.3 percent) and Hispanic women (32.9 percent).
- A larger share of Black women (33.4 percent) than of women from other groups were enrolled in business programs.
- A larger share of international women than of women from other groups were enrolled in other applied fields (40.4 percent).

## REFERENCES

- American Academy of Arts and Sciences. 2014. "Enclosed in a College Major? Variations in Course-Taking Among the Fields." *Academy Data Forum*. <https://members.amacad.org/content/research/dataForumEssay.aspx?i=1571>.
- Ma, Jennifer, Matea Pender, and Meredith Welch. 2016. *Education Pays 2016: The Benefits of Higher Education for Individuals and Society*. Washington, DC: College Board.
- McMahon, Walter W. 2009. *Higher Learning, Greater Good: The Private and Social Benefits of Higher Education*. Baltimore: Johns Hopkins University Press
- Radwin, David, Jonathan G. Conzelmann, Annaliza Nunnery, T. Austin Lacy, Joanna Wu, Stephen Lew, Jennifer Wine, and Peter Siegel. 2018. *2015–16 National Postsecondary Student Aid Study (NPSAS:16): Student Financial Aid Estimates for 2015–16*. NCES 2018-466. Washington, DC: U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018466>.
- Turk, Jonathan M. 2019. *A Look at Five Key Outcomes in Early Adulthood for Associate Degree Earners*. Washington, DC: American Council on Education; Arlington, VA: Hobsons.





## CHAPTER 4



# Enrollment in Graduate Education





# INTRODUCTION

Graduate education remains an important, and often required, stepping-stone for those interested in teaching, research, and professional practice careers. Moreover, in today's age of scientific, technological, and humanitarian discovery, graduate programs are integral—both for societal advancement in these areas, and to ensure that new discoveries of all kinds reflect the diversity of our citizenry in both outlook and outcome. For example, in recent years researchers have emphasized the need for educators and doctors with cultural competency, language diversity, and lived experiences they share with those they serve (Betancourt et al. 2003; Boutin-Foster, Foster, and Konopasek 2008).

From fall 1995 to fall 2015, graduate student enrollment in the United States increased from 2 million students to approximately 2.9 million students, an increase of 44.9 percent, and a rapid growth rate considering that undergraduate enrollment in the country increased 39.4 percent in this same period (NCES 2017a; NCES 2017b). Furthermore, according to the Council of Graduate Schools (2017), enrollment in graduate education is likely to increase as the workforce demands more master's degrees. In 2015–16, master's program enrollment accounted for three-quarters of students enrolled in graduate programs across the country.

While graduate enrollment of students of color increased between 1995–96 and 2015–16, Black,<sup>1</sup> Hispanic, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander students, in particular, remain underrepresented relative to their representation in undergraduate education and in society. Fortunately, and as shown in Chapter 3 of this report, “Enrollment in Undergraduate Education,” undergraduate enrollment has grown for students of color. Moreover, we see promising rates of enrollment, relative to other groups, in graduate education for students of color who recently completed bachelor's degrees.

A final and important point, when it comes to who enrolls in graduation education, concerns where students enroll and what they study—important indicators for individuals' income mobility and career advancement, and critical to the health and prosperity of our diverse nation. The data presented here prompt critical questions regarding disproportionate access by some groups to certain types of institutions, disciplines, and degree types.

## KEY FINDINGS

- Whites represented 75.4 percent of all graduate students in 1995–96. While they remained the majority in 2015–16, their total share of all graduate students declined to a little over half (56.0 percent) as the graduate student body diversified.
- Across all racial and ethnic groups, women represented the majority of all graduate students enrolled in 2015–16. The widest gender gap was between Black women and Black men, where seven in 10 Black students enrolled in graduate education were women.
- Almost half of 2007–08 bachelor's degree recipients had enrolled in graduate school by 2011–12 (45.9 percent). The highest enrollment rates were 61.3 percent for Native Hawaiian or other Pacific Islander students and 57.7 percent for Black students. The lowest enrollment rates were 43.8 percent for White students and 46.5 percent for Hispanic students.
- Three-quarters of students enrolled in graduate education in 2015–16 were pursuing a master's degree.

<sup>1</sup> The terms Black and African American are used interchangeably.

- The distribution of graduate students across postsecondary sectors<sup>2</sup> varied across racial and ethnic groups. For example, Black graduate students were much more likely than other groups to pursue their degrees at for-profit institutions, no matter the degree type. Half of Black students pursuing doctoral degrees<sup>3</sup> enrolled at for-profit colleges.
- Business and management was the top field of study for graduate students pursuing a master's degree, followed by education. White students were more likely than other groups to pursue a master's degree in education, while Asian and international students<sup>4</sup> were more likely to pursue a master's degree in STEM<sup>5</sup> fields.
- The majority of most professional degree<sup>6</sup> students were enrolled in a health program, with the exception of Hispanic students, of whom more than one-third were enrolled in a law program.
- More than half of international doctoral degree students were studying STEM fields in 2015–16. In contrast, fewer than one in five Hispanic students were in these fields. Black students were more likely than students of other groups to be in business and management, and education programs.

---

2 Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section.

3 Doctoral degrees reflect those classified as doctorate-research/scholarship degrees, including PhD, EdD, DMA, and other research-based degrees.

4 The National Center for Education Statistics (NCES) defines a nonresident alien as "a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely." In this report, nonresident aliens are labeled as international students.

5 For graduate-level of study, STEM includes life and physical sciences, math, engineering, and computer science.

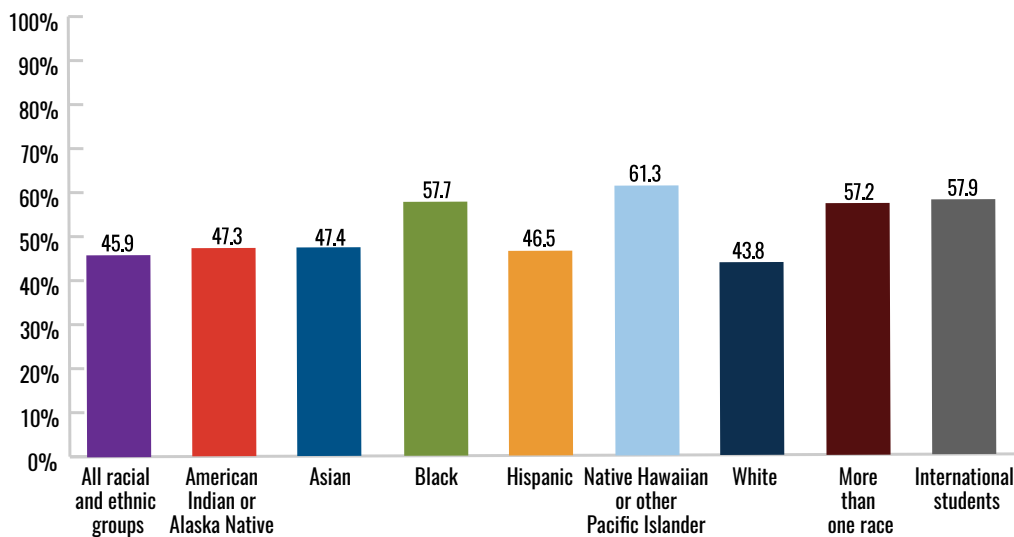
6 Professional degrees reflect those classified as doctorate-professional practice, including chiropractic, dentistry, law, medicine, pharmacy, veterinary medicine, and other degrees for which a credential or license is required for professional practice.

## GRADUATE ENROLLMENT RATES OF BACHELOR'S DEGREE RECIPIENTS

Data on the graduate enrollment rates of bachelor's degree recipients—those who enrolled in a graduate program following bachelor's degree attainment—come from the U.S. Department of Education's latest Baccalaureate and Beyond Study (B&B). The B&B data presented here will follow a cohort of students who earned bachelor's degrees in 2007–08 for 10 years after they completed college. The current dataset allows analysis of student activity four years after earning a bachelor's degree.

Nearly 46 percent of all 2007–08 bachelor's degree earners enrolled in a graduate program within four years of graduation, although there exists variation by race and ethnicity. Graduate enrollment rates of bachelor's degree earners were highest among Native Hawaiian or other Pacific Islander students (61.3 percent), international students (57.9 percent), Black students (57.7 percent), and students of more than one race (57.2 percent). The lowest graduate enrollment rate of bachelor's degree recipients was among White students (43.8 percent).

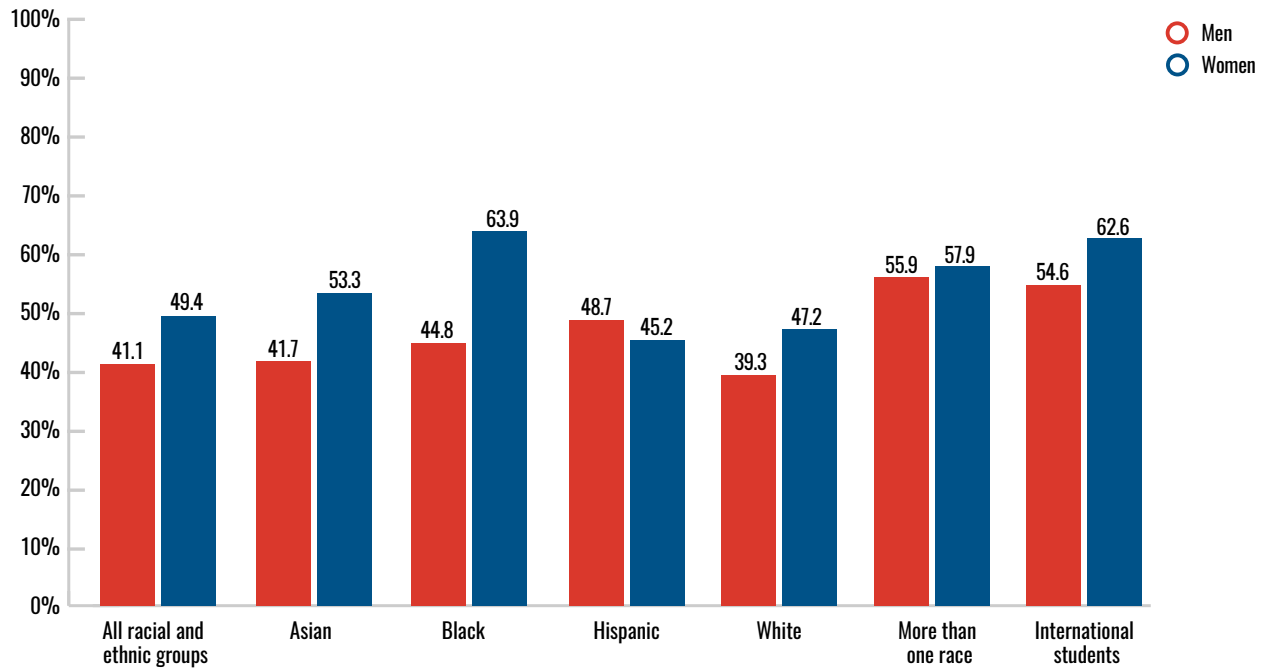
**Figure 4.1: Graduate Enrollment Rates of 2007–08 Bachelor's Degree Recipients, by Race and Ethnicity: 2012**



Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B: 08/12

Generally, the graduate enrollment rate of bachelor's degree recipients was higher among women than men, with the exception of Hispanic students, where men had a slightly higher enrollment rate (48.7 percent) than women (45.2 percent). The graduate enrollment rate of Black women was 19.1 percentage points higher than that of Black men—the largest gender gap within any racial or ethnic group.

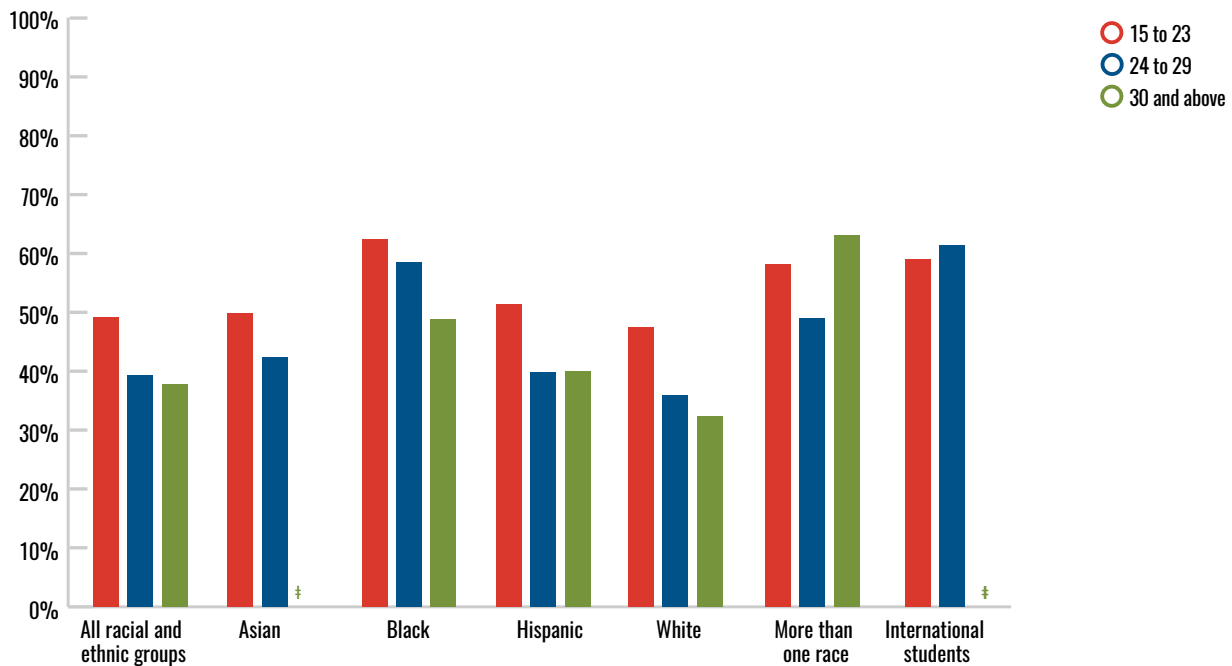
**Figure 4.2: Graduate Enrollment Rates of 2007–08 Bachelor’s Degree Recipients, by Gender and Race and Ethnicity: 2012**



Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B 08/12  
 Note: Estimates suppressed for “American Indian or Alaska Native” and “Native Hawaiian or other Pacific Islander.” Reporting standards not met.

Overall, nearly half of all bachelor’s degree recipients between the ages of 15 and 23 (49.2 percent) enrolled in graduate education within four years, higher than the rate among 24- to 29-year-olds (39.3 percent) and those who graduated from college at ages 30 or older (37.7 percent). Across nearly every student group, 15- to 23-year-olds had higher graduate enrollment rates than older students, with the exception of individuals of more than one race and international students.

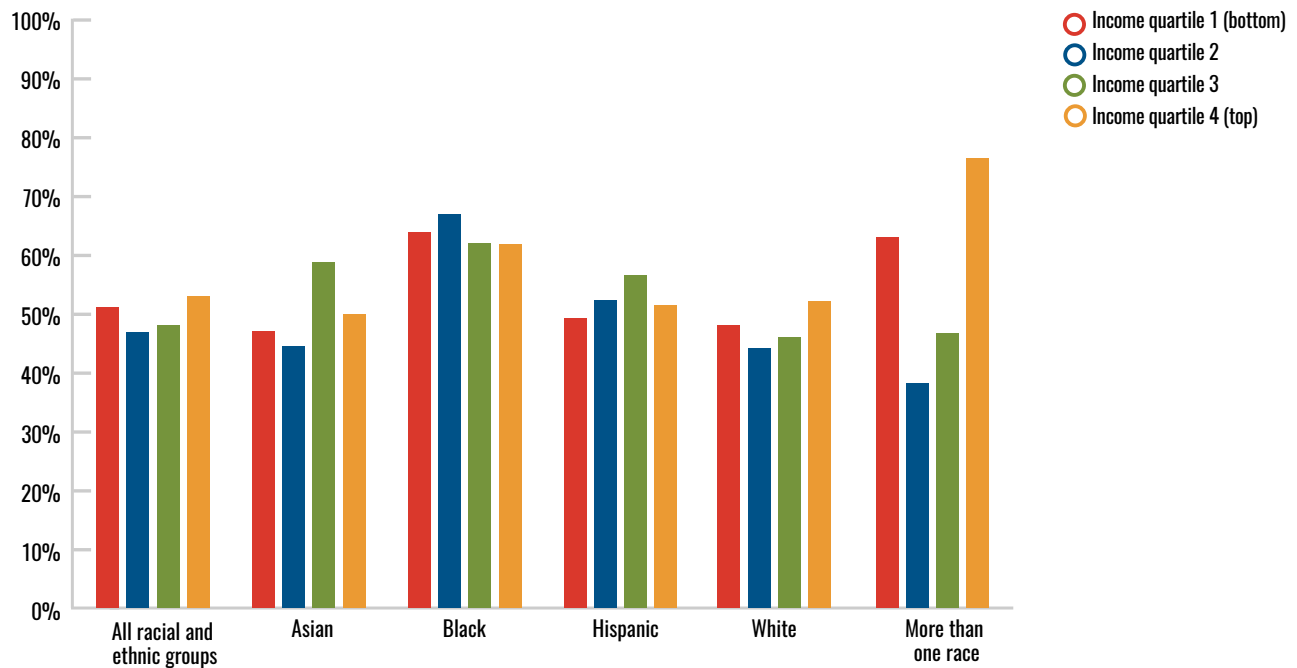
**Figure 4.3: Graduate Enrollment Rates of 2007–08 Bachelor’s Degree Recipients, by Age and Race and Ethnicity: 2012**



Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B 08/12  
 Notes: † Estimate suppressed. Reporting standards not met. | Estimates suppressed for “American Indian or Alaska Native” and “Native Hawaiian or Pacific Islander.” Reporting standards not met.

Among dependent students,<sup>7</sup> graduate school enrollment rates did not differ substantially across income groups. In most groups, the lowest-income students were slightly less likely than the most affluent students to go to graduate school (51.0 percent and 52.9 percent, respectively). Among Black bachelor’s degree recipients, the pattern was reversed, but the differences remained small, where 63.8 percent of lowest-income students compared with 61.7 percent of students from highest-income families enrolled in graduate school.

**Figure 4.4: Graduate Enrollment Rates of 2007–08 Bachelor’s Degree Recipients (Dependent Students), by Income and Race and Ethnicity: 2012**



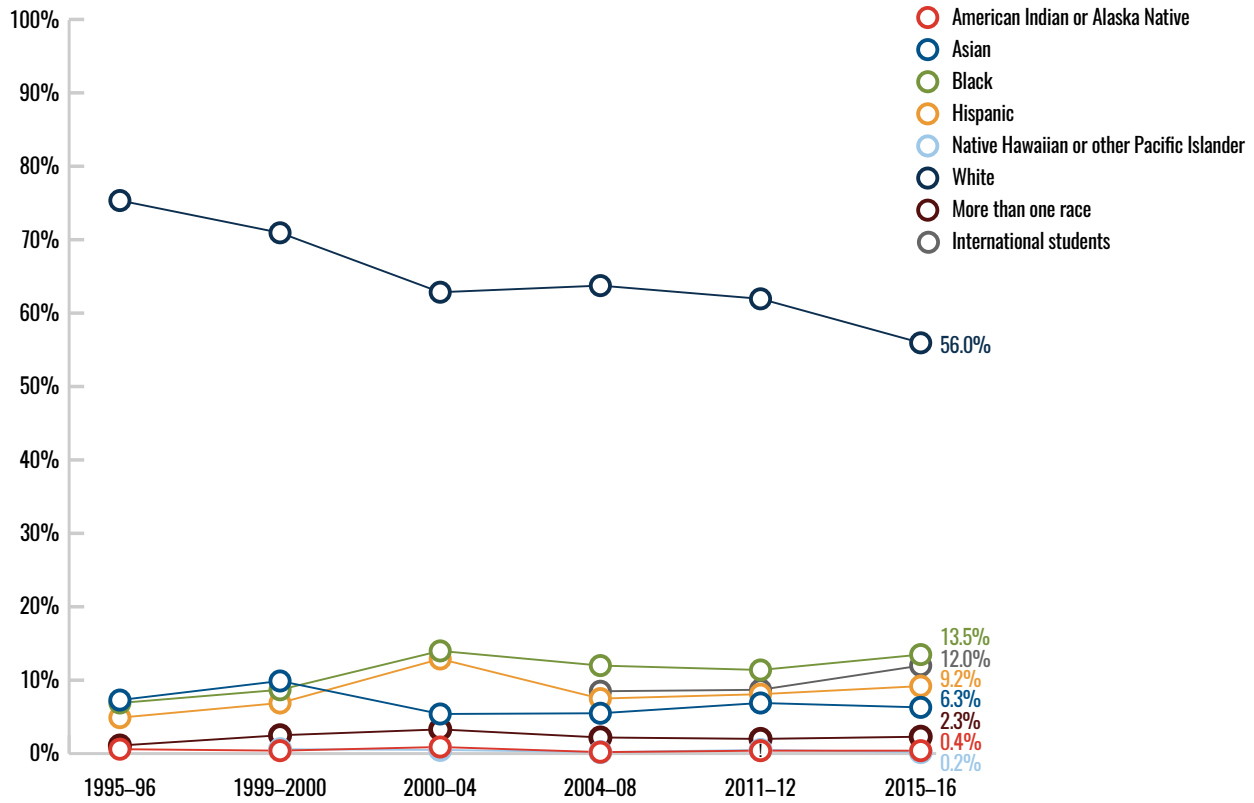
Source: U.S. Department of Education, The Baccalaureate and Beyond Longitudinal Study, B&B: 08/12  
 Note: Estimates suppressed for “American Indian or Alaska Native,” “Native Hawaiian or other Pacific Islander,” and “international students.” Reporting standards not met.

<sup>7</sup> Students in the National Postsecondary Student Aid Survey (NPSAS) are considered dependent if they are “under 24 years of age who are unmarried, do not have dependents, are not veterans or on active military duty, are not orphans or wards of the court, are not homeless or at risk of homelessness, and have not been deemed independent by a financial aid officer” (Radwin et al. 2018).

# GRADUATE ENROLLMENT: 1995–96 TO 2015–16

Graduate students became a more diverse group between 1995–96 and 2015–16. As a share of total graduate enrollment, international student enrollment increased 8.2 percentage points, Black student enrollment increased by 6.7 percentage points, and Hispanic student enrollment increased 4.3 percentage points. White enrollment as a share of the total declined, but that group still represented the majority of graduate enrollment in the United States in 2015–16 (56.0 percent).

**Figure 4.5: Graduate Enrollment, by Race and Ethnicity, Select Years: 1995–96 to 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 1996, 2000, 2004, 2008, 2012, and 2016  
 Notes: In 1995–96, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category “Asian.” | Students in NPSAS:00 and NPSAS:04 were not identified separately by international status. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.



Women represented the majority of graduate students in 1995–96, both overall (53.6 percent) and within all groups other than Asian students, students of more than one race, and international students. However, by 2015–16, women were the majority in every group except international students, among whom 62.1 percent were men.

**Table 4.1: Graduate Enrollment, by Gender and Race and Ethnicity: 1995–96 and 2015–16**

		Men	Women
1995–96	All racial and ethnic groups	46.4%	53.6%
	American Indian or Alaska Native	38.0%	62.0%
	Asian	57.5%	42.5%
	Black	36.5%	63.5%
	Hispanic	44.3%	55.7%
	Native Hawaiian or other Pacific Islander	N/A	N/A
	White	45.1%	54.9%
	More than one race	54.2%	45.8%
	International students	70.4%	29.6%
2015–16	All racial and ethnic groups	40.7%	59.3%
	American Indian or Alaska Native	39.8%	60.2%
	Asian	42.6%	57.4%
	Black	29.8%	70.2%
	Hispanic	39.2%	60.8%
	Native Hawaiian or other Pacific Islander	41.5%!	58.5%
	White	38.9%	61.1%
	More than one race	37.9%	62.1%
	International students	62.1%	37.9%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 1996 and 2016

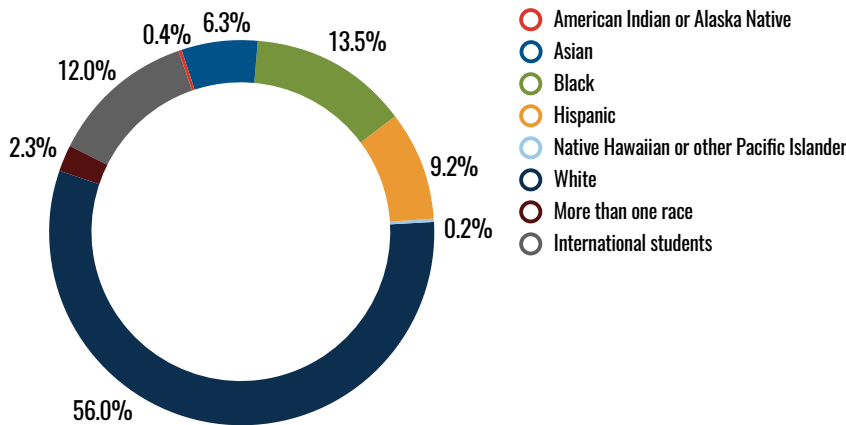
Notes: In 1995–96, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category "Asian." | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Among individuals of more than one race, women represented 62.1 percent in 2015–16, an increase from 45.8 percent in 1995–96, and the largest increase among all women during this period.
- The majority of all Asian graduate students in 2015–16 were women (57.4 percent), an increase of 14.9 percentage points from 1995–96.
- Between 1995–96 and 2015–16, the gap between Black men and Black women enrolled in graduate education widened from 26.9 percentage points to 40.4 percentage points.

# GRADUATE ENROLLMENT: 2015–16

In 2015–16, 56.0 percent of all graduates students were White, 32.0 were domestic students of color,<sup>8</sup> and 12.0 percent were international students.

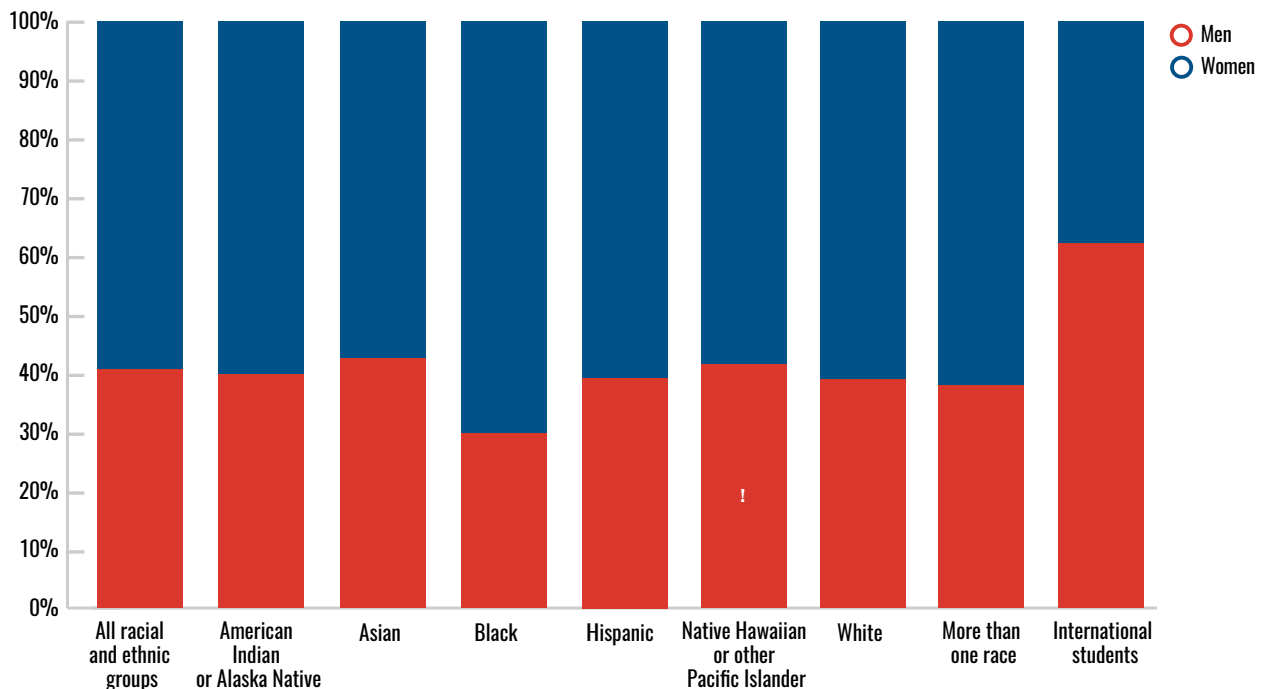
**Figure 4.6: Graduate Enrollment, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Women represented over half of all graduate students in 2015–16 (59.3 percent), while men represented 40.7 percent. With the exception of international students, the majority of graduate students across all groups were women. The widest gap, by far, occurred for Black students, followed by students of more than one race, and by White, Hispanic, and American Indian or Alaska Native students.

**Figure 4.7: Graduate Enrollment, by Gender and Race and Ethnicity: 2015–16**



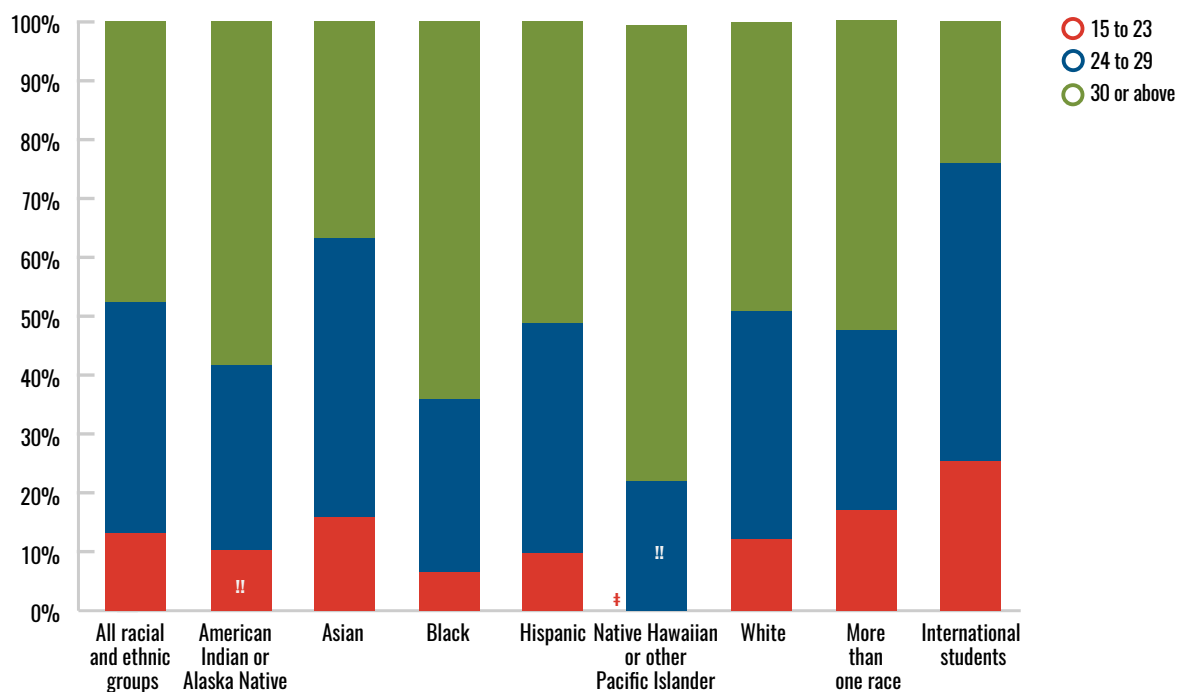
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Note: Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

<sup>8</sup> The group students of color includes American Indians or Alaska Natives, Asians, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and students of more than one race.

- The widest gap in graduate enrollment occurred for Black students, among whom 70.2 percent were women and 29.8 percent were men.
- The smallest gender gap occurred for Asian students, where women represented 57.4 percent of graduate students in this group, compared with 42.6 percent men.
- The only group for which men represented the majority was international students, where men constituted 62.1 percent of graduate enrollment, compared with 37.9 percent women.

In 2015–16, more than half of all graduate students were under the age of 30 (52.3 percent): 39.2 percent were 24 to 29 years old and 13.1 percent between 15 and 23 years old. Adults ages 30 and older represented 47.7 percent of all graduate students.

**Figure 4.8: Graduate Enrollment, by Age and Race and Ethnicity: 2015–16**

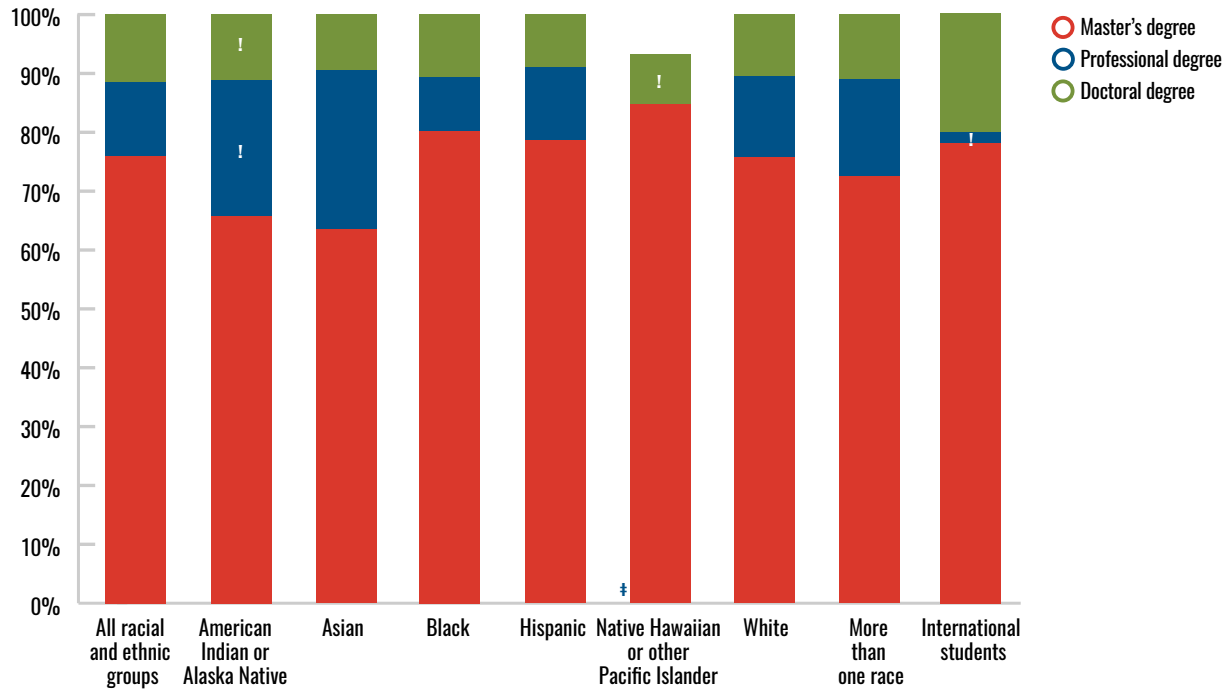


Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Notes: ‡ Estimate suppressed. Reporting standards not met. | !! Interpret with caution. Ratio of standard error is > 50%.

- About one-quarter of all international graduate students were ages 23 or younger, a larger share than among any domestic racial or ethnic group. Only 6.5 percent of Black graduate students and 9.8 percent of Hispanic graduate students were this young, compared with 15.8 percent of Asian students.
- More than three-quarters of Native Hawaiian or other Pacific Islander graduate students and 64.1 percent of Black students were ages 30 or older. In contrast, 24.0 percent of international and 36.8 percent of Asian graduate students were in this older age range.
- Nearly half of all Asian graduate students were between 24 and 29 years old (47.4 percent).

In 2015–16, three-quarters of graduate students were enrolled in master’s degree programs (75.9 percent), 12.5 percent were in professional degree programs, and 11.6 percent were in doctoral degree programs.

**Figure 4.9: Graduate Enrollment, by Program Level and Race and Ethnicity: 2015–16**



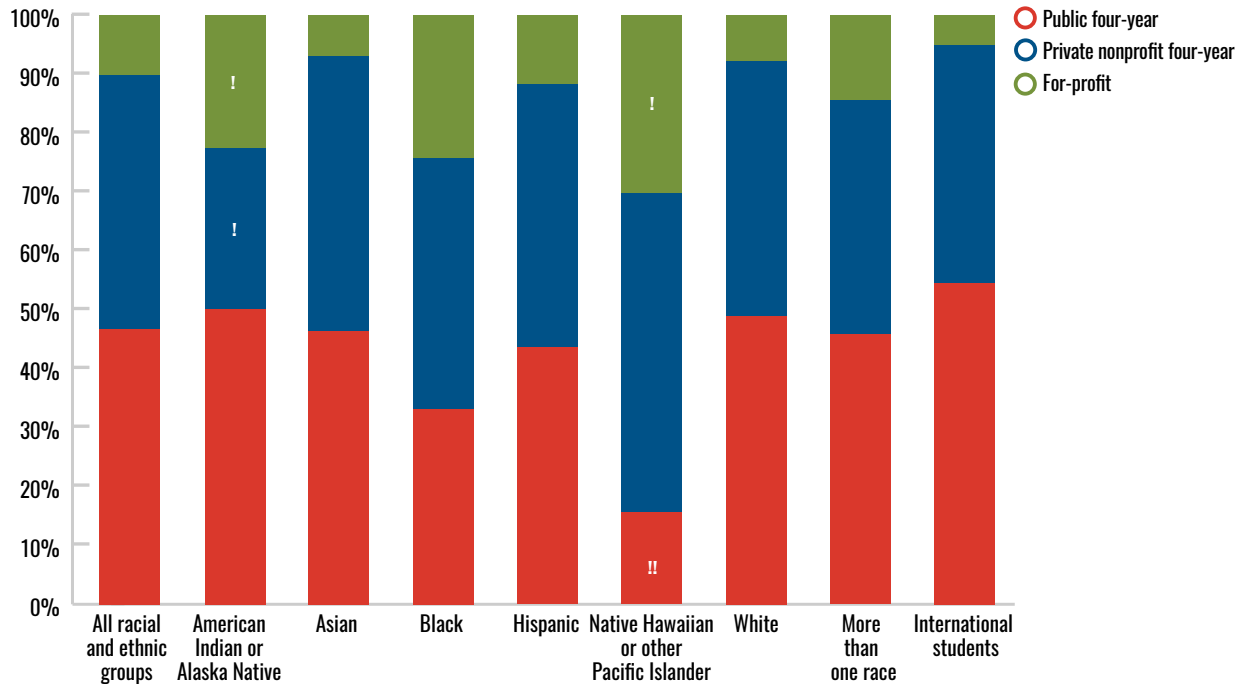
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Notes: ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error is >30% but <50%.

- One in five international graduate students was enrolled in doctoral degree programs (20.2 percent)—the highest among all student groups.
- More than one-quarter of Asian students were enrolled in professional programs (27.0 percent)—the highest among all groups.
- Less than 10 percent of all Black graduate students were enrolled in professional programs—the lowest percent among all domestic graduate students.

## GRADUATE ENROLLMENT ACROSS INSTITUTIONAL SECTORS

A little less than half of all 2015–16 graduate students were enrolled in public four-year universities (46.7 percent), 43.0 percent attended private nonprofit four-year universities, and 10.3 percent were in for-profit institutions. However, the distributions were quite different across racial and ethnic groups.

**Figure 4.10: Graduate Enrollment Across Sectors, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error to estimate is > 50%.

- Black graduate students were the least likely of any group to be enrolled in a public four-year institution. One-third of Black graduate students were enrolled in public four-year institutions (33.1 percent).
- Nearly one-quarter (24.3 percent) of Black graduate students attended a for-profit institution, compared with Hispanic (11.6 percent), White (7.9 percent), Asian (7.1 percent), and international (5.2 percent) students.

Men were slightly more likely than women to be enrolled in public four-year institutions (48.0 percent and 45.7 percent, respectively). Women were more likely to be enrolled in for-profit institutions than men (12.0 percent and 7.8 percent, respectively). Enrollment patterns differed by student group, particularly for enrollment in for-profit institutions.

**Table 4.2: Graduate Enrollment Across Sectors, by Gender and Race and Ethnicity: 2015–16**

		Public Four-Year	Private Nonprofit Four-Year	For-Profit
Men	Men Total	48.0%	44.1%	7.8%
	American Indian or Alaska Native	74.5%	13.0%!!	12.5%!!
	Asian	46.2%	47.1%	6.7%
	Black	35.3%	44.4%	20.3%
	Hispanic	46.2%	45.4%	8.3%
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	47.4%	45.8%	6.8%
	More than one race	48.6%	41.1%	10.1%
	International students	58.2%	38.2%	3.6%
Women	Women Total	45.7%	42.2%	12.0%
	American Indian or Alaska Native	34.0%!	36.7%!	29.3%!
	Asian	46.5%	46.1%	7.3%
	Black	32.2%	41.8%	26.0%
	Hispanic	41.9%	44.2%	13.8%
	Native Hawaiian or other Pacific Islander	21.3%!!	52.0%!!	26.8%!!
	White	49.9%	41.5%	8.6%
	More than one race	44.0%	38.8%	17.1%
	International students	48.5%	43.7%	7.7%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- The majority of international men were enrolled in public four-year institutions (58.2 percent), compared with just under half of all international women (48.5 percent).
- Over one-quarter of Black women were enrolled at for-profit institutions in 2015–16 (26.0 percent), compared with 7.3 percent of Asian women, 8.6 percent of White women, and 13.8 percent of Hispanic women.
- A smaller share of Black men (20.3 percent) than Black women attended for-profit institutions, but the patterns across groups were similar, with 6.7 percent of Asian men, 6.8 percent of White men, and 8.3 percent of Hispanic men enrolled in this sector.

The most notable difference in enrollment by age, race, and sector was in the type of institutions where older students chose to enroll. Namely, for students who were ages 30 or above, graduate enrollment in for-profit institutions grew, in some cases dramatically. About 16 percent of these students were enrolled in for-profit institutions, compared with graduate students ages 23 or younger (3.0 percent) and those 24 to 29 years old (5.6 percent).

**Table 4.3: Graduate Enrollment Across Sectors, by Age and Race and Ethnicity: 2015–16**

		Public Four-Year	Private Nonprofit Four-Year	For-Profit
15 to 23	15 to 23 Total	55.5%	41.4%	3.0%
	American Indian or Alaska Native	‡	‡	‡
	Asian	52.8%	45.5%	1.7%!
	Black	41.8%	48.9%	9.2%!!
	Hispanic	47.2%	47.7%	5.2%!!
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	57.2%	41.3%	1.5%
	More than one race	44.3%!	43.5%!	12.0%!!
	International students	60.5%	36.2%	3.2%
24 to 29	24 to 29 Total	49.9%	44.5%	5.6%
	American Indian or Alaska Native	‡	‡	‡
	Asian	48.0%	47.7%	4.3%
	Black	39.0%	46.5%	14.5%
	Hispanic	51.0%	43.4%	5.4%
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	51.1%	44.8%	4.1%
	More than one race	55.1%	33.9%	11.0%!!
	International students	52.1%	42.8%	5.0%
30 or Above	30 or Above Total	41.6%	42.2%	16.3%
	American Indian or Alaska Native	37.2%	32.4%!	30.3%
	Asian	41.5%	45.5%	13.0%
	Black	29.5%	40.1%	30.3%
	Hispanic	37.3%	45.1%	17.5%
	Native Hawaiian or other Pacific Islander	‡	60.0%	36.1%!
	White	45.1%	42.4%	12.5%
	More than one race	40.9%	41.9%	17.3%
	International students	53.1%	39.2%	7.7%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Older graduate students were less likely than younger students to be enrolled in public four-year universities. Among Hispanic graduate students, 51.0 percent of those ages 24 to 29 attended public four-year institutions in 2015–16, compared with 37.3 percent of those ages 30 or older. Similarly, these shares were 55.1 percent and 40.9 percent among those of more than one race.
- African American students were the most likely to choose for-profit institutions at later ages. In 2015–16, a little less than one-third of Black students ages 30 and older were enrolled in for-profit institutions (30.3 percent), compared with 14.5 percent of those ages 24 to 29.

## GRADUATE ENROLLMENT BY PROGRAM TYPE

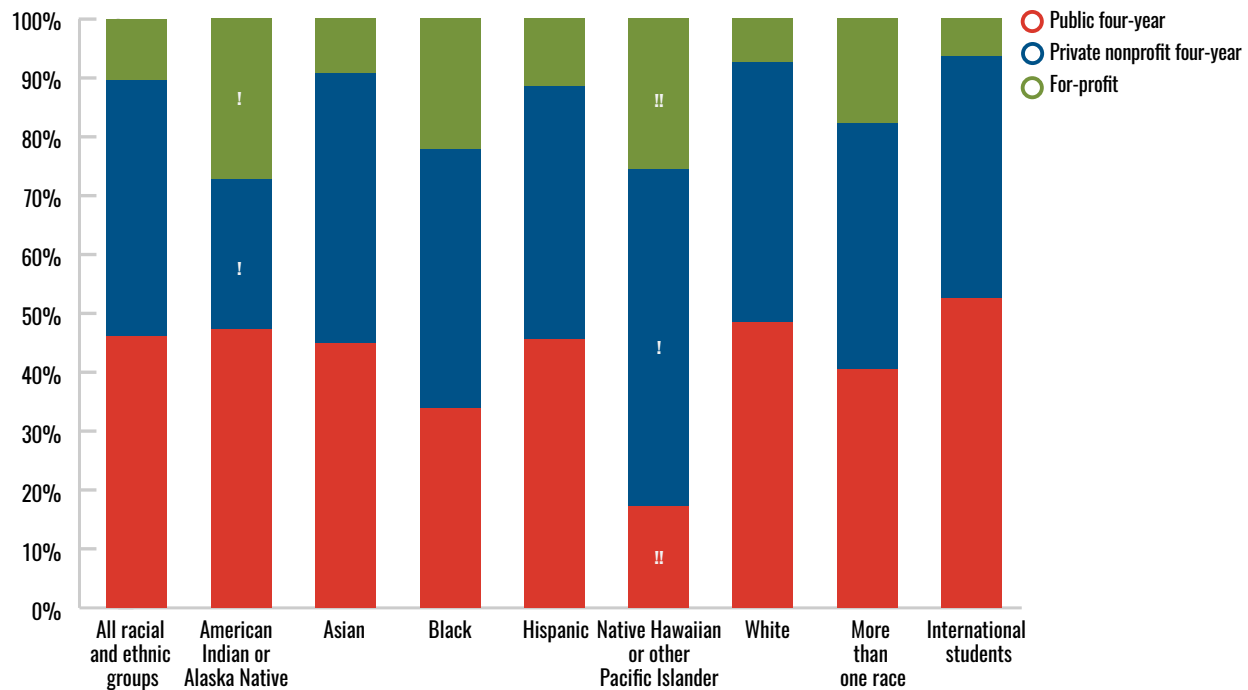
Similar to differences seen in undergraduate enrollment (as shown in Chapter 3 of this report, “Enrollment in Undergraduate Education”), we see great variation by student group in where, how, and which students enroll in graduate education. The most notable differences occurred at the intersection of race, gender, and international status.

### Master’s Degree Programs

#### HIGHER EDUCATION SECTOR

By sector, all student groups predominantly enrolled in a master’s degree program at a public four-year (46.1 percent) or private nonprofit four-year (43.5 percent) institution, compared with for-profit institutions (10.3 percent) in 2015–16. Notable differences emerged when looking at enrollment by student group, particularly in the shares attending for-profit institutions.

**Figure 4.11: Graduate Enrollment in Master’s Degree Programs Across Sectors, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Interpret with caution. Ratio of standard error to estimate is >30% but <50% | !! Interpret with caution. Ratio of standard error is > 50%.

- Over half of all international students in master’s degree programs were enrolled in public four-year institutions (52.5 percent), compared with 33.8 percent of all Black students.
- Larger shares of Black students (22.2 percent), those of more than one race (17.8 percent), and Hispanic students (11.5 percent) were enrolled at for-profit institutions. Comparatively, less than 10 percent of all Asian (9.3 percent), White (7.5 percent), and international (6.3 percent) students were enrolled at for-profit institutions in 2015–16.



## FIELD OF STUDY

In 2015–16, students pursuing a master’s degree were concentrated in business and management (21.4 percent), education (18.2 percent), and STEM (16.6 percent) programs. The differences between international and domestic students were sharp. In particular, international students were much more likely to be enrolled in programs in STEM and much less likely to be studying education.

**Table 4.4: Graduate Enrollment in Master’s Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16**

	STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields
All racial and ethnic groups	16.6%	21.4%	18.2%	16.0%	8.7%	6.5%	0.6%	12.0%
American Indian or Alaska Native	25.5%!!	15.8%!!	8.5%!!	15.9%!!	17.2%!!	‡	‡	10.1%!!
Asian	24.6%	24.5%	10.8%	19.2%	6.3%	6.5%!	1.2%!!	6.9%
Black	7.4%	22.2%	18.4%	19.8%	8.1%	6.8%	0.6%!!	16.7%
Hispanic	12.1%	25.4%	16.0%	15.2%	9.1%	10.0%	0.2%!!	11.9%
Native Hawaiian or other Pacific Islander	‡	21.7%!!	‡	32.9%!!	‡	‡	‡	6.1%!!
White	11.2%	19.9%	22.7%	17.5%	9.7%	6.6%	0.4%!	12.0%
More than one race	11.7%!	23.3%	21.1%!	10.1%	8.0%!	9.5%!	‡	16.1%
International students	51.0%	22.3%	3.4%	5.1%	5.8%	2.5%	1.5%!!	8.4%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: STEM fields include life and physical sciences, math, engineering, and computer science. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50% | !! Interpret with caution. Ratio of standard error is > 50%.

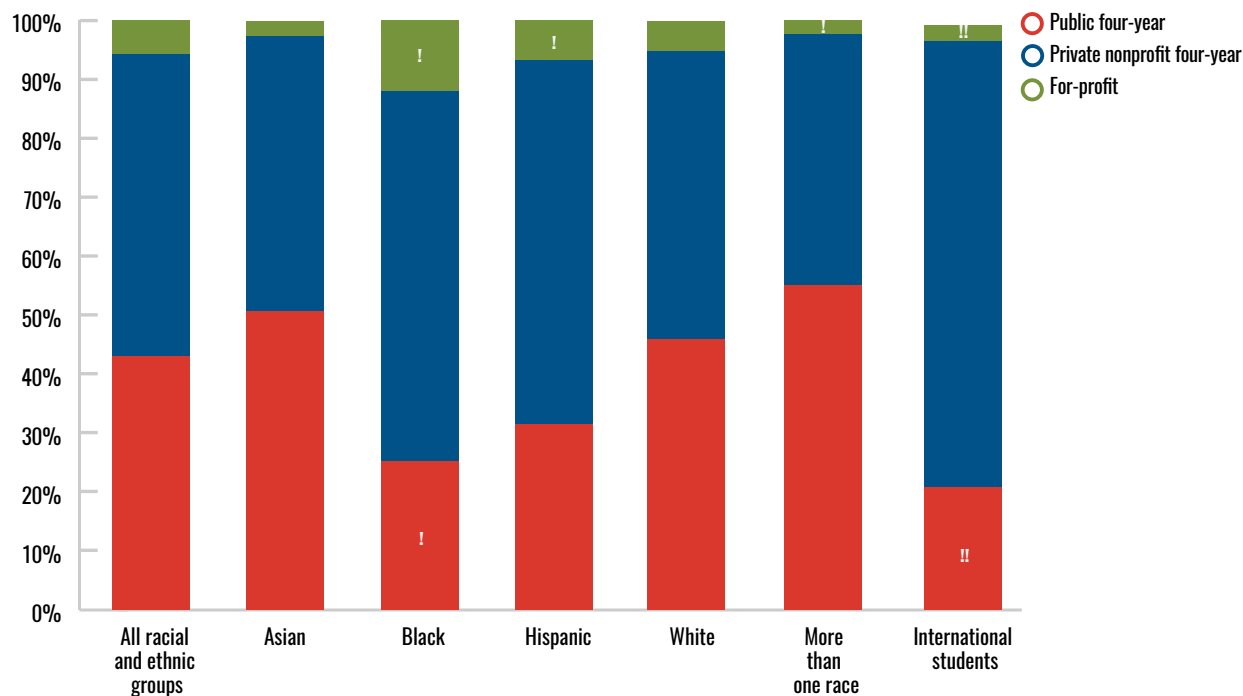
- Almost one-quarter of all Asian students (24.6 percent) and half of all international students (51.0 percent) seeking a master’s degree were enrolled in STEM programs, compared with fewer than one in 10 Black students (7.4 percent).
- A larger share of White students sought master’s degrees in education (22.7 percent), compared with only 10.8 percent of Asians and 3.4 percent of international students.

## Professional Degree Programs

### HIGHER EDUCATION SECTOR

More than half of students seeking professional degrees (e.g., law and medical fields) were enrolled in private nonprofit four-year institutions (51.4 percent) in 2015–16, 43.0 percent were enrolled in public four-year institutions, and 5.6 percent at for-profit institutions. As with other program types, there was great variation by race and ethnicity, as well as international status, as to where students were enrolled.

**Figure 4.12: Graduate Enrollment in Professional Degree Programs Across Sectors, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates suppressed for "American Indian or Alaska Native" and "Native Hawaiian or other Pacific Islander." Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- In 2015–16, three-quarters of international students seeking professional degrees attended private nonprofit four-year institutions (75.8 percent), the most of any group.
- The majority of Hispanic (61.8 percent) and Black students (62.9 percent) were also enrolled in private nonprofit four-year institutions.
- More than half of all students of more than one race (55.1 percent) and half of all Asian students (50.6 percent) were enrolled in public four-year institutions.

## FIELD OF STUDY

Health fields and law were by far the most prevalent fields for students pursuing professional degrees in 2015–16. Over half of all students in these programs sought a health degree (57.2 percent) and more than one-quarter sought a law degree (27.1 percent). These patterns were similar across race and ethnicity and international status.

**Table 4.5: Graduate Enrollment in Professional Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16**

	STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields
All racial and ethnic groups	7.2%	0.7%!	0.6%!	57.2%	1.9%	3.9%	27.1%	1.4%
American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡
Asian	13.7%	‡	‡	60.5%	0.9%!!	4.1%!!	19.1%	1.5%!!
Black	7.8%	1.2%!!	0.9%!!	57.4%	1.0%!!	3.6%!!	27.2%!	0.9%!!
Hispanic	4.4%!!	‡	0.8%!!	46.2%	2.4%!!	7.4%!!	37.6%	1.1%!!
Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡
White	6.5%	1.0%!	0.5%!!	57.5%	2.3%	3.3%	27.4%	1.5%!
More than one race	2.8%!!	‡	‡	54.6%	‡	8.2%!!	32.0%!	1.5%!!
International students	1.3%!!	‡	‡	80.4%	‡	‡	17.1%!!	‡

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: STEM fields include life and physical sciences, math, engineering, and computer science. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

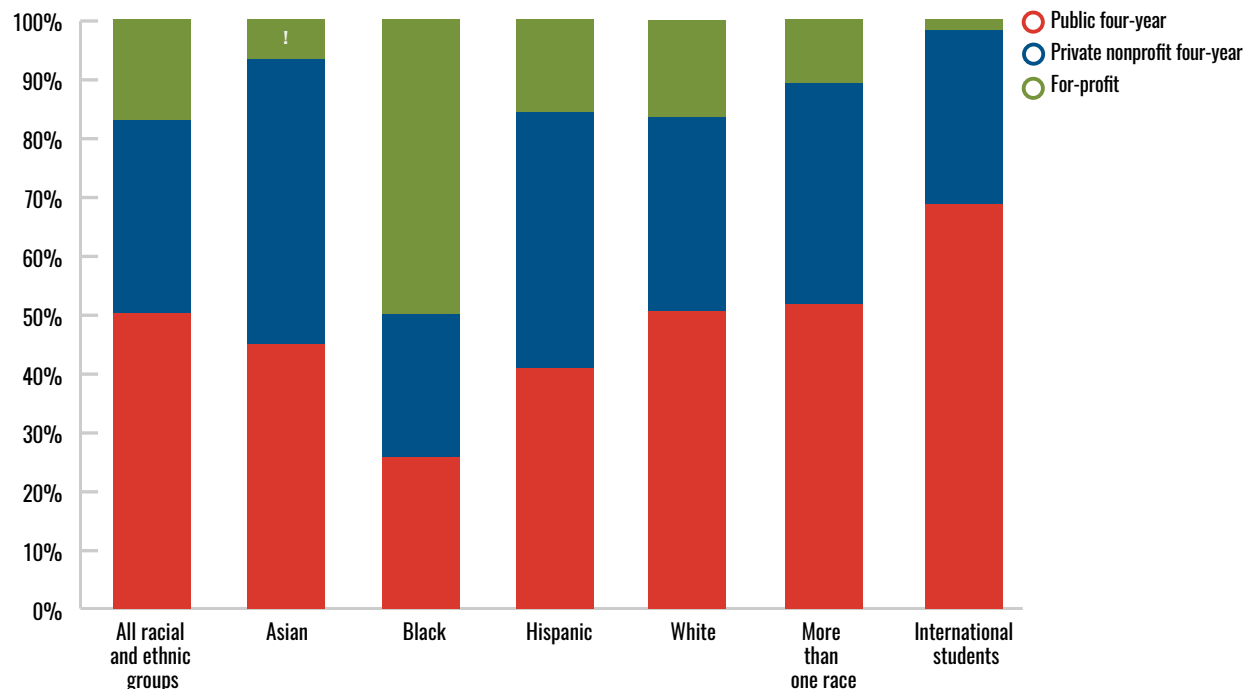
- The majority of international students who sought professional degrees were enrolled in health programs (80.4 percent), compared with less than half of all Hispanic students (46.2 percent).
- Hispanic students were more likely than other groups to pursue law degrees (37.6 percent).

## Doctoral Degree Programs

### HIGHER EDUCATION SECTOR

At the doctoral level, about half of all students were enrolled at public four-year institutions (50.2 percent). A little less than one-third were enrolled at private nonprofit four-year universities (32.7 percent), and 17.1 percent attended for-profit institutions. There was great variation by race, ethnicity, and international status.

**Figure 4.13: Graduate Enrollment in Doctoral Degree Programs Across Sectors, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates suppressed for "American Indian or Alaska Native" and "Native Hawaiian or other Pacific Islander." Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- In 2015–16, half of African American students were enrolled in a for-profit institution for their doctoral programs (50.1 percent)—a much higher share than for any other group. In contrast, 16.6 percent of White doctoral students, 15.8 percent of Hispanic students, and just 1.9 percent of international doctoral students were enrolled in this sector.
- International students were much more likely than other groups to be enrolled at public four-year institutions (68.6 percent).
- A larger share of Asian students were enrolled in private nonprofit four-year institutions than any other group (48.4 percent).

## FIELD OF STUDY

Nearly one-third of all students pursuing a doctoral degree in 2015–16 enrolled in STEM fields (31.4 percent). Almost one in five were studying education (18.2 percent), 15.3 percent were in social and behavioral sciences, 10.6 percent were in humanities fields, and 9.9 percent were in health fields.

**Table 4.6: Graduate Enrollment in Doctoral Degree Programs Across Fields of Study, by Race and Ethnicity: 2015–16**

	STEM Fields	Business and Management	Education	Health Fields	Humanities	Social and Behavioral Sciences	Law	Other Fields
All racial and ethnic groups	31.4%	7.3%	18.2%	9.9%	10.6%	15.3%	0.5%!	6.8%
American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡
Asian	28.7%	4.7%!	7.5%!	18.0%!	5.7%!!	22.9%	‡	12.4%!!
Black	13.5%!	14.6%	30.0%	8.0%!	5.2%!	14.0%	‡	14.5%
Hispanic	18.3%	9.6%!	18.0%	17.2%	8.2%	25.1%	‡	3.2%!
Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡
White	27.0%	5.7%	22.8%	8.9%	12.4%	16.2%	0.6%!!	6.3%
More than one race	21.6%	2.9%!	18.8%	4.2%!!	20.8%	27.1%	‡	3.0%!!
International students	59.0%	6.7%!	3.3%	9.5%!	10.9%!	7.1%	0.4%!!	3.0%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: STEM fields include life and physical sciences, math, engineering, and computer science. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- In 2015–16, slightly less than one-third of African Americans seeking doctoral degrees were enrolled in education (30.0 percent), compared with 22.8 percent of White students, 18.0 percent of Hispanic students, and only 3.3 percent of international students.
- The majority of international students were enrolled in STEM programs (59.0 percent), and more than one-quarter of Asian students (28.7 percent) and of White students (27.0 percent) were enrolled in these programs—the three groups most likely to be enrolled in STEM fields.
- A larger share of Hispanic students (25.1 percent) and students of more than one race (27.1 percent) were enrolled in social and behavioral sciences than White (16.2 percent), Black (14.0 percent), and international (7.1 percent) students.

## REFERENCES

- Betancourt, Joseph R., Alexander R. Green, J. Emilio Carrillo, and Owusu Ananeh-Firempong II. 2003. "Defining Cultural Competence: A Practical Framework for Addressing Racial/Ethnic Disparities in Health and Health Care." *Public Health Reports* 118 (4): 293–302. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1497553/pdf/12815076.pdf>.
- Boutin-Foster, Carla, Jordan C. Foster, and Lyuba Konopasek. 2008. "Viewpoint: Physician, Know Thyself: The Professional Culture of Medicine as a Framework for Teaching Cultural Competence." *Academic Medicine* 83 (1): 106–11. <https://pdfs.semanticscholar.org/fd95/f99052790785ecdc5c11c055304b3848c95.pdf>.
- Council of Graduate Schools. 2017. *Master's Degree Requirements and the U.S. Workforce*. Washington, DC: Council of Graduate Schools. [https://cgsnet.org/ckfinder/userfiles/files/Masters\\_Degree\\_Requirements\\_and\\_the\\_US\\_Workforce\(1\).pdf](https://cgsnet.org/ckfinder/userfiles/files/Masters_Degree_Requirements_and_the_US_Workforce(1).pdf).
- NCES (National Center for Education Statistics). 2017a. *Digest of Education Statistics 2017*, Table 303.70. Washington, DC: U.S. Department of Education, NCES. [https://nces.ed.gov/programs/digest/d17/tables/dt17\\_303.70.asp](https://nces.ed.gov/programs/digest/d17/tables/dt17_303.70.asp).
- NCES (National Center for Education Statistics). 2017b. *Digest of Education Statistics 2017*, Table 303.80. Washington, DC: U.S. Department of Education, NCES. [https://nces.ed.gov/programs/digest/d17/tables/dt17\\_303.80.asp](https://nces.ed.gov/programs/digest/d17/tables/dt17_303.80.asp).
- Radwin, David, Johnathan G. Conzelmann, Annaliza Nunnery, T. Austin Lacy, Joanna Wu, Stephen Lew, Jennifer Wine, and Peter Siegel. 2018. *2015–16 National Postsecondary Student Aid Study (NPSAS:16): Student Financial Aid Estimates for 2015–16*. NCES 2018-466. Washington, DC: U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018466>.

## CHAPTER 5



# Undergraduate Persistence and Completion







# INTRODUCTION

The importance of postsecondary credentials for the twenty-first-century workforce, and indeed for societal health and progress at large, cannot be overstated. Importantly, individuals who earn postsecondary credentials earn higher wages over their lifetimes and are more financially resilient during economic downturns. According to Carnevale, Jayasundera, and Gulish (2016), by 2016 the economy had added 11.6 million jobs since the height of the Great Recession, and 99 percent of them had gone to those with some college education.

The power of the postsecondary credential holds promise for those in our society who seek to move up the socioeconomic ladder and contribute to the economy and to the well-being of their families and communities. Of course, one has to complete a credential in order to fully realize this potential, and it is here that we see disparities by race and ethnicity. Beyond the individual benefits of postsecondary credentials, supporting high rates of completion for all groups in society is critical for creating a strong workforce and a healthy society.

Gaps in educational attainment levels across racial and ethnic groups deprive some Americans of meaningful participation in the economy. Disparities in postsecondary credential attainment also interfere with achieving the many attainment goals set in the past decade, including goals set by individual states, by the federal government, and by major philanthropies that invest in education and educational attainment efforts. Research in fact shows that Black,<sup>1</sup> Hispanic, and American Indian or Alaska Native students will not meet the nation's two most prominent college attainment goals (Nettles 2017). Such findings also bring to light a host of questions on just how we measure completion, especially when used for accountability purposes and in state funding models.

## KEY FINDINGS

- Between 1996 and 2016, the total number of undergraduate credentials awarded increased from 1.9 million to 3.7 million. While there was an increase across all credential types, the share of bachelor's degrees declined, as the total number of sub-baccalaureate credentials increased at a faster rate.
- Within each racial and ethnic group, more than 90 percent of bachelor's degree-seeking students who first enrolled in a public or private nonprofit four-year institution<sup>2</sup> in 2011–12 persisted through that academic year and returned in 2012–13. Persistence rates were lower in for-profit and public two-year institutions.
- Students of all backgrounds, at all institution types, who enrolled in college exclusively full time in fall 2011 were more likely to complete a credential in six years than were students overall.
- Black students who started college in fall 2011 had the lowest completion rates and highest dropout rates across all sectors of higher education.
- More than half of all American Indian or Alaska Native, Black, Hispanic, and Native Hawaiian or other Pacific Islander students who completed credentials in 2016 earned sub-baccalaureate credentials, whereas more than half of all international,<sup>3</sup> Asian, and White graduates earned bachelor's degrees.

1 The terms Black and African American are used interchangeably.

2 Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section.

3 The National Center for Education Statistics (NCES) defines a nonresident alien as "a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely." In this report, nonresident aliens are labeled as international students.

- Among short-term certificate recipients, health care was the most common field of study for Asian (30.3 percent), Black (35.8 percent), Hispanic (34.8 percent), and Native Hawaiian or other Pacific Islander (42.0 percent) students. For American Indian or Alaska Native (36.4 percent) and White (32.2 percent) students, manufacturing, military technology, and other applied fields was the most common. Business and personal and consumer services was the most common field of study for international (30.4 percent) short-term certificate recipients.
- One in five Native Hawaiian or other Pacific Islander students who completed a degree or certificate in 2016 completed their credentials at a for-profit institution—the highest of any group. Over one in 10 Black, American Indian or Alaska Native, and Hispanic students completed their undergraduate education at these institutions. Although predominant bachelor's degree fields in 2016 were STEM,<sup>4</sup> business, and the social sciences, there were great differences by race and ethnicity. For example, depending on institution type, Asian students were two to three times more likely to graduate in the STEM fields than were Black students.

---

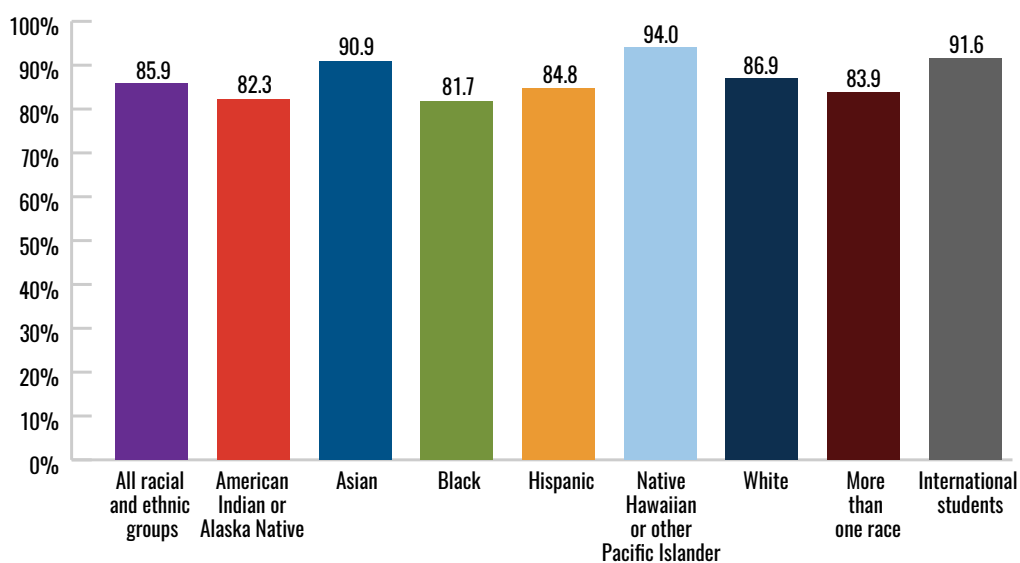
<sup>4</sup> STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture.

# FIRST-YEAR PERSISTENCE RATES FOR BACHELOR'S DEGREE-SEEKING STUDENTS

First-year persistence measures the percent of bachelor's degree-seeking students who first enrolled in postsecondary education in the 2011–12 academic year and remained enrolled in at least one month in 2012–13. Data come from the U.S. Department of Education's Beginning Postsecondary Students (BPS) Longitudinal Study, which follows a cohort of students enrolled in their first year of higher education. The data here reflect the cohort of bachelor's degree-seeking students who first enrolled in 2011–12.

The majority of students remained enrolled in college in year two of their studies (85.9 percent). Three groups had first-year persistence rates of over 90 percent: Native Hawaiian or other Pacific Islander students (94.0 percent), international students (91.6 percent), and Asian students (90.9 percent).

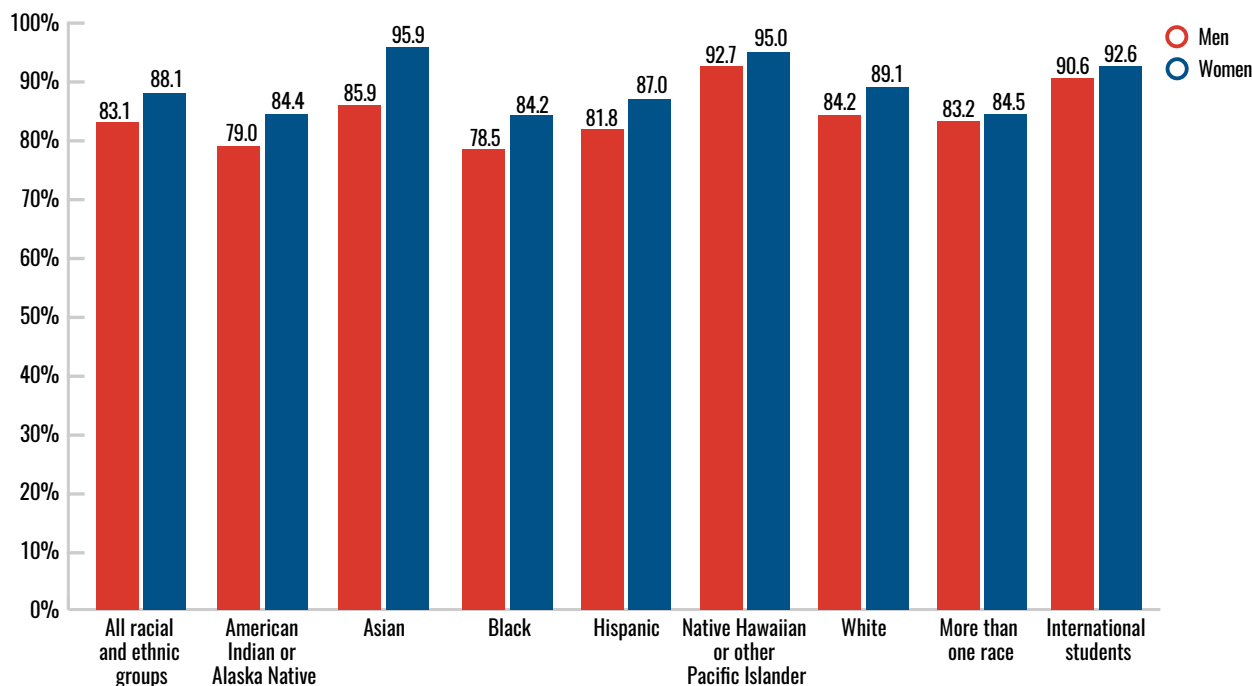
**Figure 5.1: First-Year Persistence Rates of Bachelor's Degree-Seeking Students, by Race and Ethnicity: Fall 2011 Cohort**



Source: U.S. Department of Education, Beginning Postsecondary Students Longitudinal Study, BPS: 12/14

The majority of all men and women persisted through to their second year; however, women had a slightly higher persistence rate than men (88.1 percent compared with 83.1 percent). This pattern occurred within all student groups.

**Figure 5.2: First-Year Persistence Rates of Bachelor’s Degree-Seeking Students, by Gender and Race and Ethnicity: Fall 2011 Cohort**

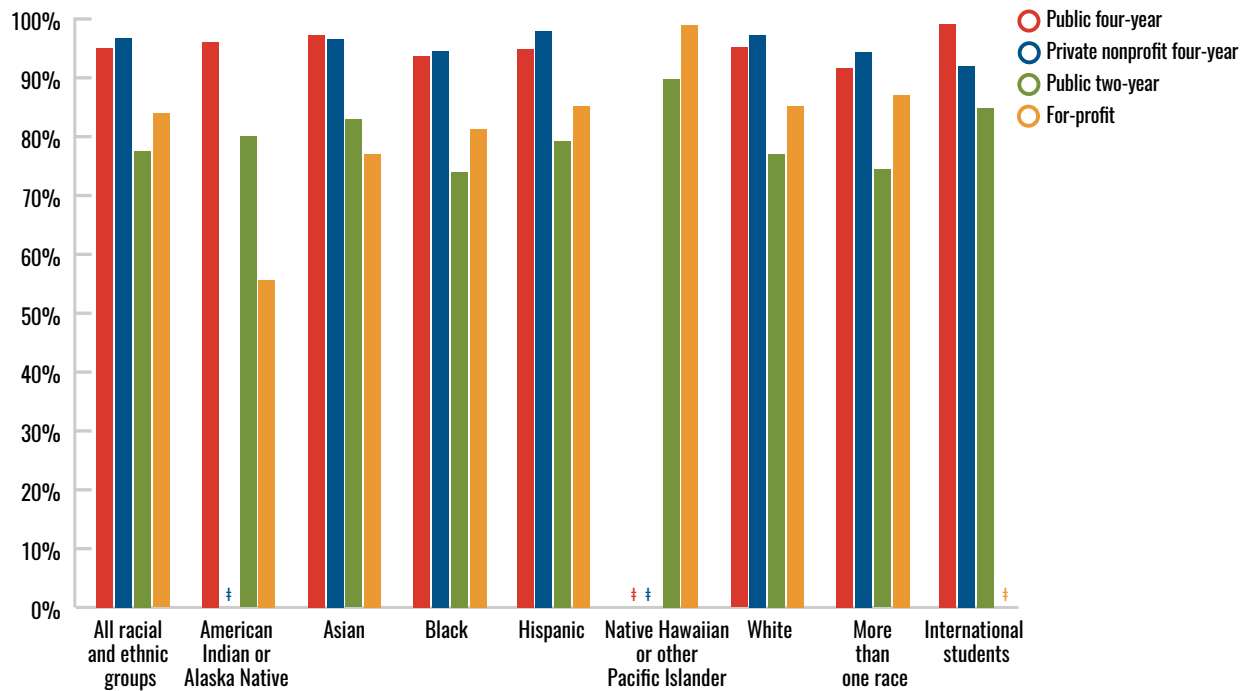


Source: U.S. Department of Education, Beginning Postsecondary Students Longitudinal Study, BPS: 12/14

- Asian students had the largest gender gap in first-year persistence rates, with Asian women 10 percentage points more likely to have persisted through to their second year than Asian men—95.9 percent compared with 85.9 percent.
- Students of more than one race had the smallest gender gap among all groups, with 84.5 percent of women and 83.2 percent of men persisting through to their second year.

By sector, first-year persistence rates were highest among public and private nonprofit four-year institutions, where over 90 percent of all students persisted through their first year (94.9 percent and 96.6 percent, respectively). Persistence rates of bachelor’s degree-seeking students at public two-year and for-profit institutions were much lower.

**Figure 5.3: First-Year Persistence Rates of Bachelor's Degree-Seeking Students, by Sector and Race and Ethnicity: Fall 2011 Cohort**



Source: U.S. Department of Education, Beginning Postsecondary Students Longitudinal Study, BPS: 12/14

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. † Estimate suppressed. Reporting standards not met.

- International (99.0 percent) and Asian (97.1 percent) students had the highest first-year persistence rates at public four-year institutions.
- Hispanic and White students had the highest first-year persistence rates at private nonprofit four-year institutions (97.8 percent and 97.2 percent, respectively).
- Nearly 90 percent of all Native Hawaiian or other Pacific Islander students (89.6 percent) at public two-year institutions persisted through to their second year, compared with about three-quarters of students of more than one race (74.3 percent) and African American students (73.9 percent).
- Nearly all Native Hawaiian or other Pacific Islander students at for-profit institutions persisted from their first to second year (98.8 percent), compared with 76.9 percent of Asian students and slightly more than half of all American Indian or Alaska Native (55.6 percent) students.

# UNDERGRADUATE COMPLETION RATES: STUDENTS WHO BEGAN COLLEGE IN 2011

The National Student Clearinghouse (NSC) is a national nonprofit organization that works with postsecondary institutions to provide educational reporting, verification, and research services (NSCRC 2018). Eighty-four percent of all Title IV degree-granting colleges and universities voluntarily participate in the Clearinghouse, providing NSC the ability to analyze data for 97 percent of all students enrolled in these institutions (Dundar and Shapiro 2016).

Given their ability to follow students as they move through American higher education, including when they transfer from one institution to another, the NSC data provide a robust collection of student enrollment, persistence, transfer, and completion information. For this reason, NSC data provide a more complete picture of student completion than federal data has historically been able to.<sup>5</sup>

This section analyzes student completion rates for the fall 2011 cohort who first enrolled in public two-year, public four-year, and private nonprofit four-year institutions. Completion rates were calculated within six years of first enrollment, following students through spring 2017. Six years represents 300 percent of normal time at public two-year institutions and 150 percent of normal time at four-year institutions.

We share data on students overall, as well as students who enrolled in college exclusively full time. Looking at students who enrolled full time is important for two reasons. First, examining the outcomes of exclusively full-time students most closely approximates the Student Right-to-Know or federal graduation rate. However, unlike the federal graduation rate, data from NSC allow us to capture students who complete at an institution other than their starting college or university. Second, we know from decades of research that students who enroll in college full time are more likely to complete. While the proportion of students who enroll exclusively full time is diminishing (Bombardieri 2017; CCSSE 2017; Shapiro et al. 2017), these students are the most likely to complete their programs of study on time, making their completion rates the most straightforward to interpret and compare. Although the data here present six-year outcomes, many students who remain enrolled, regardless of enrollment pattern, will complete a credential outside of this six-year window.

Across all racial and ethnic groups,<sup>6</sup> regardless of where students first enrolled, a larger share of students who attended exclusively full time than of the overall student cohort completed within six years of first enrolling. Completion rates varied, however, by race and ethnicity and where students first enrolled.

## Public Two-Year Institutions: Completion Rates for All Students

Nearly 40 percent of students who started at a public two-year college in fall 2011 completed a certificate or degree within six years—26.5 percent did so at their starting institution, 3.4 percent at another two-year institution, and 7.7 percent at a four-year institution. Slightly less than half (47.3 percent) of all students did not complete and were no longer enrolled in any institution six years later.

Slightly less than half of all Asian (46.8 percent) and White (46.7 percent) students completed a credential within six years, while more than one-third of all students of more than one race (38.5 percent) and Hispanic students (35.0 percent) completed within six years. Comparatively, roughly one-quarter of all Black students (26.0 percent) completed a credential within six years—the lowest completion rate of all racial and ethnic groups.

5 In 2017, the U.S. Department of Education introduced new outcome measures in an effort to provide a broader picture of student success, particularly for non-first-time, full-time students (Jones 2017), although limitations still exist.

6 Race and ethnicity unknown is included among the racial and ethnic categories within National Student Clearinghouse (NSC) and Integrated Postsecondary Education System (IPEDS) data, which are used in this chapter of the report. As a result, tables and figures include this group alongside other racial and ethnic categories.

**Table 5.1: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year Institutions: Fall 2011 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
All racial and ethnic groups (n=766,297)	37.5%	26.5%	3.4%	7.7%	7.0%	15.2%	47.3%
Asian (n=24,403)	46.8%	29.1%	3.8%	13.9%	10.3%	24.5%	28.7%
Black (n=91,067)	26.0%	17.6%	3.4%	5.0%	3.6%	19.1%	54.9%
Hispanic (n=99,974)	35.0%	25.0%	4.1%	6.0%	6.7%	23.3%	41.7%
White (n=310,771)	46.7%	32.6%	3.9%	10.3%	9.7%	13.8%	39.5%
More than one race (n=17,222)	38.5%	26.8%	3.5%	8.3%	8.2%	23.9%	37.6%
Other race or ethnicity (n=15,039)	41.8%	26.3%	3.3%	12.2%	8.6%	19.4%	38.8%
Race or ethnicity unknown or missing (n=207,822)	28.6%	21.7%	2.2%	4.8%	4.0%	9.6%	61.8%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Slightly less than one-third of White (32.6 percent) and Asian (29.1 percent) students completed at their starting institution, compared with around one-quarter of students of more than one race (26.8 percent) and Hispanic students (25.0 percent). The lowest completion rate occurred for Black students, among whom 17.6 percent completed a credential at their starting institution.

### Transfer and Completion

About 11 percent of students completed their degrees at another institution within six years of first enrolling: 3.4 percent did so at another two-year institution and 7.7 percent transferred and completed at a four-year institution. Asian students were the most likely to complete at another institution (17.7 percent), followed by White students (14.1 percent). The lowest rates of transfer and completion occurred for Black students (8.3 percent). This pattern held for students who completed a subsequent degree at a four-year institution, where Asian students (10.3 percent) and White students (9.7 percent) were more likely to have completed a subsequent degree than Black students (3.6 percent).

### Non-completion

Slightly less than one-quarter of all Asian students (24.5 percent), students of more than one race (23.9 percent), and Hispanic students (23.3 percent) were still enrolled and pursuing their first certificate or degree in the sixth year following college entry. Nearly one in five Black students (19.1 percent) remained enrolled in the sixth year, as did 13.8 percent of White students.

More than half of Black students had not earned a credential after six years and were no longer enrolled (54.9 percent), compared with 47.3 percent of students overall. Asian students were the least likely to have left without completing a credential (28.7 percent).

## Public Two-Year Institutions: Completion for Full-Time Students

Among exclusively full-time students who started college at a public two-year institution in fall 2011, nearly 60 percent completed a certificate or degree within six years—43.9 percent did so at their starting institution, 3.1 percent at another two-year institution, and 11.4 percent did so at a four-year institution. Only about 2 percent were still enrolled in spring 2017, and roughly 40 percent of students were not enrolled in any institution.

Over three-quarters of all Asian exclusively full-time students completed a credential within six years (78.8 percent)—the highest total completion rate of any racial and ethnic group. Among exclusively full-time students, more than half of all White students (69.2 percent), students of more than one race (68.1 percent), and Hispanic students (62.5 percent) completed a credential within six years. Comparatively, less than half of all Black students enrolled exclusively full time completed within six years (43.2 percent), the lowest total completion rate of any group.

**Table 5.2: Six-Year Outcomes (300% of Normal Time) for Exclusively Full-Time Students Who Started at Public Two-Year Institutions: Fall 2011 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
All racial and ethnic groups (n=188,855)	58.5%	43.9%	3.1%	11.4%	17.0%	2.2%	39.4%
Asian (n=4,220)	78.8%	52.3%	3.5%	23.0%	29.2%	2.8%	18.5%
Black (n=17,344)	43.2%	31.3%	3.5%	8.4%	10.4%	3.8%	53.1%
Hispanic (n=15,861)	62.5%	45.5%	4.8%	12.2%	20.0%	3.0%	34.5%
White (n=88,029)	69.2%	51.3%	3.6%	14.3%	22.0%	2.1%	28.7%
More than one race (n=3,374)	68.1%	51.0%	3.3%	13.8%	22.7%	2.9%	29.0%
Other race or ethnicity (n=3,622)	65.7%	44.3%	2.5%	18.9%	20.4%	2.7%	31.6%
Race or ethnicity unknown or missing (n=56,404)	42.7%	34.7%	1.8%	6.1%	8.8%	1.3%	56.0%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Over half of all Asian students (52.3 percent), White students (51.3 percent), and students of more than one race (51.0 percent) completed a credential at their starting institution, compared with Hispanic students (45.5 percent) and Black students (31.3 percent).

### Transfer and Completion

Slightly less than one-quarter of Asian students (23.0 percent) enrolled exclusively full time transferred and completed at a four-year institution—the highest rate of any group. Black students were the least likely to transfer and complete at a four-year institution (8.4 percent). Hispanic students were the most likely to transfer and complete at another two-year institution (4.8 percent). Nearly three in 10 Asian students completed a subsequent degree at a four-year institution (29.2 percent), compared with only 10.4 percent of Black students.

### Non-completion

A very small fraction of all exclusively full-time students remained enrolled at any institution in the sixth year (2.2 percent). Over half of full-time Black students (53.1 percent) left without completing a credential, a much higher percentage than Hispanic (34.5 percent), White (28.7 percent), and Asian (18.5 percent) students.



## Public Four-Year Institutions: Completion Rates for All Students

More than six in 10 students who began college at public four-year institutions in fall 2011 finished a degree within six years—53.5 percent did so at their starting institution, 3.4 percent at a two-year institution, and 7.8 percent at another four-year institution. Nearly one-quarter of students did not complete and were no longer enrolled in any institution in the sixth year (24.2 percent).

By race and ethnicity, more than seven in 10 Asian (75.8 percent) and White (71.1 percent) students completed a credential within six years of first enrolling. The total completion rate for Hispanic students was 55.7 percent, while that of students of more than one race was 62.3 percent. Black students had the lowest total completion rate of any group, with less than half completing a credential within six years (46.0 percent).

**Table 5.3: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year Institutions: Fall 2011 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
All racial and ethnic groups (n=1,011,318)	64.7%	53.5%	3.4%	7.8%	11.1%	24.2%
Asian (n=41,937)	75.8%	66.8%	2.4%	6.6%	11.7%	12.5%
Black (n=98,393)	46.0%	35.5%	3.8%	6.7%	17.5%	36.5%
Hispanic (n=99,009)	55.7%	45.9%	3.6%	6.2%	16.4%	27.9%
White (n=523,444)	71.1%	57.9%	3.9%	9.3%	9.9%	19.1%
More than one race (n=21,853)	62.3%	49.9%	3.9%	8.5%	15.7%	22.0%
Other race or ethnicity (n=45,908)	69.3%	60.6%	1.8%	6.9%	9.0%	21.8%
Race or ethnicity unknown or missing (n=180,774)	58.0%	50.2%	2.3%	5.4%	8.1%	33.9%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Two-thirds of all Asian students (66.8 percent) completed their degrees at their starting public four-year institutions, compared with White students (57.9 percent), students of more than one race (49.9 percent), Hispanic students (45.9 percent), and Black students (35.5 percent).

### Transfer and Completion

The share of students who transferred to a two-year college or to a different four-year institution and completed a credential within six years of their original enrollment ranged from 9.0 percent of Asian students to 13.2 percent of White students.

### Non-completion

Blacks (17.5 percent), Hispanics (16.4 percent), and students of more than one race (15.7 percent) were the most likely to still be enrolled in the sixth year, compared with Asian (11.7 percent) and White (9.9 percent) students. Over one-third of Black students (36.5 percent), and over one-quarter of Hispanic students (27.9 percent) had not completed a degree and were no longer enrolled in the sixth year—the highest rates of all groups. In contrast, 12.5 percent of Asian students had left college without a credential.

## Public Four-Year Institutions: Completion Rates for Full-Time Students

Of exclusively full-time students who started a public four-year college in fall 2011, 84.1 percent completed a certificate or degree by spring 2017, either at their starting institution (74.2 percent), or at another four-year (7.9 percent) or two-year (2.0 percent) institution. About 2 percent were still enrolled in college and 13.6 percent of students were not enrolled in any institution in the sixth year.

The majority of students across all racial and ethnic groups completed a credential within six years. The total completion rate was highest among Asian (91.0 percent) and White (88.8 percent) students, followed by students of more than one race (85.1 percent). Although the majority of Hispanic (81.9 percent) and Black (72.5 percent) students completed within six years, they were much less likely to do so than their peers.

**Table 5.4: Six-Year Outcomes (150% of Normal Time) for Exclusively Full-Time Students Who Started at Public Four-Year Institutions: Fall 2011 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
All racial and ethnic groups (n=529,995)	84.1%	74.2%	2.0%	7.9%	2.3%	13.6%
Asian (n=23,170)	91.0%	83.9%	1.2%	5.9%	2.8%	6.2%
Black (n=38,748)	72.5%	61.8%	2.5%	8.3%	4.6%	22.9%
Hispanic (n=38,222)	81.9%	72.9%	2.2%	6.9%	3.4%	14.7%
White (n=293,427)	88.8%	77.6%	2.2%	9.0%	1.7%	9.5%
More than one race (n=10,824)	85.1%	74.0%	2.2%	8.8%	2.7%	12.2%
Other race or ethnicity (n=28,074)	80.3%	73.2%	0.9%	6.2%	3.3%	16.5%
Race or ethnicity unknown or missing (n=97,530)	74.6%	67.5%	1.6%	5.5%	2.4%	23.0%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Asian students were the most likely to complete at their starting institution (83.9 percent), while Black students were the least likely (61.8 percent). Hispanic and White students completed at rates of 72.9 percent and 77.6 percent, respectively.

### Transfer and Completion

As with students overall, transfer and completion rates were similar across racial or ethnic groups. Asian students were the least likely of all to transfer and complete at a different institution (7.1 percent). White students were most likely to follow this path (11.2 percent).

### Non-completion

Overall, 2.3 percent of exclusively full-time students who started at a public four-year institution remained enrolled in the sixth year. More than one in five Black students (22.9 percent) who enrolled exclusively full time had not earned a degree and were no longer enrolled in any institution in the sixth year, compared with only 6.2 percent of Asian students—the highest and lowest persistence rates among all racial or ethnic groups.

## Private Nonprofit Four-Year Institutions: Completion Rates for All Students

About three-quarters of students who started at a private nonprofit four-year institution in fall 2011 completed their degrees within six years—63.7 percent did so at their starting institution, 10.0 percent at another four-year institution, and 2.3 percent did so at a two-year institution.

Although the majority of all students, regardless of race or ethnicity, completed a credential within six years, Black students had the lowest total completion rate among all groups (57.3 percent). Comparatively, 85.9 percent of Asian students, 81.9 percent of White students, and 72.3 percent of Hispanic students completed within six years.

**Table 5.5: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year Institutions: Fall 2011 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
All racial and ethnic groups (n=423,091)	76.0%	63.7%	2.3%	10.0%	7.2%	16.7%
Asian (n=15,010)	85.9%	75.4%	1.6%	8.9%	6.7%	7.5%
Black (n=34,763)	57.3%	44.5%	3.0%	9.8%	13.6%	29.1%
Hispanic (n=28,297)	72.3%	59.6%	3.3%	9.4%	10.3%	17.5%
White (n=229,370)	81.9%	68.3%	2.5%	11.1%	6.5%	11.7%
More than one race (n=8,186)	75.1%	60.9%	3.3%	10.9%	10.2%	14.7%
Other race or ethnicity (n=20,541)	81.5%	73.4%	0.9%	7.2%	5.0%	13.5%
Race or ethnicity unknown or missing (n=86,923)	66.6%	56.6%	1.6%	8.4%	6.0%	27.4%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

The majority of Asian students (75.4 percent), White students (68.3 percent), students of more than one race (60.9 percent), and Hispanic students (59.6 percent) completed at their starting institution within six years, compared with less than half of Black students (44.5 percent).

### Transfer and Completion

The share of students beginning at a private nonprofit four-year college or university in fall 2011 who transferred and earned a degree at another institution ranged from 10.4 percent of Asian students to 14.2 percent of those of more than one race.

### Non-completion

Black students were the most likely to remain enrolled at any institution in the sixth year (13.6 percent), followed by Hispanic students (10.3 percent) and students of more than one race (10.2 percent). As with completion rates, there were substantial differences in the rates at which students from different racial and ethnic groups left college without completing. More than one-quarter of all Black students left college without completing (29.1 percent), compared with 17.5 percent of Hispanics, 11.7 percent of Whites, and 7.5 percent of Asians.

## Private Nonprofit Four-Year Institutions: Completion Rates for Full-Time Students

Among exclusively full-time students who started at a private nonprofit four-year institution in fall 2011, 88.5 percent completed a degree by 2017, either at their starting institution (78.2 percent), or at another four-year (9.2 percent) or two-year (1.1 percent) institution. Less than 2 percent were still enrolled, and 9.8 percent of students had not completed a degree and were not enrolled in any institution in the sixth year.

The majority of full-time students, across all racial and ethnic groups, completed within six years, although the total completion rate of some groups was substantially higher than that of others. Roughly nine in 10 Asian students (94.2 percent), White students (92.5 percent), and students of more than one race (90.0 percent) completed a credential within six years. The total completion rate declined to 87.6 percent for Hispanic students and 77.6 percent of Black students.

**Table 5.6: Six-Year Outcomes (150% of Normal Time) for Exclusively Full-Time Students Who Started at Private Nonprofit Four-Year Institutions: Fall 2011 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
All racial and ethnic groups (n=293,818)	88.5%	78.2%	1.1%	9.2%	1.7%	9.8%
Asian (n=11,248)	94.2%	85.7%	0.7%	7.8%	1.7%	4.2%
Black (n=19,651)	77.6%	65.8%	1.6%	10.3%	3.5%	19.0%
Hispanic (n=18,444)	87.6%	77.4%	1.5%	8.7%	1.9%	10.5%
White (n=167,415)	92.5%	81.6%	1.2%	9.7%	1.3%	6.2%
More than one race (n=5,458)	90.0%	78.8%	1.4%	9.9%	1.9%	8.1%
Other race or ethnicity (n=15,939)	88.1%	81.5%	0.4%	6.2%	2.2%	9.8%
Race or ethnicity unknown or missing (n=55,663)	79.6%	70.4%	0.9%	8.3%	1.9%	18.5%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Asian students were the most likely to complete at their starting institution within six years (85.7 percent), compared with 81.6 percent of White students, 78.8 percent of students of more than one race, 77.4 percent of Hispanic students, and 65.8 percent of Black students.

### Transfer and Completion

The vast majority of students who transferred and completed elsewhere did so at another four-year institution. The shares of students who earned a credential at a different institution were similar across all racial and ethnic groups, ranging from 8.5 percent of Asian students to 11.8 percent of Black students.

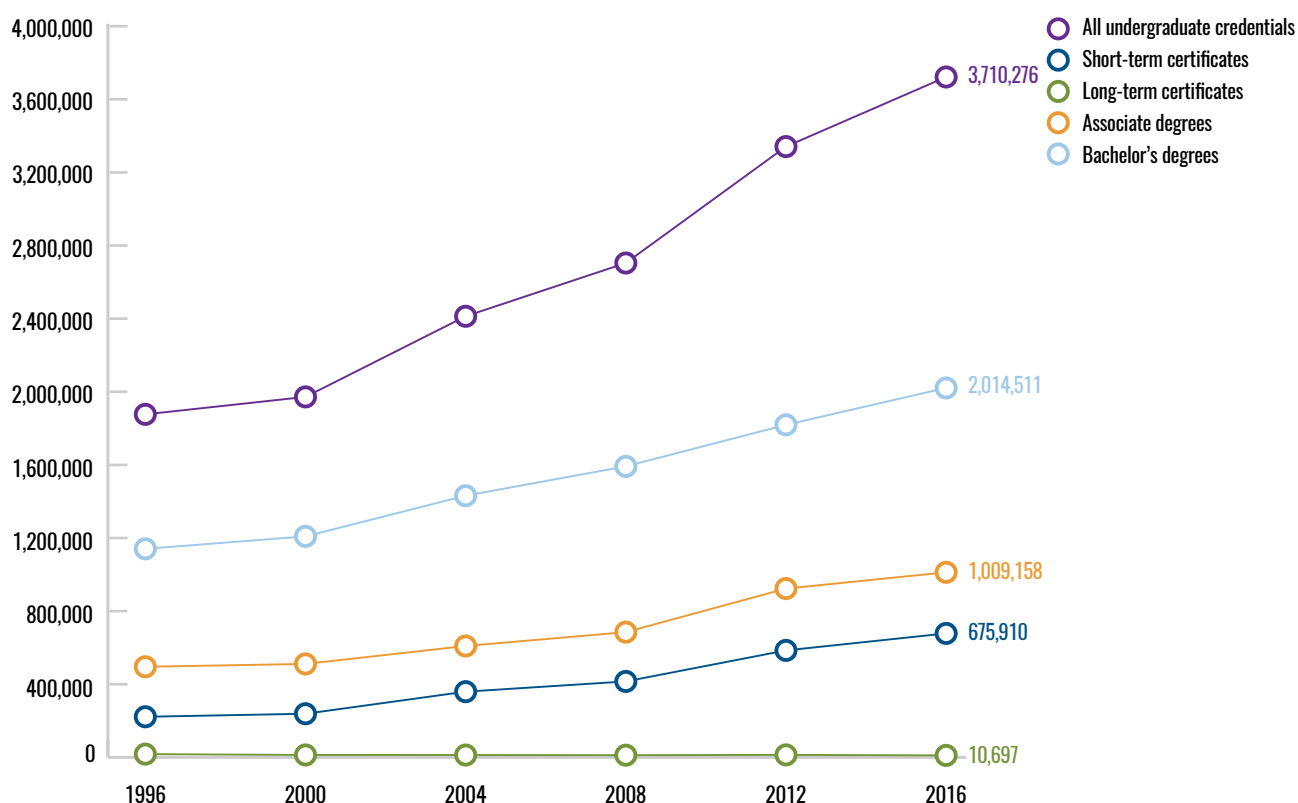
### Non-completion

Only 1.7 percent of students who started at a private nonprofit four-year institution and enrolled exclusively full time remained enrolled in the sixth year. However, there were large differences across groups in the share who left college without a degree—nearly one in five Black students (19.0 percent) left without finishing, compared with 4.2 percent of Asian, 6.2 percent of White, and 10.5 percent of Hispanic students.

## UNDERGRADUATE COMPLETIONS: 1996 TO 2016

Between 1996 and 2016, the total number of undergraduate credentials awarded increased from about 1.9 million to over 3.7 million. The total number of bachelor's degrees increased from 1.1 million in 1996 to 2 million in 2016. During this time, bachelor's degrees as a share of all undergraduate credentials completed decreased from 60.8 percent in 1996 to 54.3 percent in 2016, as the number of sub-baccalaureate credentials awarded, including short- and long-term certificates,<sup>7</sup> increased more rapidly.

**Figure 5.4: Undergraduate Completions, by Award Level, Select Years: 1996, 2000, 2004, 2008, 2012, 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 1996, 2000, 2004, 2008, 2012, and 2016

Notes: Short-term certificates include those that are less than two academic years in length. | Long-term certificates include those that are at least two, but less than four, academic years in length.

Consistent with this overall trend, the proportion of undergraduate students who earned certificates increased between 1996 and 2016 across nearly all student groups. The total share of certificates among all credentials completed increased the most for Black students (6.1 percentage points), while the share of bachelor's degrees declined by 9.2 percentage points, the largest decrease of any group. Hispanics followed a similar trajectory, with a 4.3 percentage point increase in certificates as a share of all credentials, and an 8.2 percentage point decline in the share that were bachelor's degrees.

<sup>7</sup> Short-term certificates include those that are less than two academic years in length. Long-term certificates include those that are at least two, but less than four, academic years in length.

**Table 5.7: Undergraduate Completions, by Award Level and Race and Ethnicity: 1996 and 2016**

		<b>Short-Term Certificates</b>	<b>Long-Term Certificates</b>	<b>Associate Degrees</b>	<b>Bachelor's Degrees</b>
1996	All racial and ethnic groups	11.8%	0.9%	26.4%	60.8%
	American Indian or Alaska Native	21.8%	0.9%	33.7%	43.6%
	Asian	9.3%	1.2%	22.4%	67.0%
	Black	18.3%	1.0%	27.0%	53.7%
	Hispanic	18.1%	0.9%	30.3%	50.8%
	Native Hawaiian or other Pacific Islander	N/A	N/A	N/A	N/A
	White	10.8%	0.9%	26.6%	61.7%
	More than one race	N/A	N/A	N/A	N/A
	Race or ethnicity unknown	15.2%	2.4%	22.1%	60.3%
	International students	5.1%	1.2%	19.6%	74.1%
2016	All racial and ethnic groups	18.2%	0.3%	27.2%	54.3%
	American Indian or Alaska Native	27.4%	0.4%	35.2%	37.1%
	Asian	13.0%	0.3%	23.0%	63.7%
	Black	25.1%	0.3%	30.1%	44.5%
	Hispanic	23.1%	0.2%	34.1%	42.5%
	Native Hawaiian or other Pacific Islander	20.5%	0.3%	32.3%	46.9%
	White	16.7%	0.3%	25.8%	57.2%
	More than one race	15.3%	0.3%	26.2%	58.3%
	Race or ethnicity unknown	18.8%	0.4%	26.9%	53.9%
	International students	6.6%	0.2%	16.4%	76.8%

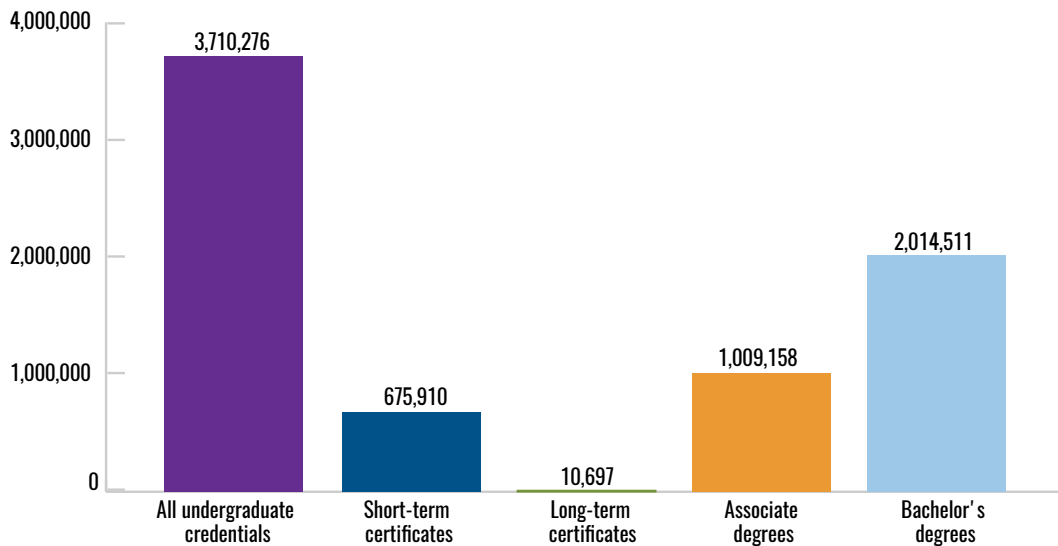
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 1996 and 2016

Notes: In 1996, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category "Asian." | In 1996, data on students of more than one race were not collected separately. | Short-term certificates include those that are less than two academic years in length. | Long-term certificates include those that are at least two, but less than four, academic years in length.

# UNDERGRADUATE COMPLETIONS: 2016

Over 3.7 million undergraduate credentials were awarded in 2016. Of these, approximately 1.7 million were sub-baccalaureate credentials—1 million were associate degrees, over 675,000 were short-term certificates, and over 10,600 were long-term certificates. The number of bachelor’s degrees earned was 2 million.

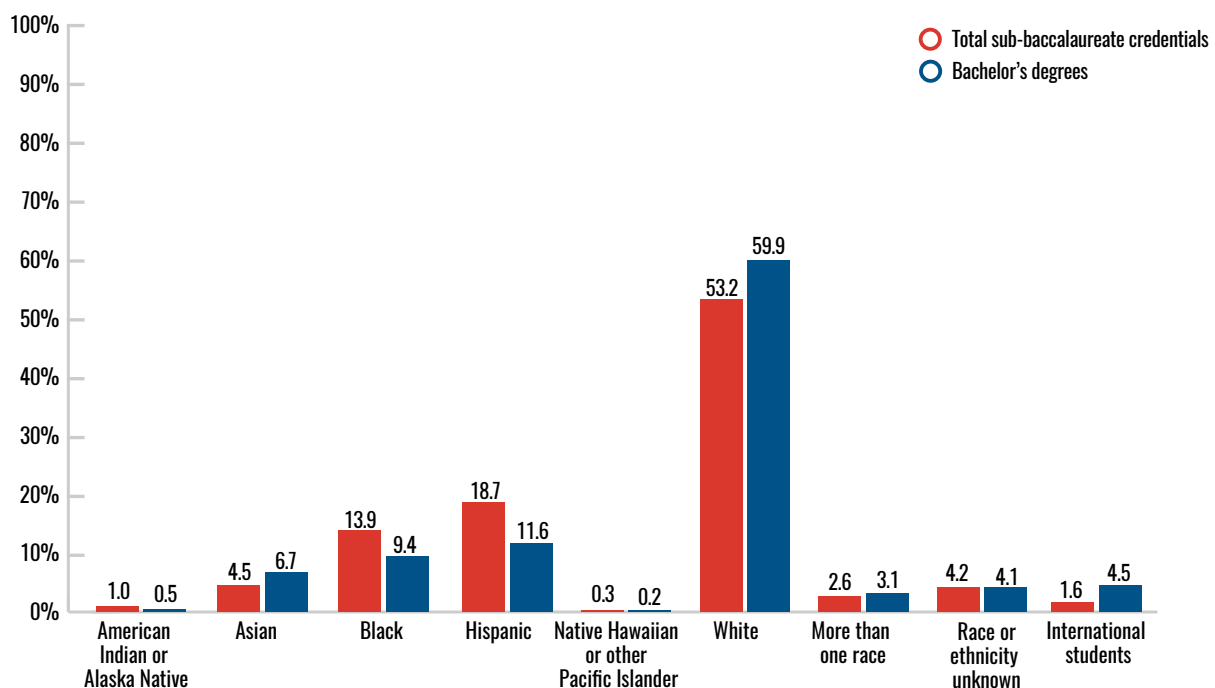
**Figure 5.5: Undergraduate Completions, by Award Level: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Notes: Short-term certificates include those that are less than two academic years in length. | Long-term certificates include those that are at least two, but less than four, academic years in length.

White students earned the majority of all sub-baccalaureate credentials awarded in 2016 (53.2 percent), followed by Hispanic students (18.7 percent) and Black students (13.9 percent). Whites also earned the largest share of all bachelor’s degrees awarded in 2016 (59.9 percent), followed by Hispanics (11.6 percent) and African Americans (9.4 percent).

**Figure 5.6: Bachelor’s Degrees and Sub-baccalaureate Credentials, by Race and Ethnicity: 2016**

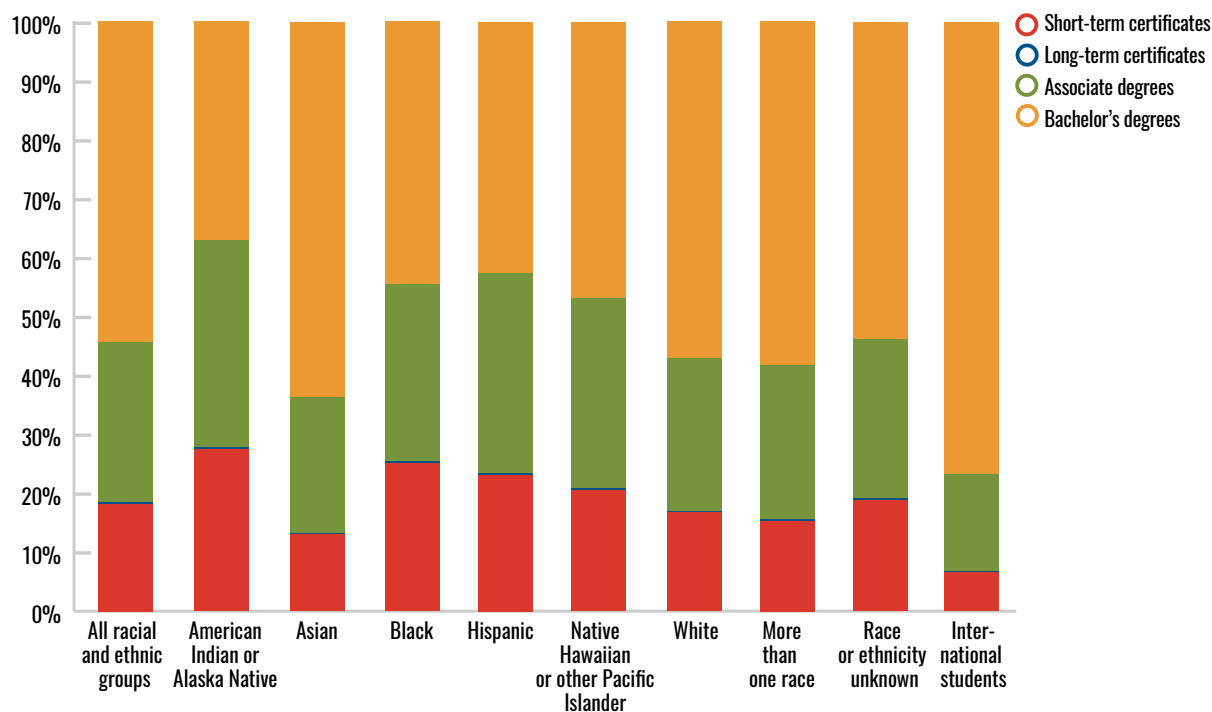


Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## Completions Within Student Groups

In 2016, the majority of undergraduate credentials awarded were bachelor's degrees (54.3 percent), followed by associate degrees (27.2 percent), short-term certificates (18.2 percent), and long-term certificates (0.3 percent). There were large differences across student groups when considering the types of credentials students complete; namely, when examining sub-baccalaureate credentials as compared with bachelor's degrees.

**Figure 5.7: Undergraduate Completions, by Award Level and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 1996 and 2016

Notes: Short-term certificates include those that are less than two academic years in length. | Long-term certificates include those that are at least two, but less than four, academic years in length.

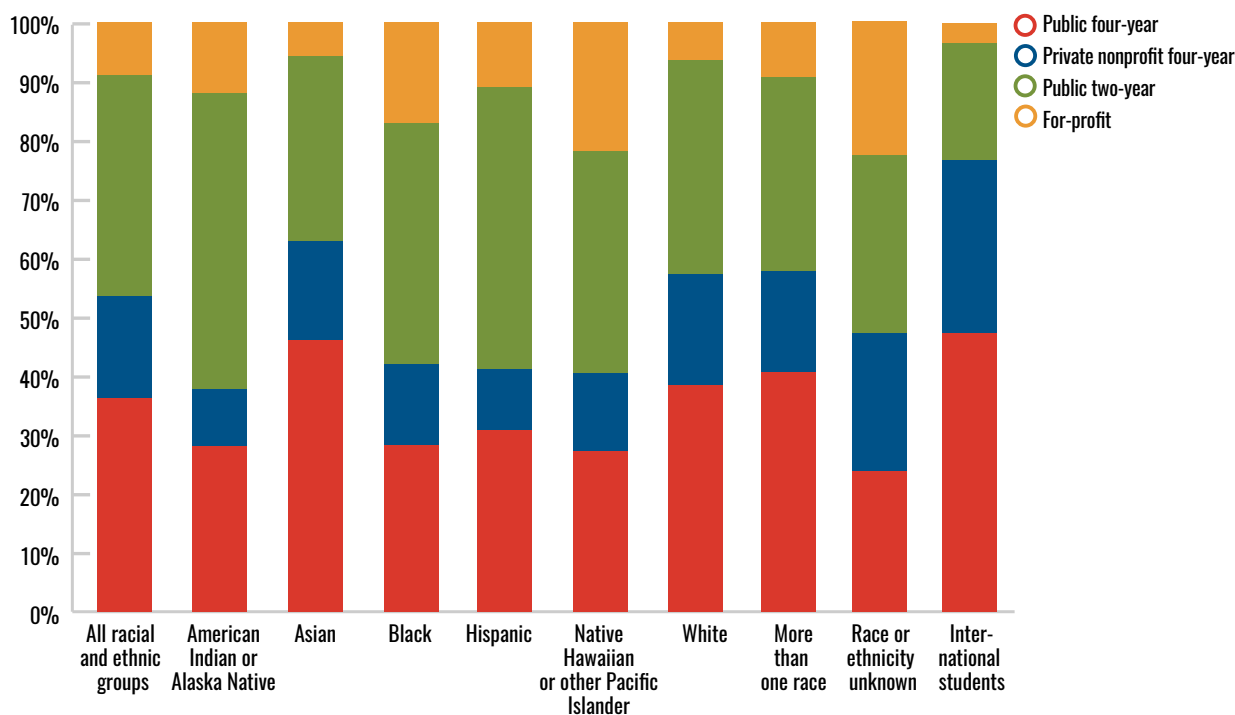
- More than half of the undergraduate credentials earned by American Indian or Alaska Native (62.9 percent), Hispanic (57.5 percent), Black (55.5 percent), and Native Hawaiian or other Pacific Islander (53.1 percent) students were certificates or associate degrees. The share of Whites, Asians, and students of more than one race awarded these degrees ranged from 36.3 percent to 42.8 percent.
- By degree type, all students earning a sub-baccalaureate credential were most likely to earn an associate degree; however, some groups were more likely than others to earn a short-term certificate, including American Indian or Alaska Native (27.4 percent), Black (25.1 percent), Hispanic (23.1 percent), and Native Hawaiian or other Pacific Islander (20.5 percent) students. In contrast, 16.7 percent of Whites and 13.0 percent of Asians earned these credentials.
- Among undergraduate credential completers, the groups most likely to earn a bachelor's degree were international students (76.8 percent), Asian students (63.7 percent), students of more than one race (58.3 percent), and White students (57.2 percent); the groups least likely to earn a bachelor's were American Indian or Alaska Native (37.1 percent), Hispanic (42.5 percent), and Black (44.5 percent) students.



## Completions by Higher Education Sector and Field

In 2016, public two-year institutions awarded 37.4 percent of all undergraduate credentials, public and private nonprofit four-year institutions awarded 53.5 percent (36.3 percent and 17.3 percent, respectively), and for-profits awarded 9.0 percent.

**Figure 5.8: Total Undergraduate Completions, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

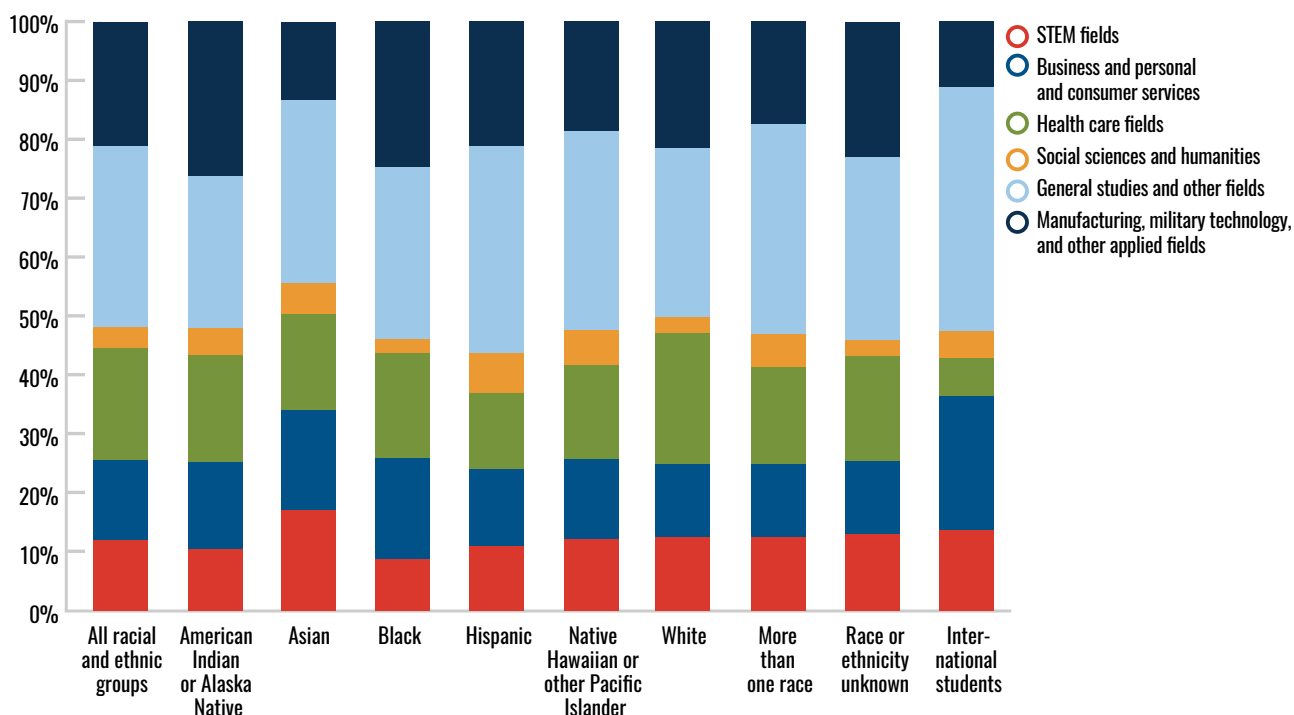
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- More than one-third of all international (47.3 percent), Asian (46.1 percent), and White (38.5 percent) students completed their undergraduate credentials at a public four-year institution, compared with just over one-quarter of all Black (28.2 percent), American Indian or Alaska Native (28.0 percent), and Native Hawaiian or other Pacific Islander (27.3 percent) students.
- More than one-quarter of all international students completed at a private nonprofit four-year institution (29.2 percent)—the largest percentage of any group.
- Half of all American Indian or Alaska Native students (50.1 percent) completed at a public two-year institution—the highest percentage of any group. Almost half of all Hispanic students (47.7 percent), and about 40 percent of Black (40.9 percent), Native Hawaiian or other Pacific Islander (37.6 percent), and White (36.3 percent) students completed at these institutions.
- One in five Native Hawaiian or other Pacific Islander students completed their undergraduate credentials at a for-profit institution (21.9 percent)—the highest of any group. Over 10 percent of all Black (17.1 percent), American Indian or Alaska Native (12.1 percent), and Hispanic (11.1 percent) students completed their undergraduate education at these institutions.

## Public Two-Year Institutions: Sub-baccalaureate Credentials

The most credentialed fields at public two-year institutions were in general studies and other programs<sup>8</sup> (30.6 percent), health care fields (18.9 percent), business and personal and consumer services (13.6 percent), and STEM fields (12.0 percent).

**Figure 5.9: Total Sub-baccalaureate Credentials Completed at Public Two-Year Institutions, by Field and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

- General studies and other programs were the top credentialed fields for most students; however, the total share of students earning credentials in these fields ranged from 25.7 percent of American Indian or Alaska Native students to 41.4 percent of international students.
- A larger share of White students completed a sub-baccalaureate credential in health care fields (22.1 percent) than any other group. International students were the least likely to complete a credential in these fields (6.3 percent).
- Asian students were nearly twice as likely as Black students to complete a sub-baccalaureate credential in STEM (17.1 percent and 8.8 percent, respectively).
- American Indian or Alaska Native students were twice as likely to complete a sub-baccalaureate credential in manufacturing, military technology, and other applied fields<sup>9</sup> as Asian students (26.4 percent and 13.4 percent, respectively).

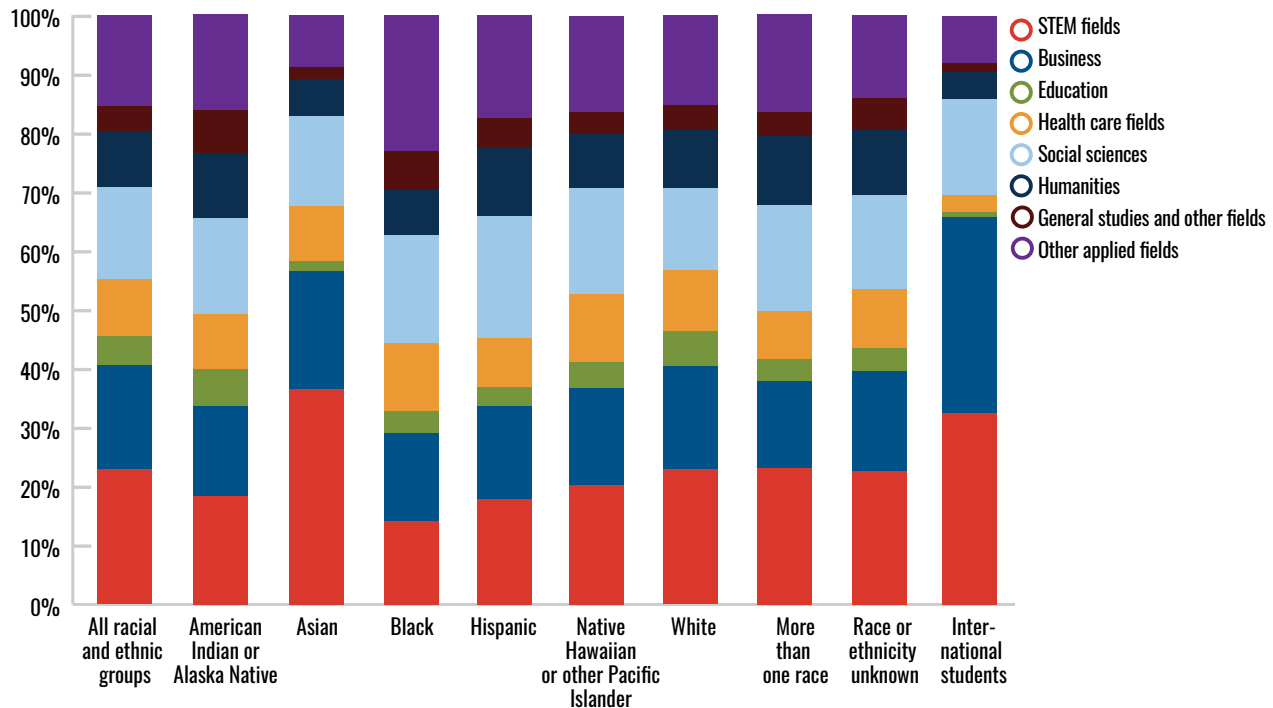
<sup>8</sup> General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others.

<sup>9</sup> Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

## Public Four-Year Institutions: Bachelor's Degrees

Three disciplinary areas represented over half of all bachelor's degrees completed at public four-year institutions in 2016: STEM (22.9 percent), business (17.8 percent), and the social sciences (15.6 percent).

**Figure 5.10: Bachelor's Degrees Completed at Public Four-Year Institutions, by Field and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for bachelor's degrees include personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

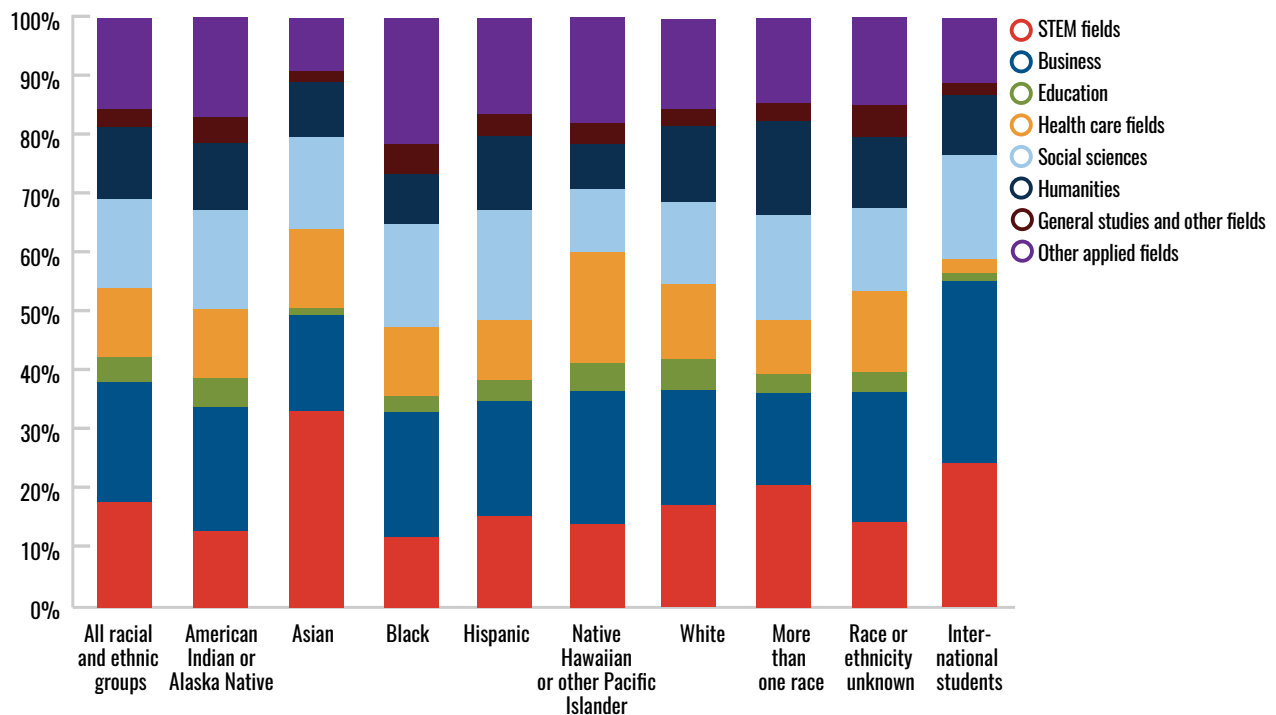
- Within the STEM fields, there existed great variation by race and ethnicity. More than twice as many Asian students (36.5 percent) as Black students (14.1 percent) earned bachelor's degrees in STEM fields.
- Slightly less than one-quarter of all Black students (23.0 percent) completed a bachelor's degree in other applied fields,<sup>10</sup> compared with 8.8 percent of Asian students and 8.1 percent of international students.
- Roughly one-third of Hispanic students earned bachelor's degrees in the humanities and social sciences (32.4 percent)—the highest percentage of any group.
- One-third of all international students completed a bachelor's degree in business—the highest percentage of any group.

<sup>10</sup> Other applied fields for bachelor's degrees include personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

## Private Nonprofit Four-Year Institutions: Bachelor's Degrees

The share of bachelor's degrees at private nonprofit four-year institutions that were in STEM fields was smaller than the share at public four-year institutions (17.9 percent versus 22.9 percent). This pattern was similar across all racial and ethnic groups. Business, health care, and humanities were larger shares of the degrees awarded by private nonprofit four-year than public four-year institutions.

**Figure 5.11: Bachelor's Degrees Completed at Private Nonprofit Four-Year Institutions, by Field and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for bachelor's degrees include personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

- International students were nearly twice as likely as students of more than one race to have completed a bachelor's degree in business (31.0 percent and 15.6 percent, respectively).
- One-third of Asian students completed a bachelor's degree in STEM fields (33.3 percent), more than twice the share of Black undergraduates (12.0 percent).
- Native Hawaiian or other Pacific Islander students were more than twice as likely as students of more than one race to have completed a bachelor's degree in health care fields (18.8 percent and 9.1 percent, respectively). International students were the least likely to complete a credential in these fields (2.3 percent).
- For most student groups, the share of all bachelor's degrees completed at private nonprofit four-year institutions in the humanities and social sciences was over one-quarter of students, with the exception of Native Hawaiian or other Pacific Islander students (18.3 percent).

## For-Profit Institutions: Sub-baccalaureate Credentials and Bachelor's Degrees

Over half of sub-baccalaureate credentials awarded at for-profit institutions in 2016 were in health care fields (55.3 percent). Business and health care together accounted for over half (56.8 percent) of bachelor's degrees awarded.

**Table 5.8: Sub-baccalaureate Credentials and Bachelor's Degrees Completed at For-Profit Institutions, by Field and Race and Ethnicity: 2016**

SUB-BACCALAUREATE CREDENTIALS						
	STEM Fields	Business and Personal and Consumer Services	Health Care Fields	Social Sciences and Humanities	General Studies and Other Fields	Manufacturing, Military Technology, and Other Applied Fields
All racial and ethnic groups	6.9%	17.1%	55.3%	1.9%	1.0%	17.9%
American Indian or Alaska Native	5.6%	12.9%	59.4%	0.9%	0.4%	20.8%
Asian	6.0%	14.6%	66.0%	3.4%	0.7%	9.3%
Black	6.8%	19.6%	54.7%	1.2%	0.8%	16.9%
Hispanic	4.8%	10.9%	67.3%	1.0%	0.6%	15.4%
Native Hawaiian or other Pacific Islander	5.3%	14.8%	62.2%	1.0%	0.9%	15.9%
White	7.2%	16.1%	53.2%	1.7%	1.2%	20.6%
More than one race	9.6%	19.6%	48.4%	3.9%	1.3%	17.2%
Race or ethnicity unknown	9.8%	28.7%	37.3%	4.3%	1.3%	18.7%
International students	13.4%	36.6%	11.5%	17.6%	0.7%	20.1%

BACHELOR'S DEGREES								
	STEM Fields	Business	Education	Health Care Fields	Social Sciences	Humanities	General Studies and Other Fields	Other Applied Fields
All racial and ethnic groups	9.7%	31.3%	3.3%	25.5%	6.3%	4.3%	0.4%	19.2%
American Indian or Alaska Native	10.0%	32.5%	2.9%	20.9%	7.5%	3.6%	0.7%	22.0%
Asian	10.5%	27.9%	0.3%	45.3%	1.5%	3.7%	0.1%	10.5%
Black	7.8%	36.3%	3.6%	24.1%	7.0%	2.9%	0.4%	17.9%
Hispanic	9.0%	31.0%	3.0%	22.7%	5.7%	4.4%	0.4%	23.7%
Native Hawaiian or other Pacific Islander	9.6%	33.6%	1.8%	23.2%	7.7%	4.3%	1.9%	17.9%
White	11.1%	28.7%	4.0%	26.5%	6.6%	4.4%	0.5%	18.2%
More than one race	10.6%	29.4%	2.6%	19.9%	9.0%	8.2%	0.2%	20.1%
Race or ethnicity unknown	8.5%	34.5%	2.1%	24.1%	5.9%	4.2%	0.4%	20.4%
International students	8.6%	32.1%	0.5%	10.9%	3.3%	11.1%	0.2%	33.2%

Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for bachelor's degrees include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations. | Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

- Over one-third (36.6 percent) of the sub-baccalaureate credentials completed by international students at for-profit institutions were in business and personal and consumer services—a much larger percentage than any other student group.
- Other than international students, of whom only 11.5 percent graduated with sub-baccalaureate credentials in health care, nearly every other student group earned more than half of their sub-baccalaureate credentials in these fields, including 67.3 percent of Hispanics, 66.0 percent of Asians, 59.4 percent of American Indians or Alaska Natives, 54.7 percent of African Americans, and 53.2 percent of Whites.
- International students were also more than four times as likely as every other group to complete a sub-baccalaureate credential in social sciences and the humanities (17.6 percent). They were also more than twice as likely as nearly all other groups to complete a bachelor’s degree in the humanities (11.1 percent).
- Asian students were the most likely to have earned bachelor’s degrees in health care fields (45.3 percent), while international students were the least likely to do so (10.9 percent).

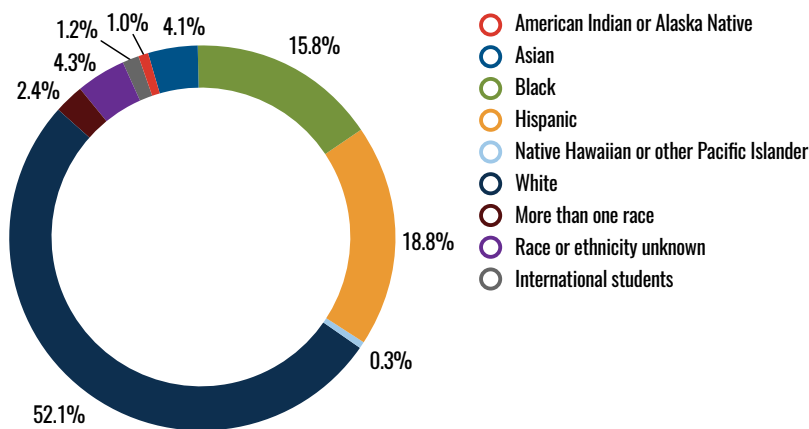
## Completions by Credential Type

Students from different racial and ethnic groups attend different types of institutions and earn different types of undergraduate degrees in different fields. (As Chapter 6 of this report, “Graduate School Completion,” indicates, there is similar variation in graduate degrees earned.)

### Short-Term Certificates

In 2016, undergraduate students completed nearly 676,000 short-term certificates. Among students who completed short-term certificates, 52.1 percent were White and 42.4 percent were students of color.<sup>11</sup> International students made up 1.2 percent of short-term certificate completers, and 4.3 percent were of unknown race and ethnicity.<sup>12</sup>

**Figure 5.12: Short-Term Certificates, by Race and Ethnicity: 2016**

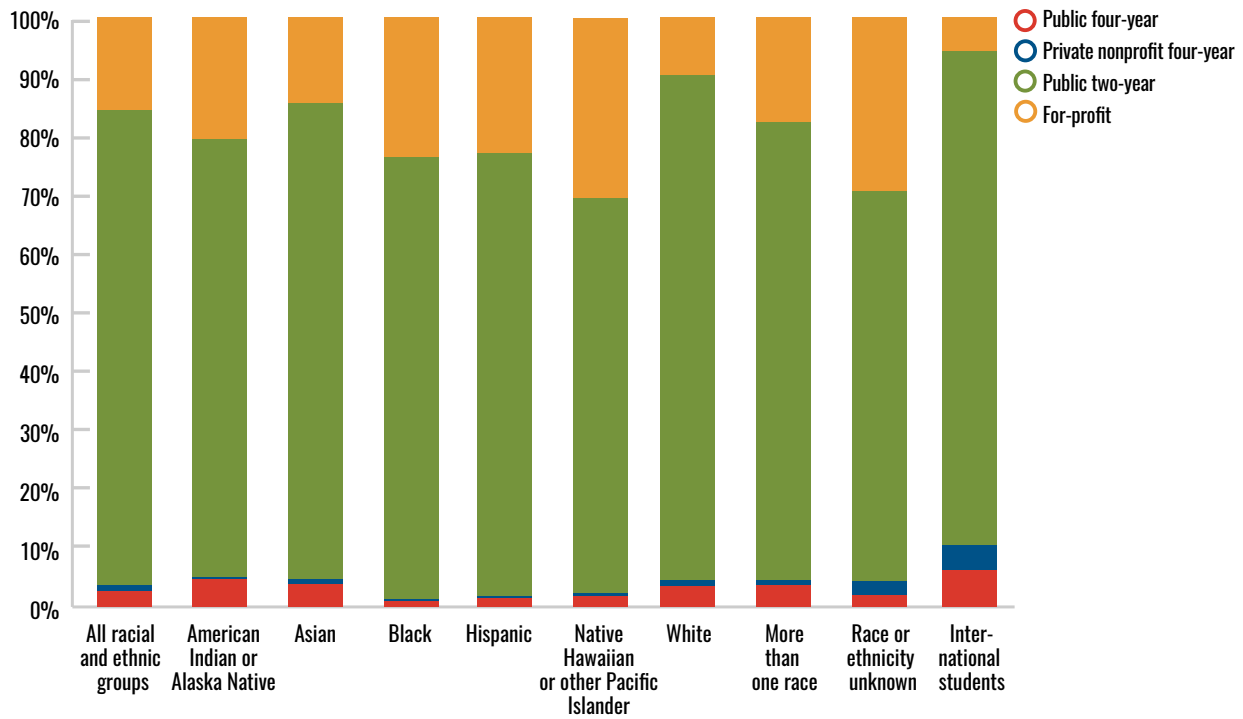


Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Short-term certificates include those that are less than two academic years in length.

11 The group students of color includes American Indians or Alaska Natives, Asians, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and students of more than one race.  
 12 Race and ethnicity unknown is included among the racial and ethnic categories within IPEDS data, which are used in this chapter of the report. As a result, tables and figures include this group alongside other racial and ethnic categories.

## HIGHER EDUCATION SECTOR

**Figure 5.13: Short-Term Certificates, by Sector and Race and Ethnicity: 2016**



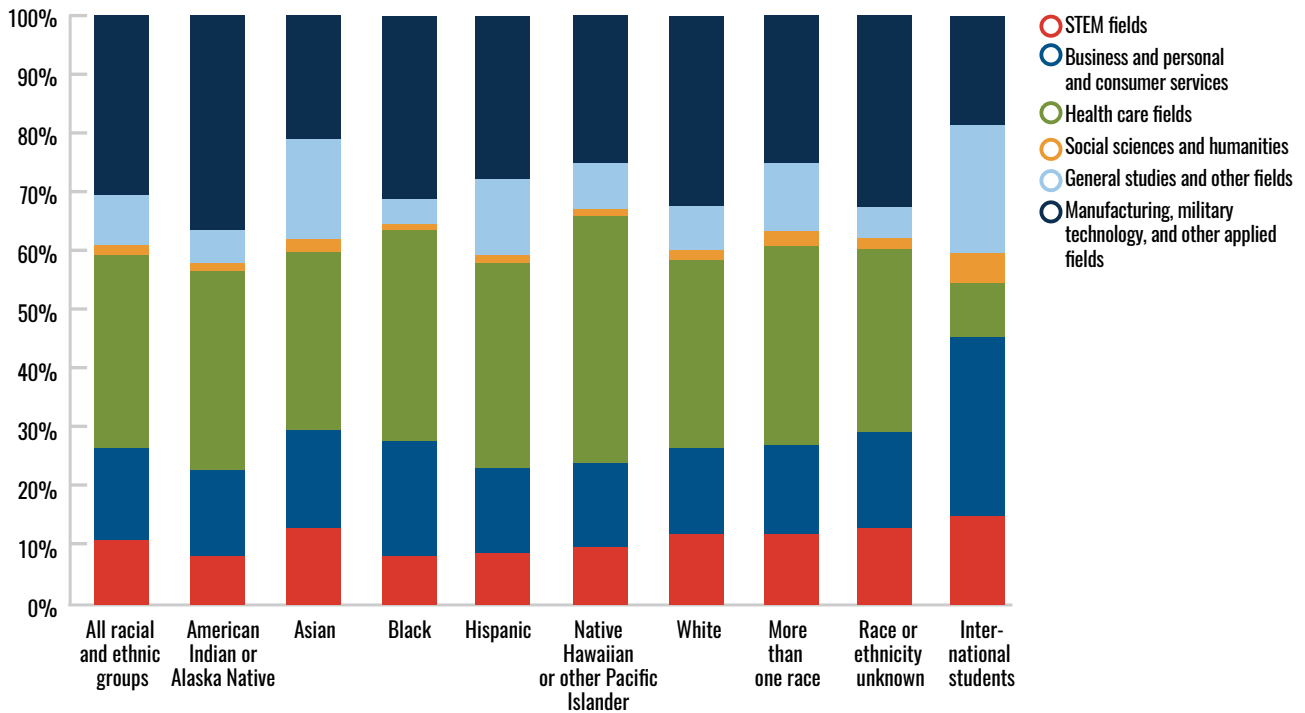
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Short-term certificates include those that are less than two academic years in length.

- The majority of short-term certificates earned in 2016 were completed at public two-year institutions (80.7 percent), followed by for-profit (15.7 percent), public four-year (2.7 percent), and private nonprofit four-year (0.9 percent) institutions.
- Nearly one in four Black and Hispanic students (23.6 percent and 23.0 percent, respectively), and over one-quarter of Native Hawaiian or other Pacific Islander students (30.7 percent) completed their short-term certificates at for-profit institutions. By contrast, only 9.7 percent of White students and 14.5 percent of Asian students who completed short-term certificates graduated from these institutions.
- International students were much more likely than all other groups to have completed their certificates at a private nonprofit four-year institution (4.3 percent).

## FIELD OF STUDY

**Figure 5.14: Field of Study for Short-Term Certificate Recipients, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Short-term certificates include those that are less than two academic years in length. | STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

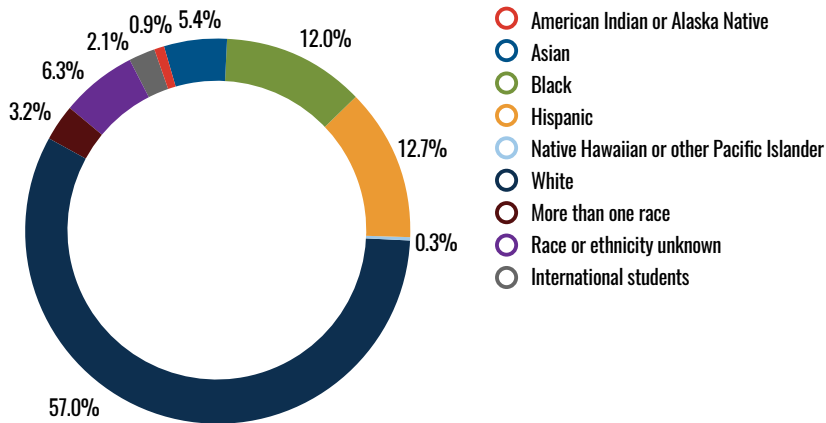
- Over one-third of Native Hawaiians or other Pacific Islanders (42.0 percent), Blacks (35.8 percent), Hispanics (34.8 percent), individuals of more than one race (33.8 percent), and American Indians or Alaska Natives (33.7 percent) completed their short-term credentials in health care fields, compared with only 9.2 percent of international students.
- A larger share of international students earned their short-term certificates in business and personal and consumer services (30.4 percent)—more than double that of most other groups.
- A larger share of American Indian or Alaska Native students than of any other group completed their certificates in manufacturing, military technology, or other applied fields (36.4 percent)

## Long-Term Certificates

A small fraction of undergraduate credentials awarded in 2016 were long-term certificates. Of the nearly 11,000 students that earned these certificates, 57.0 percent were White and 34.6 percent were students of color. International students made up 2.1 percent of long-term certificate completers, and 6.3 percent were of unknown race and ethnicity.



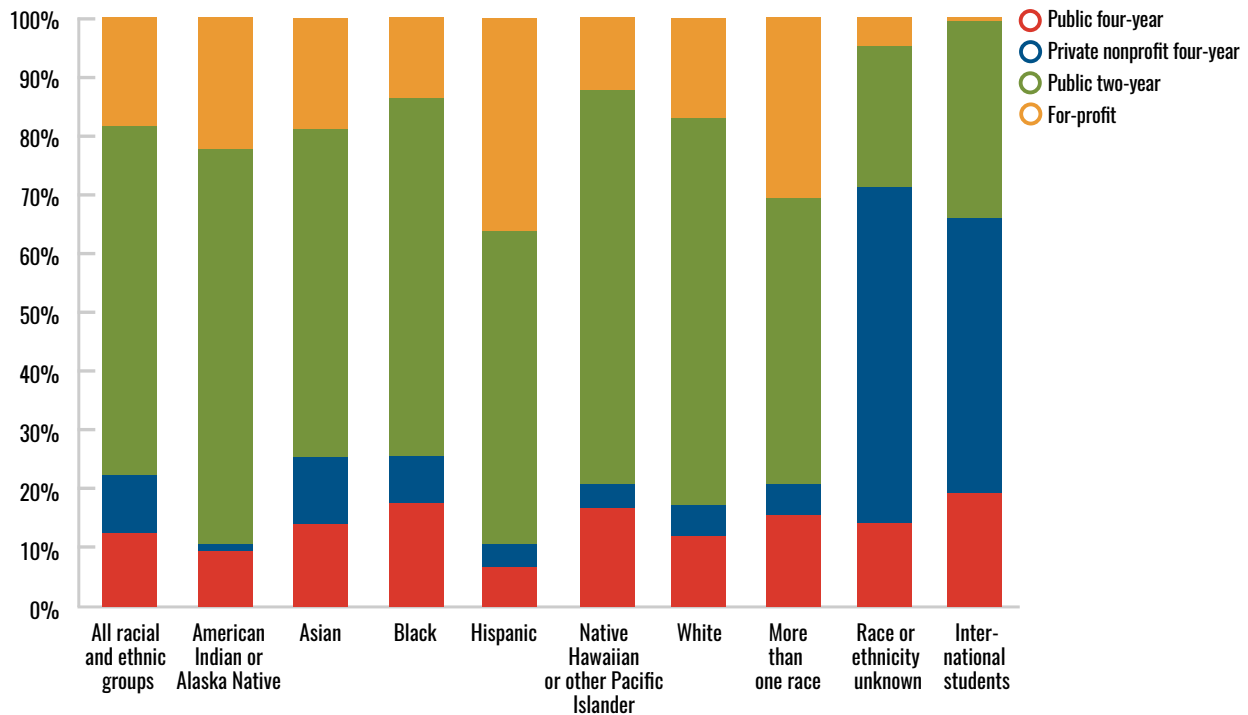
**Figure 5.15: Long-Term Certificates, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Long-term certificates include those that are at least two, but less than four, academic years in length.

## HIGHER EDUCATION SECTOR

**Figure 5.16: Long-Term Certificates, by Sector and Race and Ethnicity: 2016**



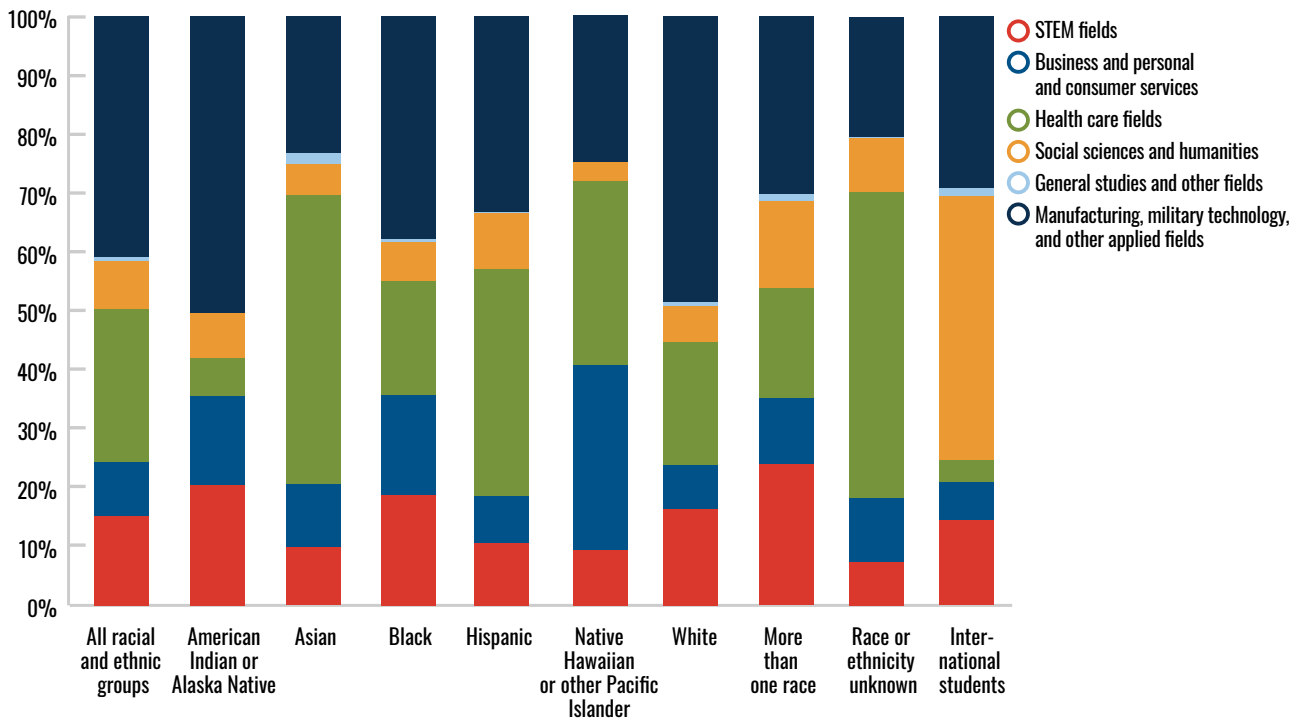
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Long-term certificates include those that are at least two, but less than four, academic years in length.

- The majority of long-term certificates were completed at public two-year institutions (59.1 percent), followed by for-profit (18.5 percent), public four-year (12.5 percent), and private nonprofit four-year (9.9 percent) institutions.
- Nearly half of all international students who completed long-term certificates earned them at private nonprofit four-year institutions (46.7 percent), the most of any group by far.

- About one in five American Indian or Alaska Native students (22.4 percent) and Asian students (19.0 percent) earned their long-term certificates at a for-profit institution. This share was more than one-third for Hispanic students (36.1 percent) and close to one-third of students of more than one race (30.6 percent) who earned long-term certificates.

## FIELD OF STUDY

**Figure 5.17: Field of Study for Long-Term Certificate Recipients, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

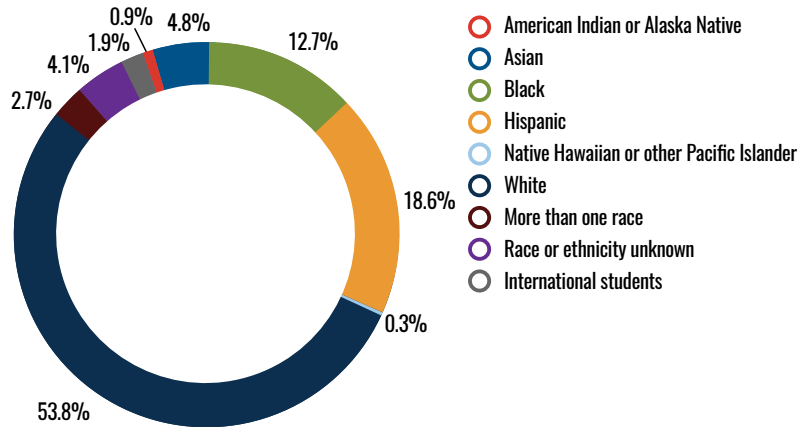
Notes: Long-term certificates include those that are at least two, but less than four, academic years in length. | STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

- Half of all American Indian or Alaska Native students completed a long-term certificate in manufacturing, military technology, and other applied fields (50.5 percent), compared with 23.4 percent of Asian students.
- A larger share of international students completed long-term certificates in social sciences and humanities (44.9 percent) than any other group.
- Just under half of all Asian students who completed a long-term certificate were in health care fields (49.1 percent), compared with 38.5 percent of all Hispanic, 21.0 percent of all White, and 19.5 percent of all Black long-term certificate recipients.

## Associate Degrees

Of the over 1 million students who received associate degrees in 2016, 53.8 percent were White and 40.1 percent were students of color. International students made up 1.9 percent of associate degree completers, and 4.1 percent were of unknown race and ethnicity.

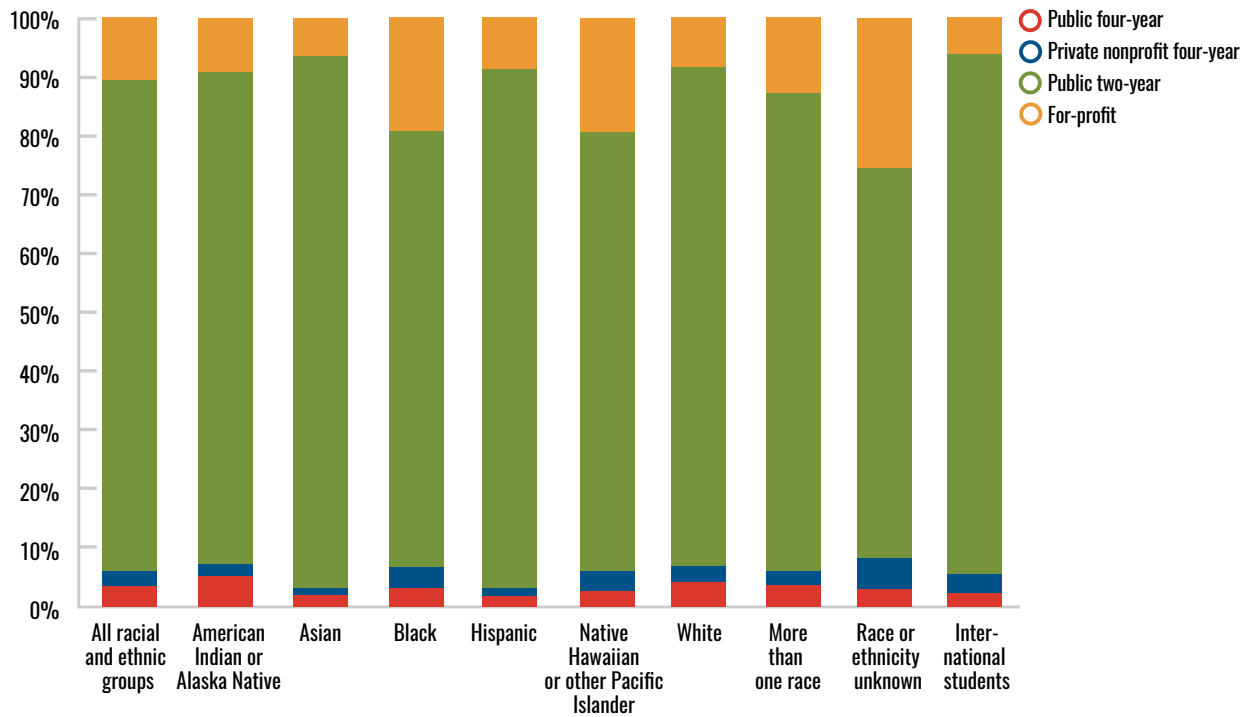
**Figure 5.18: Associate Degrees, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## HIGHER EDUCATION SECTOR

**Figure 5.19: Associate Degrees, by Sector and Race and Ethnicity: 2016**



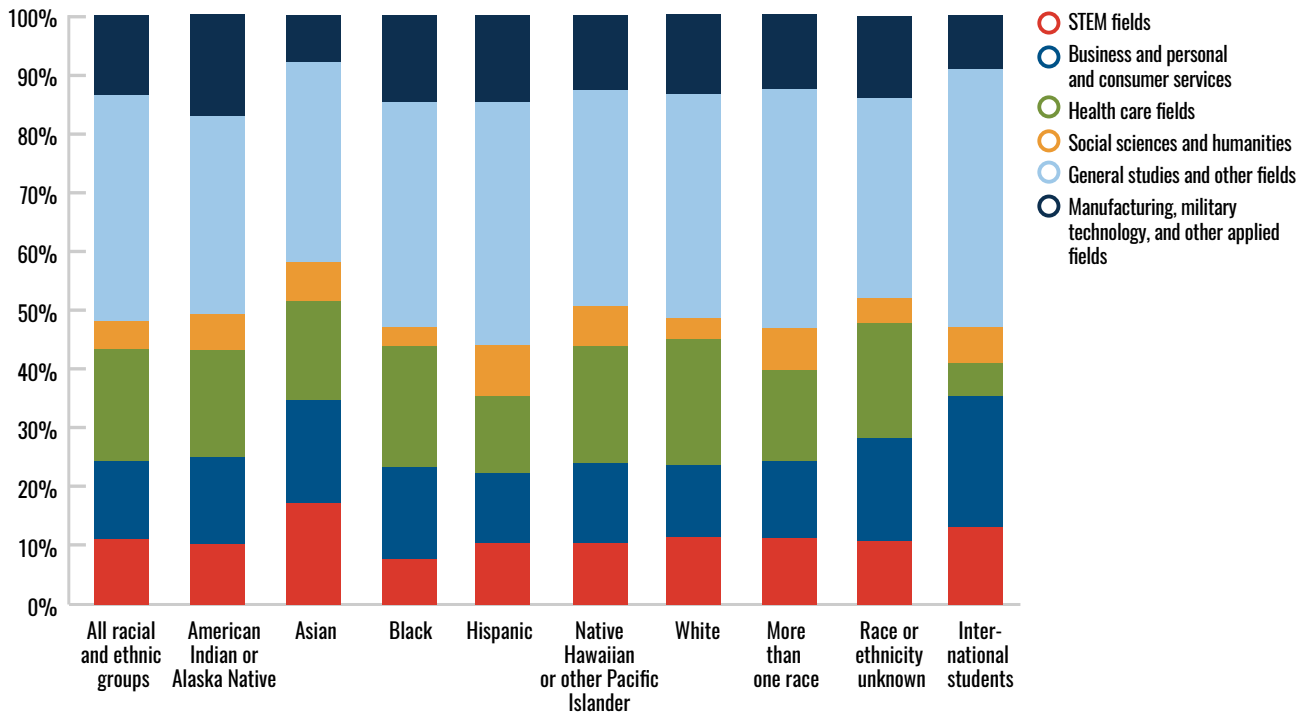
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- The majority of associate degrees were completed at public two-year institutions (83.4 percent), followed by for-profit (10.6 percent), public four-year (3.4 percent), and private nonprofit four-year (2.6 percent) institutions.
- Nearly 20 percent of Black and Native Hawaiian or other Pacific Islander associate degree recipients completed their degrees at a for-profit institution (19.3 percent and 19.5 percent, respectively), compared with 6.6 percent of Asian students and 6.3 percent of international students who earned associate degrees.

## FIELD OF STUDY

**Figure 5.20: Field of Study for Associate Degree Recipients, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

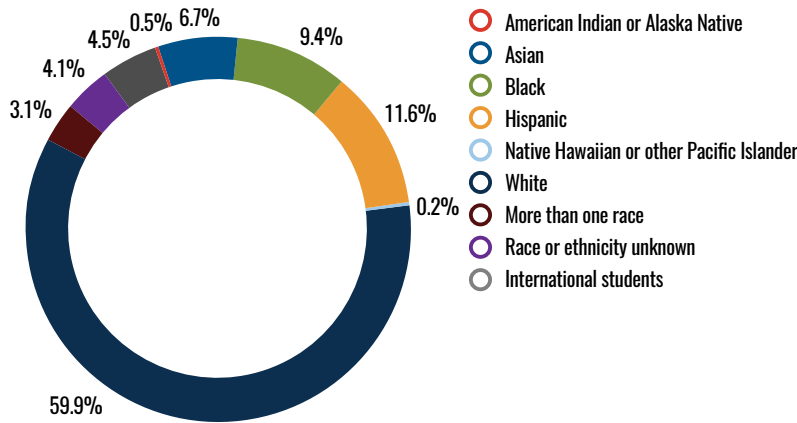
Notes: STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for sub-baccalaureate credentials include the following fields of study: manufacturing, construction, repair, and transportation; military technology and protective services; education; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

- Asian associate degree recipients were more than twice as likely to have completed their degrees in STEM as Black students (17.3 percent and 7.8 percent, respectively).
- A larger share of international (43.7 percent) and Hispanic (41.2 percent) associate degree recipients than of other groups completed their degrees in general studies.
- About one in five White students (21.5 percent), Black students (20.5 percent), and Native Hawaiian or other Pacific Islander students (19.9 percent) completed their associate degrees in health care fields, compared with only 5.7 percent of international students.

## Bachelor's Degrees

Over 2 million bachelor's degrees were awarded in 2016. Of those earning these credentials, 59.9 percent were White and 31.5 percent were students of color. International students made up 4.5 percent of associate degree completers, and 4.1 percent were of unknown race and ethnicity.

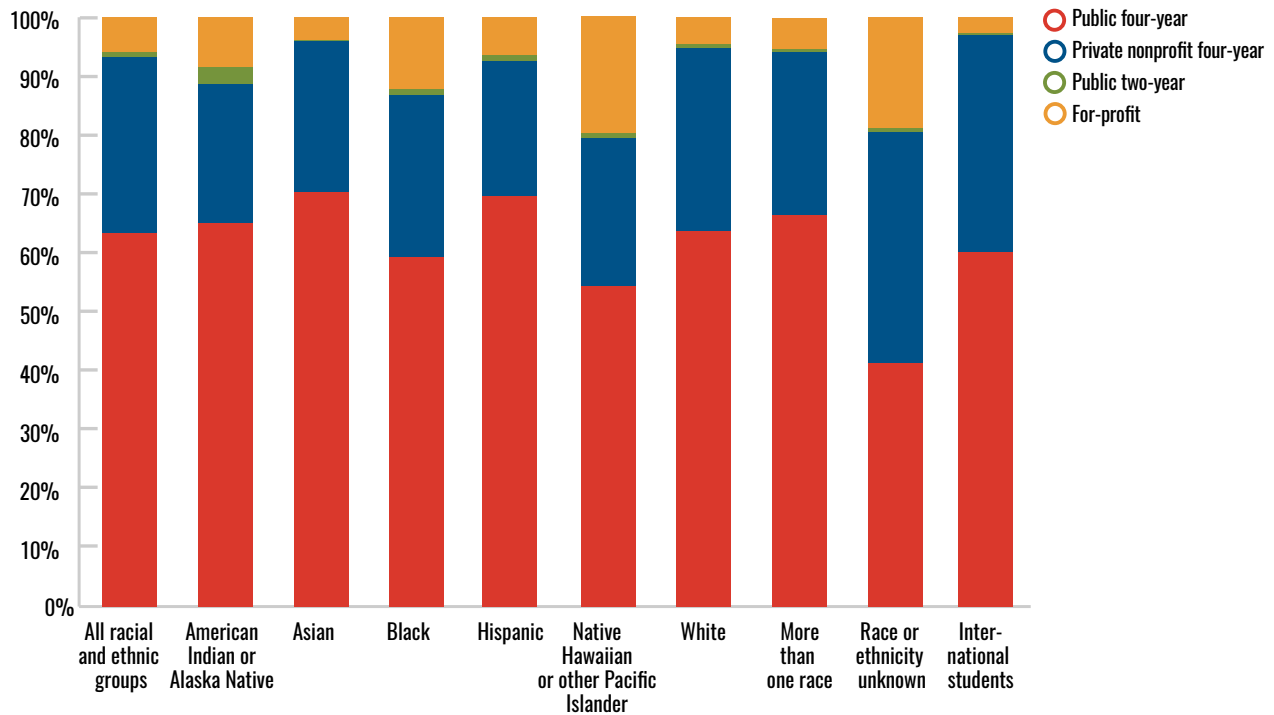
**Figure 5.21: Bachelor's Degrees, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## HIGHER EDUCATION SECTOR

**Figure 5.22: Bachelor's Degrees, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

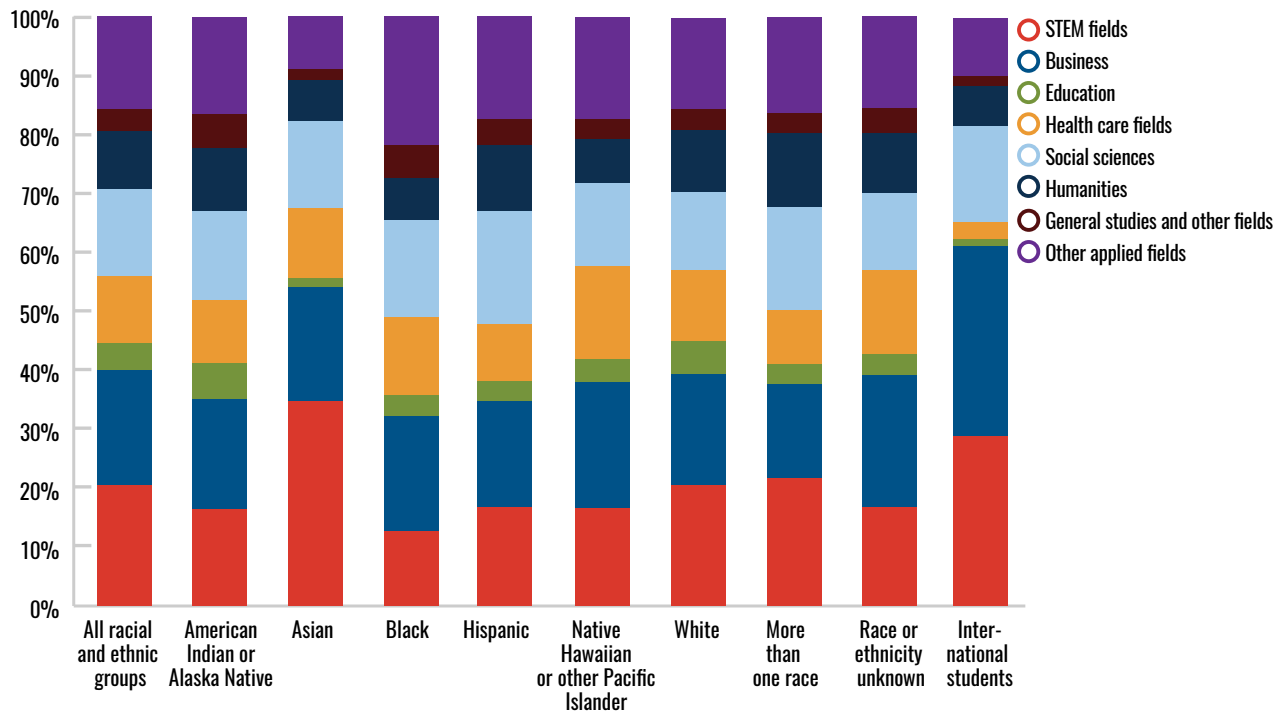
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- The majority of bachelor's degrees earned in 2016 were completed at public four-year institutions (63.4 percent), followed by private nonprofit four-year (29.8 percent), for-profit (6.0 percent), and public two-year (0.8 percent) institutions.
- Over one-third of international students who completed their bachelor's degrees earned them at a private nonprofit four-year institution (36.7 percent), compared with 22.9 percent of Hispanic students.

- Larger shares of Asian students (70.4 percent) and Hispanic students (69.6 percent) than of Black students (59.3 percent) and Native Hawaiian or other Pacific Islander students (54.4 percent) who earned bachelor's degrees in 2016 graduated from a public four-year institution.
- About one in five Native Hawaiian and other Pacific Islander students (19.9 percent) and more than one in 10 Black bachelor's degree recipients (12.2 percent) earned their degrees at a for-profit institution, a much higher percentage than White (4.5 percent), Asian (3.8 percent), and international (2.6 percent) students.

## FIELD OF STUDY

**Figure 5.23: Field of Study for Bachelor's Degree Recipients, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: STEM fields include computer and information sciences, engineering and engineering technology, biological and physical sciences, science technology, math, and agriculture. | General studies and other programs include fields such as liberal arts and sciences, interpersonal and social skills, personal awareness and self-improvement, and multi- or interdisciplinary studies, among others. | Other applied fields for bachelor's degrees include personal and consumer services; manufacturing, construction, repair, and transportation; military technology and protective services; architecture; communications; public administration and human services; design and applied arts; law and legal studies; library sciences; and theology and religious vocations.

- Over one-third of Asian bachelor's degree recipients in 2016 completed their degrees in STEM fields (34.7 percent)—the highest percentage of any group—compared with 12.6 percent of Black students, who were the least likely to complete their degrees in STEM.
- Nearly one-third of international students earned their bachelor's degrees in business (32.4 percent)—the highest of any group.
- More than one in five Black students completed their bachelor's degrees in other applied fields (21.9 percent), a much larger share than that of Asian students (9.0 percent).
- Roughly one in 10 students of more than one race (12.6 percent), Hispanic (11.2 percent), American Indian or Alaska Native (10.8 percent), and White (10.5 percent) students earned their bachelor's degrees in the humanities. International students were the least likely to complete their bachelor's degrees in the humanities (6.7 percent).

## REFERENCES

- Bombardieri, Marcella. 2017. *Hidden in Plain Sight: Understanding Part-Time College Students in America*. Washington, DC: Center for American Progress.
- Carnevale, Anthony P., Tamara Jayasundera, and Artem Gulish. 2016. *America's Divided Recovery: College Haves and Have-Nots*. Washington, DC: Georgetown University Center on Education and the Workforce.
- CCSSE (Center for Community College Student Engagement). 2017. *Even One Semester: Full-Time Enrollment and Student Success*. Austin, TX: The University of Texas at Austin, CCSSE.
- Dundar, Afet, and Doug Shapiro. 2016. *The National Student Clearinghouse as an Integral Part of the National Postsecondary Data Infrastructure*. Herndon, VA: National Student Clearinghouse Research Center.
- Jones, Gigi. 2017. "Expanding Student Success Rates to Reflect Today's Students." *NCES Blog*, National Center for Education Statistics. <https://nces.ed.gov/blogs/nces/post/expanding-student-success-rates-to-reflect-today-s-college-students>.
- Nettles, Michael T. 2017. *Challenges and Opportunities in Achieving the National Postsecondary Degree Attainment Goals*. Princeton, NJ: Educational Testing Service.
- NSCRC (National Student Clearinghouse Research Center). 2018. "About Us." <https://nscresearchcenter.org/aboutus>.
- Shapiro, Doug, Afet Dundar, Faye Huie, Phoebe Khasiala Wakhungu, Xin Yuan, Angel Nathan, and Ayesha Bhimdiwali. 2017. *Completing College: A National View of Student Completion Rates—Fall 2011 Cohort*. Signature Report No. 14. Herndon, VA: National Student Clearinghouse Research Center.





## INVITED ESSAY



### **Taking History, Funding, and Current Challenges into Account When Discussing Race, Ethnicity, and Completion in Community Colleges**

Cecilia Rios-Aguilar and Regina Deil-Amen



# Taking History, Funding, and Current Challenges into Account When Discussing Race, Ethnicity, and Completion in Community Colleges

Cecilia Rios-Aguilar, Associate Dean and Associate Professor, University of California, Los Angeles

Regina Deil-Amen, Professor, The University of Arizona

## Who Are the Students Community Colleges Serve?

The typical college student is no longer the image many of us hold in our heads—an 18- to 22-year-old who leaves his or her parents’ home for the first time, ready to begin the journey at an ivy-walled four-year college or university. Rather, many of today’s college students are beyond the age of 24, employed at least part time, and raising a family. Approximately half are low-income and financially independent from their parents, and a third are students of color (Deil-Amen 2015; Ma and Baum 2016).

Most notably, the majority of today’s students are beginning or continuing their postsecondary education in our nation’s community colleges (Deil-Amen 2015), which offer a critical point of access to first-time college-goers and students moving up the socioeconomic ladder and out of poverty (Goldrick-Rab, Richardson, and Hernandez 2017).

However, it is also vital to acknowledge that many of these students have not been served adequately by the educational system prior to their enrollment in community college (Deil-Amen and DeLuca 2010). Examining recent national data, scholars found that community colleges, in addition to enrolling many adults who return to school, now serve the *underserved half* of high school students (Bittinger et al. 2018). Deil-Amen and DeLuca (2010) define the underserved half as “an underclass of students who are neither college ready nor in an identifiable career curriculum” (28).

Traditionally, secondary and postsecondary students are thought of as being placed on either an academic or vocational track. However, Deil-Amen and DeLuca (2010) suggest that students are actually divided across three categories: academic, vocational, and underserved. Students in the academic category are exposed to a rigorous college preparatory curriculum and are well-prepared for success in college and rewarding occupations. Vocational students are prepared for the labor force through their involvement in either high school or postsecondary career and technical education programs. The underserved students, by contrast, are not prepared academically for college and are also not enrolled in any career curriculum or program.

As Table 1 reveals, this underserved group is composed of mostly low-income students and students of color. Furthermore, students in the underserved group are overrepresented in community colleges and, more specifically, in certificate programs and remedial or developmental classes (Bittinger et al. 2018).

**Table 1: Demographic Characteristics of High School Students by Track: Academic, Occupational, and Neither (Underserved)**

		Academic Track	Occupational Track	Neither Track (Underserved)
Racial Identity	American Indian or Alaska Native	18%	18%	64%
	Asian	63%	9%	28%
	Black or African American	34%	14%	52%
	Hispanic	32%	12%	56%
	Native Hawaiian or Pacific Islander	25%	13%	63%
	White	42%	17%	42%
	Multiple Races	33%	15%	52%

		Academic Track	Occupational Track	Neither Track (Underserved)
Socioeconomic Class	First Quintile (Lowest)	22%	16%	62%
	Second Quintile	29%	16%	55%
	Third Quintile	35%	16%	49%
	Fourth Quintile	43%	16%	41%
	Fifth Quintile (Highest)	59%	11%	30%
Gender	Male	35%	16%	49%
	Female	42%	13%	45%
Individualized Education Plan (IEP) Status	Did not have IEP	40%	13%	46%
	Had IEP	17%	18%	65%
	School Not Reported	41%	15%	44%

n = 16,300  
Source: Bittinger et al. 2018

Because of low tuition, convenient locations, and open admissions, community colleges enroll a high proportion of undergraduates who are marginalized by the educational system. But despite high enrollment, community colleges have notoriously low completion rates. As the data show, many students who enter the community college system are likely to get trapped in remedial classes and eventually drop out without transferring or completing any degree or certificate. If not served properly, these students become the *new forgotten half*—the half of college students who accumulate credits, but end up with no degree or credential, and few marketable skills (Rosenbaum et al. 2015).

## The Community College Disadvantage

Community colleges have been a staple of access for a substantial proportion of the U.S. population for more than half a century. Since World War II, most attempts to universalize higher education have resulted in dramatic expansion not at the top of the higher education hierarchy, but at the bottom—namely, at the least selective public two- and four-year institutions. While positive in terms of increased access, this movement solidifies existing inequalities by increasing access at resource-constrained, open-access institutions, rather than at the more selective institutions with more resources (Roksa et al. 2007). That increase in the volume of students, combined with disparities in public funding, puts community colleges at a disadvantage when it comes to student success.

Most public postsecondary institutions, including community colleges, are financed through a combination of state appropriations and tuition revenues, and for community colleges in particular local funding is vital (Baime and Baum 2016). In roughly half of all states, community colleges receive some amount of appropriations from their local government, too. Reflecting the broader state government disinvestment in higher education (Ma et al. 2015), virtually all community colleges have now become increasingly reliant on tuition as a revenue source. In fact, the proportion of expenditures covered by net tuition revenue has increased from 26 percent to 39 percent over a decade from 2002–03 to 2012–13 (Baime and Baum 2016). Furthermore, spending per full-time equivalent student over a 10-year period from 2001 to 2011 increased at public and private research universities by \$2,700 and \$11,000, respectively, while community colleges saw a decline in spending of \$904 during the same period of time (Kahlenberg 2015). These inequities are especially problematic due to the fact that community college students are more vulnerable and need more resources and support structures.

College and university tuition and related costs have risen sharply, especially at selective, four-year institutions, further restricting access. Tuition and fees at community colleges continued to remain lower and more affordable. The College Board reported that the average in-state tuition and fees at public two-year institutions was \$3,570, compared with \$9,970 at public four-year and \$34,740 at private nonprofit four-year colleges (Ma et al. 2017).

While tuition and fees are a substantial cost, they are not the only costs associated with attending college today. In addition to paying tuition, students and their families must often cover costs associated with transportation, housing, food, health care, and child care, as well as lost or reduced wages, to name only a few. So, while tuition may seem relatively affordable at community colleges, the total costs of enrolling in higher education, including community college, are still high for the vast majority of students.

Federal financial aid has not kept pace with rising college costs, concentrating low-income students—many of whom are students of color—at community colleges. The importance of financial aid is compounded for this demographic, given that the majority of community college students have greater financial needs than traditional students attending four-year research institutions.

In short, such disparities in public funding and financial aid, in addition to a large and consistent influx of underserved students, exacerbate the challenges community colleges face in addressing the structural barriers preventing student success (Baime and Baum 2016). Community colleges already serve the underserved half of high school students; these students are now at risk of becoming the new forgotten half of community college students: credits but no degree.

Given these trends, we must examine what success means at community colleges.

Societally, we've experienced a turn away from the idea of higher education serving the public good and toward higher education as a private good to be consumed. As a result, public support of higher education through tax-based funding has declined, particularly in places where the college demographic is more heavily composed of students of color, with voters more heavily white and older (Brunner and Johnson 2016). We've seen an erosion of the belief in higher education serving the public good just as more students of color have gained access.

Community colleges already serve the underserved half of high school students; these students are now at risk of becoming the new forgotten half of community college students: credits but no degree.

As the desire for public support has declined, the “accountability” movement has exploded, calling upon institutions—and their students—to prove they deserve public funding. This movement has been particularly problematic for community colleges, especially “performance-based funding,” which adjusts the funding allocated based on various success measures, including completion (D’Amico et al. 2014; McKinney and Serra Hagedorn 2017). However, at community colleges, due to their open-access nature and underserved students, less can be assumed about the level of commitment students have to their degree or transfer goals. The less concrete and more-likely shifting nature of those goals is not accounted for when student success outcomes are measured (Bailey, Jenkins, and Leinbach 2007).

As a result, we must be open and flexible when defining success in the community college sector. The fluid development of aspirations and exploration of future goals is a fundamental feature of such low-cost, open-access institutions, and is highly incompatible with rigid performance measures. Policymakers and administrators must understand the incentive structures accountability creates, because it may exacerbate inequities if funding formulas are not grounded in an understanding of students’ lives and institutional realities.

To this end, there are recent examples (see Melguizo and Witham 2018) that examine the potential of various funding formulas to achieve three interrelated and crucial goals: equity, efficiency, and student success. In 2018, Governor Jerry Brown of California proposed a budget that applied a new outcomes-based funding supplement (or what he calls the student success incentive), which will start impacting California community colleges in the 2018–19 year. The formula seems to provide flexibility to institutions and important incentives to increase productivity (broadly measured), with particular attention to closing equity gaps.

## The Completion Challenge: How to Better Support Community Colleges

Because community colleges serve so many marginalized students, especially low-income and students of color, any national response to growing inequality must include these institutions. But some community colleges are serving students better than others.

A recent report by Baime and Baum (2016) found that differences across community colleges are wide and present serious challenges for national policies that promote student access and success. For instance, tuition is an important obstacle for many students in some states, but not in others. Some scholars have argued that the varying missions and goals of community colleges have created institutional structures akin to “mazes” and a “shapeless river” (Scott-Clayton 2015) that leave students confused and unable to make timely and informed decisions, thus reducing their chances of success. To make a tangible impact on student success, policymakers and community college administrators, faculty, and staff should continually reexamine their practices and ways of thinking to overcome the structural, pedagogical, and institutional barriers that frequently create the forgotten half—leaving students of color with no college degree and few tools to reap labor market rewards.

One possible solution to address these structural barriers is redesigning community colleges to create clear, coherent, and concise “guided pathways” (Bailey, Jaggars, and Jenkins 2015) to help students navigate their educational journeys with greater success. Instead of offering an overwhelming array of courses, schedules, and programs, institutions could rethink the way they offer their services. For example, some colleges are working backward from the end goal of a degree with instant value in the labor market, or the ability to transfer to four-year institutions. These colleges create more structured pathways with maps—available in their course catalogs and websites—that clearly state the classes students need to take each term. Other colleges are hiring academic coaches and additional career counselors to help students stick to their pathways and complete their goals.

The building of such pathways requires great human and material resources to meet the academic and social needs of diverse students and their range of life circumstances. This includes additional approaches beyond the pathways themselves, for example: flexible class schedules; high-quality online courses; competency-based educational options; access to emergency funds; off-hour counseling and advising; child care; and food pantries. However, no matter how simple and few options are presented to students, “there will still be a number of students who enroll in one course at a time, who stop out, who take years to find their academic or occupational path, whose past blunders and transgressions continue to exact a material and psychological price, whose personal history of neglect and even trauma can cripple their performance” (Rose 2016). Therefore, while simplification may bring benefits to some students, simplification by itself will not be sufficient to redress inequities. Marginalized community college students, particularly racial and ethnic minorities, also need faculty, staff, and administrators who care for them and understand who they are and where they come from, in order to succeed academically and in life.

## Students’ Academic and Occupational Trajectories

While community colleges pride themselves on opening their doors to students from all walks of life and being the entry point to higher education, access is not enough. Without resources, services, networks, and a clear path to success, access is only an empty promise. Research has continuously affirmed the fact that too many low-income and racial and ethnic minority students enter community colleges with feelings of being different and ill-prepared for the college learning experience.

While recommendations often focus on structurally redesigning the way community colleges operate and serve students, the main point of contact and connection for community college students occurs within the classroom (Chang 2005; Deil-Amen 2011). Indeed, Deil-Amen (2011) finds two-year college students’ decisions to persist are shaped by socio-academic integrative moments—interactions within and just outside the classroom with instructors and peers who enhance belonging and encourage or reinforce students’ academic identity. Moreover, the research of Rebecca Cox (2009) demonstrates how the psychological and emotional aspects of classroom experiences cannot be extracted from the cognitive elements of learning.

To address these issues, faculty in community colleges could consider more systematic efforts to infuse asset-based, culturally responsive instructional materials and use pedagogical practices aligned with these materials to address equity gaps and help students succeed. Most cultural-specific efforts have occurred in K–12 contexts but can be applied at community college classes, many of which cover content similar to secondary classrooms. Additionally, a few examples do exist of how college faculty can use non-deficit approaches such as funds of knowledge and community cultural wealth (Mora and Rios-Aguilar 2018; Solórzano, Huerta, and Giraldo 2018; Neri 2017) to rethink career and technical education and to help other marginalized students succeed academically (Kiyama and Rios-Aguilar 2017).

With respect to creating more welcoming environments, it is important to start with focusing on providing students with services that meet their primary needs. In K–12 schooling, the idea that hunger impedes learning is widely accepted and serves as a rationale for the provision of reduced-priced meals. This is not the case in higher education. Broton and Goldrick-Rab (2017) documented that more than half of community college students experience food insecurity and about one-third reported at least one challenge related to housing affordability and stability. Their findings suggest that if we want students to be able to focus on learning and completing their academic goals, we must pay attention to serving their material needs.

Community colleges, and those who work and teach in these institutions, should certainly be lauded for their dedication to providing access and opportunity for so many of our nation's students. Community colleges have been positioned to deliver the promise of higher education to the most underserved populations of students, but with inadequate funding structures that continue a pattern of persistent inequity for students of color.

Rather than thinking of individual students at risk, higher education must think more systematically about how institutions can create equal opportunities throughout the higher education hierarchy. Simplifying the pathway and enhancing cultural responsiveness can improve practice, but adequately meeting the material and financial needs of community college students needs to be at the forefront of efforts to address ongoing inequities in opportunity.

The underserved forgotten half is a growing problem in higher education that disproportionately presents challenges for students of color. It is not enough simply to get students into the classroom; they must be enabled to succeed in order to realize the promise of higher education.

## References

- Bailey, Thomas, Shanna Smith Jaggars, and Davis Jenkins. 2015. *Redesigning America's Community Colleges*. Cambridge, MA: Harvard University Press.
- Bailey, Thomas, Davis Jenkins, and D. Timothy Leinbach. 2007. *The Effect of Student Goals on Community College Performance Measures*. CCRC Brief Number 33. New York: Community College Research Center, Columbia University.
- Baime, David, and Sandy Baum. 2016. *Community Colleges: Multiple Missions, Diverse Student Bodies, and a Range of Policy Solutions*. Washington, DC: Urban Institute. <https://files.eric.ed.gov/fulltext/ED570475.pdf>.
- Bittinger, Joshua, Cecilia Rios-Aguilar, Ryan Wells, and David Bills. 2018. "Credentials with (Economic) Value? Unmasking Inequities in the Sub-baccalaureate Sector." Paper presented at the American Educational Research Association Annual Meeting, New York, NY.
- Broton, Katherine M., and Sara Goldrick-Rab. 2017. "Going Without: An Exploration of Food and Housing Insecurity Among Undergraduates." *Educational Researcher* 47 (2): 121–133.
- Brunner, Eric J., and Erik B. Johnson. 2016. "Intergenerational Conflict and the Political Economy of Higher Education Funding." *Journal of Urban Economics* 91: 73–87.
- Chang, June C. 2005. "Faculty Student Interaction at the Community College: A Focus on Students of Color." *Research in Higher Education* 46 (7): 769–802.
- Cox, Rebecca D. 2009. "'It Was Just That I Was Afraid' Promoting Success by Addressing Students' Fear of Failure." *Community College Review* 37 (1): 52–80.
- D'Amico, Mark M., Janice N. Friedel, Stephen G. Katsinas, and Zoë M. Thornton. 2014. "Current Developments in Community College Performance Funding." *Community College Journal of Research and Practice* 38 (2–3): 231–41. <https://doi.org/10.1080/10668926.2014.851971>.
- Deil-Amen, Regina. 2015. "The 'Traditional' College Student: A Smaller and Smaller Minority and Its Implications for Diversity and Access Institutions." In *Remaking College: The Changing Ecology of Higher Education*, edited by Michael W. Kirst and Mitchell L. Stevens, 134–168. Stanford, CA: Stanford University Press.



- Deil-Amen, Regina. 2011. "Socio-Academic Integrative Moments: Rethinking Academic and Social Integration Among Two-Year College Students in Career-Related Programs." *The Journal of Higher Education* 82 (1): 54–91.
- Deil-Amen, Regina, and Stefanie DeLuca. 2010. "The Underserved Third: How Our Educational Structures Populate an Educational Underclass." *Journal of Education for Students Placed at Risk* 15 (1–2): 27–50.
- Goldrick-Rab, Sara, Jen Richardson, and Anthony Hernandez. 2017. *Hungry and Homeless in College: Results from a National Study of Basic Needs Insecurity in Higher Education*. Madison, WI: Wisconsin HOPE Lab.
- Kahlenberg, Richard D. 2015. *How Higher Education Funding Shortchanges Community Colleges*. The Century Foundation. <http://tcf.org/blog/detail/how-higher-education-funding-shortchanges-community-colleges>.
- Kiyama, Judy Marquez, and Cecilia Rios-Aguilar, eds. 2017. *Funds of Knowledge in Higher Education: Honoring Students' Cultural Experiences and Resources as Strengths*. New York: Routledge.
- Ma, Jennifer, and Sandy Baum. 2016. *Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion*. College Board.
- Ma, Jennifer, Sandy Baum, Matea Pender, and D'Wayne Bell. 2017. *Trends in College Pricing 2017*. Trends in Higher Education Series. College Board. [https://trends.collegeboard.org/sites/default/files/2017-trends-in-college-pricing\\_0.pdf](https://trends.collegeboard.org/sites/default/files/2017-trends-in-college-pricing_0.pdf).
- Ma, Jennifer, Sandy Baum, Matea Pender, and D'Wayne Bell. 2015. *Trends in College Pricing 2015*. Trends in Higher Education Series. College Board. <https://trends.collegeboard.org/sites/default/files/2015-trends-college-pricing-final-508.pdf>.
- McKinney, Lyle, and Linda Serra Hagedorn. 2017. "Performance-Based Funding for Community Colleges: Are Colleges Disadvantaged by Serving the Most Disadvantaged Students?" *The Journal of Higher Education* 88 (2): 159–182.
- Melguizo, Tatiana, and Keith Witham. 2018. *Funding Community Colleges for Equity, Efficiency, and Student Success: An Examination of Evidence in California*. New York: The Century Foundation. <https://tcf.org/content/report/funding-community-colleges-equity-efficiency-student-success-examination-evidence-california>.
- Mora, Juana, and Cecilia Rios-Aguilar. 2018. "Aligning Practice with Pedagogy: Funds of Knowledge for Community College Teaching." In *Funds of Knowledge in Higher Education: Honoring Students' Cultural Experiences and Resources as Strengths*, edited by Judy Marquez Kiyama and Cecilia Rios-Aguilar, 145–159. New York: Routledge.
- Neri, Rebecca Colina. 2017. "Learning from Students' Career Ideologies and Aspirations: Utilizing a Funds of Knowledge Approach to Reimagine Career and Technical Education (CTE)." In *Funds of Knowledge in Higher Education: Honoring Students' Cultural Experiences and Resources as Strengths*, edited by Judy Marquez Kiyama and Cecilia Rios-Aguilar, 160–174. New York: Routledge.
- Roksa, Josipa, Eric Grodsky, Richard Arum, and Adam Gamoran. 2007. "United States: Changes in Higher Education and Social Stratification." In *Stratification in Higher Education: A Comparative Study*, edited by Yossi Shavit, Richard Arum, and Adam Gamoran, 165–191.
- Rose, Mike. 2016. "Reassessing a Redesign of Community Colleges." *Inside Higher Ed*, June 23, 2016.
- Rosenbaum, James, Caitlin Ahearn, Kelly Becker, and Janet Rosenbaum. 2015. *The New Forgotten Half and Research Directions to Support Them*. New York: William T. Grant Foundation.
- Scott-Clayton, Judith. 2015. "The Shapeless River: Does a Lack of Structure Inhibit Students' Progress at Community Colleges?" In *Decision Making for Student Success: Behavioral Insights to Improve College Access and Persistence*, edited by Benjamin J. Castleman, Saul Schwartz, and Sandy Baum, 102–123.
- Solórzano, Daniel G., Adrian H. Huerta, and Luis G. Giraldo. 2018. "From Incarceration to Community College: Funds of Knowledge, Community Cultural Wealth, and Critical Race Theory." In *Funds of Knowledge in Higher Education: Honoring Students' Cultural Experiences and Resources as Strengths*, edited by Judy Marquez Kiyama and Cecilia Rios-Aguilar, 64–81. New York: Routledge.



# CHAPTER 6



## Graduate School Completion





# INTRODUCTION

Research has consistently shown the value of achieving higher levels of educational attainment for individuals and families. As shown in Chapter 11 of this report, “Employment and Earnings,” median annual earnings increase with each additional level of educational attainment. For example, the median annual earnings of adults who attained a master’s degree was about \$65,000<sup>1</sup>—nearly \$13,000 higher than that of a bachelor’s degree holder—while the median annual earnings of doctoral degree holders<sup>2</sup> was about \$84,000 and that of professional degree holders<sup>3</sup> was \$95,000. These earnings differentials, as well as job-specific requirements, have raised demand for graduate education across a multitude of fields and professions, and student enrollment in graduate education is likely to increase as the workforce demands more master’s degrees (Council of Graduate Schools 2017).

The U.S. higher education system is arguably the best in the world. Beyond the individual benefits that our system confers to credential holders, the production of knowledge in our country’s graduate schools is critical to the advancement of our society and economy. Over 1 million teachers, doctors, researchers, nurses, and other professionals completed graduate degrees in 2016, and while not all American institutions of higher education produce graduate credentials, roughly half<sup>4</sup> do. Many of these institutions are not only knowledge engines for their community and the country but also top employers in their region and state.

While graduate credential completion by students of color has increased over the last 20 years, some groups saw zero growth and others were marginal. Moreover, we continue to see disproportionate attendance by certain groups at for-profit institutions and relatively small numbers of domestic students and underrepresented students of color completing STEM graduate degrees. Indeed, where students complete their credentials and what they study have great implications not only for them as individuals, but also for their families and communities, and for the production and relevance of knowledge for an increasingly diverse citizenry.

## KEY FINDINGS

- The total number of graduate completions rose sharply between 1996 and 2016, growing from about 527,000 to over 1 million. While there were increases across all award levels, the largest were in post-baccalaureate certificates<sup>5</sup> and master’s degrees.
- African American,<sup>6</sup> Hispanic, and international<sup>7</sup> students each saw an increase of about 4 percentage points in their representation among all graduate credentials earned between 1996 and 2016. This equates to an increase of over 69,000 Black graduates, an increase of over 54,000 Hispanic graduates, and an increase of over 102,000 international graduates over this 20-year period.

1 Data reflect the U.S. Census Bureau’s 2016 five-year estimates of median annual earnings of individuals ages 25 and older. For more information on postgraduate outcomes, please see Chapter 11 of this report, “Employment and Earnings.”

2 Doctoral degrees reflect those classified as doctorate-research/scholarship degrees, including PhD, EdD, DMA, and other research-based degrees.

3 Professional degrees reflect those classified as doctorate-professional practice, including chiropractic, dentistry, law, medicine, pharmacy, veterinary medicine, and other degrees for which a credential or license is required for professional practice.

4 In 2017, 48 percent of degree-granting, Title IV institutions of higher education produced graduate credentials (authors’ calculation of data from the Integrated Postsecondary Education Data System (IPEDS)).

5 Includes post-baccalaureate and post-master’s certificates.

6 The terms Black and African American are used interchangeably.

7 The National Center for Education Statistics (NCES) defines a nonresident alien as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.” In this report, nonresident aliens are labeled as international students.

- Most graduate students earned their degrees from public and private nonprofit four-year institutions.<sup>8</sup> However, differences emerge when looking at completions by race and ethnicity, in particular for Black, Native Hawaiian or other Pacific Islander, and American Indian or Alaska Native students, who were more likely to complete their graduate education at a for-profit institution.
- White, American Indian or Alaska Native, Black, and Hispanic students were much more likely to have completed a post-baccalaureate certificate in education than Asian and international students. Asians were nearly twice as likely as other groups to complete a post-baccalaureate certificate in health.
- Almost half of all international students who earned master's degrees in 2016 studied STEM fields. Asian master's degree recipients were also more likely than students in other groups to have completed in STEM fields;<sup>9</sup> however, international students were more than twice as likely as Asian students to do so.
- Across all groups, health and law were the top fields of study for all professional degree completers. American Indian or Alaska Native students were the only group to have earned more degrees in law than in health, and Hispanic students were as likely to earn a degree in law as in health.
- A larger proportion of Black and Native Hawaiian or other Pacific Islander doctoral students completed their degrees in education than any other group. Asian and international students were more likely to complete doctoral degrees in STEM fields.

---

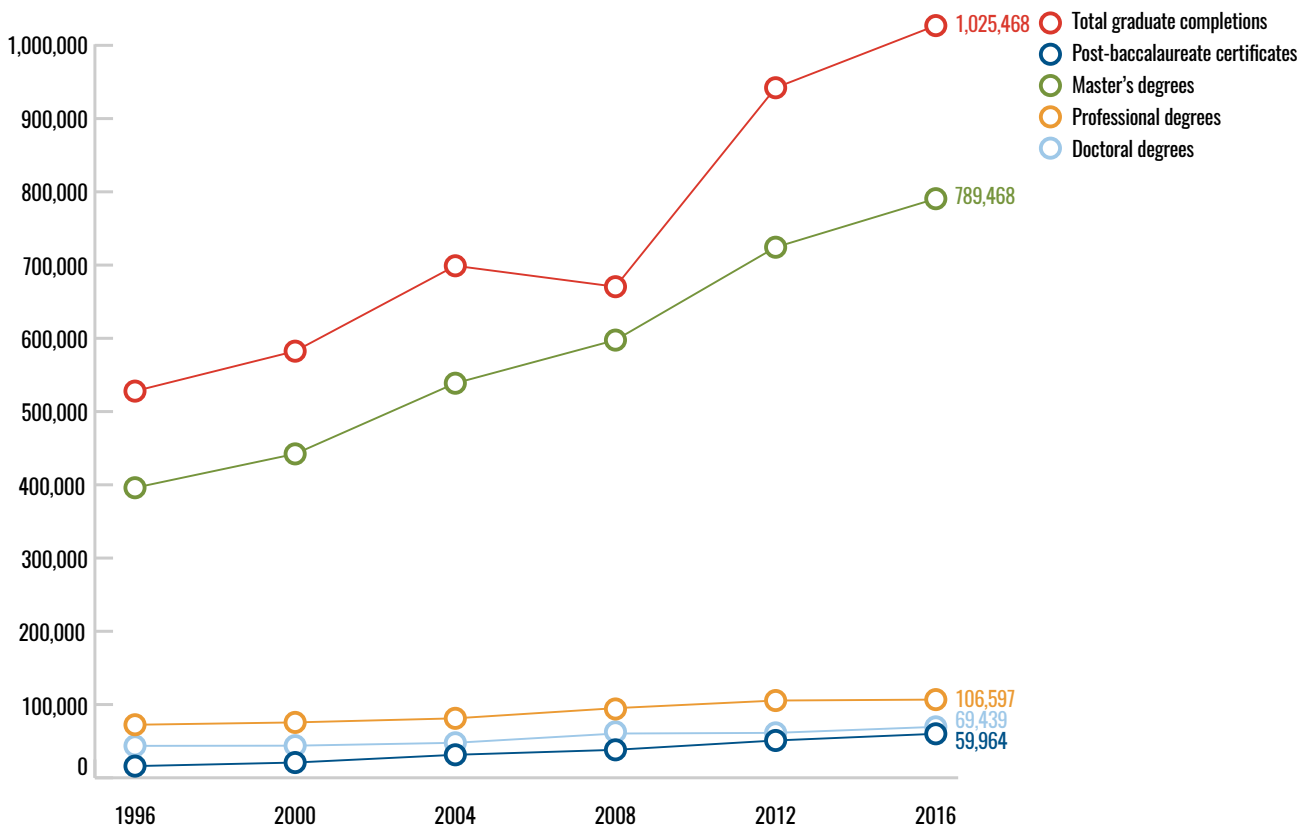
8 Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section

9 For graduate-level field of study, STEM includes life and physical sciences, math, engineering, and computer science.

## GRADUATE STUDENT COMPLETIONS: 1996 TO 2016

The total number of graduate credentials earned rose sharply between 1996 and 2016, growing from about 527,000 to over 1 million. While there were increases across all award levels, the largest were in post-baccalaureate certificates (44,028 new degrees—a 276.3 percent increase) and master’s degrees (394,049 new degrees—a 99.7 percent increase). Master’s degrees rose from 75.0 percent to 77.0 percent of all graduate credentials, and post-baccalaureate certificates increased from 3.0 percent to 5.8 percent. Professional degrees fell from 13.7 percent of the total in 1996 to 10.4 percent in 2016, and doctoral degrees fell from 8.3 percent of the total to 6.8 percent.

**Figure 6.1: Graduate Student Completions, by Award Level: Select Years, 1996 to 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 1996, 2000, 2004, 2008, 2012, and 2016

While White students continued to earn the majority of graduate-level credentials in 2016, their total share of all completions declined from 69.5 percent in 1996 to 51.8 percent—a 17.7 percentage point decrease. Black, Hispanic, and international students each saw an increase of about 4 percentage points in their representation among all graduate credentials earned between 1996 and 2016. This growth has resulted in an increase of over 69,000 Black graduates, an increase of over 54,000 Hispanic graduates, and an increase of over 102,000 international graduates during this 20-year period.

**Table 6.1: Graduate Student Completions, by Award Level and Race and Ethnicity: 1996 and 2016**

	Total Graduate Completions		Post-baccalaureate Certificates		Master's Degrees		Professional Degrees		Doctoral Degrees	
	1996	2016	1996	2016	1996	2016	1996	2016	1996	2016
American Indian or Alaska Native	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.6%	0.5%	0.3%	0.4%
Asian	4.9%	6.0%	4.8%	4.6%	4.2%	5.2%	8.4%	13.4%	5.6%	5.1%
Black	5.9%	9.8%	6.0%	11.4%	6.0%	10.3%	6.5%	6.5%	3.5%	7.6%
Hispanic	3.4%	7.1%	3.5%	6.4%	3.3%	7.4%	4.5%	6.9%	2.1%	4.9%
Native Hawaiian or other Pacific Islander	N/A	0.2%	N/A	0.2%	N/A	0.2%	N/A	0.2%	N/A	0.1%
White	69.5%	51.8%	70.7%	57.1%	69.5%	50.4%	75.7%	61.3%	59.0%	47.9%
More than one race	N/A	1.9%	N/A	1.9%	N/A	1.9%	N/A	2.3%	N/A	1.4%
Race or ethnicity unknown	4.3%	6.9%	8.2%	9.2%	4.6%	6.9%	2.3%	6.2%	3.8%	5.9%
International students	11.5%	15.9%	6.6%	8.6%	11.9%	17.3%	2.1%	2.7%	25.6%	26.7%

Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 1996 and 2016

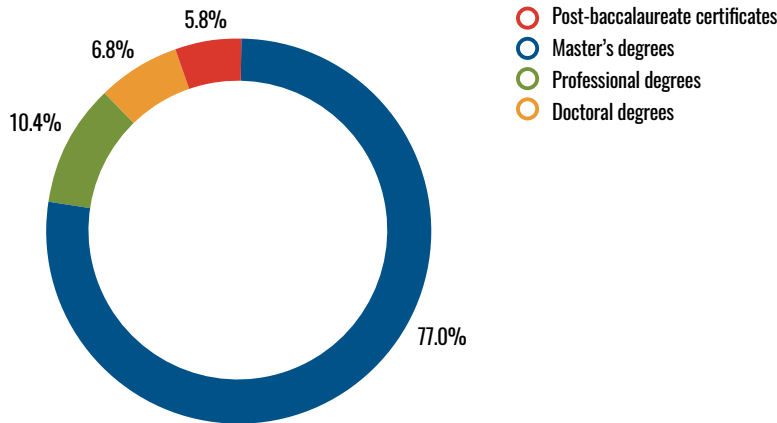
Notes: In 1996, Native Hawaiian or other Pacific Islander students was not an available category. These students were included in the category "Asian." | In 1996, data on students of more than one race were not collected separately.

- The total share of Black students among all post-baccalaureate certificate completions increased from 6.0 percent of all certificates in 1996 to 11.4 percent in 2016, the largest increase of any group. The total share of Hispanics increased from 3.5 percent in 1996 to 6.4 percent in 2016.
- The total share of Black and Hispanic students among master's degrees completions increased (a 4.3 percentage point and 4.1 percentage point increase, respectively). The total share of international students rose by 5.4 percentage points.
- The total share of Asians among all professional degree completions increased 5.0 percentage points, from 8.4 to 13.4 percent—the largest increase of any group. The share of Black students remained unchanged at 6.5 percent of all professional degrees completed.
- Black and Hispanic students showed the largest increase in their total share of all doctoral degrees earned. Blacks increased from 3.5 percent of all doctoral degree completions in 1996 to 7.6 percent in 2016; Hispanics increased from 2.1 percent in 1996 to 4.9 percent in 2016.
- While the total share of White students decreased across all levels of graduate completions, the largest decline was among master's degrees, where their share fell from 69.5 percent to 50.4 percent, a decline of roughly 19 percentage points. The smallest decrease for this group occurred in doctoral degree programs, a decline of roughly 11 percentage points in 20 years.

# GRADUATE STUDENT COMPLETIONS: 2016

Over 1 million graduate credentials were completed in 2016. Of these, 77.0 percent were master's degrees, 10.4 percent were professional degrees, 6.8 percent were doctoral degrees, and 5.8 percent were post-baccalaureate certificates.

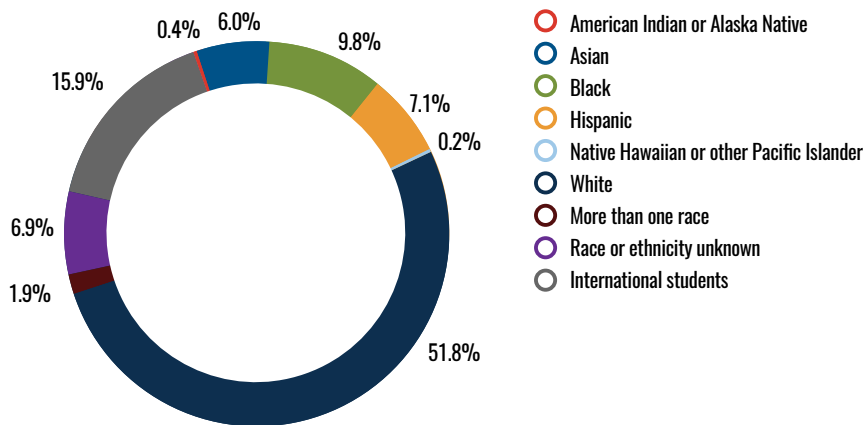
**Figure 6.2: Graduate Student Completions, by Award Level: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

In 2016, Whites represented the largest share of graduate completions (51.8 percent), followed by international students (15.9 percent), Black students (9.8 percent), Hispanic students (7.1 percent), and Asian students (6.0 percent). American Indian or Alaska Native (0.4 percent) and Native Hawaiian or other Pacific Islander (0.2 percent) students represented less than 1 percent of all graduate completions in 2016.

**Figure 6.3: Graduate Student Completions, by Race and Ethnicity: 2016**

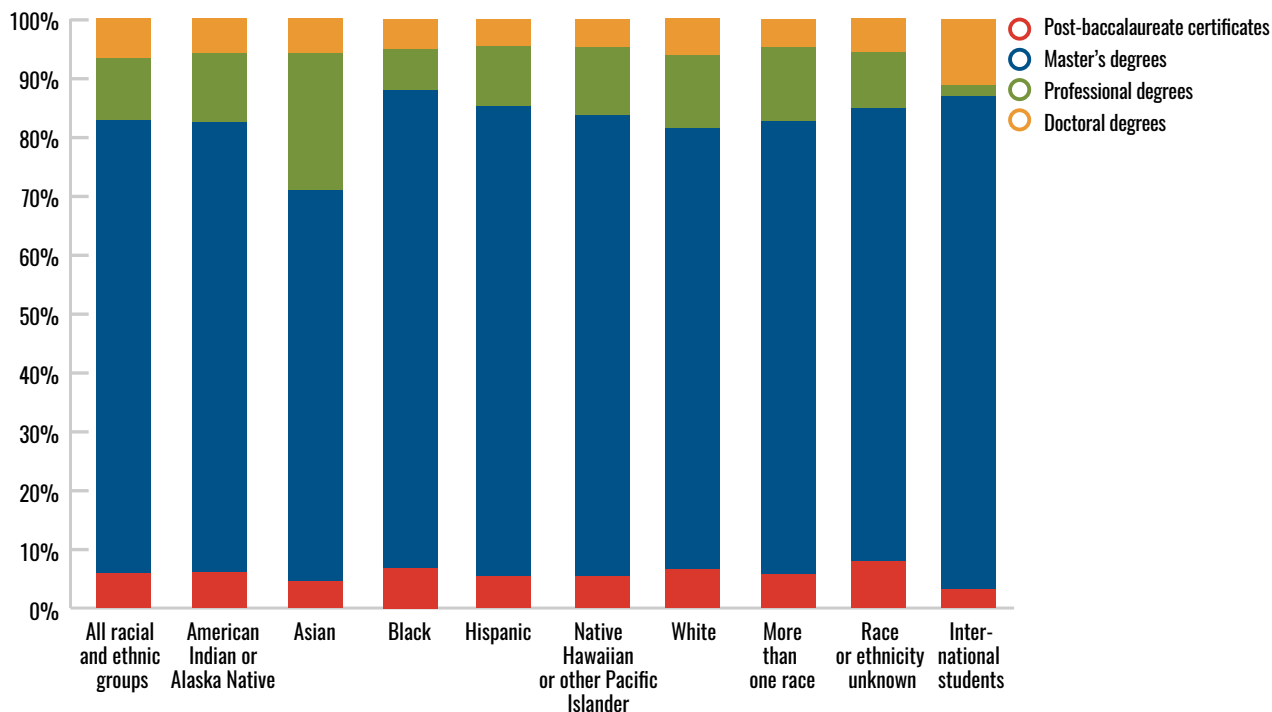


Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## Completions Within Student Groups

While the vast majority of graduate students earned master's degrees rather than other forms of credentials, variation emerged across student groups.

**Figure 6.4: Graduate Student Completions, by Award Level and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

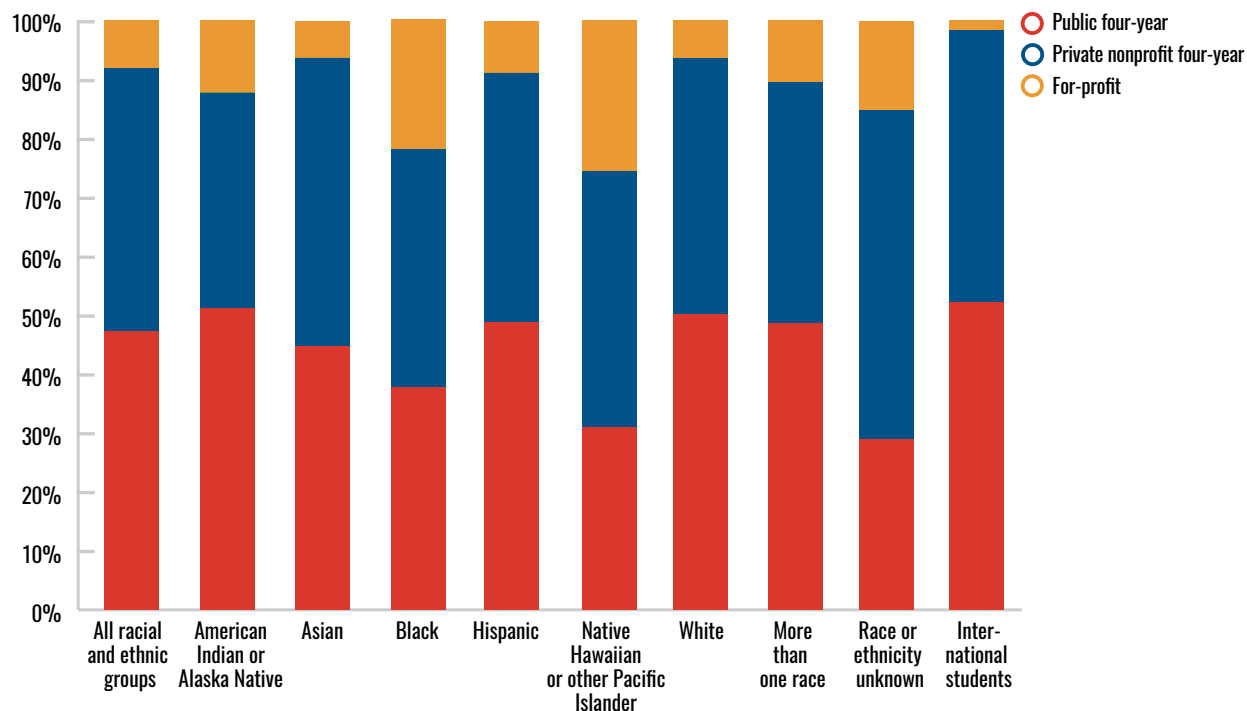
- A larger proportion of Asian students completed a professional degree (23.2 percent) than did other student groups.
- Black students (6.9 percent) and international students (1.7 percent) were much less likely to complete professional degrees than their peers, but were more likely to have completed a master's degree (81.1 percent for Black students and 83.7 percent for international students).
- A larger proportion of international students completed doctoral degrees (11.3 percent) than did other groups. Whites were the next largest group to earn these types of degrees (6.3 percent).



## Completions by Higher Education Sector and Field

Across all student groups in 2016, public four-year institutions awarded 47.3 percent of all graduate credentials, private non-profit four-year institutions awarded 44.6 percent, and for-profit institutions awarded 8.1 percent.

**Figure 6.5: Graduate Student Completions Across Sectors, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

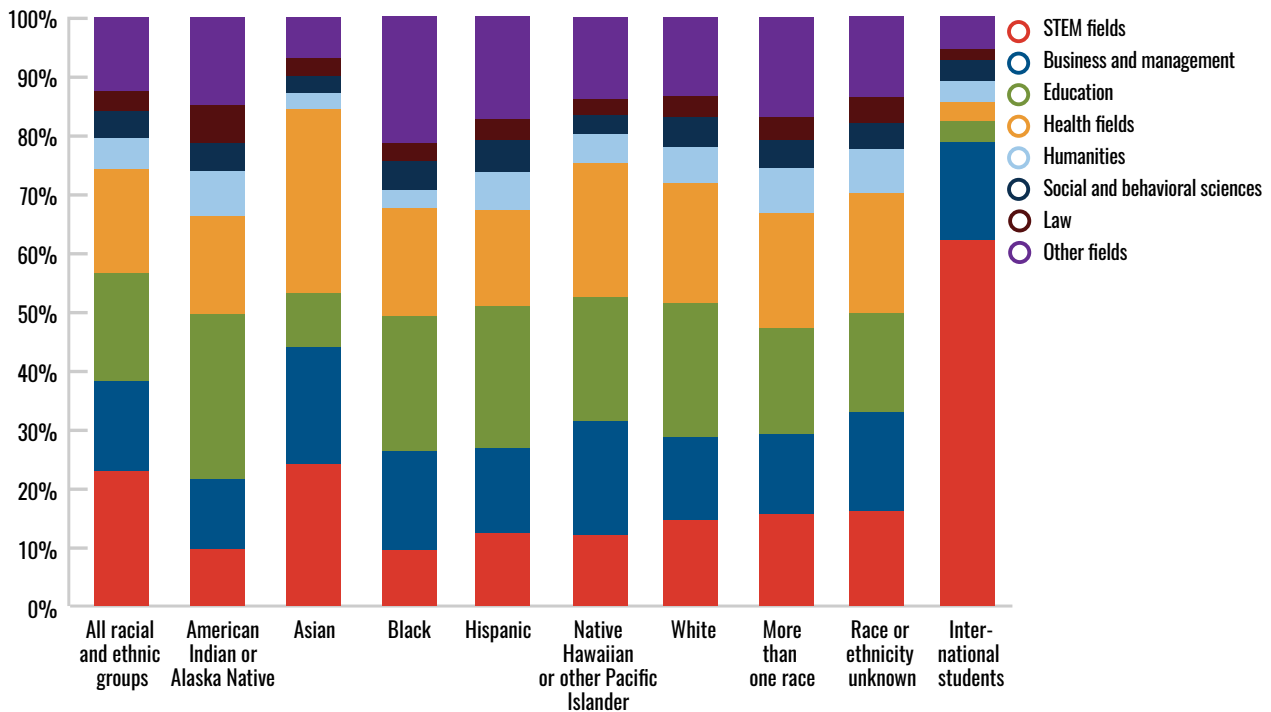
Notes: In 2016, 0.2% of American Indian or Alaska Native students completed their graduate studies at a public two-year institution. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Over half of all international (52.2 percent), American Indian or Alaska Native (51.2 percent), and White (50.1 percent) students earned their graduate credentials at a public four-year institution.
- A greater proportion of Native Hawaiian or other Pacific Islander (25.7 percent) and Black (21.9 percent) students earned their graduate credentials at for-profit institutions than any other group.

## Public Four-Year Institutions

The primary fields in which students completed graduate credentials at public four-year institutions were STEM fields (22.9 percent), education (18.4 percent), and health (17.5 percent).

**Figure 6.6: Total Graduate Credentials Completed at Public Four-Year Institutions, by Field of Study and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

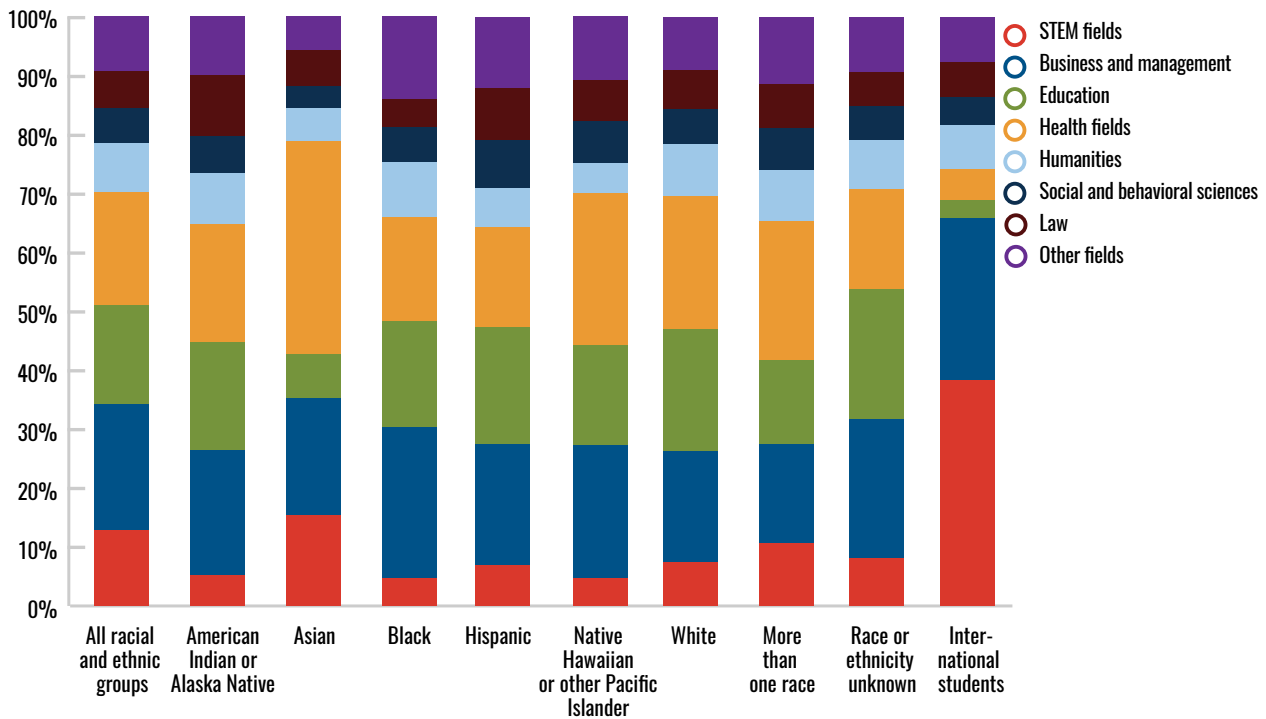
Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include life and physical sciences, math, engineering, and computer science.

- International students overwhelmingly graduated in STEM fields (62.1 percent), the only student group to choose STEM as their top field of study.
- More than one in five American Indians or Alaska Natives (28.0 percent), Blacks (23.0 percent), Hispanics (24.1 percent), and Whites (22.8 percent) completed a graduate credential in education, compared with 9.0 percent of Asians and 3.6 percent of international students.
- Larger shares of Asians (31.3 percent), Native Hawaiians or other Pacific Islanders (22.7 percent), and students of more than one race (19.6 percent) than of other groups completed a graduate credential in health.

## Private Nonprofit Four-Year Institutions

The primary fields in which students completed graduate credentials at private nonprofit four-year institutions were business and management (21.5 percent), health (19.3 percent), and education (16.7 percent).

**Figure 6.7: Total Graduate Credentials Completed at Private Nonprofit Four-Year Institutions, by Field of Study and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

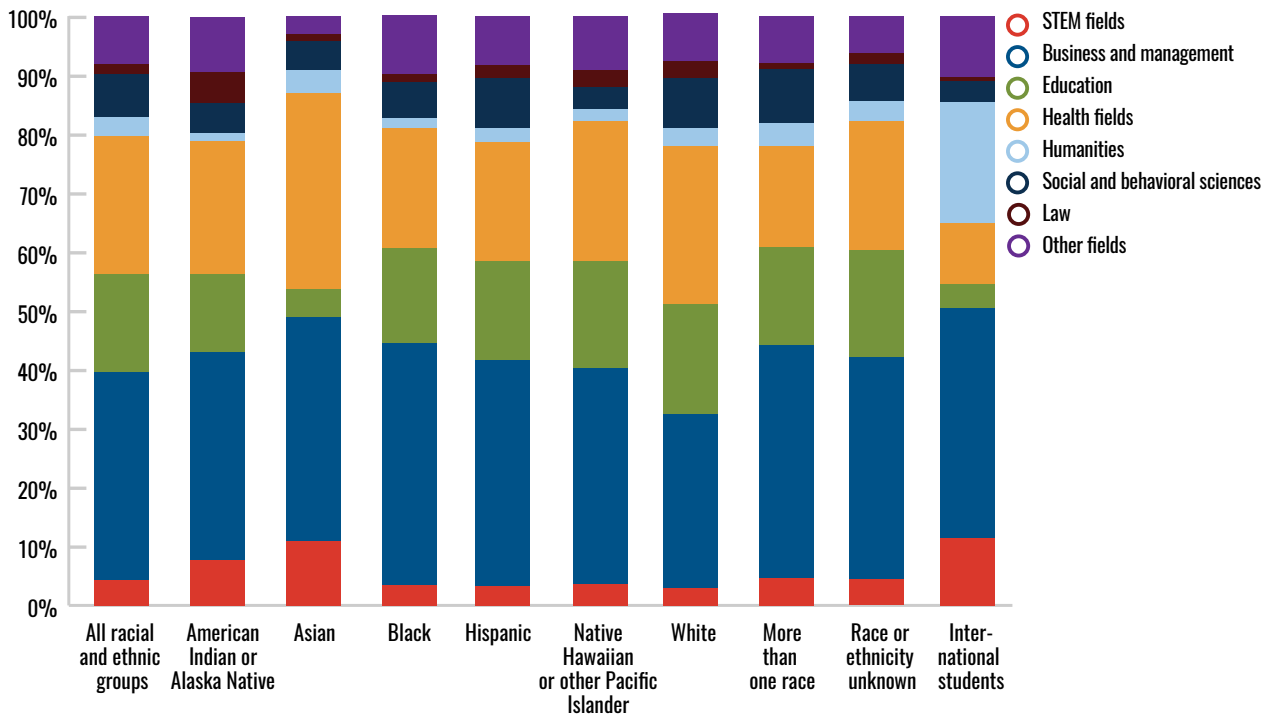
Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include life and physical sciences, math, engineering, and computer science.

- Approximately one in five Hispanic (20.0 percent) and White (20.7 percent) students at private nonprofit four-year institutions completed a graduate credential in education, compared with 7.5 percent of Asian students.
- More than one-third of Asian students completed a graduate credential in health (36.1 percent)—the highest percentage of any group.
- More than one-third of international students earned a graduate credential in STEM fields (38.2 percent), compared with less than 10 percent of all American Indians or Alaska Natives, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and Whites.

## For-Profit Institutions

The primary fields in which graduate credentials were completed at for-profit institutions were business and management (35.3 percent), health (23.4 percent), and education (16.6 percent).

**Figure 6.8: Total Graduate Credentials Completed at For-Profit Institutions, by Field and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | STEM fields include life and physical sciences, math, engineering, and computer science.

- Around 41 percent of graduate credentials earned by Black students were in business and management fields, the most of any group. This was true for only 29.4 percent of White students.
- Asian and international students were more than twice as likely as their peers in other groups to graduate with a credential in STEM fields (11.0 percent and 11.5 percent, respectively).
- One in five international students (20.7 percent) completed a credential in the humanities, compared with less than 5 percent of all other student groups.

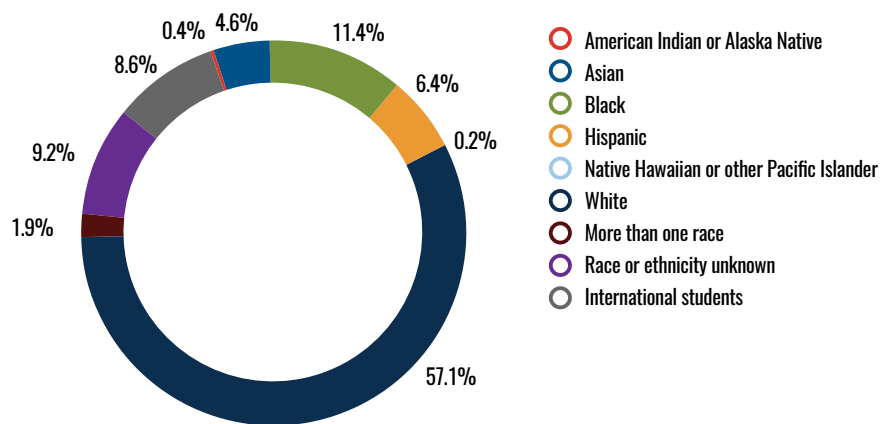
## Completions by Credential Type

Similar to differences seen in undergraduate credential completion (as shown in Chapter 5 of this report, “Undergraduate Persistence and Completion”), we see great variation across student groups when it comes to where students attend graduate school and what types of credentials they complete.

### Post-baccalaureate Certificates

In 2016, graduate students completed nearly 60,000 post-baccalaureate certificates. Among post-baccalaureate certificate completers, 57.1 percent were White and 25.0 percent were students of color.<sup>10</sup> International students made up 8.6 percent of post-baccalaureate certificate completers, and 9.2 percent were of unknown race and ethnicity.<sup>11, 12</sup>

**Figure 6.9: Post-baccalaureate Certificates, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

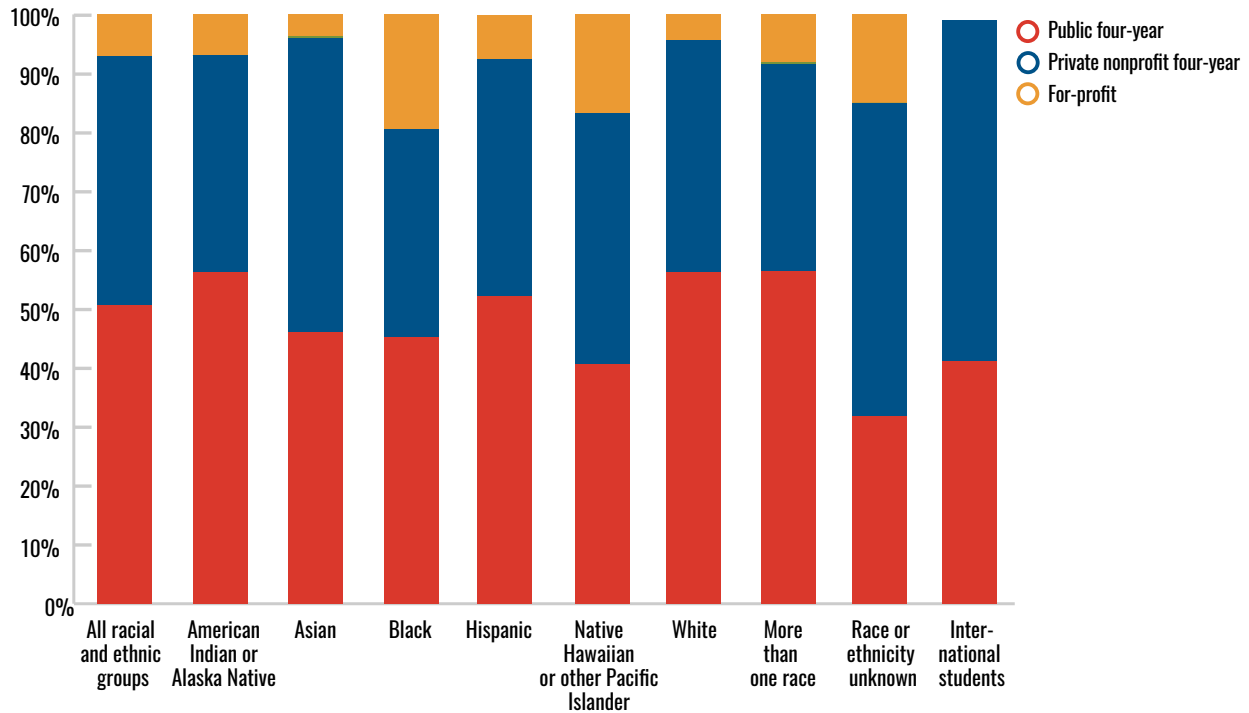
<sup>10</sup> The group students of color includes American Indians or Alaska Natives, Asians, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and students of more than one race.

<sup>11</sup> Numbers may not add to 100 due to rounding.

<sup>12</sup> Race and ethnicity unknown is included among the racial and ethnic categories within IPEDS data, which are used in this chapter of the report. As a result, tables and figures include this group alongside other racial and ethnic categories.

## HIGHER EDUCATION SECTOR

**Figure 6.10: Post-baccalaureate Certificates, by Sector and Race and Ethnicity: 2016**



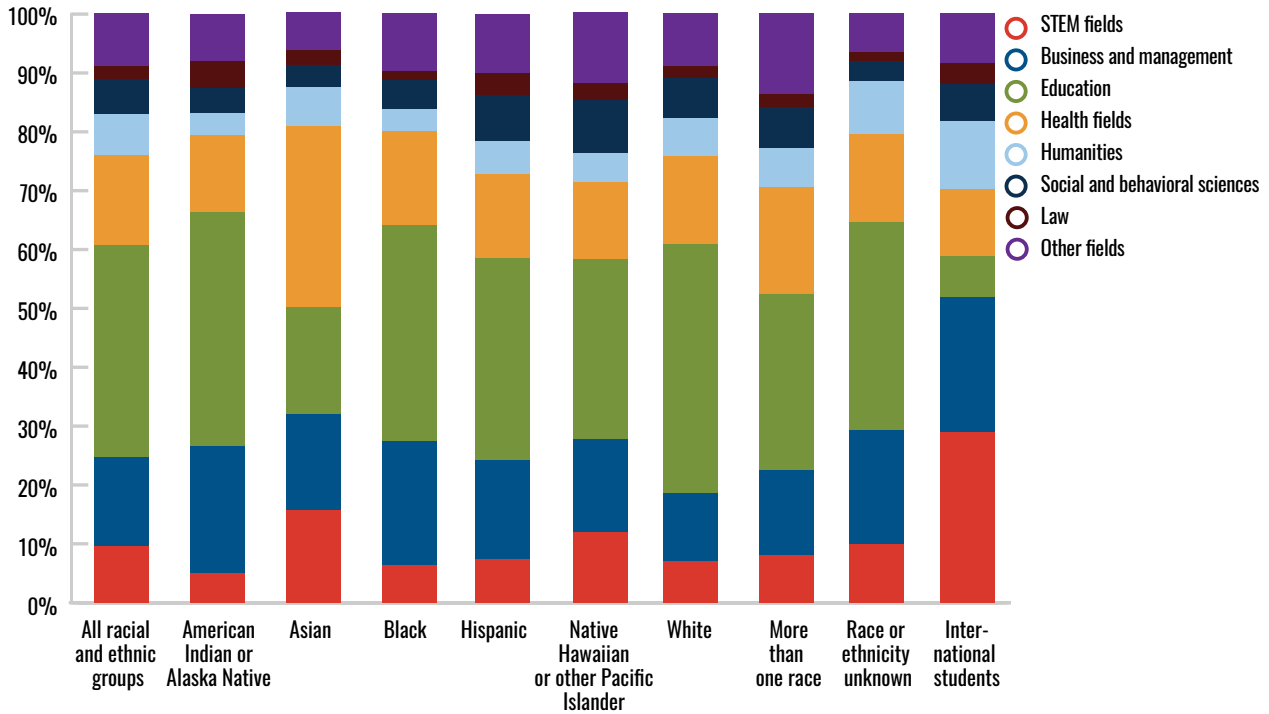
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Notes: In 2016, 0.2% or fewer students overall, Asian students, White students, students of more than one race, and international students completed a post-baccalaureate certificate at a public two-year institution. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Half of all post-baccalaureate certificates were completed at public four-year institutions (50.7 percent), 42.1 percent at private nonprofit four-year institutions, 7.1 percent at for-profit institutions, and 0.1 percent at public two-year institutions.
- Nearly one in five Black students (19.5 percent) earned their post-baccalaureate certificate at a for-profit institution—the highest percentage of any group.
- International students were more likely than other groups to have earned their post-baccalaureate certificate at a private nonprofit four-year institution (58.0 percent).

## FIELD OF STUDY

**Figure 6.11: Field of Study for Post-baccalaureate Certificate Recipients, by Race and Ethnicity: 2016**



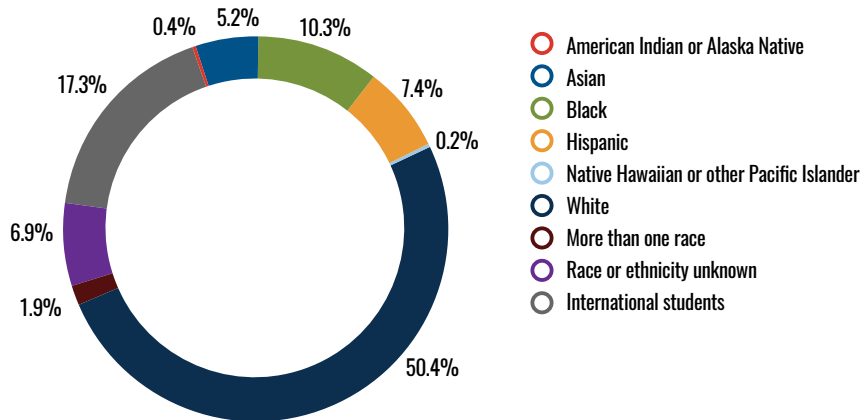
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- Over one-third of all White (42.3 percent), American Indian or Alaska Native (39.8 percent), Black (36.6 percent), and Hispanic (34.3 percent) students completed their post-baccalaureate certificates in education, compared with 18.2 percent of all Asian certificate completers and 7.0 percent of all international students earning these credentials.
- Asians were nearly twice as likely as other groups to complete a post-baccalaureate certificate in health (30.7 percent).
- International students were more likely to complete their credential in the humanities (11.4 percent) than other groups.
- International students were nearly twice as likely as other groups to complete a certificate in a STEM field (29.0 percent).

## Master's Degrees

In 2016, graduate students completed over 789,000 master's degrees. Among master's degree completers, 50.4 percent were White and 25.4 percent were students of color. International students made up 17.3 percent of master's degree completers, and 6.9 percent were of unknown race and ethnicity.

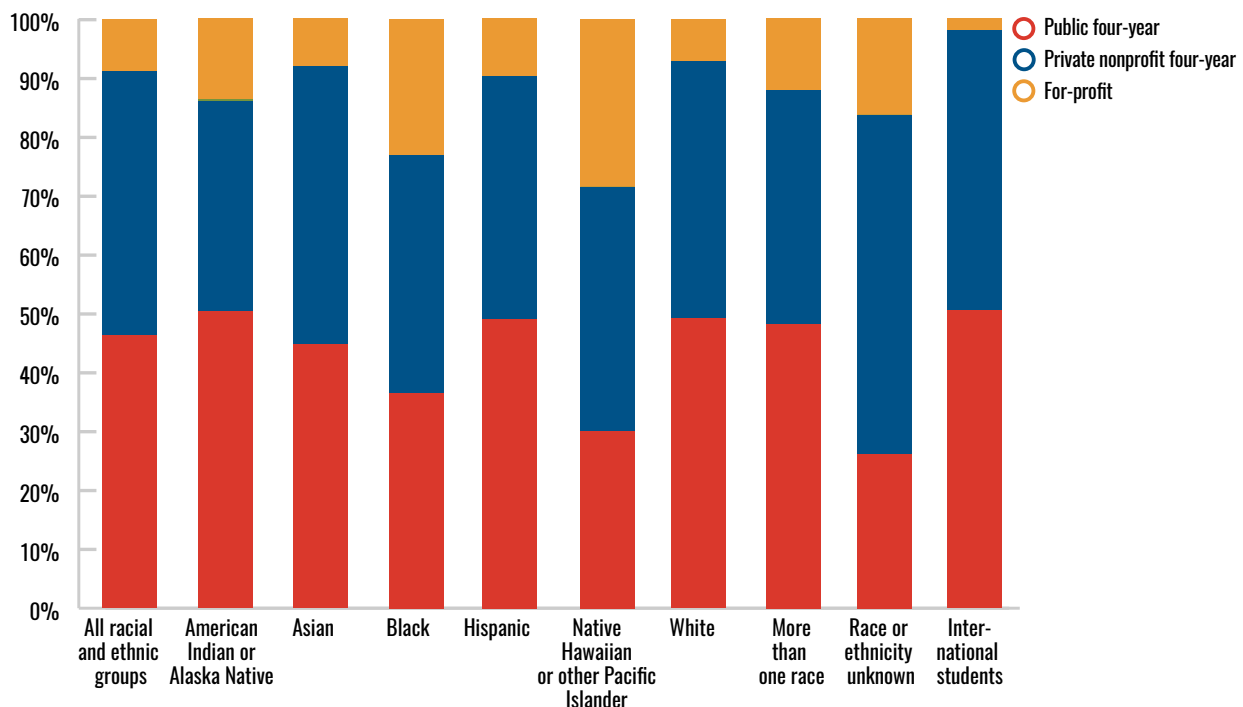
**Figure 6.12: Master's Degrees, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## HIGHER EDUCATION SECTOR

**Figure 6.13: Master's Degrees, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

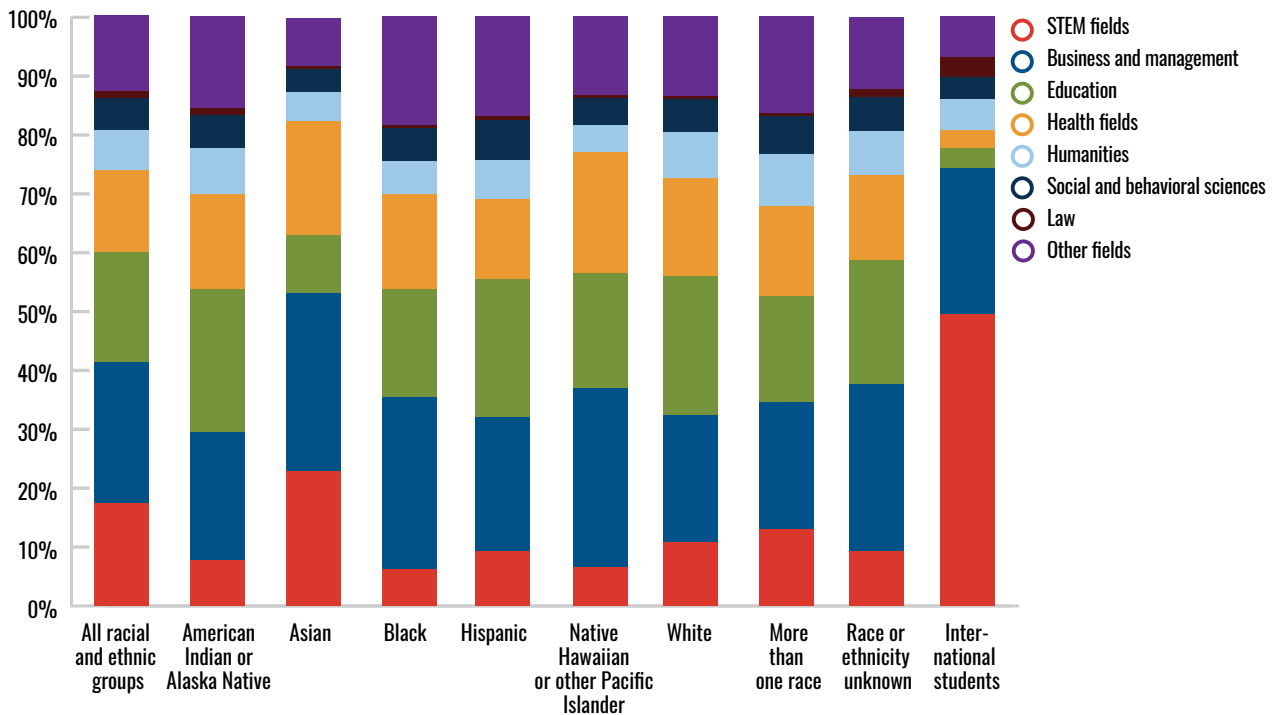
Notes: In 2016, 0.3% of American Indian or Alaska Native students completed a master's degree at a public two-year institution. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.



- Almost half of students who completed master's degrees in 2016 earned their degrees at public four-year institutions (46.3 percent), and 44.8 percent completed their degrees at private nonprofit four-year institutions. The remaining 8.9 percent of students graduated from for-profit institutions.
- Nearly one-third of Native Hawaiian or other Pacific Islander students earned their master's degrees at a for-profit institution (28.5 percent)—the highest percentage of any group. Black students were the second most likely to complete their master's degree at for-profit institutions (23.2 percent).

## FIELD OF STUDY

**Figure 6.14: Field of Study for Master's Degree Recipients, by Race and Ethnicity: 2016**



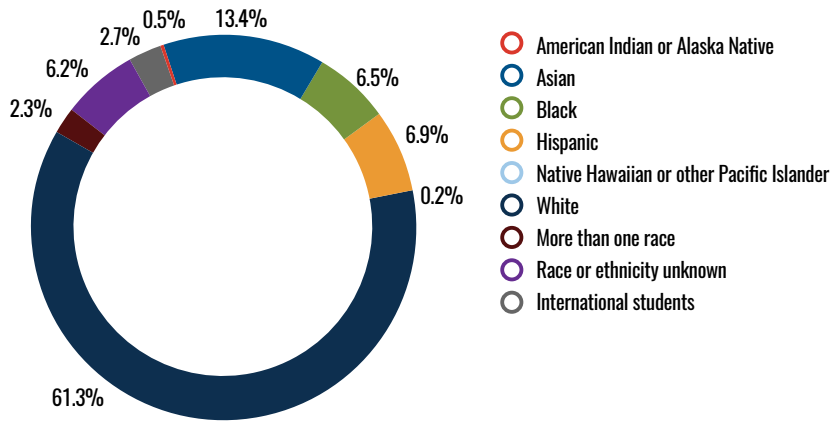
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- Nearly one-quarter of all American Indian or Alaska Native (24.4 percent), White (23.6 percent), and Hispanic (23.5 percent) master's degree recipients completed degrees in education, compared with only 9.9 percent of Asian students and 3.3 percent of international students.
- About half of all international master's degree recipients earned degrees in STEM fields (49.4 percent), as did 22.9 percent of Asian students. The shares of all other groups of master's degree recipients earning their degrees in STEM fields were much lower.

## Professional Degrees

Graduate students completed over 106,000 professional degrees in 2016. Among professional degree completers, 61.3 percent were White and 29.8 percent were students of color. International students made up 2.7 percent of professional degree completers, and 6.2 percent were of unknown race and ethnicity.

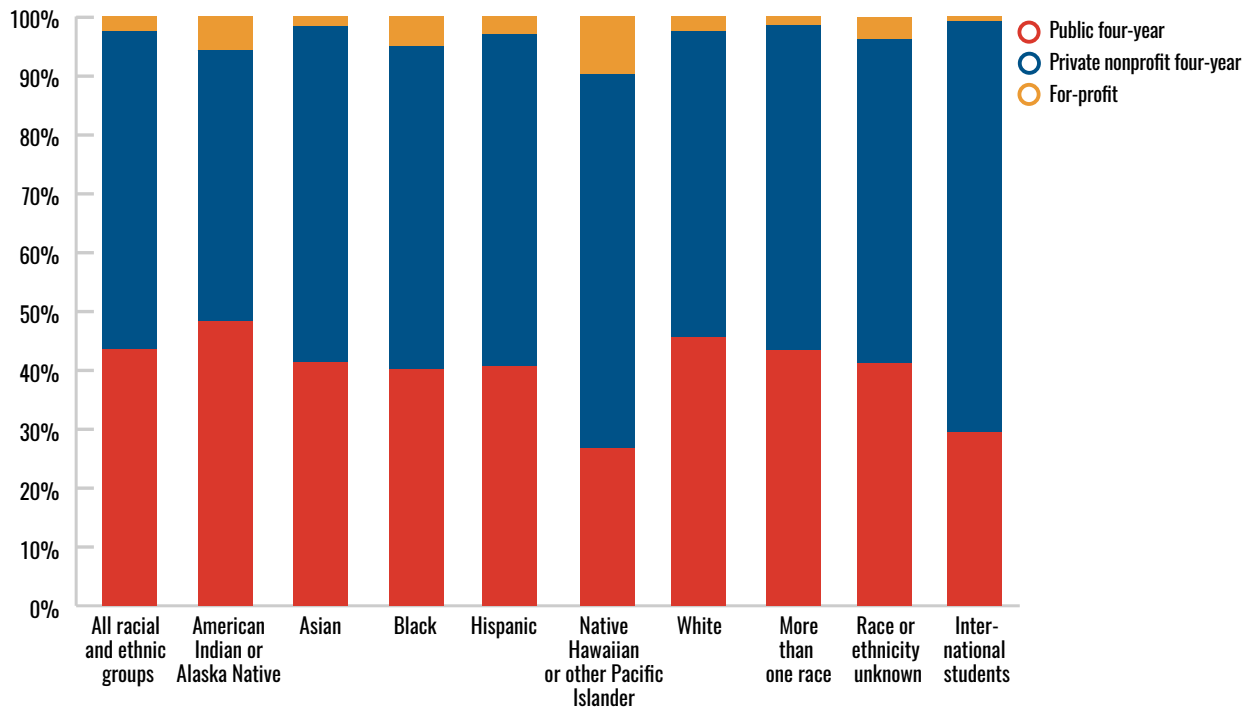
**Figure 6.15: Professional Degrees, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## HIGHER EDUCATION SECTOR

**Figure 6.16: Professional Degrees, by Sector and Race and Ethnicity: 2016**



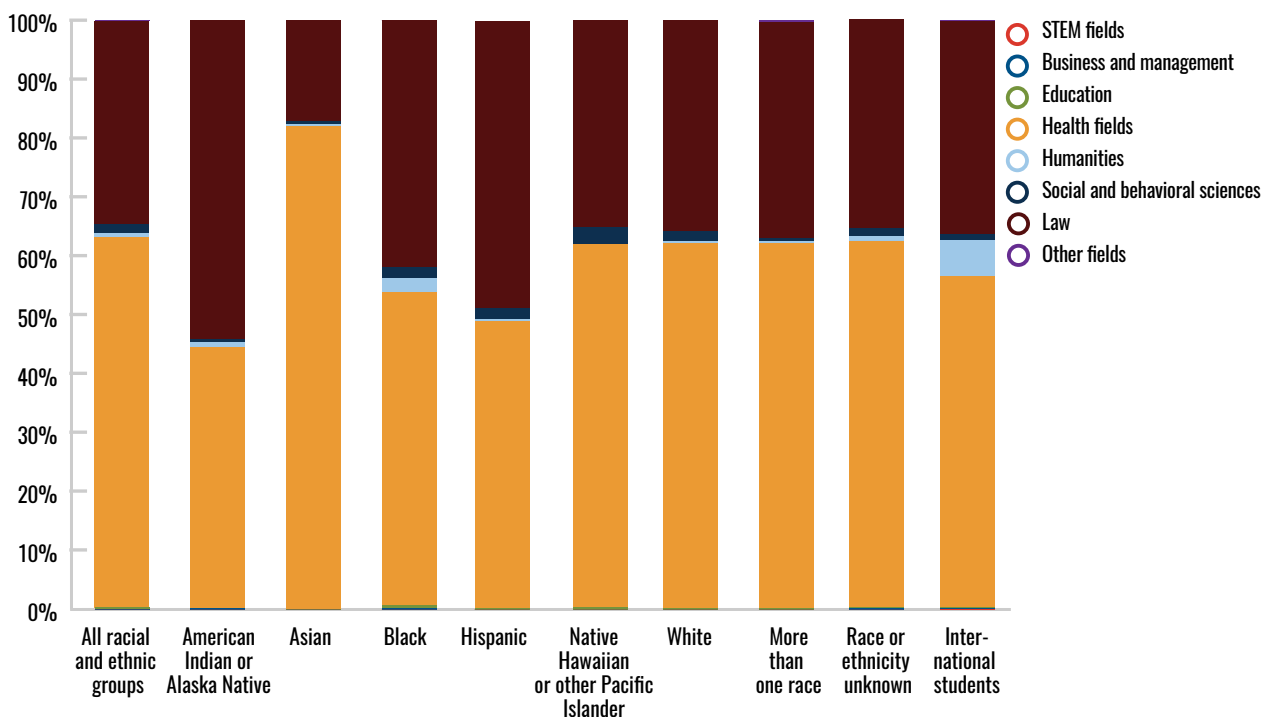
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Over half of the students who completed professional degrees in 2016 earned their degrees at private nonprofit four-year institutions (53.8 percent); 43.6 percent earned their degrees at public four-year institutions and 2.7 percent at for-profit institutions.
- American Indian or Alaska Native students were more likely than their peers to complete their professional degrees at public four-year institutions (48.3 percent).
- Nearly 10 percent of Native Hawaiian or other Pacific Islander students earned their professional degrees at for-profit institutions—the highest of any group; 5.8 percent of American Indian or Alaska Native and 5.1 percent of Black professional degree recipients attended institutions in this sector.

## FIELD OF STUDY

**Figure 6.17: Field of Study for Professional Degree Recipients, by Race and Ethnicity: 2016**



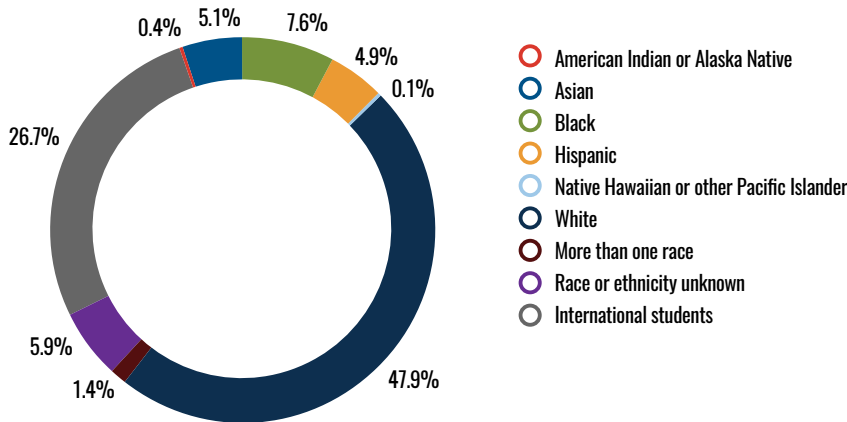
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- Health was the top field of study for recipients of professional degrees, with 62.8 percent of all degrees awarded in this field, followed by law at 34.6 percent. These were the top two fields of study across all student groups.
- Nearly half of all Hispanic students completed their professional degrees in law (48.8 percent), compared with 17.0 percent of Asian students, the lowest percentage among all student groups.
- American Indian or Alaska Native students were the only group to have earned more professional degrees in law (54.1 percent) rather than health (44.3 percent).

## Doctoral Degrees

In 2016, graduate students completed about 69,400 doctoral degrees. Among doctoral degree completers, 47.9 percent were White and 19.6 percent were students of color. International students made up 26.7 percent of doctoral degree completers, and 5.9 percent were of unknown race or ethnicity.<sup>13</sup>

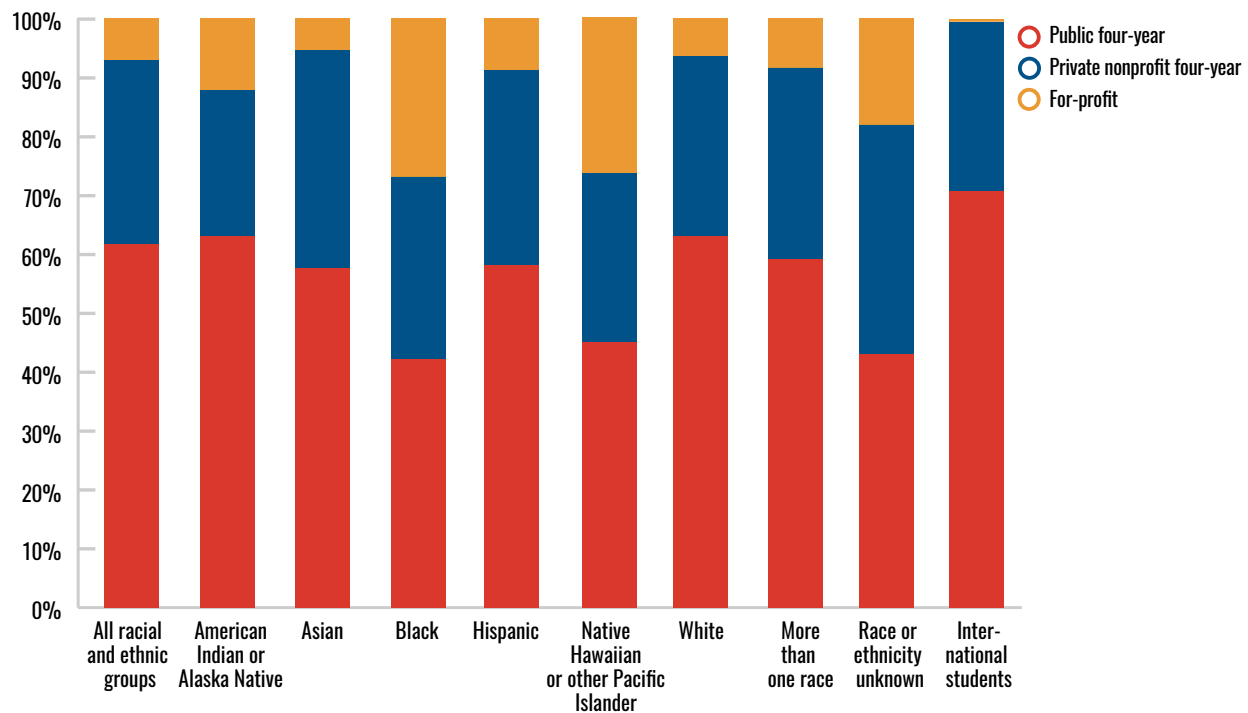
**Figure 6.18: Doctoral Degrees, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

## HIGHER EDUCATION SECTOR

**Figure 6.19: Doctoral Degrees, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

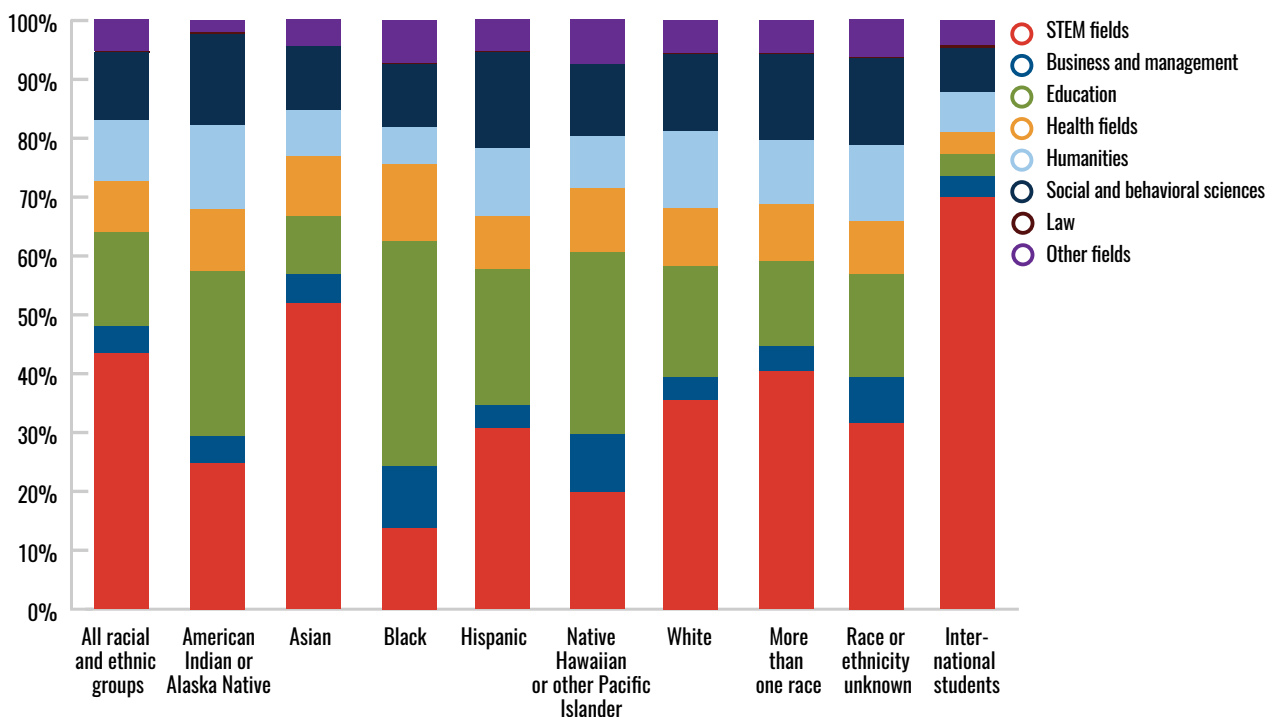
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

13 Numbers may not add to 100 due to rounding.

- The majority of students earned their doctoral degrees at public four-year institutions (61.7 percent), followed by private nonprofit four-year (31.1 percent) and for-profit (7.2 percent) institutions. There was considerable variation across racial and ethnic groups.
- Over one-quarter of Black (26.9 percent) and Native Hawaiian or other Pacific Islander (26.4 percent) students, and over one in 10 American Indian or Alaska Native students (12.2 percent) earned their doctoral degrees at for-profit institutions.
- The largest share of any group of students who completed their doctoral degree at public four-year institutions was 70.6 percent among international students.

## FIELD OF STUDY

**Figure 6.20: Field of Study for Doctoral Degree Recipients, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: STEM fields include life and physical sciences, math, engineering, and computer science.

- More than half of all international (69.9 percent) and Asian (51.9 percent) students completed their doctoral degrees in STEM fields, compared with only 24.8 percent of American Indian or Alaska Native doctoral degree recipients, 19.8 percent of Native Hawaiian or other Pacific Islander students, and 13.8 percent of Black students.
- Larger proportions of Black doctoral degree recipients (38.3 percent) and Native Hawaiian or other Pacific Islander students (30.8 percent) than of other groups completed their degrees in education. Asian (9.9 percent) and international (3.6 percent) students were the least likely to complete their doctoral degrees in education.

## REFERENCES

Council of Graduate Schools. 2017. *Master's Degree Requirements and the U.S. Workforce*. Washington, DC: Council of Graduate Schools. [https://cgsnet.org/ckfinder/userfiles/files/Masters\\_Degree\\_Requirements\\_and\\_the\\_US\\_Workforce\(1\).pdf](https://cgsnet.org/ckfinder/userfiles/files/Masters_Degree_Requirements_and_the_US_Workforce(1).pdf).

## CHAPTER 7



# How Students Finance Undergraduate Study







# INTRODUCTION

College affordability has been a mainstream issue in American society over the last several years, and for good reason. As noted elsewhere in this report, postsecondary credentials are associated with higher wages for those who earn them, not to mention the many societal benefits that result from an educated citizenry (McMahon 2009; Ma, Pender, and Welch 2016; Turk 2019). Yet as college is becoming more valuable to individuals and society, it is also less affordable than in the past.

For those students who do pursue higher education, there is considerable variation in how they finance college, by race, ethnicity, and economic circumstance. The most notable and consistent finding that emerged from these data is that Black<sup>1</sup> students were most likely to borrow and accrue larger debts when compared with other students. Asian and Hispanic students were least likely to borrow to fund their undergraduate education. These patterns hold both overall and within types of institutions, dependent student status, and family income quartile. As policymakers, institutional leaders, and others seek to make college more affordable for everyone, it is important to recognize the uneven financial barriers and opportunities facing today's students.<sup>2</sup>

## KEY FINDINGS

- The share of undergraduate students completing the Free Application for Federal Student Aid (FAFSA) in 2015–16 ranged from 67.5 percent of Asian students to 84.4 percent of Black students.
- A larger share of African American students than students from any other racial and ethnic group had no expected family contribution (EFC) based on the financial data provided on the FAFSA. White students were least likely to have \$0 EFCs and most likely to have EFCs of \$19,300 or more. The share of Black students with EFCs this high was lower than the share of any other racial and ethnic group.
- Receiving grant aid but not borrowing was more common among Asian and Hispanic students than among Black and White students.
- Larger shares of Black and American Indian or Alaska Native students than of students from other racial and ethnic groups received grant aid.
- Sources of grant aid differed across demographic groups. For example, Black, Hispanic, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander students received around 30 percent of their grant aid from the federal government, compared with 11.6 percent for White students. White students, Asian students, and students of more than one race received about half of their aid from their institutions.
- In 2015–16, 37.3 percent of students took both federal subsidized and unsubsidized direct loans. The shares of students borrowing under these programs ranged from 26.0 percent of Asian students to 49.8 percent of Black students.
- Both independent and dependent Black students were more likely to borrow than members of other racial and ethnic groups. Asian and Hispanic students borrowed at lower than average rates.
- Black bachelor's degree recipients left college with higher average debt per borrower and higher debt per graduate than students from any other racial and ethnic group. Hispanic students graduated with lower than average levels of debt. The same pattern held for associate degree recipients.

1 The terms Black and African American are used interchangeably.

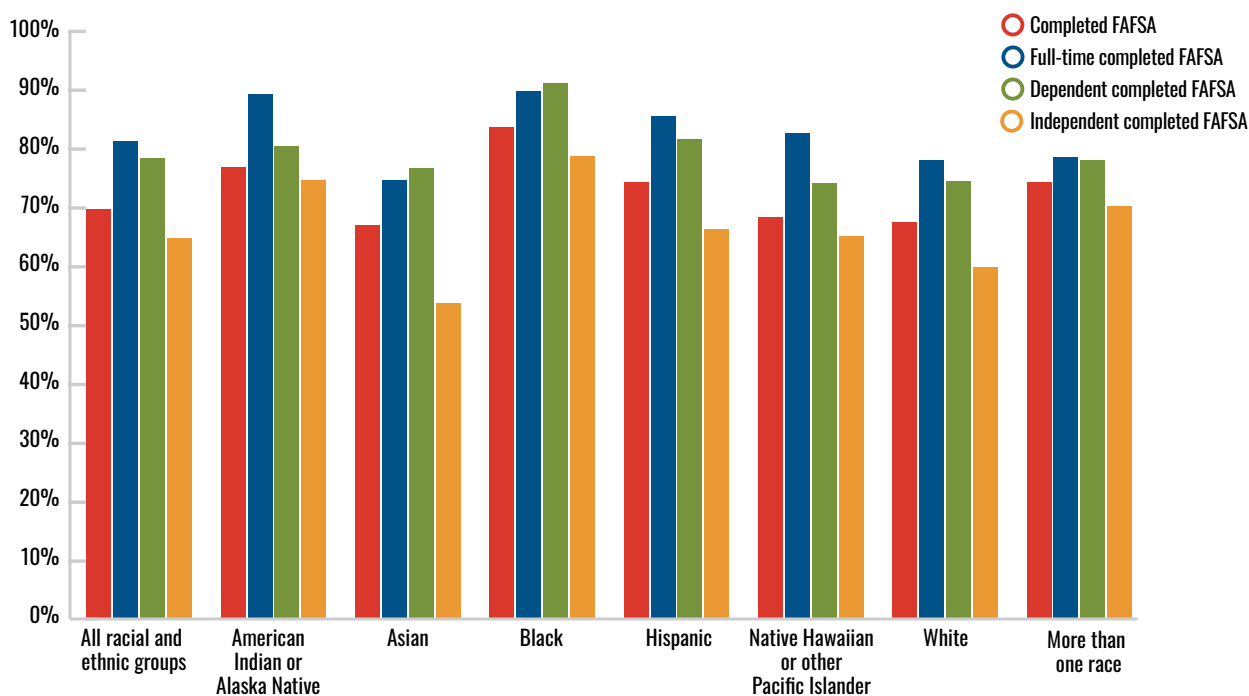
2 Where possible, the data in this chapter cover a wide range of demographic groups, including international students. However, international students who have certain visas, including an F1 or F2 nonimmigrant student visa or a J1 or J2 nonimmigrant exchange visitor visa are not eligible for federal financial aid. Meaningful comparisons are limited by the small sizes of some groups and by exclusion of international students from the federal and state aid on which domestic students rely.

As presented in Chapter 3 of this report, “Enrollment in Undergraduate Education,” Whites represented the majority of undergraduate students (52.0 percent) in 2015–16. Hispanics were the second largest racial and ethnic group (19.8 percent), followed by Blacks (15.2 percent), Asians (5.7 percent), students of more than one race (3.3 percent), American Indians or Alaska Natives (0.8 percent), and Native Hawaiians or other Pacific Islanders (0.4 percent). An additional 2.8 percent were international students.<sup>3</sup> Comparisons of data presented in this chapter across groups should be made with caution, as small sample sizes for certain racial and ethnic groups may not be meaningful.

## FINANCIAL AID APPLICATION AND EXPECTED FAMILY CONTRIBUTION

Students who wish to receive federal financial aid must first submit a Free Application for Federal Student Aid (FAFSA). The FAFSA is used to determine eligibility for grants, loans, and work-study, and is often required by many state and institutional aid programs as well. In 2015–16, over 70 percent of domestic undergraduate students completed the FAFSA.

**Figure 7.1: FAFSA Completion Rates, by Race and Ethnicity: 2015–16**



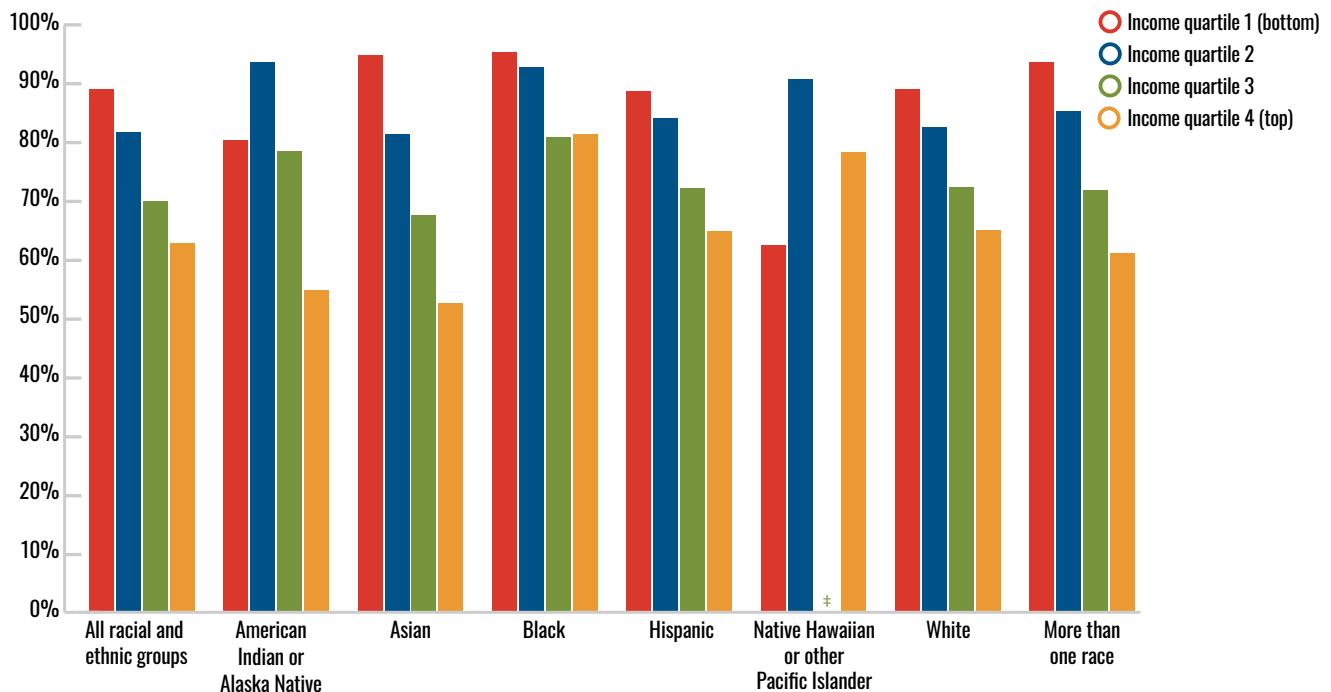
Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

- About 82 percent of full-time students and 65.0 percent of students who enrolled part time for at least part of the 2015–16 academic year completed the FAFSA.
- Overall, FAFSA filing rates ranged from 67.5 percent of Asian students to 84.4 percent of Black students.
- Filing rates rose when looking just at full-time students, ranging from 75.2 percent of Asian students to 90.6 percent of Black students.

<sup>3</sup> The National Center for Education Statistics (NCES) defines a nonresident alien as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.” In this report, nonresident aliens are labeled as international students.

Low-income students—those with little to no expected family contribution (EFC)<sup>4</sup>—have the most to gain from submitting the FAFSA. These students will have access to greater amounts of grant aid as well access to subsidized student loans. Within each income quartile, Black students were the most likely to complete the FAFSA.

**Figure 7.2: FAFSA Completion Rates of Dependent Students, by Family Income and Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Note: † Estimate suppressed. Reporting standards not met.

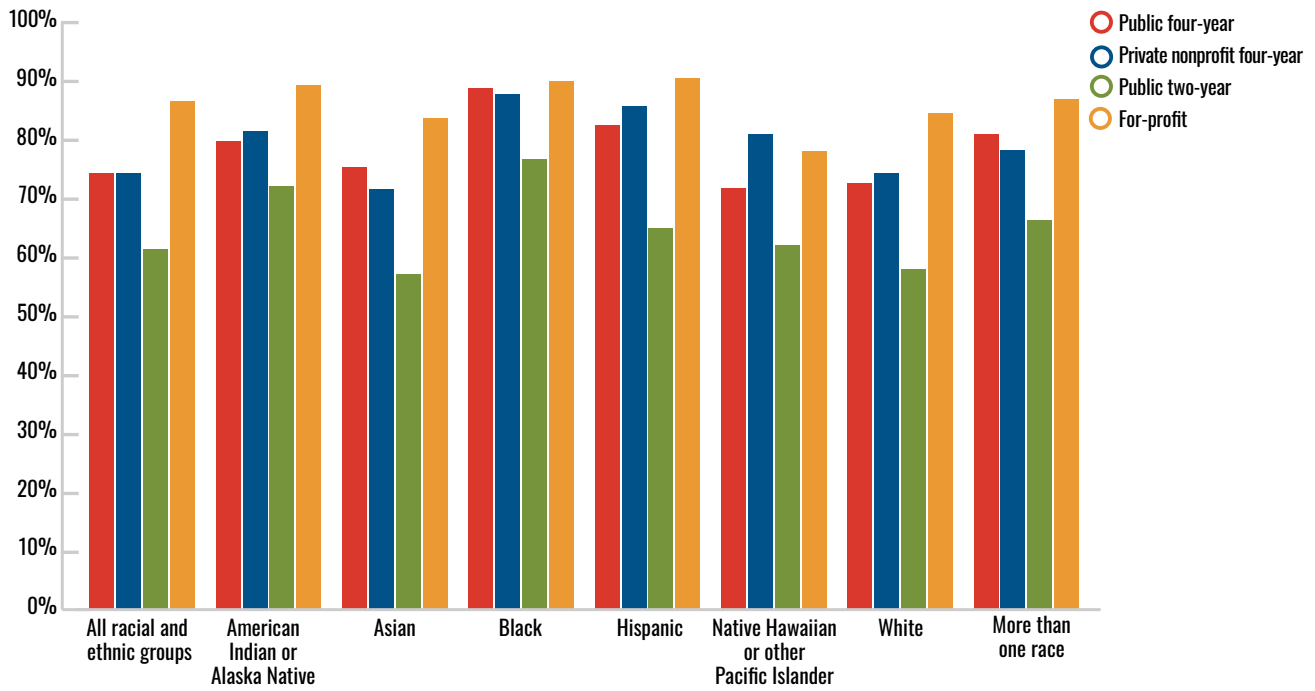
- Among students in the bottom income quartile, approximately 96 percent of dependent<sup>5</sup> Black and Asian students completed the FAFSA, compared with only 63.1 percent of Native Hawaiian or other Pacific Islander students.
- In the highest income quartile, 82.1 percent of Black students applied for federal aid, compared with 53.0 percent of Asian students.
- Seventy-nine percent of dependent students and 65.4 percent of independent students completed the FAFSA, ranging from 54.2 percent of independent Asian students to 91.9 percent of dependent Black students.
- Full-time students completed the FAFSA at higher rates than those enrolled part time. Among each of these groups, Black students had the highest filing rates.
- Asians had the lowest FAFSA completion rate overall and among both full-time (75.2 percent) and independent students (54.2 percent).
- However, among dependent students, White (75.1 percent) and Native Hawaiian or other Pacific Islander (74.7 percent) students were slightly less likely than Asians (77.3 percent) to submit the form.

<sup>4</sup> Expected family contribution (EFC) is a measure used to determine eligibility for federal financial aid as well as how much aid a student can receive. The calculation to determine EFC considers family income, assets, benefits, family size, and how many family members will attend college that year (Federal Student Aid, n.d.).

<sup>5</sup> Students in the National Postsecondary Student Aid Study (NPSAS) are considered dependent if they are “under 24 years of age who are unmarried, do not have dependents, are not veterans or on active military duty, are not orphans or wards of the court, are not homeless or at risk of homelessness, and have not been deemed independent by a financial aid officer” (Radwin et al. 2018). Students who do not fit the previously mentioned categories are considered independent students.

FAFSA submission rates also differed by the higher education sector in which students enrolled. Overall, FAFSA filing rates were highest among students in the for-profit sector<sup>6</sup> and lowest in public two-year colleges.

**Figure 7.3: FAFSA Completion Rates, by Sector and Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

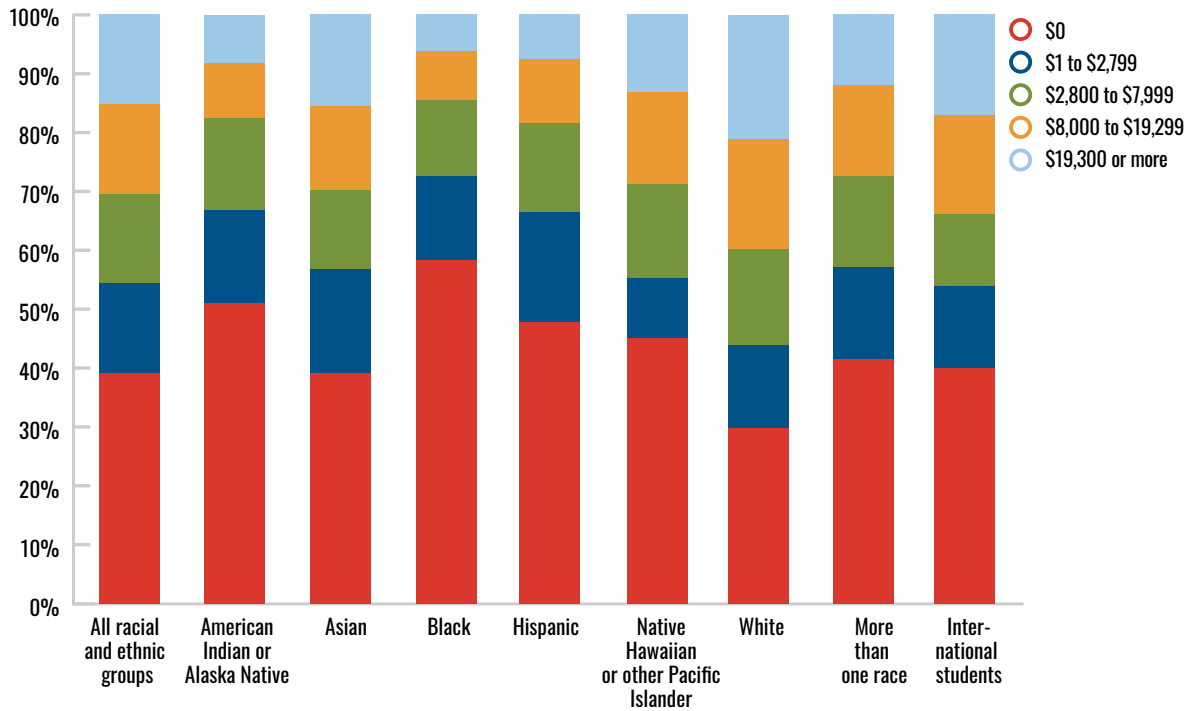
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Across sectors, Black students applied for federal aid at higher rates than did students from other groups.
- In the for-profit sector, approximately 91 percent of Hispanic and Black students completed the FAFSA in 2015–16, a larger share than among other races and ethnicities.
- Across sectors, the lowest filing rates were generally among Asian, White, and Native Hawaiian or other Pacific Islander students.

Students whose resources, combined with those of their parents in the case of dependent students and their spouses in the case of independent students, are deemed inadequate to make any financial contribution to their college education have a \$0 EFC.

<sup>6</sup> Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report’s methods section.

**Figure 7.4: Expected Family Contribution, by Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Note: Expected family contribution estimated by NCES for non-FAFSA filers.

- In 2015–16, 39.1 percent of undergraduate students had an EFC of \$0, with shares ranging from 29.7 percent of White students and 39.1 percent of Asian students to 58.3 percent of Black students.
- One-quarter of those with a positive EFC had an EFC of \$19,300 or more. The share of students with EFCs this high ranged from 6.2 percent of Black students and 7.5 percent of Hispanic students to 21.0 percent of White students.

## FINANCIAL AID

Students receive different types of financial aid depending on their financial circumstances and financial literacy, the types of institutions in which they enroll, borrowing behavior, and a variety of other factors. In 2015–16, 86.8 percent of full-time undergraduates (and 72.3 percent of all undergraduates) received some form of financial aid. Only 8.5 percent of full-time students at private nonprofit four-year institutions, 6.2 percent of those at for-profit institutions, and 13.0 percent of those at public four-year institutions paid for college without financial aid, compared with 21.4 percent of public two-year college students.

Even among full-time students at one type of institution, there was considerable variation in the types of financial aid packages that students from different racial and ethnic groups received, largely because of differences in their financial circumstances and the particular institutions in which they enrolled. Table 7.1 illustrates the types of financial aid received for all full-time undergraduates and those at public four-year institutions, which enrolled the largest share (38 percent) of full-time undergraduates in 2015–16.

**Table 7.1: Types of Financial Aid for All Full-Time Undergraduates and Full-Time Undergraduates at Public Four-Year Institutions, by Race and Ethnicity: 2015–16**

		No Aid	Any Aid	Grants, No Loans	Loans, No Grants	Grants and Loans	Federal Work-Study or Other Only
All Undergraduate Students	All racial and ethnic groups	13.2%	86.8%	32.2%	8.4%	45.2%	1.0%
	American Indian or Alaska Native	7.0%	93.0%	56.5%	2.9%	33.2%	0.0%
	Asian	16.3%	83.7%	42.1%	5.8%	35.2%	0.6%
	Black	3.9%	96.1%	23.7%	6.1%	65.2%	0.9%
	Hispanic	9.2%	90.8%	41.0%	5.4%	43.6%	0.7%
	Native Hawaiian or other Pacific Islander	10.0%	90.0%	38.7%	6.9%	42.5%	0.0%
	White	13.6%	86.4%	29.2%	10.6%	45.5%	1.1%
	More than one race	10.4%	89.6%	35.5%	7.6%	45.4%	1.1%
Public Four-Year	All racial and ethnic groups	13.0%	87.0%	27.1%	12.3%	46.7%	0.9%
	Asian	15.0%	85.0%	38.1%	7.6%	38.4%	0.6%
	Black	2.8%	97.2%	17.1%	9.1%	70.1%	0.4%
	Hispanic	7.8%	92.2%	34.7%	7.3%	49.1%	0.7%
	White	13.5%	86.5%	24.8%	15.4%	45.3%	1.0%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

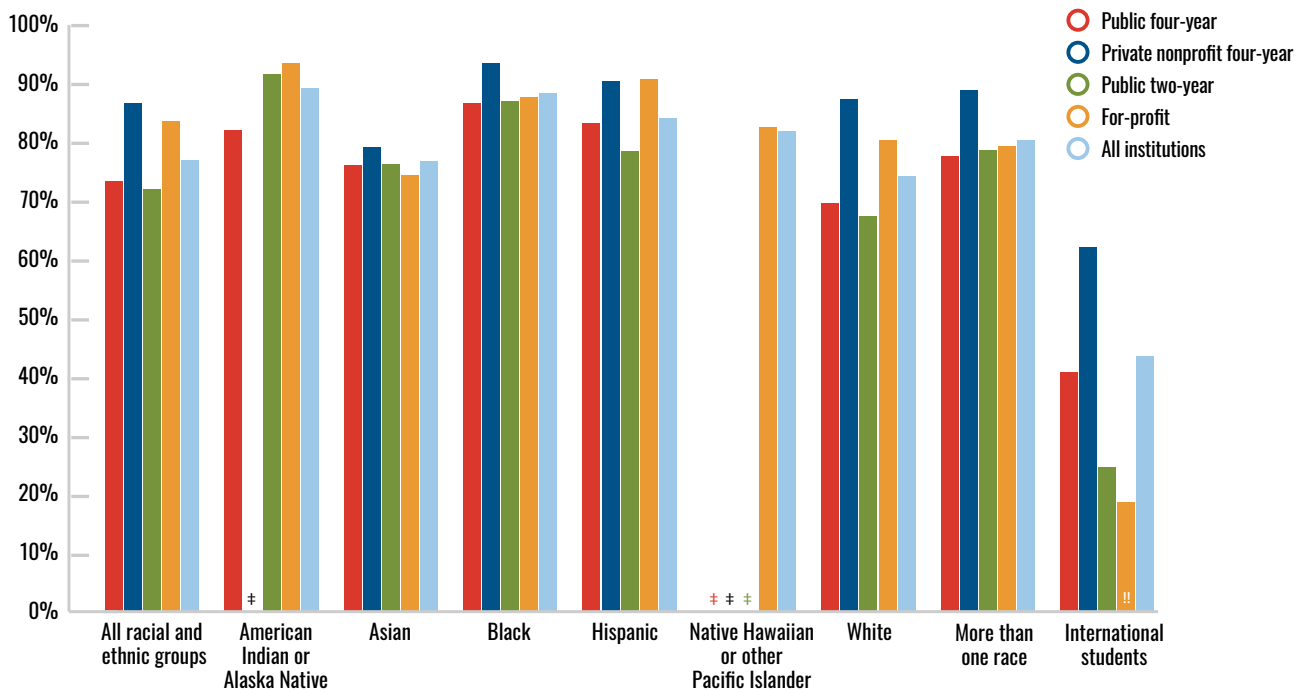
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Across racial and ethnic groups, the shares of students receiving financial aid ranged from 83.7 percent of Asian students and 86.4 percent of White students to 93.0 percent of American Indian or Alaska Native students and 96.1 percent of Black students.
- Asian students were least likely to receive financial aid; Black and American Indian or Alaska Native students were most likely to receive aid.
- Most students either received grants but not loans, or received both grants and loans. The share receiving grants but not loans ranged from 23.7 percent of Black students to 42.1 percent of Asian students and 56.5 percent of American Indian or Alaska Native students.

## GRANT AID

Grant aid is the form of financial aid that best relieves the financial pressure of paying for college. Unlike loans, grants do not have to be repaid. Unlike work-study, grants do not require work in exchange for funding, and unlike tax credits, they are available at the time the bills have to be paid. Some grant aid depends on academic achievement and on the resources and policies of the colleges and universities in which students enroll. But most of this aid is allocated at least partially on the basis of students' financial need. Grant aid is awarded by the federal and state governments, colleges and universities, employers, and other private entities.

**Figure 7.5: Share of Full-Time Students Receiving Grant Aid, by Sector and Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | † Estimate suppressed. Reporting standards not met. | !! Interpret with caution. Ratio of standard error is > 50%.

- In 2015–16, when 77.4 percent of students who attended one institution full time received grant aid from at least one source, there was considerable variation across domestic racial and ethnic groups. The proportion of students receiving grant aid ranged from 74.7 percent of White students and 77.2 percent of Asian students to 88.9 percent of Black students and 89.8 percent of American Indian or Alaska Native students.
- International students are much less likely than citizens and permanent residents to receive grant aid, but 62.5 percent of those enrolled full time in private nonprofit four-year institutions did receive this assistance in 2015–16.
- Some of the variation was related to institutional sector, with full-time students in private nonprofit four-year and for-profit institutions more likely than those attending public colleges and universities to receive some amount of grant aid.
- However, within sectors, full-time Black and American Indian or Alaska Native students were generally the most likely and White or Asian students the least likely to receive grant aid.

Almost 80 percent of full-time undergraduate students received grant aid in 2015–16. About half of that aid came from the colleges and universities in which students enrolled (i.e., institutional grant aid), and 25.2 percent came from the federal government (including 7.4 percent through programs for veterans and members of the military). State governments provided 11.6 percent of grant aid; employers and other private sources provided the remainder.

Sources of aid varied across racial and ethnic groups, primarily because of differences in their financial circumstances and in the institutions in which they enrolled.

- Black, Hispanic, American Indian or Alaska Native, and Native Hawaiian or other Pacific Islander students received about 30 percent of their grant aid from the federal government (excluding veterans and military aid). White students received only 11.6 percent of their grants from this source in 2015–16.
- White students received almost 60 percent of their grant aid from the institutions in which they enrolled. American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students received just over 30 percent of their grant aid from this source in 2015–16.
- International students received 68.8 percent of their grant aid from their institutions, with the remainder almost evenly split between employers and other private sources.
- Hispanic students received 16.8 percent of their grant aid from their states in 2015–16—a larger share than any other group.
- American Indian or Alaska Native students received 22.9 percent of their grant aid from private sources other than employers in 2015–16, compared with 7.0 percent of overall grant aid from this source.

Average grant aid per student depends both on the share of students receiving aid and the average amounts awarded. Only 3.2 percent of full-time undergraduates received veterans and military aid in 2015–16 and 4.3 percent received employer assistance. The average \$651 and \$354, respectively, of aid per student in these categories represent relatively large grants (\$20,500 for veterans and military aid and \$8,200 for employer aid) to a small number of students. In contrast, 45.3 percent of students received federal grant aid averaging \$1,573 per student and 42.8 percent of students received institutional grant aid.

**Table 7.2: Grant Aid per Student by Source: Full-Time Undergraduate Students, by Race and Ethnicity: 2015–16**

		Total Grants	Federal	Veterans/ DOD	State	Institutional	Employer	Private
Average Grant Aid per Student	All racial and ethnic groups	\$8,820	\$1,573	\$651	\$1,027	\$4,600	\$354	\$615
	American Indian or Alaska Native	\$9,311	\$2,791	\$557	\$805	\$2,969	\$54	\$2,135
	Asian	\$10,828	\$2,183	\$427	\$1,589	\$5,486	\$556	\$587
	Black	\$9,875	\$3,011	\$748	\$1,194	\$4,117	\$251	\$554
	Hispanic	\$8,835	\$2,618	\$611	\$1,487	\$3,393	\$239	\$487
	Native Hawaiian or other Pacific Islander	\$8,121	\$2,410	\$629	\$1,008	\$2,655	\$174	\$1,245
	White	\$8,370	\$967	\$695	\$868	\$4,920	\$337	\$583
	More than one race	\$9,421	\$1,604	\$926	\$966	\$4,738	\$257	\$930
	International students	\$8,115	\$2	\$0	\$8	\$5,585	\$1,255	\$1,265



		Total Grants	Federal	Veterans/ DOD	State	Institutional	Employer	Private
Share Receiving Grants	All racial and ethnic groups	77.4%	45.3%	3.2%	29.6%	42.8%	4.3%	14.9%
	American Indian or Alaska Native	89.8%	69.3%	3.0%	25.5%	36.7%	3.2%	34.0%
	Asian	77.2%	48.6%	1.7%	37.1%	43.3%	4.8%	11.2%
	Black	88.9%	74.5%	4.1%	34.8%	39.3%	4.1%	12.6%
	Hispanic	84.6%	64.8%	2.8%	39.3%	34.5%	3.3%	12.2%
	Native Hawaiian or other Pacific Islander	82.4%	61.1%	1.8%	33.9%	38.9%	‡	11.2%
	White	74.7%	35.2%	3.4%	26.7%	46.6%	4.4%	16.7%
	More than one race	80.9%	50.8%	4.4%	31.8%	45.5%	4.7%	17.1%
	International students	43.8%	‡	‡	‡	33.1%	7.8%	8.4%
Distribution of Grant Aid by Source	All racial and ethnic groups	100%	17.8%	7.4%	11.6%	52.2%	4.0%	7.0%
	American Indian or Alaska Native	100%	30.0%	6.0%	8.6%	31.9%	0.6%	22.9%
	Asian	100%	20.2%	3.9%	14.7%	50.7%	5.1%	5.4%
	Black	100%	30.5%	7.6%	12.1%	41.7%	2.5%	5.6%
	Hispanic	100%	29.6%	6.9%	16.8%	38.4%	2.7%	5.5%
	Native Hawaiian or other Pacific Islander	100%	29.7%	7.7%	12.4%	32.7%	2.1%	15.3%
	White	100%	11.6%	8.3%	10.4%	58.8%	4.0%	7.0%
	More than one race	100%	17.0%	9.8%	10.3%	50.3%	2.7%	9.9%
	International students	100%	0.0%	0.0%	0.1%	68.8%	15.5%	15.6%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
Note: ‡ Estimate suppressed. Reporting standards not met.

- In 2015–16, total grant aid per student (including both recipients and non-recipients) ranged from \$8,115 for international students and \$8,121 for Native Hawaiians or other Pacific Islanders to \$9,875 for Black students and \$10,828 for Asian students.
- Asian students received, on average, the highest amount of state grant aid and high institutional and employer grant aid relative to other student groups. They had lower than average military and veterans' aid.
- Black students had the highest average federal grant aid (\$3,011) and the highest aid to veterans and members of the military (\$748) (other than the small number of students of more than one race). They had lower than average institutional, employer, and private grant aid.
- Despite their relatively low total grant aid, Native Hawaiian or other Pacific Islander students had higher than average grants from federal and private sources.
- Many of the differences in grant aid by race and ethnicity were associated with differences in income.

**Table 7.3: Share of Grant Aid for Full-Time Dependent Undergraduate Students, by Source, Income, and Race and Ethnicity: 2015–16**

		Federal Grants (Excludes Veterans and Department of Defense)	Federal Veterans Benefits and Department of Defense	State Grants	Institutional Grants	Employer Aid	Private Source Grants
All Income Quartiles	All Income Quartiles Total	19.2%	2.0%	11.6%	56.4%	3.8%	7.0%
	American Indian or Alaska Native	26.4%	1.3%!!	8.3%!	41.2%!	0.8%!!	22.0%!!
	Asian	21.3%	0.6%!!	14.8%	52.7%	5.2%!	5.4%
	Black	30.5%	2.5%	12.3%	46.4%	2.3%	6.0%
	Hispanic	31.5%	1.8%	17.1%	41.2%	2.6%	5.8%
	Native Hawaiian or other Pacific Islander	24.2%	4.3%!	12.8%!	41.1%!	0.0%!	17.6%!!
	White	13.5%	2.2%	10.1%	63.3%	3.8%	7.1%
	More than one race	20.9%	2.8%!	9.9%	55.1%	2.2%!	9.2%
	International students	0.0%!!	0.0%!	0.1%!!	69.8%	16.4%	13.6%
Income Quartile 1 (Bottom)	Income Quartile 1 Total	40.7%	0.7%!	15.8%	35.5%	1.7%	5.7%
	Asian	35.9%	0.1%!!	19.3%	38.1%	0.6%!	5.9%!
	Black	44.8%	0.9%!!	14.1%	32.6%	1.6%!	6.0%
	Hispanic	45.4%	0.6%!!	19.5%	28.4%	1.4%!	4.6%
	White	40.6%	0.6%!!	15.1%	37.4%	1.6%	4.8%
Income Quartile 2	Income Quartile 2 Total	26.5%	1.4%	15.7%	47.5%	2.3%	6.6%
	Asian	26.9%	0.0%	18.0%	43.3%	7.5%!!	4.3%!
	Black	29.3%	3.0%!	13.8%	47.7%	1.6%!	4.5%
	Hispanic	33.5%	1.4%!	19.4%	38.7%	1.2%!	5.8%
	White	23.8%	1.1%!	15.3%	51.4%	1.9%	6.5%
Income Quartile 3	Income Quartile 3 Total	3.1%	2.5%	9.2%	72.6%	4.7%	7.9%
	Asian	3.1%	1.4%!!	13.0%	74.5%	3.8%!!	4.2%
	Black	3.3%	2.5%!	8.1%	73.5%	6.2%!!	6.3%!
	Hispanic	6.8%	2.1%!!	13.7%	65.1%	3.1%!	9.2%
	White	2.5%	2.9%	8.8%	73.6%	4.0%	8.3%
Income Quartile 4 (Top)	Income Quartile 4 Total	0.3%	3.8%	4.1%	76.1%	7.4%	8.3%
	Asian	0.4%	1.8%!!	2.6%!!	74.1%	14.2%!	6.8%!
	Black	0.4%	8.6%!!	3.8%!!	73.9%	2.8%!!	10.5%
	Hispanic	0.2%	7.2%!!	3.6%!	71.2%	11.4%!	6.4%
	White	0.3%	3.4%!	4.5%	77.6%	6.3%	7.8%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Notes: ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Overall, White students received a lower share of their grant aid from the federal government (13.5 percent) and a higher share from their institutions (63.3 percent) than other groups. However, low-income Asian students received a lower share of their grants from the federal government (35.9 percent) and a higher share from their institutions (38.1 percent) than low-income White students.
- Overall, relative to other groups, Black and Hispanic students received a higher share of their grant aid from the federal government (30.5 percent and 31.5 percent, respectively) and a lower share from their institutions (46.4 percent for Black students and 41.2 percent for Hispanic students).
- Like White and Asian students, Black students from the third income quartile received about three-quarters of their grant aid from their institutions (73.5 percent).

## ANNUAL BORROWING

By far the most common forms of loans for all groups of students are direct subsidized and unsubsidized loans from the federal government. Subsidized loans are available only to students with documented financial need; the government pays the interest on these loans while students are enrolled in college. Unsubsidized loans are available to all students. Students are responsible for paying on the interest of these loans while they are enrolled in college (Federal Student Aid, n.d.).

In 2015–16, about 40 percent of undergraduate students—including both full-time and part-time students—borrowed to help finance their education. About 37 percent of students took subsidized and unsubsidized direct loans in 2015–16.

**Table 7.4: Types of Loans: Undergraduate Students, by Race and Ethnicity: 2015–16**

		All racial and ethnic groups	American Indian or Alaska Native	Asian	Black	Hispanic	Native Hawaiian or other Pacific Islander	White	More than one race
Direct Subsidized Loans	% Borrowing	32.4%	27.7%	24.0%	46.2%	26.7%	26.0%	31.2%	37.1%
	Average Amount Borrowed per Borrower	\$3,722	\$3,427	\$3,985	\$3,545	\$3,735	\$3,783	\$3,776	\$3,711
Direct Unsubsidized Loans	% Borrowing	31.2%	23.6%	18.8%	43.0%	22.8%	28.4%	32.2%	33.6%
	Average Amount Borrowed per Borrower	\$4,045	\$3,853	\$3,734	\$4,141	\$3,884	\$4,754	\$4,068	\$4,048
Subsidized and Unsubsidized Combined	% Borrowing	37.3%	29.6%	26.0%	49.8%	29.1%	31.4%	37.9%	40.4%
	Average Amount Borrowed per Borrower	\$6,609	\$6,274	\$6,385	\$6,859	\$6,463	\$7,429	\$6,560	\$6,775
Perkins Loans	% Borrowing	2.1%	1.5%!	3.1%	2.3%	1.7%	0.3%!!	2.2%	2.6%
	Average Amount Borrowed per Borrower	\$2,131	‡	\$2,173	\$2,293	\$2,162	\$1,221	\$2,056	\$2,143
Private Loans	% Borrowing	5.5%	2.2%	4.6%	3.8%	3.9%	3.1%	6.8%	5.6%
	Average Amount Borrowed per Borrower	\$8,711	\$5,779	\$10,034	\$7,434	\$7,138	\$8,226	\$9,208	\$8,239
Direct PLUS Loans to Parents	% Borrowing	4.4%	1.1%	3.4%	5.5%	3.2%	3.7%	4.8%	4.6%
	Average Amount Borrowed per Borrower	\$14,027	‡	\$16,201	\$12,549	\$12,152	‡	\$14,834	\$14,060
Total Loans (Excluding Parent PLUS Loans)	% Borrowing	39.5%	31.0%	28.4%	51.2%	31.2%	32.4%	40.4%	42.9%
	Average Amount Borrowed per Borrower	\$7,636	\$6,557	\$7,801	\$7,354	\$7,109	\$8,021	\$7,892	\$7,635
Total loans (Including Parent PLUS Loans)	% Borrowing	39.6%	31.0%	28.5%	51.5%	31.3%	32.4%	40.6%	43.0%
	Average Amount Borrowed per Borrower	\$9,175	\$7,069	\$9,713	\$8,664	\$8,318	\$9,408	\$9,602	\$9,110

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- The shares of students borrowing under the Direct Loan Program ranged from 26.0 percent of Asian students to 49.8 percent of Black students.
- Among borrowers (excluding Parent PLUS Loans), average amounts borrowed ranged from \$6,557 among American Indian or Alaska Native students to \$8,021 among Native Hawaiian or other Pacific Islander students.
- The share of students using private loans ranged from 2.2 percent of American Indian or Alaska Native students to 6.8 percent of White students. The average amount borrowed ranged from \$5,779 among American Indian or Alaska Native students to \$10,034 among Asian students.
- Approximately 4 percent of students' parents used federal student loans, ranging from 1.1 percent of American Indian or Alaska Native students to 5.5 percent of Black students. The average annual amount borrowed by those taking these loans ranged from \$12,152 among Native Hawaiian or other Pacific Islander students to \$16,201 among Asian borrowers.
- The pattern of average loans per student differs from the pattern of average per borrower because of variation in the shares of students in different racial and ethnic groups who borrowed. Whether or not Parent PLUS Loans were included, Black students borrowed most: \$3,767 per student excluding PLUS and \$4,458 including PLUS. American Indian or Alaska Native students borrowed least: \$2,034 per student excluding PLUS and \$2,192 including PLUS.

**Table 7.5: Total Loans per Student, by Race and Ethnicity: 2015–16**

	<b>Total Loans per Student without PLUS</b>	<b>Total Loans per Student with PLUS</b>
All racial and ethnic groups	\$3,013	\$3,636
American Indian or Alaska Native	\$2,034	\$2,192
Asian	\$2,212	\$2,764
Black	\$3,767	\$4,458
Hispanic	\$2,216	\$2,602
Native Hawaiian or other Pacific Islander	\$2,600	\$3,050
White	\$3,185	\$3,894
More than one race	\$3,272	\$3,921

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

## Borrowing by Dependency Status

With the exception of American Indian or Alaska Native students, within each racial and ethnic group, a larger share of dependent than of independent students took out student loans in 2015–16. The average amounts borrowed were higher for independent students (\$8,009) than dependent students (\$7,344). However, including the amounts borrowed by the parents of dependent students ultimately made total borrowing within each group higher for dependent students.

**Table 7.6: Total Annual Borrowing, by Dependency Status and Race and Ethnicity: 2015–16**

	Dependent Students						Independent Students	
	PLUS		Total Loans (with PLUS)		Total Loans (without PLUS)		Total Loans	
	% Borrowing	Average Amount Borrowed per Borrower	% Borrowing	Average Amount Borrowed per Borrower	% Borrowing	Average Amount Borrowed per Borrower	% Borrowing	Average Amount Borrowed per Borrower
All racial and ethnic groups	8.8%	\$14,027	44.2%	\$10,078	43.9%	\$7,344	35.0%	\$8,009
American Indian or Alaska Native	2.8%	\$14,889	25.8%	\$7,793	25.8%	\$6,197	34.3%	\$6,727
Asian	5.9%	\$16,201	32.3%	\$9,940	32.2%	\$7,004	23.2%	\$9,287
Black	13.9%	\$12,549	57.6%	\$9,693	57.1%	\$6,742	47.4%	\$7,840
Hispanic	6.1%	\$12,152	33.1%	\$8,617	32.9%	\$6,440	29.3%	\$7,943
Native Hawaiian or other Pacific Islander	9.9%	\$12,061	32.5%	\$9,522	32.5%	\$5,862	32.3%	\$9,339
White	9.1%	\$14,834	47.1%	\$10,614	46.7%	\$7,799	33.4%	\$8,036
More than one race	8.9%	\$14,060	45.8%	\$9,897	45.4%	\$7,231	40.1%	\$8,133

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

- Among both dependent and independent students, Black students borrowed at higher rates in 2015–16 than other students.
- Although these high borrowing rates generated high average loans per student, among borrowers, White dependent students had the largest loans, both excluding and including parent loans. Among the relatively small share of Asian parents who borrowed, PLUS loans averaged \$16,201, compared with an overall average of \$14,027.
- Native Hawaiian or other Pacific Islander students had the largest loan size among independent students (\$9,339).
- Among independent students, Asian students borrowed at the lowest rate (23.2 percent) and had one of the highest average loan amounts (\$9,287).
- Among dependent students, Asian and Hispanic students borrowed at similarly low rates relative to other groups. Hispanic students had one of the lowest average loan amounts of any group.

## Borrowing by Income Level

The lower income levels of Black families relative to others likely contributed to their larger reliance on loans to finance post-secondary education. However, even within income groups Black students consistently borrowed more than others.

**Table 7.7: Average Annual Borrowing for Dependent Undergraduate Students, by Family Income and Race and Ethnicity: 2015–16**

		Student Loans	Parent Loans	Total Loans
Income Quartile 1 (Bottom)	Income Quartile 1 Total	\$2,497	\$635	\$3,132
	American Indian or Alaska Native	\$1,530!	\$435!!	\$1,965!
	Asian	\$2,006	\$753	\$2,759
	Black	\$3,452	\$1,126	\$4,578
	Hispanic	\$1,629	\$330	\$1,958
	Native Hawaiian or other Pacific Islander	\$1,522!	\$146!!	\$1,669!
	White	\$2,825	\$543	\$3,367
	More than one race	\$2,956	\$1,027!	\$3,983
	International students	‡	‡	‡
Income Quartile 2	Income Quartile 2 Total	\$3,173	\$955	\$4,128
	American Indian or Alaska Native	\$1,652	\$277!!	\$1,929!
	Asian	\$1,989	\$696	\$2,685
	Black	\$4,257	\$1,820	\$6,077
	Hispanic	\$2,200	\$639	\$2,839
	Native Hawaiian or other Pacific Islander	\$1,578!	\$1,147!!	\$2,725!
	White	\$3,582	\$931	\$4,514
	More than one race	\$3,618	\$817	\$4,436
	International students	‡	‡	‡
Income Quartile 3	Income Quartile 3 Total	\$3,549	\$1,443	\$4,992
	American Indian or Alaska Native	\$2,349	\$427!!	\$2,776!
	Asian	\$2,964	\$1,306	\$4,270
	Black	\$3,701	\$2,389	\$6,090
	Hispanic	\$2,385	\$1,181	\$3,567
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	\$3,868	\$1,425	\$5,293
	More than one race	\$3,730	\$1,410	\$5,140
	International students	‡	‡	‡
Income Quartile 4 (Top)	Income Quartile 4 Total	\$3,677	\$1,915	\$5,592
	American Indian or Alaska Native	\$853!	\$623!!	\$1,476!
	Asian	\$2,192	\$1,238	\$3,430
	Black	\$4,643	\$3,303	\$7,946
	Hispanic	\$3,180	\$1,719	\$4,899
	Native Hawaiian or other Pacific Islander	\$3,502!	\$2,924!!	\$6,426!
	White	\$3,835	\$1,903	\$5,738
	More than one race	\$2,710	\$1,779	\$4,490
	International students	‡	‡	‡

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: ‡ Estimate suppressed. Reporting standards not met. | Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- Among 2015–16 dependent students whose parent incomes were in the lowest income quartile, borrowing per student (including both borrowers and non-borrowers) for the year ranged from around \$1,600 for Hispanic students to approximately \$2,800 for White students and \$3,500 for Black students.
- Annual parent borrowing per student in the lowest income quartile was much higher for Black students (\$1,126) than for others.
- Adding parent and student borrowing together, averages were \$4,578 per Black student and \$3,367 per White student, compared with about \$2,000 per Hispanic student.
- The highest average student borrowing for Black students was in the highest income quartile—\$4,643.
- Average borrowing for Black parents increased with income, reaching approximately \$3,300 per student in the highest income quartile for a combined student and parent average loan of \$7,946.
- At every income level, average borrowing was higher among Black and White students than among Asian and Hispanic students.



## DEBT: ASSOCIATE DEGREE RECIPIENTS

The data presented here provide information on the average amount borrowed per borrower and per student. The average amount borrowed per borrower includes only those students who took out loans to finance their education. The average amount borrowed per student includes all students, regardless of whether or not they took out loans to finance their education.

Among students who received an associate degree in 2015–16, almost half borrowed an average of \$18,500, with a median debt among borrowers of \$15,000 at graduation. Black students and American Indian or Alaska Native students had the highest rates of borrowing (67.2 percent each).

**Table 7.8: Total Borrowing: Associate Degree Recipients, by Race and Ethnicity: 2015–16**

	% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	Average Amount Borrowed per Student	% Independent	% Completed at Public Two-Year Institution	% Completed at For-Profit Institution
All racial and ethnic groups	48.0%	\$18,501	\$15,005	\$8,889	64.3%	82.3%	11.2%
American Indian or Alaska Native	67.2%	\$18,225	\$14,713	\$12,254	76.3%	84.1%	14.0%!
Asian	29.6%	\$17,459	\$15,013	\$5,170	60.4%	87.3%	8.2%
Black	67.2%	\$22,303	\$19,482	\$14,986	76.8%	71.5%	20.4%
Hispanic	36.3%	\$15,778	\$12,000	\$5,719	55.9%	83.5%	10.9%
Native Hawaiian or other Pacific Islander	47.3%	‡	‡	‡	46.3%	82.1%	15.9%!
White	50.9%	\$17,794	\$14,250	\$9,063	64.1%	84.0%	9.3%
More than one race	51.0%	\$21,795	\$20,199	\$11,113	65.4%	84.4%	9.4%
International students	7.9%!	‡	‡	‡	70.2%	87.2%	4.3%!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Black students had the highest median debt (\$19,482), the highest average debt per borrower (\$22,303), and the highest average debt per student (\$14,986).
- These higher debt levels could be partly attributed to the fact that 76.8 percent of Black associate degree recipients were independent students, compared with 64.3 percent overall (and 55.9 percent of Hispanic students).
- Roughly one-fifth (20.4 percent) of Black graduates earned their degrees at for-profit institutions, where tuition prices and debt levels are much higher than at public two-year colleges.

Students who earned their associate degrees at for-profit institutions were much more likely to borrow and borrow considerably larger amounts than those who earned similar degrees at public two-year colleges.

**Table 7.9: Total Borrowing: Associate Degree Recipients, by Sector and Race and Ethnicity: 2015–16**

		<b>% Who Borrowed</b>	<b>Average Amount Borrowed per Borrower</b>	<b>Median Amount Borrowed per Borrower</b>	<b>Average Amount Borrowed per Student</b>
Public Two-Year	All racial and ethnic groups	40.4%	\$15,486	\$11,811	\$6,264
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	23.0%	\$12,771	\$11,433!	\$2,931
	Black	57.3%	\$18,581	\$14,334	\$10,652
	Hispanic	27.7%	\$11,624	\$6,750	\$3,221
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	44.6%	\$15,451	\$12,000	\$6,889
	More than one race	44.8%	\$19,392	\$1,700	\$8,690
For-Profit	All racial and ethnic groups	87.4%	\$26,231	\$24,676	\$22,928
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	79.6%	\$27,913	\$22,111	\$22,220
	Black	92.9%	\$30,210	\$29,690	\$28,075
	Hispanic	85.1%	\$22,854	\$20,588	\$19,444
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	87.3%	\$24,985	\$23,346	\$21,807
	More than one race	83.4%	\$28,816	\$28,761	\$24,022

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Among 2015–16 associate degree graduates, 87.4 percent from the for-profit sector had education debt averaging \$26,231 with a median of \$24,676; 40.4 percent of graduates at public two-year institutions had education debt averaging \$15,486, with a median of \$11,811.
- The relatively large share of Black students who graduated from for-profit institutions (20.4 percent of Black students compared with 11.2 percent overall) contributed to this group’s high debt levels. Yet, even within sectors, Black associate degree recipients were more likely to accrue debt and had the highest average and median debt levels.
- At public two-year colleges, the average debt per associate degree recipient was around \$3,000 for both Asian and Hispanic students, \$6,900 for White students, and \$10,700 for Black students. In the for-profit sector the average debt per Black student was \$28,075.
- The average debt of \$19,444 per Hispanic student was the lowest of the four largest racial and ethnic groups at for-profit institutions.

**Table 7.10: Total Borrowing per Borrower and per Student: Associate Degree Recipients, by Dependency Status and Race and Ethnicity: 2015–16**

		<b>% Who Borrowed</b>	<b>Average Amount Borrowed per Borrower</b>	<b>Average Amount Borrowed per Student</b>
<b>Dependent Students</b>	All racial and ethnic groups	34.7%	\$12,087	\$4,197
	American Indian or Alaska Native	‡	‡	‡
	Asian	19.9%	\$12,542	\$2,502
	Black	48.7%	\$12,975	\$6,324
	Hispanic	28.5%	\$12,206	\$3,475
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	More than on race	39.0%	\$13,175	\$5,179
	White	38.0%	\$11,628	\$4,415
<b>Independent Students</b>	All racial and ethnic groups	55.4%	\$20,728	\$11,490
	American Indian or Alaska Native	81.7%	\$18,540	\$15,156
	Asian	36.0%	\$19,250	\$6,921
	Black	72.8%	\$24,189	\$17,601
	Hispanic	42.4%	\$17,672	\$7,488
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	More than on race	57.0%	\$24,930	\$14,251
	White	58.2%	\$20,050	\$11,669

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Note: ‡ Estimate suppressed. Reporting standards not met.

- Independent associate degree recipients were more likely to borrow than dependent degree recipients (55.4 percent compared with 34.7 percent). They also, on average, borrow more (\$20,728 compared with \$12,087).
- Within both dependent and independent student groups, Black associate degree recipients were more likely than those from other racial and ethnic groups to borrow and they borrowed more.
- Asian dependent and independent associate degree recipients were least likely to borrow (19.9 percent and 36.0 percent) than other groups.
- Among dependent students who borrowed, White associate degree recipients had the lowest average debt level in 2015–16 at \$11,628. Among independent students who borrowed, Hispanic associate degree recipients had the lowest average debt level at \$17,672.

Although dependent Black students tended to have lower family incomes than those from other groups, even within income quartiles, Black associate degree recipients accrued more debt than did other student groups. Sample sizes permit comparisons across groups only within the lower two income quartiles.

**Table 7.11: Total Borrowing: Associate Degree Recipients, by Family Income and Race and Ethnicity: 2015–16**

		<b>% Who Borrowed</b>	<b>Average Amount Borrowed per Borrower</b>	<b>Average Amount Borrowed per Student</b>
<b>Income Quartile 1 (Bottom)</b>	<b>Income Quartile 1 Total</b>	33.2%	\$12,216	\$10,875
	<b>American Indian or Alaska Native</b>	‡	‡	‡
	<b>Asian</b>	23.2%	‡	‡
	<b>Black</b>	48.8%	\$13,178	\$9,500!
	<b>Hispanic</b>	18.8%	\$9,970	\$8,692!
	<b>Native Hawaiian or other Pacific Islander</b>	‡	‡	‡
	<b>More than one race</b>	‡	‡	‡
	<b>White</b>	43.3%	\$11,685	\$10,875
<b>Income Quartile 2</b>	<b>Income Quartile 2 Total</b>	33.1%	\$11,497	\$10,250
	<b>American Indian or Alaska Native</b>	‡	‡	‡
	<b>Asian</b>	‡	‡	‡
	<b>Black</b>	57.5%	\$11,654	\$9,500!
	<b>Hispanic</b>	28.3%	\$12,809	\$10,250
	<b>Native Hawaiian or other Pacific Islander</b>	‡	‡	‡
	<b>More than one race</b>	‡	‡	‡
	<b>White</b>	35.3%	\$10,404	\$9,000

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Sample sizes permit comparisons across groups only within the lower two income quartiles. | ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Among students from the lowest income quartile, the share of 2015–16 associate degree recipients graduating with debt ranged from 18.8 percent of Hispanic students, who borrowed an average of \$9,970, to 48.8 percent of Black students, who borrowed an average of \$13,178.
- Among students from the lower-middle income quartile, the share of associate degree recipients graduating with debt ranged from 28.3 percent of Hispanic students, who borrowed an average of \$12,809, to 57.5 percent of Black students, who borrowed an average of \$11,654.

## DEBT: BACHELOR'S DEGREE RECIPIENTS

The share of 2015–16 bachelor's degree recipients who borrowed for their undergraduate education ranged from 58.7 percent of Asian students to 86.4 percent of Black students and 89.6 percent of Native Hawaiian or other Pacific Islander students.

**Table 7.12: Total Borrowing: Bachelor's Degree Recipients, by Race and Ethnicity: 2015–16**

	Share of Total	% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	Average Amount Borrowed per Student	% Independent	% Completing at Public Four-Year	% Completing at Private Nonprofit Four-Year	% Completing at For-Profit
All racial and ethnic groups	100%	68.9%	\$29,669	\$27,000	\$20,432	45.6%	59.8%	27.9%	8.9%
American Indian or Alaska Native	0.7%	76.2%	\$26,380	\$24,000	\$20,103	63.3%	59.9%	14.5% <sup>!</sup>	11.7% <sup>!</sup>
Asian	6.6%	58.7%	\$25,510	\$22,307	\$14,968	40.8%	63.0%	28.8%	7.2%
Black	12.0%	86.4%	\$34,010	\$32,523	\$29,390	58.0%	53.7%	24.8%	18.3%
Hispanic	15.0%	67.3%	\$25,524	\$23,500	\$17,183	49.6%	61.2%	21.5%	12.4%
Native Hawaiian or other Pacific Islander	0.4%	89.6%	\$26,515	\$29,000	\$23,756	66.7%	53.6%	13.9% <sup>!</sup>	25.2% <sup>!</sup>
White	58.5%	70.3%	\$30,119	\$27,000	\$21,184	42.8%	60.3%	29.7%	6.6%
More than one race	3.0%	73.7%	\$29,906	\$27,958	\$22,053	43.0%	61.5%	27.3%	8.8%
International students	3.9%	‡	‡	‡	‡	‡	59.7%	37.3%	2.3%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. <sup>!</sup> Interpret with caution. Ratio of standard error to estimate is >30% but <50%. <sup>‡</sup> Estimate suppressed. Reporting standards not met

- The Black bachelor's degree recipients who borrowed had median debt of \$32,523 and average debt of \$34,010, the highest of any group. This compares with a median of \$22,307 and an average of \$25,510 for Asian students, the lowest of any group.
- Fifty-eight percent of Black bachelor's degree recipients were independent, compared with 40.8 percent of Asian students. Around 18 percent of Black students graduated from for-profit institutions, compared with 7.2 percent of Asian students.
- Debt levels for Hispanic bachelor's degree recipients were lower than those for White students.

Although some of the differences in the debt levels accrued by bachelor's degree recipients were associated with the sectors from which they earned their degrees, the debt levels of Black graduates stood out even within sectors.

**Table 7.13: Total Borrowing upon Completion of a Bachelor's Degree, by Sector and Race and Ethnicity: 2015–16**

		<b>% Who Borrowed</b>	<b>Average Amount Borrowed per Borrower</b>	<b>Median Amount Borrowed per Borrower</b>	<b>Average Amount Borrowed per Student</b>
Public Four-Year	All racial and ethnic groups	66.6%	\$27,079	\$25,703	\$18,041
	American Indian or Alaska Native	79.4%	\$24,367	\$22,168	\$19,353
	Asian	56.5%	\$20,658	\$20,020	\$11,664
	Black	83.7%	\$30,613	\$29,750	\$25,617
	Hispanic	63.4%	\$22,322	\$20,000	\$14,146
	Native Hawaiian or other Pacific Islander	84.8%	‡	‡	‡
	White	68.6%	\$28,079	\$26,020	\$19,259
	More than one race	74.6%	\$28,680	\$27,140	\$21,409
Private Nonprofit Four-Year	All racial and ethnic groups	68.7%	\$31,435	\$27,000	\$21,598
	American Indian or Alaska Native	72.9%	‡	‡	‡
	Asian	57.0%	\$29,145	\$25,250	\$16,626
	Black	88.6%	\$36,093	\$35,693	\$31,987
	Hispanic	74.5%	\$25,612	\$25,000	\$19,091
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	70.6%	\$31,925	\$27,000	\$22,551
	More than one race	67.0%	\$29,995	\$27,000	\$20,100
For-Profit	All racial and ethnic groups	86.1%	\$40,583	\$42,544	\$34,923
	American Indian or Alaska Native	87.2%	\$40,010	\$38,474	\$34,907
	Asian	88.9%	\$43,186	\$44,000	\$38,371
	Black	90.9%	\$42,046	\$45,000	\$38,216
	Hispanic	84.6%	\$37,962	\$39,812	\$32,107
	Native Hawaiian or other Pacific Islander	95.9%	\$27,039!	\$22,250!!	\$25,943!
	White	85.1%	\$41,134	\$42,650	\$34,990
	More than one race	89.5%	\$38,560	\$39,558	\$34,517

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. ‡ Estimate suppressed. Reporting standards not met. ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. !! Interpret with caution. Ratio of standard error is > 50%.

- The share of students earning bachelor's degrees from public four-year colleges and universities who borrowed ranged from 56.5 percent of Asian students to 83.7 percent of Black students.
- Among bachelor's degree recipients at public four-year institutions, Black borrowers had debts averaging \$30,613; this compared with \$28,079 for the 68.6 percent of White students who borrowed, \$22,322 for the 63.4 percent of Hispanic students who borrowed, and \$20,658 for the 56.5 percent of Asian students who borrowed.
- Borrowing rates were higher and less varied in the for-profit sector. The average debt per bachelor's degree recipient ranged from \$32,107 for Hispanic students to \$38,216 for Black students and a slightly higher \$38,371 for Asian students.

Independent bachelor's degree recipients were more likely than dependent bachelor's degree recipients to have debt. The median debt levels for independent borrowers upon completion was \$32,014, compared with \$25,536 for dependent graduates in 2015–16. Average debt levels per student were \$17,472 for dependent bachelor's degree recipients and \$23,961 for independent bachelor's degree recipients.

**Table 7.14: Total Borrowing: Bachelor's Degree Recipients, by Dependency Status and Race and Ethnicity: 2015–16**

		<b>% Who Borrowed</b>	<b>Average Amount Borrowed per Borrower</b>	<b>Median Amount Borrowed per Borrower</b>	<b>Average Amount Borrowed per Student</b>
<b>Dependent Students</b>	<b>Dependent Students Total</b>	65.7%	\$26,585	\$25,536	\$17,472
	<b>American Indian or Alaska Native</b>	79.2%	\$19,345	\$20,292!	\$15,325
	<b>Asian</b>	55.1%	\$21,995	\$19,750	\$12,122
	<b>Black</b>	85.7%	\$29,661	\$28,850	\$25,418
	<b>Hispanic</b>	64.8%	\$22,142	\$20,250	\$14,358
	<b>Native Hawaiian or other Pacific Islander</b>	87.9%	\$20,445!	\$22,000!!	\$17,973
	<b>White</b>	67.6%	\$27,583	\$26,000	\$18,653
	<b>More than one race</b>	73.1%	\$27,072	\$26,188	\$19,798
<b>Independent Students</b>	<b>Independent Students Total</b>	72.6%	\$32,996	\$32,014	\$23,961
	<b>American Indian or Alaska Native</b>	74.5%	\$30,722	\$26,682!	\$22,875
	<b>Asian</b>	63.8%	\$29,913	\$26,510	\$19,094
	<b>Black</b>	86.9%	\$37,111	\$38,923	\$32,261
	<b>Hispanic</b>	69.8%	\$28,721	\$26,528	\$20,058
	<b>Native Hawaiian or other Pacific Islander</b>	90.4%	\$29,405	\$33,000	\$26,589
	<b>White</b>	74.0%	\$33,220	\$32,000	\$24,569
	<b>More than one race</b>	74.5%	\$33,598	\$33,649	\$25,047

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Among both dependent and independent bachelor's degree recipients, Black students accrued the largest debts.
- Native Hawaiian or other Pacific Islander students borrowed at rates similar to those of Black students, but borrowed less.
- Average debt per Black graduate was \$25,418 among dependent students and \$32,261 among independent students.
- Asian and Hispanic debt levels, for both dependent and independent graduates, were lower than the overall averages.

Even within income quartiles, Black students had higher rates of borrowing and higher cumulative debt levels than other bachelor's degree recipients.

**Table 7.15: Total Borrowing: Bachelor's Degree Recipients, by Income and Race and Ethnicity: 2015–16**

		<b>% Who Borrowed</b>	<b>Average Amount Borrowed per Borrower</b>	<b>Median Amount Borrowed per Borrower</b>	<b>Average Amount Borrowed per Student</b>
Income Quartile 1 (Bottom)	Income Quartile 1 Total	74.1%	\$24,836	\$25,000	\$18,407
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	55.2%	\$18,976	\$17,781	\$10,467
	Black	93.5%	\$28,994	\$28,910	\$27,110
	Hispanic	62.5%	\$20,781	\$19,500	\$12,994
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	81.2%	\$25,490	\$26,000	\$20,694
	More than one race	84.8%	\$26,127	\$24,451	\$22,159
Income Quartile 2	Income Quartile 2 Total	69.5%	\$26,186	\$25,515	\$18,188
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	55.0%	\$20,601	\$19,000	\$11,329
	Black	82.8%	\$29,905	\$28,809	\$24,764
	Hispanic	67.2%	\$21,658	\$19,500	\$14,547
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	75.7%	\$27,314	\$26,000	\$20,669
	More than one race	76.7%	\$29,423	\$30,000	\$22,582
Income Quartile 3	Income Quartile 3 Total	68.2%	\$27,137	\$26,000	\$18,506
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	66.4%	\$21,705	\$22,242	\$14,421
	Black	77.6%	\$29,390	\$29,000	\$22,817
	Hispanic	69.2%	\$24,203	\$21,500	\$16,744
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	70.6%	\$28,167	\$26,400	\$19,885
	More than one race	72.1%	\$24,390	\$22,250	\$17,576
Income Quartile 4 (Top)	Income Quartile 4 Total	57.3%	\$27,515	\$25,106	\$15,774
	American Indian or Alaska Native	‡	‡	‡	‡
	Asian	44.3%	\$28,024	\$22,539	\$12,415
	Black	79.3%	\$31,871	\$28,000	\$25,278
	Hispanic	60.5%	\$23,073	\$20,311	\$13,961
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
	White	59.1%	\$27,903	\$26,000	\$16,500
	More than one race	63.2%	\$28,909	\$27,000	\$18,275

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Note: ‡ Estimate suppressed. Reporting standards not met.



- Among bachelor's degree recipients in the second quartile of the household income distribution, 82.8 percent of Black graduates borrowed an average of \$29,905, yielding an average debt per student of \$24,764.
- Approximately 67 percent of Hispanic graduates in the second income quartile borrowed an average of \$21,658, yielding an average debt per student of \$14,547.
- Across each income quartile, Asian bachelor's degree recipients borrowed at the lowest rates and borrowed on average the least (with the exception of those in the highest income quartile).

It is possible to examine debt levels for bachelor's degree recipients in the larger racial and ethnic groups broken down by dependency status, sector of enrollment, and household income quartile. Focusing on dependent students in the second income quartile reveals that Black students consistently borrowed at the highest rates and borrowed more than other groups. By sector, the average and median amounts borrowed were highest at for-profit institutions.

**Table 7.16: Total Borrowing upon Completion of a Bachelor's Degree for Dependent Students in the Second Income Quartile, by Sector and Race and Ethnicity: 2015–16**

		% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower
Public Four-Year	All racial and ethnic groups	65.8%	\$24,387	\$23,000
	American Indian or Alaska Native	‡	‡	‡
	Asian	51.4%	\$17,053	\$15,208
	Black	77.1%	\$27,534	\$27,000
	Hispanic	63.9%	\$19,567	\$17,800
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	72.1%	\$26,216	\$25,000
	More than one race	73.8%	\$29,553	\$30,000
Private Nonprofit Four-Year	All racial and ethnic groups	78.1%	\$29,445	\$27,000
	American Indian or Alaska Native	‡	‡	‡
	Asian	59.3%	\$25,297	\$19,200
	Black	94.9%	\$33,951	\$31,000
	Hispanic	83.6%	\$26,217	\$25,500
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	83.1%	\$29,429	\$27,000
	More than one race	‡	‡	‡
For-Profit	All racial and ethnic groups	81.4%	\$35,475	\$31,461
	American Indian or Alaska Native	‡	‡	‡
	Asian	94.5%	‡	‡
	Black	98.1%	\$41,409	\$38,065
	Hispanic	82.5%	\$32,947	\$29,999
	Native Hawaiian or other Pacific Islander	‡	‡	‡
	White	79.1%	\$34,538	\$31,000
	More than one race	‡	‡	‡

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. ‡ Estimate suppressed. Reporting standards not met.

- Nearly all Black graduates at for-profit institutions borrowed (98.1 percent), compared with 77.1 percent having borrowed at public four-year institutions and 94.9 percent having borrowed at private nonprofit four-year institutions.
- The average amount borrowed upon completion of a bachelor's degree was \$27,534 for Black students at public four-year institutions, \$33,951 at private nonprofit four-year institutions, and \$41,409 at for-profit institutions.
- Relative to other groups, Asian bachelor's degree recipients who attended public four-year institutions borrowed at the lowest rates (51.4 percent) and on average borrowed the least (\$17,053).
- Hispanic and White graduates from private nonprofit four-year institutions borrowed at roughly the same rates—83.6 percent and 83.1 percent, respectively—with Hispanics borrowing a lower average amount than Whites (\$26,217 and \$29,429, respectively).

## REFERENCES

- Federal Student Aid. "Glossary." n.d. U.S. Department of Education, Federal Student Aid. Accessed November 14, 2018. <https://studentaid.ed.gov/sa/glossary>.
- Ma, Jennifer, Matea Pender, and Meredith Welch. *Education Pays 2016: The Benefits of Higher Education for Individuals and Society*. Washington, DC: College Board.
- McMahon, Walter W. 2009. *Higher Learning, Greater Good: The Private and Social Benefits of Higher Education*. Baltimore: Johns Hopkins University Press
- Radwin, David, Jonathan G. Conzelmann, Annaliza Nunnery, T. Austin Lacy, Joanna Wu, Stephen Lew, Jennifer Wine, and Peter Siegel. 2018. *2015–16 National Postsecondary Student Aid Study (NPSAS:16): Student Financial Aid Estimates for 2015–16*. NCES 2018-466. Washington, DC: U.S. Department of Education, National Center for Education Statistics. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018466>.
- Turk, Jonathan M. 2019. *A Look at Five Key Outcomes in Early Adulthood for Associate Degree Earners*. Washington, DC: American Council on Education; Arlington, VA: Hobsons.



## CHAPTER 8



# How Students Finance Graduate Study





# INTRODUCTION

While much of the national discourse on college affordability focuses on undergraduate education, it is important to examine how students afford graduate education given the workforce importance of these credentials and the role of advanced training in knowledge discovery. It is also true that graduate education differs greatly in terms of how students finance their studies. For example, the most common form of grant aid was not from the federal government, but from the colleges themselves. In addition, loans were more prevalent and loan amounts were higher than at the undergraduate level. Still, like undergraduates, graduate students from different demographic groups enrolled and completed their scholarly work across a range of difference, in types of institutions attended, in types of degrees sought, and in fields of study chosen.<sup>1</sup> Because of these differences, as well as those in students' economic circumstances, there was considerable variation in how students financed their post-baccalaureate studies.<sup>2</sup> For example, as was the case in Chapter 7, "How Students Finance Undergraduate Study," African American<sup>3</sup> students were more likely to borrow and have higher levels of debt than students from other backgrounds.

## KEY FINDINGS

- Across all types of graduate degrees and at all types of institutions, Black graduate students were more likely to borrow and accrue larger debts than other graduates. Asian graduate students were least likely to borrow to fund their graduate education.
- The most common source of grant aid for graduate students was support from their institutions, especially at the doctoral<sup>4</sup> and professional<sup>5</sup> degree levels.
- In 2015–16, only one-quarter of Black doctoral students received institutional aid, compared with over half of Asian students. In contrast, about half of Black professional degree students received institutional grants.
- Approximately 56 percent of all master's degree recipients borrowed to fund their graduate education, but this was true for 81.3 percent of Black master's degree recipients.
- Half of all Asian master's degree recipients who borrowed accrued average debt of \$59,824, with a median of \$48,802, compared with a mean of \$51,699 and a median of \$47,093 for Black students.
- Ninety percent of Black master's degree students had borrowed for at least part of their undergraduate and graduate education, compared with 61.5 percent of Asian and 75.9 percent of White master's degree recipients. This average cumulative debt for Black students amounted to roughly \$69,000. Seventy-eight percent of professional degree recipients borrowed to fund their graduate education, but 91.6 percent of Black graduates and 85.2 percent of Hispanic graduates accrued debt.

1 Data presented in this chapter reflect how graduate students finance their education by award level and the type of institution where they complete. When analyzing differences in how graduate students finance their education and their student loan debt, representation by field should be considered. However, as shown in Chapter 6 of this report, "Graduate School Completion," the fields of study in which students complete their graduate education varied widely by demographic group. As a result, small sample sizes at the intersection of race and ethnicity, field of study, and award level decrease the ability to provide reliable estimates for debt by field and award level.

2 Because of sample sizes in the survey data on which this chapter relies, in most cases meaningful comparisons were possible only across larger racial and ethnic groups.

3 The terms Black and African American are used interchangeably.

4 Doctoral degrees reflect those classified as doctorate-research/scholarship degrees, including PhD, EdD, DMA, and other research-based degrees.

5 Professional degrees reflect those classified as doctorate-professional practice, including chiropractic, dentistry, law, medicine, pharmacy, veterinary medicine, and other degrees for which a credential or license is required for professional practice.

- Roughly half of all doctoral degree recipients borrowed. Overall, Black students had the highest average debt level at \$109,148. This number grew to \$128,359 among Black students who earned their doctoral degree at a for-profit institution.
- Black and Hispanic doctoral degree recipients arrived with similar levels of debt, but the higher borrowing of Black students for graduate school led to average combined postsecondary debt per student of \$103,097, compared with a total of \$86,556 per Hispanic student, including both borrowers and non-borrowers. The combined debt level for White doctoral degree holders was \$51,078.

As presented in Chapter 4 of this report, “Enrollment in Graduate Education,” Whites represented the majority of graduate students (56.0 percent) in 2015–16. Blacks were the second largest racial and ethnic group (13.5 percent), followed by Hispanics (9.2 percent), Asians (6.3 percent), students of more than one race (2.3 percent), American Indians or Alaska Natives (0.4 percent), and Native Hawaiians or other Pacific Islanders (0.2 percent). An additional 12.0 percent were international students.<sup>6</sup> Comparisons of data presented in this chapter across groups should be made with caution, as small sample sizes for certain racial and ethnic groups may not be meaningful.

---

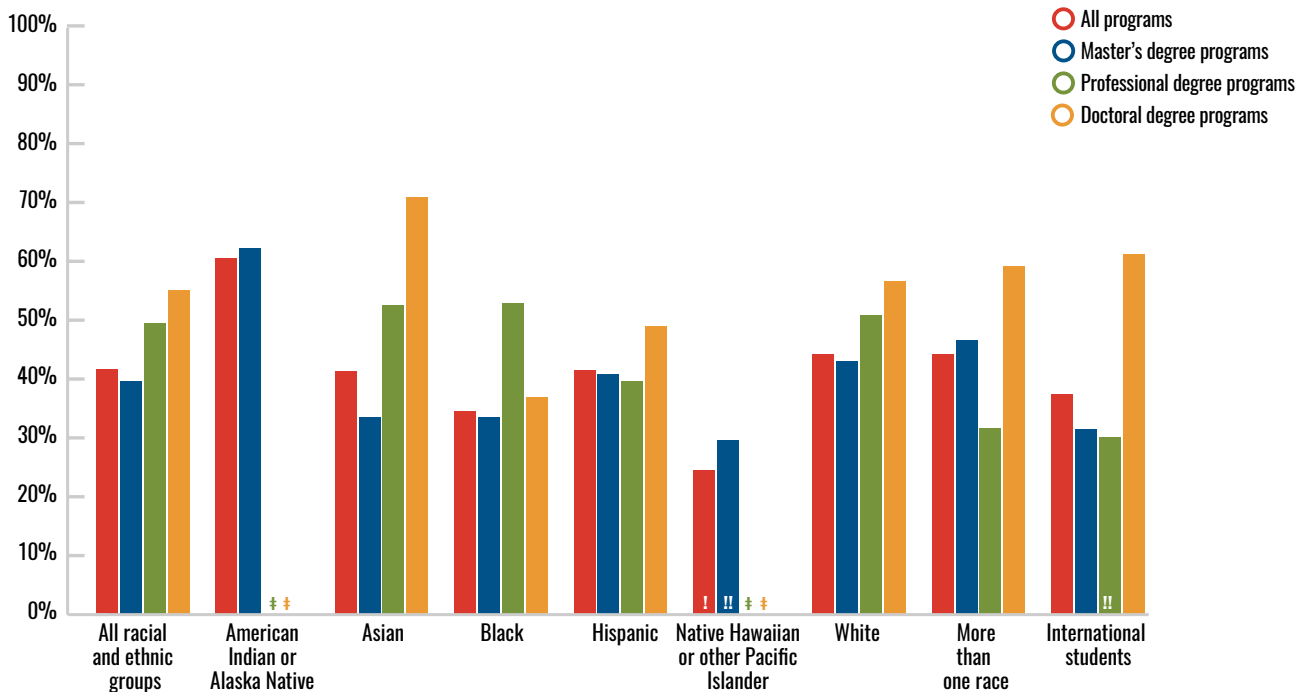
<sup>6</sup> The National Center for Education Statistics (NCES) defines a nonresident alien as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.” In this report, nonresident aliens are labeled as international students.



## GRANT AID

In general, graduate students received less grant aid than undergraduates and covered more of their expenses through earnings and loans. In 2015–16, approximately 42.1 percent of all graduate students received some amount of grant aid. Grant aid was most common among students pursuing doctoral degrees (55.7 percent) and least common for master’s students (40.0 percent). Patterns of grant receipt across racial and ethnic groups varied by program type.

**Figure 8.1: Share of Graduate Students Receiving Any Grant Aid, by Degree Program and Race and Ethnicity: 2015–16**



Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: # Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- American Indian or Alaska Native master’s students and Asian doctoral students were the most likely to receive grant aid—62.8 percent and 71.6 percent, respectively.
- Within the Asian graduate student population, 33.8 percent of master’s students received grant aid, compared with 71.6 percent of doctoral students—a nearly 38 percentage point difference, the largest difference for any group.
- A smaller share of Black doctoral students (37.3 percent) than of other doctoral students received grant aid.

## Types of Grant Aid

Five percent or less of master's, doctoral, and professional degree students received federal or state grant aid or educational aid to veterans and military in 2015–16. Instead, the most common source of grant aid for graduate students was from the colleges and universities in which they were enrolled, including graduate fellowships and tuition waivers.<sup>7</sup> In 2015–16, about one-quarter of these students received grant aid from their universities. The second largest source of grant aid for graduate students was from employers; around 13.5 percent received this type of assistance. Patterns varied by degree type and by race and ethnicity within degree types. While not explored here, differences may also occur based on field of study.

**Table 8.1: Shares of Graduate Students Receiving Grant Aid from Institutions, Employers, and Other Private Sources, by Degree Program and Race and Ethnicity: 2015–16**

		All racial and ethnic groups	American Indian or Alaska Native	Asian	Black	Hispanic	Native Hawaiian or other Pacific Islander	White	More than one race
Master's Degree Programs	Institutional	21.9%	31.2%!	20.1%	16.8%	21.3%	22.8%!!	22.6%	27.7%
	Employer	15.2%	15.0%!	9.8%	11.7%	14.0%	11.3%!	19.1%	14.0%
	Private	4.8%	35.3%!	5.2%!	4.0%	4.8%	11.8%!	5.2%	3.8%!
Professional Degree Programs	Institutional	41.7%	‡	42.3%	49.9%	32.4%	‡	42.4%	27.7%!
	Employer	4.2%	‡	3.6%!	4.0%!	3.9%!	‡	4.1%	‡
	Private	8.3%	‡	12.7%	6.9%!	5.5%!	‡	8.2%	4.7%!
Doctoral Degree Programs	Institutional	45.1%	‡	56.1%	25.4%	41.4%	‡	44.3%	47.5%
	Employer	10.1%	‡	16.0%!	8.5%	8.9%!	‡	13.5%	6.9%!
	Private	5.3%	‡	5.9%!	1.4%	4.0%!	‡	6.4%	5.7%!

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Overall, 45.1 percent of doctoral students received institutional grant aid, a much larger share than among master's students (21.9 percent) and slightly more than among professional degree students (41.7 percent).
- Only 25.4 percent of Black doctoral students received institutional grant aid, compared with 45.1 percent of all doctoral students and 56.1 percent of Asian students.
- In contrast, Black professional degree students were more likely than others to receive institutional grants. The shares of students that received this aid ranged from 32.4 percent of Hispanic students to 49.9 percent of Black students.
- There was less institutional grant aid and less variation across racial and ethnic groups for master's degree students. The shares that received this aid ranged from 16.8 percent of Black students to 27.7 percent of students of more than one race.

Master's degree students were more likely than professional and doctoral degree students to receive support from employers. Overall, 15.2 percent of all master's degree students received grant aid from their employers.

<sup>7</sup> Teaching and research assistantships are forms of employment and are not included in institutional grant aid.

**Table 8.2: Average Grant Aid per Recipient, by Degree Program, Source, and Race and Ethnicity: 2015–16**

		All racial and ethnic groups	American Indian or Alaska Native	Asian	Black	Hispanic	Native Hawaiian or other Pacific Islander	White	More than one race
Master's Degree Programs	Institutional	\$7,094	‡	\$6,846	\$6,132	\$5,210	‡	\$6,966	\$5,044!
	Employer	\$6,204	‡	\$10,878	\$4,568	\$4,875	‡	\$6,051	\$5,355
	Private	\$4,926	‡	‡	\$3,521	\$3,615	‡	\$4,453	‡
Professional Degree Programs	Institutional	\$13,472	‡	\$15,562	\$12,321	\$16,189	‡	\$13,114	‡
	Employer	\$7,299	‡	‡	‡	‡	‡	\$6,101	‡
	Private	\$7,952	‡	‡	‡	‡	‡	\$4,892	‡
Doctoral Degree Programs	Institutional	\$16,502	‡	‡	\$15,742	\$19,059	‡	\$16,227	\$19,577
	Employer	\$6,649	‡	‡	\$4,322	\$7,472	‡	\$6,278	‡
	Private	\$15,282	‡	‡	‡	‡	‡	\$16,465	‡

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Only around 4.2 percent of professional degree students received employer grant aid.
- Approximately 19.1 percent of White and 14.0 percent of Hispanic master's degree students received employer grant aid, compared with 11.7 percent of Black and 9.8 percent of Asian master's degree students.
- Although Asian master's degree students were 1.9 to 9.3 percentage points less likely than those from other racial and ethnic groups to receive employer grant aid, their average grant per recipient was \$10,878, compared with \$6,204 overall.
- Black professional degree students were 7.5 to 22.2 percentage points more likely than those from other racial and ethnic groups to receive institutional grant aid, but their average grant per recipient was \$12,321, compared with \$13,472 overall.

## ANNUAL BORROWING

Borrowing patterns also differed quite a bit across racial and ethnic groups during the 2015–16 academic year. Segmenting students by the types of graduate degree programs they enrolled in helps to identify and recognize meaningful borrowing patterns. Students enrolled in professional degree programs were more likely to borrow (72.3 percent borrowed), and borrow larger amounts than those in master’s and doctoral degree programs. The amount borrowed did not follow the same pattern as the share of students borrowing. Almost all of the borrowing was from federal loan programs, through which graduate degree students can borrow to cover their full budgets not covered by other financial aid, including housing, food, books and supplies, transportation, and other expenses, in addition to tuition and fees.

**Table 8.3: Annual Borrowing, by Type of Loan, Degree Program, and Race and Ethnicity: 2015–16**

		Federal Loans			Private Loans			Any Loans		
		% Receiving Loans	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	% Receiving Loans	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	% Receiving Loans	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower
All Graduate Degree Programs	All racial and ethnic groups	42.2%	\$23,959	\$20,360	5.1%	\$13,125	\$9,000	45.9%	\$23,749	\$20,000
	American Indian or Alaska Native	53.3%	\$21,157	\$13,704	5.3%!!	‡	‡	54.2%	\$21,234	\$13,704!
	Asian	33.3%	\$32,203	\$20,500	5.0%	\$21,196	\$10,374!!	37.5%	\$31,471	\$20,500
	Black	68.1%	\$22,347	\$19,197	4.1%	\$11,134	\$4,433!!	70.1%	\$22,440	\$19,163
	Hispanic	57.9%	\$23,429	\$20,218	4.4%	\$7,312	\$3,101!!	59.7%	\$23,262	\$20,000
	Native Hawaiian or other Pacific Islander	71.3%	‡	‡	‡	‡	‡	71.8%	‡	‡
	White	43.0%	\$23,993	\$20,465	4.1%	\$10,002	\$7,094	45.5%	\$23,862	\$20,019
	More than one race	54.4%	\$24,441	\$20,500	3.4%!	‡	‡	55.1%	\$25,360	\$20,500
Master’s Degree Programs	All racial and ethnic groups	39.8%	\$18,430	\$17,010	5.5%	\$13,324	\$8,553	43.8%	\$18,570	\$16,724
	American Indian or Alaska Native	51.3%	‡	‡	4.9%!!	‡	‡	51.5%	‡	‡
	Asian	23.9%	\$21,701	\$20,449	6.2%	\$23,236	\$10,374	29.7%	\$22,362	\$20,449
	Black	67.0%	\$17,927	\$17,693	4.7%	\$11,783	\$4,433	69.4%	\$18,119	\$17,422
	Hispanic	56.3%	\$18,477	\$16,958	4.4%	\$5,955	\$3,100	58.0%	\$18,402	\$16,930
	Native Hawaiian or other Pacific Islander	70.5%	‡	‡	‡	‡	‡	70.5%	‡	‡
	White	39.9%	\$18,706	\$16,609	3.9%	\$9,035	\$6,277	42.3%	\$18,684	\$16,560
	More than one race	51.1%	\$14,769	\$15,375	4.6%!	‡	‡	51.9%	\$16,280	\$15,900

		Federal Loans			Private Loans			Any Loans		
		% Receiving Loans	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	% Receiving Loans	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	% Receiving Loans	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower
Professional Degree Programs	All racial and ethnic groups	69.6%	\$45,348	\$43,500	5.4%	\$13,126	\$9,000	72.3%	\$45,136	\$43,500
	American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Asian	59.8%	\$43,894	\$41,000	3.8%	NA	NA	61.8%	\$43,470	\$40,500
	Black	88.3%	\$55,579	\$59,413	3.7%	NA	NA	89.3%	\$55,498	\$59,413
	Hispanic	79.3%	\$46,952	\$43,500	6.2%	NA	NA	82.8%	\$45,988	\$41,026
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡	‡
	White	68.6%	\$42,931	\$40,500	6.2%	\$13,606	\$10,000	71.6%	\$42,982	\$40,500
	More than one race	80.9%	\$50,320	\$48,042	‡	‡	‡	81.0%	\$50,314	\$48,042
Doctoral Degree Programs	All racial and ethnic groups	28.8%	\$18,409	\$19,197	1.9%	\$9,269	\$7,983	30.6%	\$17,984	\$18,500
	American Indian or Alaska Native	‡	‡	‡	‡	‡	‡	‡	‡	‡
	Asian	20.6%	\$16,838	\$14,700	NA	NA	NA	20.9%	\$16,803	\$14,700
	Black	59.0%	\$17,479	\$16,488	0.6%	NA	NA	59.2%	\$17,756	\$16,488
	Hispanic	42.3%	\$20,246	\$20,500	1.3%	NA	NA	43.2%	\$20,165	\$20,500
	Native Hawaiian or other Pacific Islander	‡	‡	‡	‡	‡	‡	‡	‡	‡
	White	31.7%	\$18,087	\$19,308	2.6%	\$9,228	\$7,000	34.4%	\$17,481	\$18,506
More than one race	36.3%	\$26,961	\$20,500	‡	‡	‡	36.7%	\$26,725	\$20,500	

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- The share of all graduate students that borrowed ranged from approximately 37.5 percent of Asian students to 70.1 percent of Black students and 71.8 percent of Native Hawaiian or other Pacific Islander students.
- Professional degree students from all racial and ethnic groups borrowed at higher rates than master's and doctoral students from all groups, with the exception of Asian professional degree students (61.8 percent) and Black master's degree students (69.4 percent).
- Master's degree annual borrowing rates ranged from 29.7 percent of Asian students to 69.4 percent of Black students; doctoral student borrowing rates ranged from 20.9 percent of Asian students to 59.2 percent of Black students; and professional degree student borrowing rates ranged from 61.8 percent of Asian students to 89.3 percent of Black students.
- Asian master's degree students were much less likely than others to borrow (only around 29.7 percent borrowed), but among borrowers, their average loans were the largest, at \$22,362.
- The average borrowing of Black professional degree students (\$55,498) was nearly \$5,000 more than that of the next largest average amount borrowed. The same was not true among master's and doctoral students, where Black graduate students, on average, borrowed amounts similar to students of other race and ethnicities.

## DEBT LEVELS

The data presented here provide information on the average amount borrowed per borrower and per student. The average amount borrowed per borrower includes only those students who took out loans to finance their education. The average amount borrowed per student includes all students, regardless of whether or not they took out loans to finance their education.

### Master's Degree Students

The differences in annual borrowing patterns of graduate degree students across racial and ethnic groups are reflected in differences in the total debt levels accumulated by those who complete their degrees. Additionally, across all student groups, the average amount of debt accumulated for graduate study, \$43,354, surpassed the median, \$35,250, indicating that a subset of the population took out substantially larger amounts of debt.

**Table 8.4: Cumulative Debt for Graduate Study: Master's Degree Recipients, by Race and Ethnicity: 2015–16**

	% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	Average Debt per Student
All racial and ethnic groups	56.4%	\$43,354	\$35,250	\$24,446
American Indian or Alaska Native	‡	‡	‡	‡
Asian	50.1%	\$59,824	\$48,802	\$29,996
Black	81.3%	\$51,699	\$47,093	\$42,009
Hispanic	72.9%	\$42,411	\$37,532	\$30,924
Native Hawaiian or other Pacific Islander	‡	‡	‡	‡
White	57.3%	\$41,506	\$32,500	\$23,786
More than one race	54.1%	\$40,336	\$30,681!	\$21,814

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: ‡ Estimate suppressed. Reporting standards not met. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Approximately 56.4 percent of all master's degree recipients borrowed to fund their graduate education, compared with 81.3 percent of Black graduates.
- The 50.1 percent of Asian master's degree completers who borrowed accrued larger average debts than others. Asian graduates had an average debt of \$59,824, with a median of \$48,802.
- The 81.3 percent of Black master's degree completers who accrued debt had an average debt of \$51,699 and a median of \$47,093.
- White students borrowed at about the same rate as the average across all races, 56.4 percent for all students versus 57.3 percent for White students, but borrowed less on average than all racial and ethnic groups (\$41,506 and \$43,354, respectively).

Some of the variation in borrowing across racial and ethnic groups is a function of the institutions they attend. Master's degree completers who attended public four-year institutions<sup>8</sup> borrowed at lower rates (53.1 percent) and on average less (\$37,251) than master's degree completers at for-profit or private nonprofit four-year institutions.

<sup>8</sup> Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section.

**Table 8.5: Cumulative Debt for Graduate Study: Master's Degree Recipients, by Sector and Race and Ethnicity: 2015–16**

		<b>% Who Borrowed</b>	<b>Average Amount Borrowed per Borrower</b>	<b>Median Amount Borrowed per Borrower</b>	<b>Average Amount Borrowed per Student</b>
<b>Public Four-Year</b>	All racial and ethnic groups	53.1%	\$37,251	\$29,958	\$19,795
	Asian	57.0%	\$48,344	\$40,741	\$27,540
	Black	77.9%	\$52,658	\$47,258	\$41,044
	Hispanic	75.8%	\$33,700	\$31,000	\$25,554
	White	52.9%	\$35,758	\$26,887	\$18,900
<b>Private Nonprofit Four-Year</b>	All racial and ethnic groups	56.3%	\$48,235	\$40,529	\$27,153
	Asian	37.4%	\$82,958	\$73,558!	\$31,019
	Black	83.6%	\$48,597	\$47,803	\$40,612
	Hispanic	69.3%	\$50,641	\$41,000	\$35,112
	White	60.1%	\$46,612	\$37,391	\$28,004
<b>For-Profit</b>	All racial and ethnic groups	74.4%	\$48,829	\$41,000	\$36,320
	Asian	80.4%	\$47,890	\$34,051!	\$38,527
	Black	82.3%	\$54,946	\$47,093	\$45,217
	Hispanic	78.0%	\$40,982	\$35,000	\$31,971
	White	77.3%	\$47,513	\$40,000	\$36,707

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates were suppressed for all other groups due to small sample size. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. |

! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Within each institution type, Black master's degree recipients borrowed at the highest rate among all race and ethnicities, with 77.9 percent at public four-year, 82.3 percent at for-profit, and 83.6 percent at private nonprofit four-year institutions accumulating debt.
- Within each race and ethnicity, master's degree recipients who attended for-profit institutions generally borrowed at higher rates than students of the same race at other types of institutions.
- Asian master's degree recipients at private nonprofit four-year institutions borrowed at the lowest rate of only 37.4 percent, but their average debt per borrower was \$82,958. In contrast, 83.6 percent of Black master's degree recipients who earned their degrees in this sector borrowed, but had an average debt per borrower of \$48,597.
- The \$31,971 average debt per student for Hispanic master's degree recipients at for-profit institutions was lower than the average debt of other racial and ethnic groups.

Some students who did not borrow for graduate school had debt remaining from their undergraduate studies. Approximately 14 percent of 2015–16 master's degree recipients without graduate school debt did borrow for their undergraduate education. For master's degree recipients with debt, the majority of their debt (61.6 percent) was accumulated during their graduate study.

**Table 8.6: Undergraduate and Graduate Debt: Master's Degree Recipients, by Race and Ethnicity: 2015–16**

	Average Graduate Debt per Student	Average Undergraduate Debt per Student	Average Combined Undergraduate and Graduate Debt per Student	% of Total Debt That Is from Graduate Study	% with Any Debt	% with Graduate Debt
All racial and ethnic groups	\$24,446	\$15,215	\$39,661	61.6%	70.8%	56.4%
Asian	\$29,996	\$9,096	\$39,091	76.7%	61.5%	50.1%
Black	\$42,009	\$26,950	\$68,959	60.9%	90.1%	81.3%
Hispanic	\$30,924	\$18,335	\$49,259	62.8%	88.0%	72.9%
White	\$23,786	\$16,274	\$40,061	59.4%	75.9%	57.3%
More than one race	\$21,814	\$14,377	\$36,191	60.3%	69.2%	54.1%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016  
 Note: Estimates were suppressed for all other groups due to small sample size.

- The gap in the share of students with any debt and the share of students with graduate debt was largest among White master's degree recipients, among whom 75.9 percent borrowed for part of their education, but only 57.3 percent borrowed for graduate education.
- Despite the high average graduate school debt per borrower among Asian master's degree recipients, the relatively low share of these students who borrowed (50.1 percent) made their debt per student (including borrowers and non-borrowers) substantially lower than that for Black students.
- Black master's degree recipients borrowed \$42,009 per student, compared with an overall average (across all races and ethnicities) of \$24,446.
- Black students also came to their master's degree programs with higher levels of undergraduate debt than did others—\$26,950 per student, compared with just \$9,096 for Asian students and an overall average of \$15,215. As a result, Black master's degree recipients left graduate school having borrowed \$68,959 per student.
- Approximately 90 percent of Black master's degree recipients had borrowed for at least part of their education, compared with 61.5 percent of Asian and 75.9 percent of White students.
- Hispanic master's recipients also had a very high rate of borrowing for their education (88.0 percent), with an average debt of \$49,259 per student. Although high, this was nearly \$20,000 less than the average for Black students.

## Professional Degree Students

Nearly 80 percent of students who earned professional degrees in 2015–16 borrowed to fund their graduate studies. The average debt level among borrowers was almost \$150,000. Comparing debt levels of professional degree recipients across racial and ethnic groups within sectors were not possible because of small sample sizes in available survey data.



**Table 8.7: Cumulative Debt for Graduate Study: Professional Degree Recipients, by Race and Ethnicity: 2015–16**

	% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	Average Debt per Student
All racial and ethnic groups	78.3%	\$149,356	\$140,038	\$116,926
Asian	65.6%	\$153,372	\$125,000	\$100,680
Black	91.6%	\$204,754!	\$206,700!	\$187,614!
Hispanic	85.2%	\$132,692	\$147,203	\$113,007
White	78.2%	\$142,469	\$134,322	\$111,468

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates were suppressed for all other groups due to small sample size. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Around 78 percent of professional degree recipients borrowed to fund their graduate education, but 91.6 percent of Black and 85.2 percent of Hispanic professional degree students accrued debt.
- The average amount borrowed among Hispanic professional degree recipients was \$132,692, nearly \$17,000 less than the average for all students (\$149,356).
- Asian professional degree students borrowed at a much lower rate (65.6 percent), but borrowed on average more than both White and Hispanic borrowers—\$153,372.

Because both the share of students borrowing and the average amount borrowed were highest among Black professional degree recipients, the gaps in borrowing per student across racial and ethnic groups were even larger than the gaps among borrowers.

**Table 8.8: Undergraduate and Graduate Debt: Professional Degree Recipients, by Race and Ethnicity: 2015–16**

	Average Graduate Debt per Student	Average Undergraduate Debt per Student	Average Combined Undergraduate and Graduate Debt per Student	% of Total Debt That Is from Graduate Study	% with Any Debt	% with Graduate Debt
All racial and ethnic groups	\$116,926	\$11,378	\$128,303	91.1%	80.7%	78.3%
Asian	\$100,680	\$9,994	\$110,674	91.0%	70.1%	65.6%
Black	\$187,614!	\$13,699!	\$201,312!	93.2%	92.4%	91.6%
Hispanic	\$113,007	\$10,320	\$123,327	91.6%	85.3%	85.2%
White	\$111,468	\$11,642	\$123,110	90.5%	80.6%	78.2%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates were suppressed for all other groups due to small sample size. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Black students came to professional degree programs with higher levels of undergraduate debt than others—\$13,699 per student, compared with just \$9,994 for Asian students and an overall average of \$11,378 per student.
- In 2015–16, 92.4 percent of Black professional degree recipients had borrowed for at least part of their education, compared with 70.1 percent of Asian and 80.6 percent of White professional degree recipients.
- In total, Black professional degree recipients left graduate school having borrowed \$201,312 per student.

## Doctoral Degree Students

Institutional funding for doctoral students varies widely by institution and field. For example, 2016 doctoral degree recipients in the physical and earth sciences covered 95.7 percent of their expenditures with fellowships, grants, and assistantships and 2.2 percent with their own resources. For psychology and social science students, these shares were 72.8 percent and 23.9 percent, respectively (National Science Foundation 2018). Students from different racial and ethnic groups had different enrollment patterns that contributed to the range of average debt levels for students in these degree programs.

Nearly half of doctoral students borrowed to finance their education (47.7 percent). The average debt level among borrowers was \$81,176, with the highest debt levels occurring for Black and Hispanic borrowers.

**Table 8.9: Cumulative Debt for Graduate Study: Doctoral Degree Recipients, by Race and Ethnicity: 2015–16**

	% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower	Average Debt per Student
All racial and ethnic groups	47.7%	\$81,176	\$65,897	\$38,758
Asian	21.7%!!	‡	‡	‡
Black	80.6%	\$109,148	\$113,054	\$87,920
Hispanic	72.3%	\$96,947	\$65,897!	\$70,065
White	55.7%	\$72,699	\$58,093	\$40,461

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates were suppressed for all other groups due to small sample size. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%.

- The shares of Black and Hispanic doctoral degree recipients who borrowed for their graduate study, 80.6 and 72.3 percent, respectively, were far higher than the shares of White doctoral degree recipients, 55.7 percent.
- Debt levels were highest for Black doctoral degree recipients, with an average of \$109,148 and a median of \$113,054 among borrowers.
- The 72.3 percent of Hispanic doctoral degree recipients who borrowed had lower debt levels than Black students.
- Among those who borrowed, the median White doctoral degree recipient borrowed just \$58,093, considerably less than Black graduates (\$113,054).

The differences in the borrowing patterns of White and Black doctoral degree students were stark. Small sample sizes did not permit comparisons among other racial and ethnic groups of doctoral degree recipients by sector.

**Table 8.10: Cumulative Debt for Graduate Study: Doctoral Degree Recipients, by Sector and Race and Ethnicity: 2015–16**

		% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower
Public Four-Year	All racial and ethnic groups	45.5%	\$72,130	\$54,490
	Black	66.5%	\$111,486	\$107,602
	White	62.7%	\$71,724	\$57,968

		% Who Borrowed	Average Amount Borrowed per Borrower	Median Amount Borrowed per Borrower
Private Nonprofit Four-Year	All racial and ethnic groups	67.1%	\$74,590	\$50,000!
	Black	86.0%	\$111,611	\$80,926!!
	White	78.7%	\$57,568	\$34,217
For-Profit	All racial and ethnic groups	87.9%	\$120,110	\$129,795
	Black	95.2%	\$128,359	\$133,965
	White	86.0%	\$108,317	\$101,293

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates were suppressed for all other groups due to small sample size. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- The shares of Black graduates who borrowed to fund their doctoral degrees ranged from 66.5 percent at public four-year universities to 95.2 percent in the for-profit sector. However, average debt per borrower was similar for Black students in all sectors, ranging from an average of approximately \$111,000 at public and private nonprofit four-year universities to \$128,359 at for-profit institutions.
- The range of borrowing rates was smaller among White doctoral degree recipients, from 62.7 percent at public four-year institutions to 86.0 percent in the for-profit sector, but the differences in average debt levels were larger—\$57,568 at private nonprofit four-year universities and \$108,317 at for-profit institutions.
- As a result, the racial gap in debt levels varied by sector. Average debt per Black borrower was almost twice as high as average debt per White borrower at private nonprofit four-year universities—\$111,611 versus \$57,568.
- Average debt per borrower was more similar for Black and White graduates in the for-profit sector, although the median was lower for White students. Debt per borrower was substantially larger for Black doctoral degree recipients at for-profit institutions (\$133,965) than for their White peers (\$101,293) because a much larger share of them borrowed.

Nearly 58 percent of doctoral degree recipients borrowed across their undergraduate and graduate degree programs. This was true for 70.8 percent of master's degree recipients and 80.7 percent of professional degree recipients. As undergraduates, Black and Hispanic doctoral degree recipients borrowed more per student than their White counterparts.

**Table 8.11: Undergraduate and Graduate Debt: Doctoral Degree Recipients, by Race and Ethnicity: 2015–16**

	Average Graduate Debt per Student	Average Undergraduate Debt per Student	Average Combined Undergraduate and Graduate Debt per Student	% of Total Debt That Is from Graduate Study	% with Any Debt	% with Graduate Debt
All racial and ethnic groups	\$38,758	\$9,244	\$48,002	80.7%	57.9%	47.7%
Asian	‡	‡	\$16,617!!	‡	27.9%!!	21.7%!!
Black	\$87,920	\$15,176	\$103,097	85.3%	85.2%	80.6%
Hispanic	\$70,065	\$16,491	\$86,556	80.9%	74.1%	72.3%
White	\$40,461	\$10,617	\$51,078	79.2%	70.9%	55.7%

Source: U.S. Department of Education, National Postsecondary Student Aid Study, 2016

Notes: Estimates were suppressed for all other groups due to small sample size. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is > 50%.

- Black and Hispanic doctoral degree recipients entered graduate school with similar levels of debt—\$15,176 and \$16,491, respectively—but the higher borrowing rates of Black doctoral degree recipients for graduate school led to average combined undergraduate and graduate debt per student of \$103,097, compared with \$86,556 per Hispanic doctoral degree recipient.

## REFERENCES

National Science Foundation. 2018. *Survey of Earned Doctorates, 2016*, Table 35. <https://www.nsf.gov/statistics/2018/nsf18304/data/tab35.pdf>.

## INVITED ESSAY



### **Student Debt: The Unique Circumstances of African American Students**

Sandy Baum



# Student Debt: The Unique Circumstances of African American Students

Sandy Baum, Nonresident Fellow, The Urban Institute

Discussions of student debt frequently treat borrowing for college as a general problem. As a result, they pay inadequate attention to the sharp differences in borrowing and repayment patterns across demographic groups. The data presented in this report show that African American students face unique difficulties. Addressing these difficulties is critical to ensuring access to meaningful educational opportunities for all who can benefit.

African American students are more likely to borrow than students from other racial and ethnic groups pursuing similar types of degrees, and are more likely to borrow relatively large amounts. They are less successful in repaying their loans and more likely to default. The issues facing this group of students are obscured by discussions that paint student debt with a broad brush. Racial differences in pre-college circumstances, in the types of institutions attended, and in post-college earnings all contribute to the difficulties African American students face in college and beyond.

Understanding which borrowers are most vulnerable is an important first step in overcoming the barriers some students face in converting postsecondary enrollment to meaningful opportunities that will improve their lives and their communities. Efforts to mitigate problems with student debt should be grounded in the dramatically different circumstances of students from different backgrounds, and the range of difficulties they face financing higher education.

## Debt Levels

The general idea of students “drowning in debt” is greatly exaggerated. But some students do have unmanageable levels of debt, and African American students are particularly likely to be in that situation. The same is not so true for Hispanic students, whose circumstances are often perceived as similar to those of African Americans.

Twenty-nine percent of 2015–16 bachelor’s degree recipients graduated without debt, but only 14 percent of African American graduates managed this. About one-third of African American bachelor’s degree recipients accumulated \$40,000 or more in debt, compared with 18 percent overall and 13 percent of Hispanic graduates. The pattern among associate degree and certificate recipients is similar (Table 1).

Only 19 percent of African American master’s degree recipients completed their degrees without borrowing for graduate school, and 16 percent borrowed \$75,000 or more. In contrast, 43 percent of white master’s degree recipients avoided borrowing, and 7 percent borrowed \$75,000 or more for graduate school.

**Table 1: Total Borrowed for Undergraduate Education, by Type of Credential and Race and Ethnicity: 2015–16 Graduates**

		No Debt	\$1–\$9,999	\$10,000–\$19,999	\$20,000–\$29,999	\$30,000–\$39,999	\$40,000 or More
Bachelor’s Degree	All	29%	11%	13%	17%	12%	18%
	White	30%	10%	13%	18%	12%	18%
	African American	14%	12%	10%	15%	16%	33%
	Hispanic	33%	14%	15%	15%	10%	13%
	Asian	41%	11%	14%	16%	9%	9%

		No Debt	\$1–\$9,999	\$10,000–\$19,999	\$20,000–\$29,999	\$30,000–\$39,999	\$40,000 or More
Associate Degree	All	51%	17%	13%	10%	5%	5%
	White	49%	18%	15%	10%	4%	4%
	African American	33%	20%	14%	13%	9%	10%
	Hispanic	64%	16%	8%	6%	4%	2%
	Asian	70%	10%	8%	11%		
Certificate	All	33%	30%	21%	9%	4%	4%
	White	34%	30%	18%	8%	4%	5%
	African American	17%	33%	27%	13%	6%	4%
	Hispanic	38%	30%	20%	8%	2%	2%
	Asian	53%	16%	23%	8%		

		No Debt	\$1–\$24,999	\$25,000–\$49,999	\$50,000–\$74,999	\$75,000 or More
Master's Degree	All	38%	21%	20%	12%	9%
	White	43%	22%	19%	10%	7%
	African American	19%	18%	26%	22%	16%
	Hispanic	27%	24%	24%	16%	8%
	Asian	50%	11%	14%	12%	13%

Source: U.S. Department of Education, NCES, National Postsecondary Student Aid Study, 2016

African American students disproportionately enroll in for-profit institutions, where debt levels tend to be highest. For example, 18 percent of 2015–16 African American bachelor's degree recipients earned their degrees in this sector, compared with 12 percent of Hispanic and 7 percent of white and Asian graduates (see Table 7). But even within sectors, African American students borrow more than others.

Within the public four-year sector, the share of African American graduates borrowing \$40,000 or more was almost twice as high as the share of white graduates—24 percent versus 14 percent. Only 8 percent of Hispanic graduates borrowed this much. The differences are starkest in the private nonprofit sector, where 40 percent of African American bachelor's degree recipients graduated with \$40,000 or more in debt, compared with 19 percent of white graduates and smaller shares of Hispanic and Asian graduates (Table 2).

**Table 2: Debt Levels of Bachelor's Degree Recipients, by Race and Ethnicity and Sector: 2015–16**

		No Debt	\$1–\$9,999	\$10,000–\$19,999	\$20,000–\$29,999	\$30,000–\$39,999	\$40,000 or More
Public	All	32%	12%	14%	18%	12%	14%
	White	32%	10%	14%	19%	12%	14%
	African American	16%	14%	13%	17%	17%	24%
	Hispanic	38%	15%	16%	15%	8%	8%
	Asian	44%	14%	14%	17%	7%	4%



		No Debt	\$1–\$9,999	\$10,000–\$19,999	\$20,000–\$29,999	\$30,000–\$39,999	\$40,000 or More
Private Nonprofit	All	28%	9%	12%	19%	12%	20%
	White	29%	9%	12%	19%	12%	19%
	African American	11%	11%	7%	17%	14%	40%
	Hispanic	26%	14%	15%	20%	13%	12%
	Asian	43%	4%	16%	16%	10%	11%
Private For-Profit	All	13%	7%	8%	11%	14%	47%
	White	15%	6%	8%	11%	13%	48%
	African American	9%	7%	8%	10%	16%	51%
	Hispanic	15%	10%	9%	11%	13%	42%
	Asian	11%	6%	10%	8%	16%	49%

Source: U.S. Department of Education, NCES, National Postsecondary Student Aid Study, 2016

This disproportionate borrowing by African American students is likely driven by a combination of problematic societal and historical forces. These forces generate significant gaps across racial and ethnic groups in the availability of financial resources from family income and wealth, K–12 academic preparation, postsecondary enrollment and success patterns, and post-college earnings.

## Available Resources

The relatively high levels of debt among African American students are at least partially attributable to the low levels of financial and other resources available to them when they enroll in college. African American parents in the age range when children are typically ready for college have a median income equal to about 70 percent of the overall median. African American adults in the age range when those without a college degree are most likely to return to school earn about 80 percent of the overall median (Table 3).

**Table 3: Median Income: 2016**

	All	White	African American	Asian	Hispanic
Families with Householder Ages 45–54	\$90,119	\$102,396	\$64,358	\$103,429	\$61,998
Individuals Ages 25–34	\$34,067	\$35,598	\$27,469	\$42,038	\$27,986

Source: U.S. Census Bureau, Current Population Survey, Tables FINC-02 and PINC-01

Earnings for Hispanics in both of these groups are similar to those of African Americans, and as noted, Hispanic students have lower debt levels than African American students. However, the family income levels of African American undergraduates are lower than those of Hispanic students. More than half of 2015–16 African American bachelor’s degree recipients were from the lowest income quartile of students completing these degrees. Only 9 percent came from the top quartile, with parent incomes of \$136,200 or higher. In contrast, 42 percent of Hispanic graduates were from the lowest family income quartile; 14 percent of Hispanic graduates, 18 percent of Asian graduates, and 31 percent of white graduates came from the highest-income families (Table 4).

**Table 4: Parents' Income for Dependent Bachelor's Degree Recipients: 2015–16**

	Less than \$39,200	\$39,200–\$82,499	\$82,500–\$136,199	\$136,200 or More
All	25%	25%	25%	25%
White	16%	24%	30%	31%
African American	52%	26%	13%	9%
Hispanic	42%	30%	14%	14%
Asian	36%	27%	20%	18%

Source: U.S. Department of Education, NCES, National Postsecondary Student Aid Study, 2016

In addition to their relatively low incomes, African American families have much lower wealth than others—including Hispanic families. In 2016, the average wealth of \$139,523 for African American families was 15 percent of the average for white families and 73 percent of the average for Hispanic families. The median wealth of \$17,409 for African American families was 10 percent of that for white families and 83 percent of that for Hispanic families (Table 5).

**Table 5: Average Family Wealth, by Race and Ethnicity: 2016**

	White	African American	Hispanic
Mean	\$919,336	\$139,523	\$191,727
Median	\$171,000	\$17,409	\$20,920

Source: Urban Institute, *Nine Charts About Wealth Inequality in America* (Updated)

The racial and ethnic wealth gap is in fact becoming wider over time, with white families experiencing growth in wealth and African American and Hispanic families experiencing declines. Between 2007 and 2016, mean wealth rose by 15 percent for white families, but declined by 11 percent for African American and Hispanic families. Median (as opposed to mean) wealth declined for all groups, but by 28 percent for African American families versus 14 percent for white and Hispanic families (McKernan et al. 2017). A long history of racial discrimination in housing policies and in access to financing explains much of the wealth gap (Jones 2017; Asante-Muhammad et al. 2017).

The resource gaps facing African American students are not only financial. In 2015–16, 34 percent of African American undergraduates (and 44 percent of Hispanic undergraduates) came from families where neither parent had any college experience. This was the case for 22 percent of white and 30 percent of Asian undergraduates. About a third of African American and Hispanic undergraduates had at least one parent with a bachelor's degree or higher, compared with 52 percent of white and 49 percent of Asian undergraduates.<sup>1</sup>

In sum, on average African American students come to college with less family income and wealth and less social capital than others. In addition to these financial strains and lack of family experience with higher education, many African American students have had limited educational opportunities in elementary and secondary school.

## Academic Preparation

Many African American and Hispanic students attend elementary and secondary schools with relatively low instructional resources and come to college less prepared for its academic demands than others. Scholars have attributed these differential secondary experiences to a variety of factors, including school resources, teacher attitudes, school segregation, and family and community environments (Rouse and Barrow 2006; Jencks and Phillips 1998).

<sup>1</sup> U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study, 2016, PowerStats, author's calculations.

As a result of these realities and other differences in circumstances, in 2015–16 almost one-quarter of African American undergraduates had high school GPAs below 2.5, compared with 17 percent of all undergraduates. And one-third of African American students scored 800 or lower on the combined SAT, compared with 17 percent of students overall (Table 6). Limited access to advanced coursework in high school, combined with the more fundamental gaps in pre-college opportunities, make it unsurprising that African American students enroll in developmental education at high rates (College Board 2014). Overall, 39 percent of 2015–16 undergraduate students had taken at least one developmental education course, compared with 47 percent of African American and Hispanic students. These courses do not carry academic credit that counts toward a degree, although students *do* have to pay tuition for them, resulting in a higher overall cost of college.

**Table 6: Academic Preparation of 2015–16 Undergraduates**

	Ever Took a Remedial Course	HS GPA < 2.5	GPA 3.5 or Higher	Combined SAT 800 or Below	Combined SAT 1200 or Higher
All	39%	17%	34%	17%	17%
White	34%	14%	40%	10%	21%
African American	47%	23%	21%	34%	7%
Hispanic	47%	21%	27%	24%	10%
Asian	35%	14%	41%	12%	27%

Source: U.S. Department of Education, NCES, National Postsecondary Student Aid Study, 2016

The academic profiles of African American students, combined with their financial circumstances and insufficient access to good information about higher education limit their access to selective colleges and universities, which have more ample resources and better outcomes than other institutions.

## Enrollment Patterns

College-going patterns exacerbate high debt levels for African American students. As noted above, African Americans are more likely than others to enroll in for-profit institutions, where tuition prices are higher than at public colleges and universities. In addition, 30 percent of African American graduates were age 30 or older when they completed their degrees, compared with 18 percent overall and 19 percent of Hispanic graduates. Older students borrow more and have lower completion rates than younger students. Twenty-nine percent of African American graduates had dependents of their own, and thus greater financial commitments, compared with 18 percent overall and 19 percent of Hispanic graduates. And only 42 percent of African American graduates completed their degrees within five years of first enrolling, compared with 57 percent overall and 51 percent of Hispanic graduates (Table 7). All of these circumstances are associated with higher levels of borrowing and are likely contributors to the differences between debt levels of African Americans and other students.

**Table 7: Characteristics of 2015–16 Bachelor’s Degree Recipients, by Race and Ethnicity**

	All	White	African American	Hispanic	Asian	
Sector of Bachelor’s Degree	Public four-year	63%	63%	56%	65%	64%
	Private nonprofit four-year	28%	30%	26%	22%	29%
	For-profit	9%	7%	18%	12%	7%
Age in December 2015	23 or younger	60%	64%	47%	55%	65%
	24 to 29	21%	19%	23%	26%	25%
	30 or older	18%	17%	30%	19%	10%

		All	White	African American	Hispanic	Asian
Dependency Status	Dependent	54%	57%	42%	50%	59%
	Independent without dependents	28%	27%	29%	30%	28%
	Independent with dependents	18%	16%	29%	19%	13%
Time Elapsed Between First Enrollment and Degree Completion	Within four years	38%	42%	26%	31%	41%
	Five years	19%	19%	16%	20%	17%
	Six years	10%	9%	11%	11%	12%
	Seven or eight years	11%	9%	12%	15%	13%
	Nine to 11 years	8%	8%	11%	8%	8%
	12 years or more	14%	13%	24%	15%	9%

Source: U.S. Department of Education, NCES, National Postsecondary Student Aid Study, 2016

## After College

Given their higher debt levels, African American students would have more difficulty than others repaying their loans even if their post-college earnings were similar. But African American (and Hispanic) adults between the ages of 25 and 34 have lower earnings than white and Asian adults with the same level of educational attainment—further exacerbating an already uphill climb to student loan repayment. For example, median earnings for bachelor’s degree recipients in 2016 were \$41,529 for African American young adults, \$41,664 for Hispanics, and \$47,478 for white adults in this age range (Table 8).

**Table 8: Median Earnings, Ages 25 to 34, by Race and Ethnicity and Educational Attainment: 2016**

	Some College	Associate Degree	Bachelor’s Degree	Master’s Degree
All	\$35,282	\$38,544	\$46,854	\$56,419
White	\$30,867	\$35,387	\$47,478	\$55,187
African American	\$27,058	\$30,850	\$41,529	\$57,397
Asian	\$31,239	\$32,298	\$52,178	\$68,687
Hispanic	\$28,156	\$31,681	\$41,664	\$56,127

Source: U.S. Census Bureau, Current Population Survey, Table PINC-03

In addition to having lower earnings than their peers, African American borrowers in repayment on their student loans are less likely than others to have assistance from parents or others in repaying their loans. Among students who began college in 2003–04, the range of borrowers saying after they left school that they had help repaying their loans was from 10 percent among African American borrowers to 20 percent among Asian borrowers (Table 9).

**Table 9: Share of Borrowers Reporting Assistance Repaying Their Student Loans**

All	17%
White	18%
African American	10%
Hispanic	15%
Asian	20%

Source: U.S. Department of Education, NCES, Beginning Postsecondary Students Longitudinal Study, 2004/09

## Repayment

The release of new data from the U.S. Department of Education has recently focused attention on the repayment patterns of African American borrowers. Given their debt levels and limited access to resources before, during, and after college, it is not surprising that they struggle more with student debt. But the findings are, nonetheless, startling. The data reveal that 12 years after they first enrolled in 2003–04, about half of African American borrowers had defaulted on at least one federal loan and more than half of the borrowers in this group owed more than they originally borrowed. This was not the case for other borrowers—including Hispanic borrowers (Miller 2017).

Controlling for family background eliminates about half of the difference in default rates between Black and white borrowers. But even accounting for differences in degree attainment, college GPA, and post-college income and employment cannot fully explain the Black-white difference in default rates (Scott-Clayton 2018). Solving this problem and alleviating the challenges facing these students is critical to achieving the nation's goals for a successful postsecondary system.

Of particular concern is that even African American bachelor's degree recipients appear to be having difficulty repaying their loans. The median amount owed by this group 12 years after starting college was 114 percent of the amount borrowed, compared with 47 percent for white graduates, 79 percent for Hispanic graduates, and 80 percent for those from low-income households, as measured by having received a federal Pell Grant (Scott-Clayton 2018).

## Conclusion

Student debt is more of a burden for African American students than for others. The financial resources available to them before, during, and after college are very limited. They are more likely than others to have attended elementary and secondary schools that did not prepare them well for college-level work and they come disproportionately from families without college experience. Other underrepresented groups, such as Hispanic students, face some but not all of the same barriers.

These circumstances, combined with the institutions in which they enroll and the timing of their postsecondary education, likely all contribute to the fact that African American students tend to accrue more debt than those from other racial and ethnic groups—including other underrepresented minority groups—earning similar degrees. The barriers that African American students face in repaying their loans are at least partially the result of the difficulty they have completing their studies, their own post-college earnings, and the limited resources of their families of origin. Further research should improve our understanding of how all the circumstances facing African American students contribute to their unique struggles with student debt. Improved understanding of these distinct factors and how they interact should make it possible for educators and policymakers to better target solutions that can reverse these trends.

Failure to address these problems threatens the potential for college education to improve the lives of young African Americans. Solutions should not ignore the role of access to loans in making college a realistic possibility for students lacking family resources. Among 2003–04 beginning college students, 10 percent of African American students reported being able to start college sooner because of loans—more than in any other group.<sup>2</sup> Providing more grant funding, better guidance in choosing postsecondary paths, and stronger supports while students are in college has the potential to mitigate some of the difficulties facing African American students. Over the longer run, only diminishing disparities in pre-college and post-college circumstances can put African American students on a more level playing field with their peers.

## References

Asante-Muhammad, Dedrick, Chuck Collins, Josh Hoxie, and Emanuel Nieves. 2017. *The Road to Zero Wealth: How the Racial Wealth Divide is Hollowing Out America's Middle Class*. Washington, DC: Institute for Policy Studies and Prosperity Now. <https://prosperitynow.org/resources/road-zero-wealth>.

---

2 U.S. Department of Education, National Center for Education Statistics, Beginning Postsecondary Students Longitudinal Study, 2004/09, PowerStats, author's calculations.

- College Board. 2014. *10th Annual AP Report to the Nation*. <http://media.collegeboard.com/digitalServices/pdf/ap/rtn/10th-annual/10th-annual-ap-report-to-the-nation-single-page.pdf>.
- Jencks, Christopher, and Meredith Phillips, eds. 1998. *The Black-White Test Score Gap*. Washington, DC: Brookings Institution Press.
- Jones, Janelle Jones. 2017. "The Racial Wealth Gap: How African-Americans Have Been Shortchanged out of the Materials to Build Wealth." *Working Economics Blog*, Economic Policy Institute. February 13, 2017. <https://www.epi.org/blog/the-racial-wealth-gap-how-african-americans-have-been-shortchanged-out-of-the-materials-to-build-wealth>.
- McKernan, Signe-Mary, Caroline Ratcliffe, C. Eugene Steuerle, Caleb Quakenbush, and Emma Kalish. 2017. *Nine Charts About Wealth Inequality in America (Updated)*. Urban Institute. <http://apps.urban.org/features/wealth-inequality-charts>.
- Miller, Ben. 2017. "New Federal Data Show a Student Loan Crisis for African American Borrowers." Center for American Progress, October 16, 2017. <https://www.americanprogress.org/issues/education-postsecondary/news/2017/10/16/440711>.
- Rouse, Cecilia Elena, and Lisa Barrow. 2006. "U.S. Elementary and Secondary Schools: Equalizing Opportunity or Replicating the Status Quo?" *The Future of Children* 16 (2): 99–123.
- Scott-Clayton, Judith. 2018. "What Accounts for Differences in Student Loan Default, and What Happens After." *Evidence Speaks*, Brookings. June 21, 2018. <https://www.brookings.edu/research/what-accounts-for-gaps-in-student-loan-default-and-what-happens-after>.
- U.S. Census Bureau. 2016. Current Population Survey.



## CHAPTER 9



# Spotlight on Minority Serving Institutions







# INTRODUCTION

Minority serving institutions, also known as MSIs, are an integral part of U.S. higher education, providing access to college for millions of students of color, many of whom are from low-income backgrounds and are the first in their family to attend college. While often referred to as a collective group, there are vast differences across MSIs in terms of their histories, missions, and student bodies. In fall 2016, over 700 institutions met the eligibility requirements to receive federal MSI designation.<sup>1</sup> Collectively, these institutions enrolled over 5 million undergraduate and graduate students.

MSIs are not only enrolling large percentages of students from diverse backgrounds, but are supporting them through to credential completion. Recent data show that, overall, MSIs have higher completion rates than what federal data suggest (Espinosa, Turk, and Taylor 2017). Moreover, these institutions contribute to the upward income mobility of the students they enroll, propelling their lowest income students up the income ladder at higher rates than non-MSIs (Espinosa, Kelchen, and Taylor 2018). As America's K–12 and college student populations continue to become more diverse in the years ahead (Hussar and Bailey 2017), we expect that the number of MSIs will steadily increase. Understanding enrollment and outcomes data for MSIs provides a lens by which we can view this important sector of higher education and their contributions to individuals, families, and communities.

## KEY FINDINGS

- In 2016, African American<sup>2</sup> students represented the majority of undergraduates enrolled at Historically Black Colleges and Universities (HBCUs). This pattern was evident across postsecondary sectors, with the exception of public two-year<sup>3</sup> HBCUs, which had slightly more racial and ethnic diversity.
- Overall, four in 10 students who started at a public four-year HBCU in fall 2010 completed a credential within six years. The total completion rate rose to six in 10 among students who attended college exclusively full time.
- Nearly half of students who started at a private nonprofit four-year HBCU in fall 2010 completed a credential within six years. The total completion rate increased for students who attended exclusively full time to more than six in 10.
- Across all sectors, American Indian or Alaska Native students represented the majority of undergraduate students enrolled at Tribal Colleges and Universities (TCUs). The majority of TCUs were public two-year institutions, followed by private nonprofit two-year institutions.
- In fall 2016, Hispanic students represented just under half of all students enrolled in Hispanic-Serving Institutions (HSIs). This pattern was similar across sectors, except for private nonprofit four-year HSIs, where Hispanic students represented more than half of all students.
- More than one-third of all students who started at a public two-year HSI in fall 2010 completed a credential within six years. The total completion rate for students who attended exclusively full time increased to over 50 percent.

1 In this report, MSI status was determined using data from the Department of Education's College Scorecard for the 2015–16 academic year, the most recent publicly available data at the time of analysis. Data from the College Scorecard provide the number of institutions that are eligible to apply for a grant under Title III and Title V of the Higher Education Opportunity Act of 2008. It should be noted that the number of MSIs whose designation is predicated on an institution reaching an enrollment threshold varies annually; therefore, this chapter covers a snapshot of institutions eligible for MSI designation and funding in one given fiscal year and is thus a conservative estimate of the number of MSIs.

2 The terms Black and African American are used interchangeably.

3 Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report's methods section.

- More than one-third of all students who started at a public two-year Alaska Native- and Native Hawaiian-Serving Institution in fall 2010 completed a credential within six years; this increased to slightly more than half for exclusively full-time students.
- Across all sectors, Asians and Native Hawaiians or other Pacific Islanders represented nearly one in five undergraduate students enrolled at Asian American and Native American Pacific Islander-Serving Institutions (AANAPISIs) in 2016. Turning to completions, nearly four in 10 students who started at a public two-year AANAPISI in fall 2010 completed a credential within six years. Among exclusively full-time students, about six in 10 completed within six years.
- Black students represented nearly half of all students enrolled at Predominantly Black Institutions (PBIs) in 2016. Just over one-third of students who started at a public two-year PBI in fall 2010 completed a credential within six years. Slightly less than half of exclusively full-time students completed within six years.
- Overall, American Indian or Alaska Native students were the second largest student group enrolled at Native American-Serving Nontribal Institutions (NASNTIs) in 2016. Nearly four in 10 students who started at a public two-year NASNTI in fall 2010, and nearly half of all exclusively full-time students completed a credential within six years of first enrolling.

Institutions can receive federal recognition as a minority serving institution in two ways. Historically designated MSIs—HBCUs and TCUs—were established with the specific purpose of providing access to higher education for Black and Native American<sup>4</sup> students. Institutions can also receive MSI recognition when they reach a specified enrollment threshold, outlined in legislation that defines each MSI type. As a result, institutions can meet the enrollment eligibility threshold for multiple MSI designations (e.g., an institution can be recognized as both an HSI and an AANAPISI). Since federal recognition is predicated on enrollment, MSIs determined by that criteria can have great variability in student demographics and institutional characteristics, even within each MSI type. For example, community colleges, large public institutions, and small private institutions could all be HSIs, but have different student bodies and resources with which to serve their students.

MSIs can apply for institutional capacity building grants from the Department of Education through Title III and Title V of the Higher Education Opportunity Act. Federal designation and participation in these programs further requires enrollment-based MSIs to meet additional eligibility requirements: institutions must enroll a high percentage of low-income students and have low educational and general expenditures, meaning they often have fewer resources with which to serve their students (Espinosa, Turk, and Taylor 2017). Research shows that MSIs invest their resources in institutional practices that meet students where they are, including intrusive advising; implementation of learning communities; academic and student support services that are culturally responsive; and faculty development (National Academies of Sciences, Engineering, and Medicine 2018; Garcia 2017; Garcia and Okhidoi 2015; CARE 2013; Teranishi et al. 2014). While not exhaustive, these practices serve as examples for the broader field of how MSIs serve the millions of students of color and students from low-income backgrounds that they enroll.

Historically, MSIs have been regionally concentrated. For example, the majority of HBCUs are located in the South and AANAPISIs in the West. However, as the population enrolling in postsecondary education continues to diversify, it can be expected that the number of enrollment-based MSIs will continue to grow throughout the nation.

<sup>4</sup> The terms Native American and American Indian are used interchangeably.

**Table 9.1: MSIs at a Glance**

**Department of Education Federal Institutional Eligibility Criteria by MSI Type**

<b>MSI Type</b>	<b>Acronym</b>	<b>Federal Recognition</b>	<b>Definition</b>
Historically Black Colleges and Universities	HBCU	Higher Education Act of 1965 <sup>1</sup>	Any historically Black college or university established prior to 1964, whose principal mission was, and is, the education of Black Americans.
Tribal Colleges and Universities	TCU	Tribally Controlled College or University Assistance Act of 1978 <sup>2,3</sup>	Institutions chartered by their respective Indian tribes through the sovereign authority of the tribes or by the federal government with the specific purpose to provide higher education opportunities to American Indians through programs that are locally and culturally based, holistic, and supportive.
Hispanic-Serving Institutions	HSI	Higher Education Act of 1992 <sup>4</sup>	Institutions with 25 percent or more total undergraduate Hispanic full-time equivalent student enrollment.
Alaska Native- and Native Hawaiian-Serving Institutions	ANNH	Higher Education Act of 1998 <sup>5</sup>	Alaska Native-Serving Institutions are institutions that have at least 20 percent Alaska Native students. Native Hawaiian-Serving Institutions are institutions that have at least 10 percent Native Hawaiian students. These institutions are collectively referred to as ANNH institutions.
Asian American and Native American Pacific Islander-Serving Institutions	AANAPISI	College Cost Reduction and Access Act of 2007 <sup>6,7</sup>	Institutions that have at least 10 percent enrollment of Asian American Pacific Islander students.
Predominantly Black Institutions	PBI	Higher Education Opportunity Act of 2008 <sup>8</sup>	Institutions that serve at least 1,000 undergraduate students; have at least 50 percent low-income or first-generation to college degree-seeking undergraduate enrollment; have low per-full-time undergraduate expenditure in comparison with other institutions offering similar instruction; and enroll at least 40 percent African American students. <sup>9</sup>
Native American-Serving, Nontribal Institutions	NASNTI	Higher Education Opportunity Act of 2008	Institutions that have at least 10 percent enrollment of Native American students. <sup>10</sup>

1 Higher Education Act of 1965, Pub. L. No. 89-329 (1965).

2 Tribally Controlled College or University Assistance Act of 1978, Pub. L. No. 95-471 (1978).

3 TCUs were not established by this piece of legislation, as they are founded by individual Native tribes. Rather, this piece of legislation provides federal support for these institutions.

4 Higher Education Act of 1992, Pub. L. No. 102-325 (1992).

5 Higher Education Act of 1998, Pub. L. No. 105-244 (1998).

6 College Cost Reduction and Access Act of 2007, Pub. L. No. 110-84 (2007).

7 AANAPISIs were first designated under the College Cost Reduction and Access Act of 2007. The AANAPISI program was further expanded under the Higher Education Opportunity Act of 2008 (AANAPISI 2016).

8 Higher Education Opportunity Act of 2008, Pub. L. No. 110-315 (2008).

9 It is important to note that these institutions are not the same as HBCUs in that PBIs are predicated on the institution meeting an enrollment threshold and HBCUs were established for the primary purpose of educating Black students.

10 It is important to note that these institutions are not the same as TCUs in that NASNTIs are predicated on the institution meeting an enrollment threshold, and TCUs were established for the purpose of educating Native American students.

## MSI ENROLLMENT AND OUTCOMES

According to the U.S. Department of Education, in 2015–16, 709 institutions<sup>5</sup> were eligible to apply for federal MSI designation and funding in the United States, its territories, and the District of Columbia. Of this number, 156 were public four-year institutions, 166 were private nonprofit four-year institutions, 321 were public two-year institutions, and 66 were private nonprofit two-year institutions.

**Table 9.2: Total Number of MSIs, by Sector and MSI Type**

	Total	Public Four-Year	Private Nonprofit Four-Year	Public Two-Year	Private Nonprofit Two-Year
Total MSIs	709	156	166	321	66
HBCU	99	40	41	11	7
TCU	34	1	0	25	8
HSI	375	77	88	182	27
ANNH	27	7	3	14	3
PBI	104	8	23	56	17
AANAPISI	120	36	23	54	7
NASNTI	26	9	2	12	3

Source: U.S. Department of Education, College Scorecard, 2015–16

Notes: "Total MSIs" reflects an unduplicated count of institutions. | Institutions eligible for multiple MSI designations are included in the total counts for each MSI type. For example, an institution that is eligible for AANAPISI and HSI designation appears in the total count for both MSI types. | Total number of HSIs includes one non-degree-granting, sub-baccalaureate institution. | Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | Total number of HBCUs does not include the three HBCUs that offer only graduate-level credentials.

The National Student Clearinghouse (NSC) is a national nonprofit organization that works with postsecondary institutions to provide educational reporting, verification, and research services (NSCRC 2018). Eighty-four percent of all Title IV degree-granting colleges and universities voluntarily participate in the Clearinghouse, providing NSC the ability to analyze data for 97 percent of all students enrolled in these institutions (Dundar and Shapiro 2016).

Given the Clearinghouse's ability to follow students as they move through American higher education, including when they transfer from one institution to another, the NSC data provide a robust collection of student enrollment, persistence, transfer, and completion information. For this reason, NSC data provide a more complete picture of student completion than federal data has historically been able to.<sup>6</sup>

This chapter analyzes data for the cohort of students who first enrolled in fall 2010.<sup>7</sup> It analyzes six-year outcomes for select public two-year, public four-year, and private nonprofit four-year MSIs. Completion rates were calculated within six years of first enrollment, following students through spring 2016. Six years represents 300 percent of normal time at public two-year institutions and 150 percent of normal time at four-year institutions.

5 This report used the College Scorecard to identify institutions that were eligible to apply for federal funding in 2015–16 under Title III and Title V of the Higher Education Opportunity Act of 2008. The College Scorecard flagged 718 institutions as eligible to apply for MSI designation and funding. The total number of 709 MSIs includes only institutions that enrolled undergraduate students. Institutions were removed from this total if they did not enroll undergraduate students or if authors could not match enrollment information from the Integrated Postsecondary Education Data System (IPEDS).

6 In 2017, the U.S. Department of Education introduced new outcome measures in an effort to provide a broader picture of student success, particularly for non-first-time, full-time students (Jones 2017), although limitations still exist.

7 Due to small sample size, National Student Clearinghouse (NSC) data presented in this chapter reflect students who first started at an MSI regardless of their racial and ethnic group.

We share data on students overall, as well as students who enrolled in college exclusively full time. Looking at students who enrolled full time is important for two reasons. First, examining the outcomes of exclusively full-time students most closely approximates the Student Right-to-Know or federal graduation rate. However, unlike the federal graduation rate, data from NSC allow us to capture students who complete at an institution other than their starting college or university. Second, we know from decades of research that students who enroll in college full time are more likely to complete. While the proportion of students who enroll exclusively full time is diminishing (Bombardieri 2017; CCSSE 2017; Shapiro et al. 2017), these students are the most likely to complete their programs of study on time, making their completion rates the most straightforward to interpret and compare. Although the data here present six-year outcomes, many students who remain enrolled, regardless of enrollment pattern, will complete a credential outside of this six-year window.

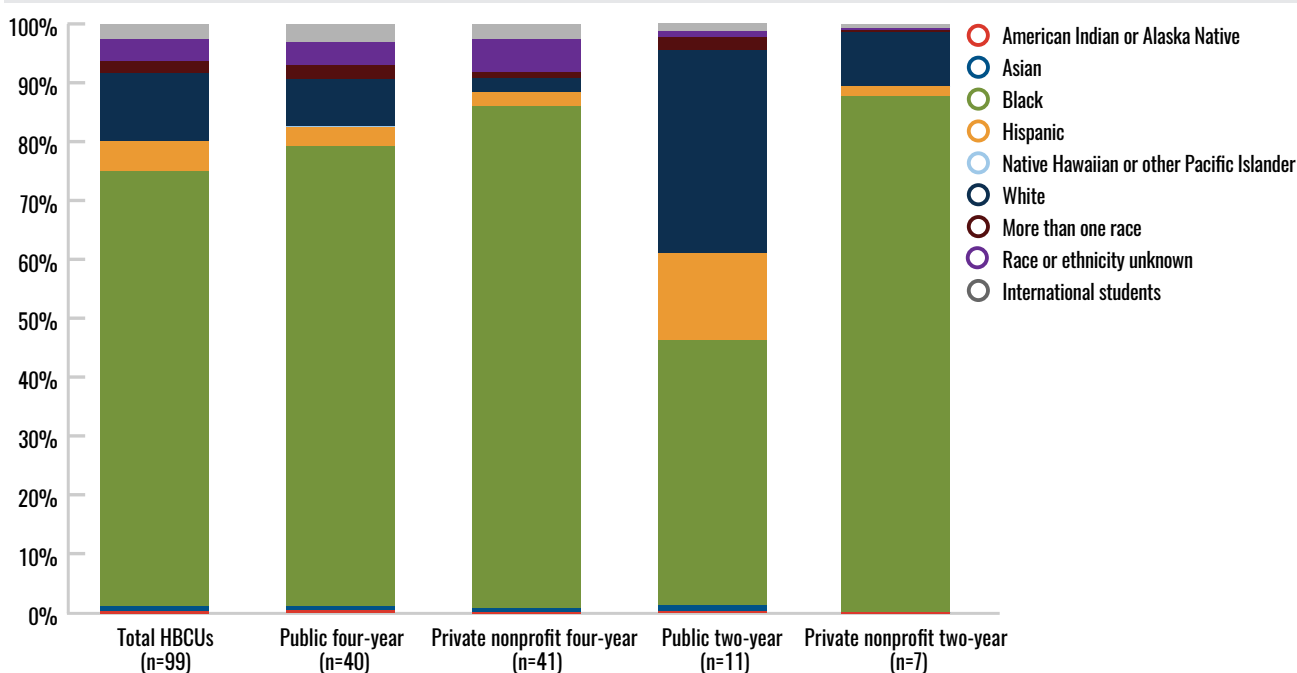
## HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

Historically Black Colleges and Universities (HBCUs) are institutions established prior to 1964, whose principle mission was, and is, the education of Black Americans. In fall 2016, there were 102 HBCUs<sup>8</sup> enrolling 267,276 undergraduate and 35,638 graduate students. Of these, 44 were private nonprofit four-year institutions, 40 were public four-year institutions, 11 were public two-year institutions, and seven were private nonprofit two-year institutions.

### Undergraduate Enrollment<sup>9</sup>

In 2016, Black students represented the majority of undergraduates enrolled at HBCUs. This pattern was evident across post-secondary sectors, with the exception of public two-year HBCUs, which had slightly more racial and ethnic diversity.

**Figure 9.1: Undergraduate Student Enrollment at HBCUs, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Almost three-quarters of all undergraduate students enrolled at HBCUs were Black (73.8 percent). Over one in 10 (11.4 percent) were White, and 5.1 percent were Hispanic. The remaining 9.7 percent were from other backgrounds,<sup>10</sup> including 2.5 percent who were international students.<sup>11</sup>

8 College Scorecard flagged 102 institutions as HBCUs in 2015–16. Analysis for undergraduate enrollment and completions excludes the three HBCUs that were classified as graduate student only institutions.

9 Counts of institutions are included throughout the enrollment figures in this chapter. It is important to note that undergraduate enrollment data from IPEDS include all institutions within each MSI type that report federal data to the U.S. Department of Education. Completion rate data from the NSC only include those institutions that voluntarily report data to the NSC. As a result, counts of students are included throughout the outcomes tables in this chapter.

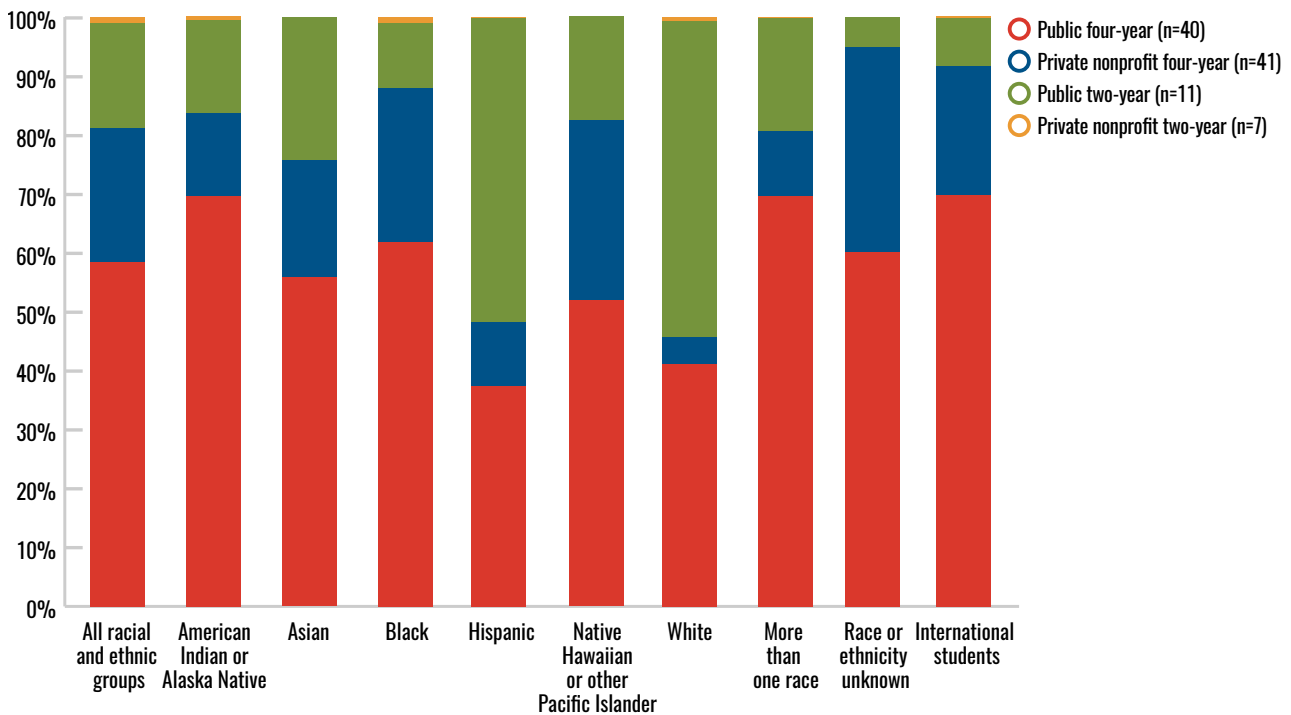
10 Race and ethnicity unknown is included among the racial and ethnic categories within IPEDS data, which are used in this chapter of the report. As a result, tables and figures include this group alongside other racial and ethnic categories.

11 The National Center for Education Statistics (NCES) defines a nonresident alien as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.” In this report, nonresident aliens are labeled as international students.

- Black students represented the majority of students enrolled at public four-year (78.0 percent), private nonprofit four-year (85.1 percent), and private nonprofit two-year (87.5 percent) HBCUs. However, Black students represented less than half of all students at public two-year HBCUs (45.0 percent), followed by White students (34.3 percent) and Hispanic students (14.7 percent).

Over half of all Black undergraduate students enrolled at HBCUs attended a public four-year HBCU (61.9 percent), followed by private nonprofit four-year (26.1 percent), public two-year (10.9 percent), and private nonprofit two-year (1.1 percent) HBCUs. The majority of other student groups also enrolled in public four-year HBCUs, with the exception of Hispanic and White students, who were more likely to enroll in public two-year HBCUs (51.6 and 53.5 percent, respectively), compared with other sectors.

**Figure 9.2: Undergraduate Student Enrollment at HBCUs Across Sectors, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

## Public Two-Year HBCUs: Completion Rates

Overall, one-third of students who started at a public two-year HBCU in fall 2010 completed a credential (at their starting institution or at another institution) within six years. The total completion rate increased to close to half for exclusively full-time students (48.7 percent).

**Table 9.3: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year HBCUs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=6,851)	33.4%	23.9%	3.5%	6.0%	3.6%	13.4%	53.2%
Exclusively Full-Time (n=1,853)	48.7%	40.3%	2.7%	5.7%	8.2%	4.1%	47.2%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Almost one-quarter of all students who started at a public two-year HBCU completed at their starting institution within six years (23.9 percent). The completion rate increased to 40.3 percent for students who enrolled exclusively full time.

### Transfer and Completion

About one in 10 students who started at a public two-year HBCU in 2010 transferred to another institution to complete their first certificate or degree: 3.5 percent did so at another two-year institution and 6.0 percent did so at a four-year institution. About 4 percent of students who completed their first credential at a two-year institution went on to earn a subsequent degree from a four-year institution (3.6 percent). Students who enrolled exclusively full time were slightly less likely to transfer and complete their first credential at a different institution (8.5 percent), but more than twice as likely to complete a subsequent credential at a four-year institution within six years (8.2 percent).

### Non-completion

A little more than one in 10 students in the 2010 cohort remained enrolled in college six years after entry (13.4 percent), and a little more than half were no longer enrolled and had not completed a credential (53.2 percent). These rates decreased for students who enrolled exclusively full time, with 4.1 percent who remained enrolled and 47.2 percent no longer enrolled at any institution in the sixth year.

### Public Four-Year HBCUs: Completion Rates

Overall, 42.0 percent of students who started at a public four-year HBCU in fall 2010 completed a credential (at their starting institution or at another institution) within six years. The total completion rate rose to 60.1 percent for students who attended college exclusively full time.

**Table 9.4: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year HBCUs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=30,354)	42.0%	32.3%	2.9%	6.8%	18.9%	39.0%
Exclusively Full-Time (n=13,568)	60.1%	51.4%	1.7%	7.0%	8.5%	31.4%

Source: National Student Clearinghouse Research Center



## First Completion at Starting Institution

Nearly one-third of students who started at a public four-year HBCU completed at their starting institution (32.3 percent). This completion rate increased to over half for students enrolled exclusively full time (51.4 percent).

## Transfer and Completion

About 10 percent of students completed their credential at another institution: 2.9 percent did so at a two-year institution and 6.8 percent did so at another four-year institution. The transfer and completion rate decreased slightly for students who enrolled exclusively full time, to 8.7 percent.

## Non-completion

Nearly one in five students from the 2010 cohort remained enrolled six years after college entry (18.9 percent), and over one-third were no longer enrolled at any institution (39.0 percent). These rates decreased for students enrolled exclusively full time—the percent of students who remained enrolled fell to 8.5 percent, while the percent of students who left without completing decreased to 31.4 percent.

## Private Nonprofit Four-Year HBCUs: Completion Rates

Nearly half of students who started at a private nonprofit four-year HBCU completed a credential (at their starting institution or at another institution) within six years (47.1 percent). The total completion rate increased for students who attended exclusively full time to 63.6 percent.

**Table 9.5: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year HBCUs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=11,798)	47.1%	37.3%	2.2%	7.6%	16.7%	36.3%
Exclusively Full-Time (n=6,703)	63.6%	55.0%	1.4%	7.2%	6.9%	29.6%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

Nearly four in 10 students who started at a private nonprofit four-year HBCU completed a degree at their starting institution (37.3 percent) within six years. This rate increased to over half for students who enrolled exclusively full time (55.0 percent).

## Transfer and Completion

Nearly one in 10 students completed their first credential at another institution: 2.2 percent did so at a two-year institution and 7.6 percent did so at another four-year institution. These rates decreased slightly for the exclusively full-time sub-cohort: 1.4 percent completed at a two-year institution and 7.2 percent completed at another four-year institution.

## Non-completion

Of students who started at a private nonprofit four-year HBCU in 2010, 16.7 percent remained enrolled in the sixth year, while over one-third of students were no longer enrolled at any institution (36.3 percent). These rates decreased for students enrolled exclusively full time, with 6.9 percent still enrolled and 29.6 percent left without completing a credential.

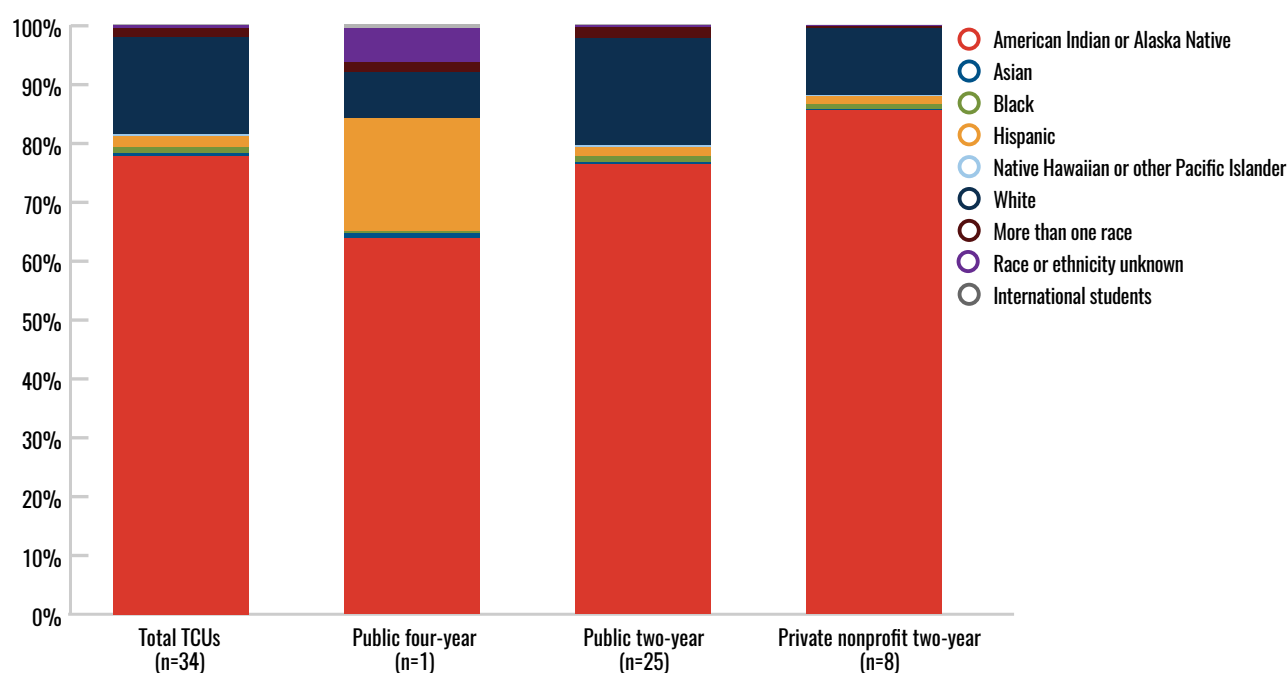
## TRIBAL COLLEGES AND UNIVERSITIES

Tribal Colleges and Universities (TCUs) are chartered by their respective Indian tribes through the sovereign authority of the tribes or by the federal government. In 2016, there were 34 TCUs<sup>12</sup> enrolling 16,677 undergraduate and 143 graduate students. Of these, 25 were public two-year colleges, eight were private nonprofit two-year institutions, and one was a public four-year institution. Due to small sample sizes, completion rate data are unavailable for TCUs.

### Undergraduate Enrollment

American Indian or Alaska Native<sup>13</sup> students represented the majority of undergraduate students enrolled at TCUs, a pattern that held true across sectors.

**Figure 9.3: Undergraduate Student Enrollment at TCUs, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

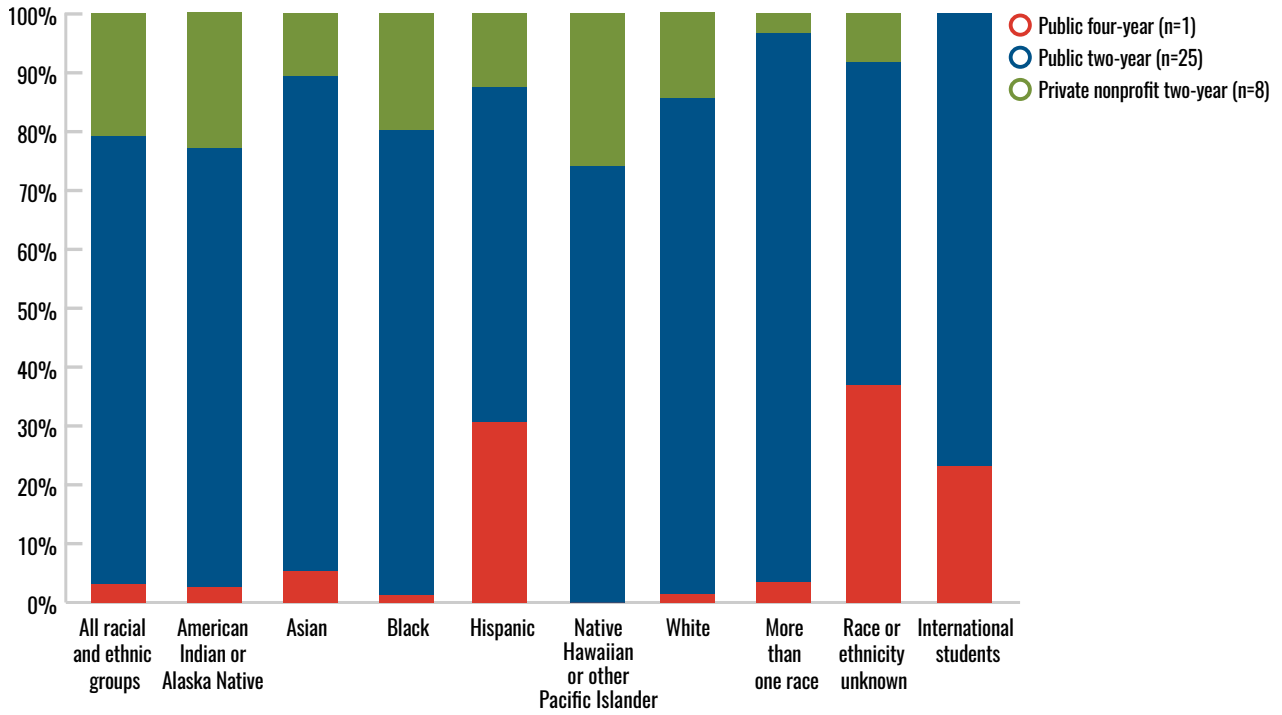
- More than three-quarters of all undergraduate students enrolled at TCUs in 2016 were American Indian or Alaska Native (77.8 percent). White students represented the second largest group (16.5 percent); the remaining 5.7 percent of undergraduate students were from other backgrounds.
- The student body at the one public four-year TCU was slightly more diverse, where Hispanics represented one-fifth of the study body, American Indian or Alaska Native students represented 63.8 percent, and Whites made up 7.7 percent.

Most students attending TCUs enrolled at public two-year institutions, followed by private nonprofit two-year institutions. Nearly three-quarters of all American Indian or Alaska Native undergraduate students enrolled at TCUs attended a public two-year institution (74.5 percent), and slightly less than one-quarter were enrolled at private nonprofit two-year institutions (23.0 percent). The majority of students from other groups were also enrolled in public two-year TCUs. A larger share of Hispanic students, however, were enrolled in the public four-year institution (30.7 percent) than most other groups.

<sup>12</sup> The total count of TCUs only includes those institutions that report data to IPEDS.

<sup>13</sup> Data from IPEDS, from which this analysis was derived, do not disaggregate enrollment data for individuals who are American Indian or Alaska Native. Therefore, estimates in this chapter represent these groups as a combined total.

**Figure 9.4: Undergraduate Student Enrollment at TCUs Across Sector, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

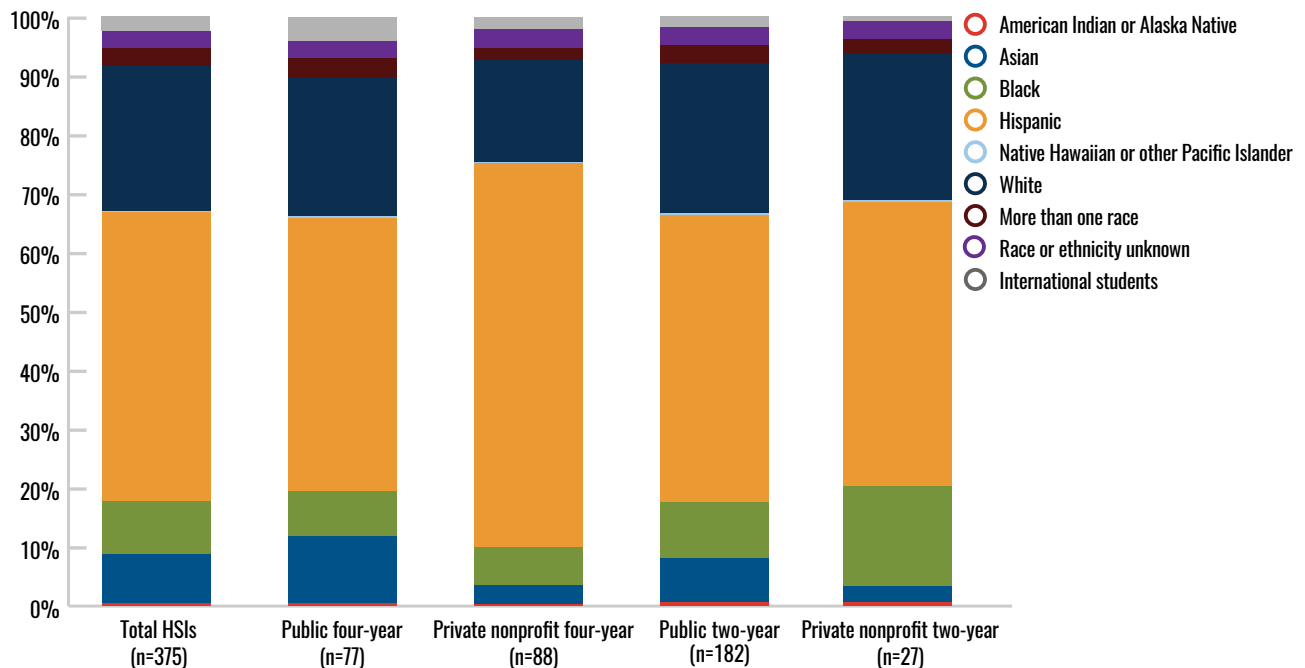
# HISPANIC-SERVING INSTITUTIONS

Hispanic-Serving Institutions (HSIs) are institutions with 25 percent or more total undergraduate Hispanic full-time equivalent student enrollment. In 2016, there were 375 HSIs<sup>14</sup> enrolling about 3.5 million undergraduate and 290,080 graduate students. Of this number, 182 were public two-year colleges, 88 were private nonprofit four-year institutions, 77 were public four-year institutions, and 27 were private nonprofit two-year institutions.

## Undergraduate Enrollment

Hispanic students represented just under half of all students enrolled in HSIs. This pattern was similar across sectors, with the exception of private nonprofit four-year HSIs, where more than half of students were Hispanic.

**Figure 9.5: Undergraduate Student Enrollment at HSIs, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

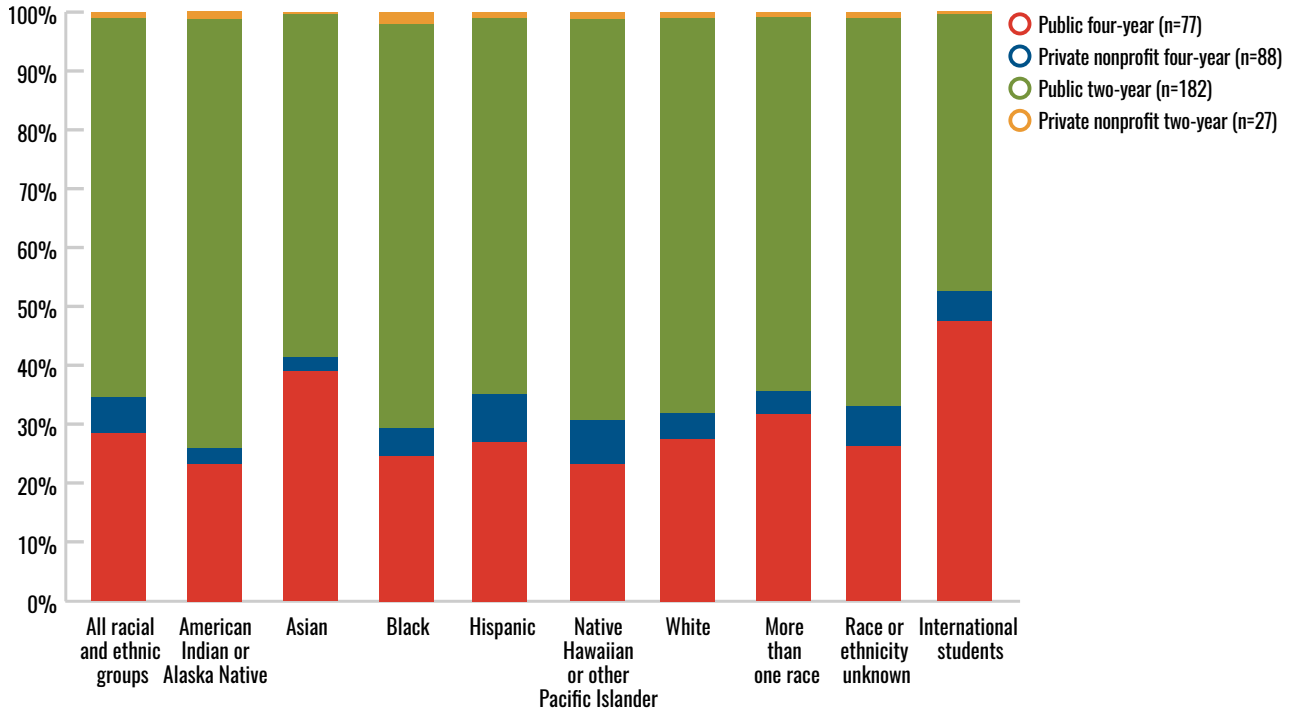
Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | The total count for HSIs includes one non-degree-granting, sub-baccalaureate institution.

- Hispanics represented nearly half of all undergraduate students at HSIs in 2016 (49.0 percent), followed by White (24.6 percent), Black (9.0 percent), and Asian (8.3 percent) students. The remaining 9.2 percent were from other backgrounds, including 2.5 percent who were international students.
- Enrollment at private nonprofit four-year HSIs followed a different pattern than other sectors. Hispanics represented 65.0 percent of students, followed by White (17.3 percent), and Black (6.6 percent) students.

The majority of Hispanic students attending HSIs enrolled in public two-year institutions (63.8 percent), compared with public four-year (27.0 percent), private nonprofit four-year (8.2 percent), and private nonprofit two-year (1.0 percent) HSIs. The majority of students from other groups were also enrolled in public two-year HSIs, with the exception of international students who were as likely to enroll in public two-year and public four-year HSIs (47.1 percent and 47.5 percent, respectively).

<sup>14</sup> The total count for HSIs includes one non-degree-granting, sub-baccalaureate institution.

**Figure 9.6: Undergraduate Student Enrollment at HSI Across Sector, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Notes: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. | The total count for HSI includes one non-degree-granting, sub-baccalaureate institution.

## Public Two-Year HSI: Completion Rates

Over one-third of students who started at a public two-year HSI completed a credential (at their starting institution or at another institution) within six years (34.2 percent). The total completion rate for students who attended exclusively full time rose to 53.0 percent.

**Table 9.6: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year HSI: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=273,604)	34.2%	22.0%	3.6%	8.5%	5.8%	22.1%	43.8%
Exclusively Full-Time (n=43,118)	53.0%	37.9%	3.3%	11.8%	16.8%	4.3%	42.8%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

More than one in five students who began college at a public two-year HSI completed their first credential at their starting institution (22.0 percent). The completion rate was much higher for students who enrolled full time, at 37.9 percent.

## Transfer and Completion

About 12 percent of students overall completed their first credential at another institution: 3.6 percent did so at another two-year institution and 8.5 percent did so at a four-year institution. Among all students who started at a public two-year HSI, 5.8 percent completed an additional, subsequent degree at a four-year institution. These rates increased for students who studied exclusively full time: 15.1 percent of full-time students transferred and completed their first credential at another institution, while the percent of students who went on to complete a subsequent degree at a four-year institution nearly tripled (16.8 percent).

## Non-completion

A little more than one in five students who started college in 2010 remained enrolled in 2016 (22.1 percent). More than 40 percent of students had left without completing a credential (43.8 percent). Exclusively full-time students were substantially less likely to remain enrolled in the sixth year (4.3 percent), but were nearly as likely as students were overall to have left without completing a credential (42.8 percent).

## Public Four-Year HSIs: Completion Rates

Among students who started at a public four-year HSI, over half completed a credential within six years (53.6 percent), either at their starting institution or at another institution. The total completion rate increased to more than three-quarters of exclusively full-time students completed within six years (76.4 percent).

**Table 9.7: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year HSIs: Fall 2010 Cohort**

	<b>Total Completion Rate</b>	<b>1st Completion at Starting Institution</b>	<b>1st Completion at Different Institution: Two-Year</b>	<b>1st Completion at Different Institution: Four-Year</b>	<b>Still Enrolled (at Any Institution)</b>	<b>Not Enrolled (at Any Institution)</b>
<b>Overall Cohort (n=167,859)</b>	53.6%	41.9%	3.0%	8.7%	18.0%	28.5%
<b>Exclusively Full-Time (n=53,705)</b>	76.4%	67.4%	2.0%	7.0%	5.6%	18.1%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

About four in 10 students who started at a public four-year HSI completed at their starting institution (41.9 percent). This rate increased to more than two-thirds of students among those who studied exclusively full time (67.4 percent).

## Transfer and Completion

Over one in 10 students who started at a public four-year HSI transferred and completed at another institution: 3.0 percent did so at a two-year institution and 8.7 percent did so at another four-year institution. Students who enrolled exclusively full time were slightly less likely to complete at another institution (9.0 percent).

## Non-completion

Nearly one in five students remained enrolled six years after starting college (18.0 percent), and more than one-quarter of all students left without completing a degree (28.5 percent). These rates decreased substantially for students who enrolled exclusively full time, where 5.6 percent of full-time students remained enrolled and 18.1 percent had left without a credential.

## Private Nonprofit Four-Year HSIs: Completion Rates

Over half of all students who started at a private nonprofit four-year HSI completed a credential (at their starting institution or at another institution) within six years (61.0 percent). The total completion rate increased to more than three-quarters of exclusively full-time students (76.4 percent).

**Table 9.8: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year HSIs: Fall 2010 Cohort**

	<b>Total Completion Rate</b>	<b>1st Completion at Starting Institution</b>	<b>1st Completion at Different Institution: Two-Year</b>	<b>1st Completion at Different Institution: Four-Year</b>	<b>Still Enrolled (at Any Institution)</b>	<b>Not Enrolled (at Any Institution)</b>
<b>Overall Cohort (n=20,605)</b>	61.0%	48.0%	3.1%	9.9%	12.8%	26.3%
<b>Exclusively Full-Time (n=10,682)</b>	76.4%	66.6%	1.8%	8.0%	4.3%	19.3%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Almost half of all students who started at a private nonprofit four-year HSI completed at their starting institution (48.0 percent) within six years. This rate increased to 66.6 percent for students who enrolled exclusively full time.

### Transfer and Completion

Thirteen percent of students completed at a different institution within six years: 3.1 percent did so at a two-year institution and 9.9 percent did so at a different four-year institution. Roughly one in 10 students who enrolled exclusively full time completed a credential at a different institution (9.8 percent).

### Non-completion

More than 10 percent of students who started in 2010 remained enrolled six years later (12.8 percent), and more than one-quarter were not enrolled in any college and did not earn a degree (26.3 percent). These rates decreased for students who enrolled exclusively full time, of whom 4.3 percent remained enrolled, and 19.3 percent left college without completing a degree.

## ALASKA NATIVE- AND NATIVE HAWAIIAN-SERVING INSTITUTIONS

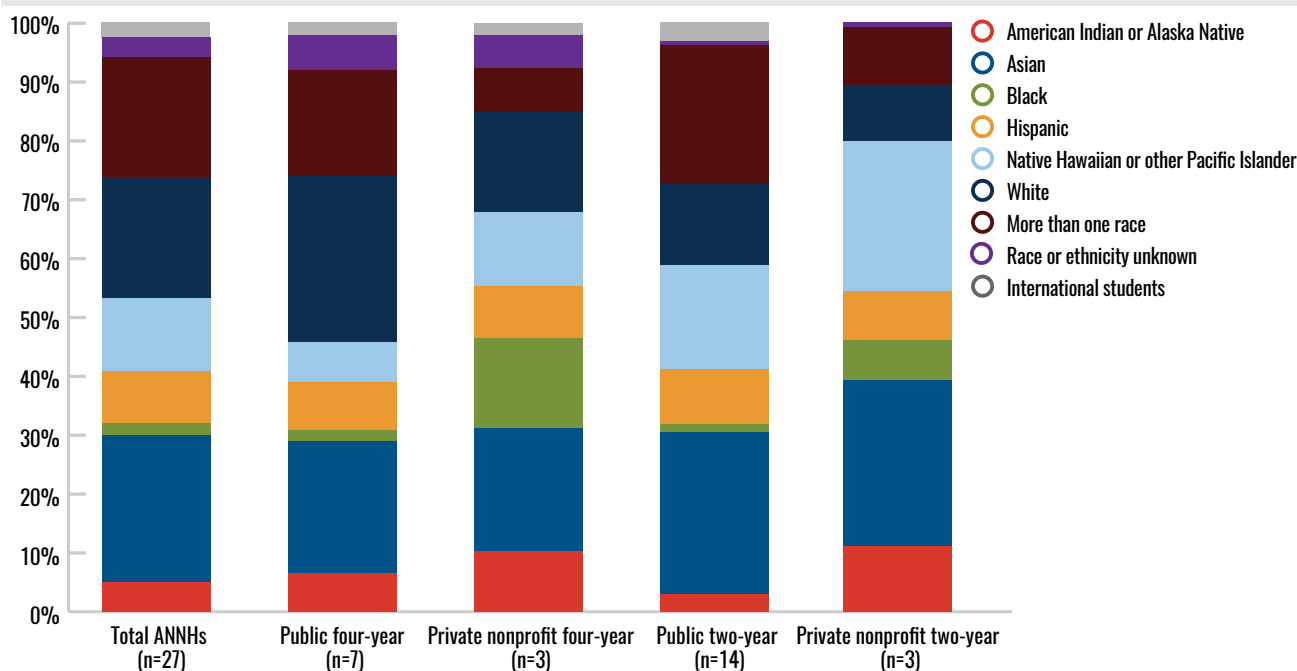
Alaska Native-Serving Institutions are institutions with at least 20 percent Alaska Native undergraduate students. Native Hawaiian-Serving Institutions are institutions with at least 10 percent Native Hawaiian<sup>15</sup> undergraduate student enrollment. Collectively, these institutions are referred to as ANNH institutions; in 2016, there were 27 ANNHs enrolling 83,225 undergraduate and 9,075 graduate students. Of these, 14 were public two-year institutions, seven were public four-year institutions, and three each were private nonprofit two-year and private nonprofit four-year institutions.

This report utilizes data from the U.S. Department of Education's College Scorecard to identify institutions that were eligible in 2015–16 to apply for a grant under Title III and Title V of the Higher Education Opportunity Act of 2008. Under this act, Alaska Native-Serving Institutions and Native Hawaiian-Serving Institutions have different enrollment thresholds for meeting eligibility requirements for federal MSI designation and funding. Although the enrollment threshold varies for the two MSI types, these institutions are collectively referred to as ANNH institutions and are under the same program within Title III. As a result, the College Scorecard identifies institutions as eligible for ANNH designation and funding, but does not explicitly state whether an institution is an Alaska Native-Serving Institution or a Native Hawaiian-Serving Institution. Therefore, the data for this section examine enrollment and outcomes for these institutions as a collective MSI type. Of note, completion rate data for private nonprofit four-year ANNHs were not available due to small sample size.

### Undergraduate Enrollment

Roughly one-quarter of all undergraduate students at ANNHs were Asian. American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students represented slightly fewer than one in five students enrolled at these institutions. Of note, and as described in the text box above, enrollment by distinct racial and ethnic groups at ANNH institutions can be misleading given that the two institution types (Alaska Native-Serving Institutions and Native Hawaiian-Serving Institutions) are combined into one overarching MSI type; the reader should interpret these data with that limitation in mind.

**Figure 9.7: Undergraduate Student Enrollment at ANNHs, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

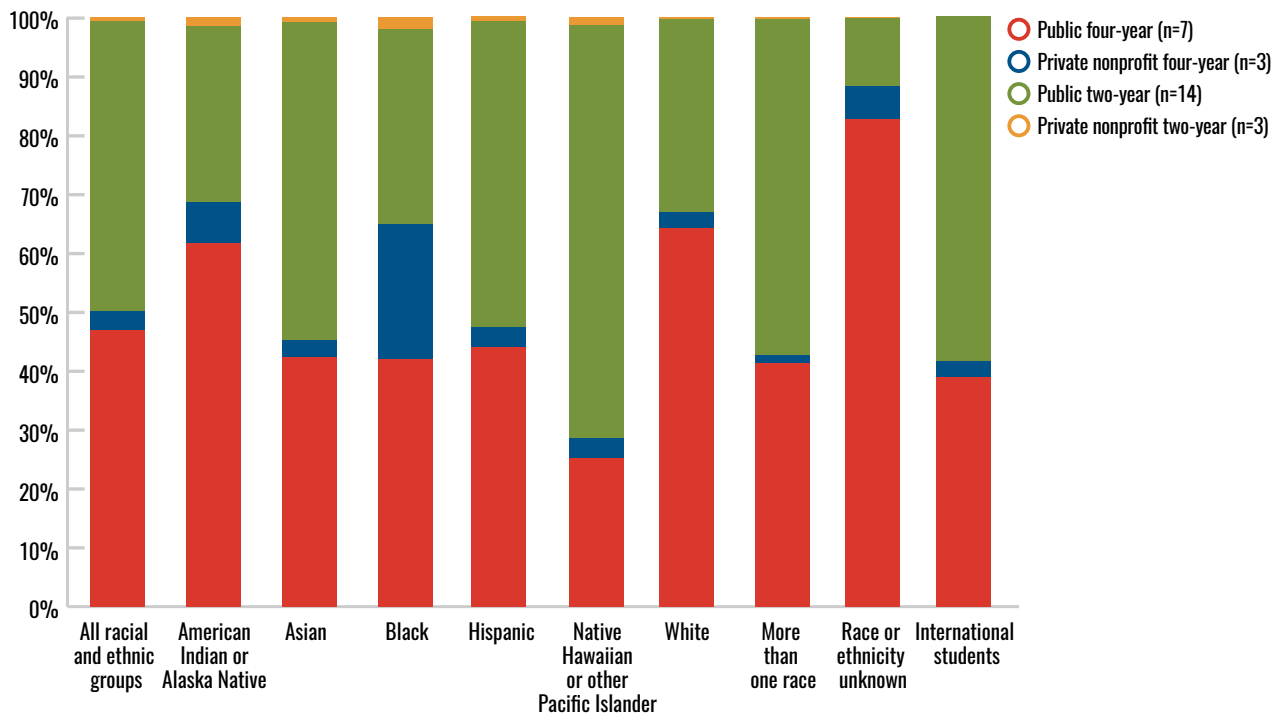
<sup>15</sup> Data from IPEDS, from which this analysis was derived, do not disaggregate enrollment data for individuals who are Native Hawaiian or other Pacific Islander. Therefore, estimates in this chapter represent these groups as a combined total.



- About one-quarter of all undergraduate students enrolled at ANNHs in fall 2016 were Asian (24.9 percent), followed by White students (20.6 percent) and students of more than one race (20.2 percent). American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students represented 17.4 percent of all undergraduate students at ANNHs in 2016. The remaining 16.9 percent were from other backgrounds.
- By sector, American Indian or Alaska Native and Native Hawaiian or other Pacific Islander students together represented the largest share of students at private nonprofit four-year (22.9 percent) and private nonprofit two-year (36.5 percent) institutions. The second largest racial and ethnic group within both sectors was Asian students.

Students enrolled at ANNH institutions were more likely to attend public institutions than private nonprofit institutions. The majority of American Indian or Alaska Native students at ANNHs were enrolled in public four-year institutions (61.7 percent), followed by public two-year (29.9 percent), private nonprofit four-year (6.9 percent), and private nonprofit two-year (1.5 percent) institutions. Native Hawaiian or other Pacific Islander students followed a different pattern, with the majority of these students enrolling in public two-year ANNHs (70.0 percent), followed by public four-year (25.2 percent), private nonprofit four-year (3.4 percent), and private nonprofit two-year (1.4 percent) institutions.

**Figure 9.8: Undergraduate Student Enrollment at ANNHs Across Sector, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- More than half of Asian students (54.0 percent), Hispanic students (52.0 percent), students of more than one race (57.0 percent), and international students (58.4 percent) who attended ANNHs were enrolled in public two-year institutions, while nearly two-thirds of White students were enrolled in public four-year ANNHs (64.3 percent).
- The share of Black students who attended public four-year ANNHs was 42.0 percent, followed by 33.2 percent at public two-year, and 22.8 percent at private nonprofit four-year institutions.

## Public Two-Year ANNHs: Completion Rates

More than one-third of all students who started at a public two-year ANNH completed a credential within six years at their starting institution or at another institution (39.3 percent). The total completion rate increased to slightly more than half for exclusively full-time students (50.7 percent).

**Table 9.9: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year ANNHs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=5,510)	39.3%	31.6%	4.1%	3.7%	7.6%	11.6%	49.1%
Exclusively Full-Time (n=1,483)	50.7%	43.8%	2.5%	4.4%	16.1%	3.0%	46.3%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

Slightly less than one-third of students who started at a public two-year ANNH completed at their starting institution (31.6 percent). This completion rate increased to 43.8 percent for students who enrolled exclusively full time.

### Transfer and Completion

About 8 percent of students who started in 2010 transferred and completed their first credential at another institution: 4.1 percent did so at another two-year institution and 3.7 percent did so at a four-year institution. About 8 percent of students completed another, subsequent degree at a four-year institution (7.6 percent). The rate of students who completed a subsequent degree at a four-year institution more than doubled for students who enrolled exclusively full time (16.1 percent).

### Non-completion

Roughly one in 10 students overall remained enrolled six years after starting college (11.6 percent). Nearly half of all students left without completing a credential (49.1 percent). For exclusively full-time students, the percent that remained enrolled decreased substantially (3.0 percent), while the percent of students who left college without a credential stayed nearly the same (46.3 percent).

## Public Four-Year ANNHs: Completion Rates

Roughly four in 10 students who started at a public four-year ANNH completed a credential within six years (43.8 percent), either at their starting institution or at another institution. The total completion rate for students who attended exclusively full time rose to 69.7 percent.

**Table 9.10: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year ANNHs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=7,370)	43.8%	33.5%	3.7%	6.7%	15.2%	41.0%
Exclusively Full-Time (n=2,442)	69.7%	58.2%	3.3%	8.1%	5.8%	24.6%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

One-third of students who started at a public four-year ANNH completed at their starting institution (33.5 percent). The completion rate increased to 58.2 percent among students who enrolled exclusively full time.

## Transfer and Completion

About 10 percent of students transferred and completed their first credential at a different institution: 3.7 did so at a two-year institution and 6.7 percent did so at another four-year institution. These rates increased slightly for students who enrolled exclusively full time to 11.4 percent, with 3.3 percent completing at a two-year institution and 8.1 percent completing at a different four-year institution.

## Non-completion

About 15 percent of students in the 2010 cohort remained enrolled in college in the sixth year (15.2 percent), while nearly four in 10 had left without completing a credential (41.0 percent). These numbers decreased substantially for students who studied exclusively full time, of whom 5.8 percent remained enrolled and nearly one-quarter left college without a credential (24.6 percent).

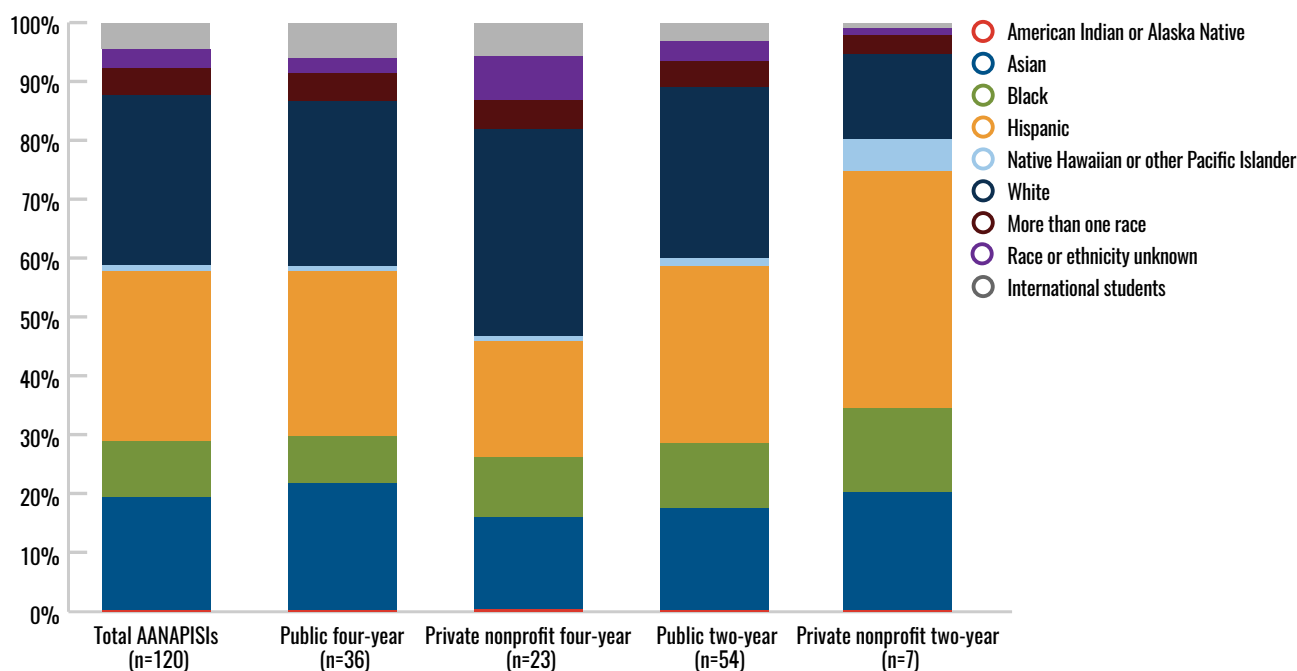
# ASIAN AMERICAN AND NATIVE AMERICAN PACIFIC ISLANDER-SERVING INSTITUTIONS

Asian American and Native American Pacific Islander-Serving Institutions (AANAPISIs) are institutions with at least 10 percent Asian American and Pacific Islander undergraduate student enrollment. In 2016, there were 120 AANAPISIs enrolling over 1.3 million undergraduate and 169,241 graduate students. Of this number, 54 were public two-year colleges, 36 were public four-year institutions, 23 were private nonprofit four-year institutions, and seven were private nonprofit two-year institutions.

## Undergraduate Enrollment

Across all AANAPISIs, Asians and Native Hawaiians or other Pacific Islanders represented nearly one in five undergraduate students. The total share of Asian and Native Hawaiian or other Pacific Islander students varied by sector.

**Figure 9.9: Undergraduate Student Enrollment at AANAPISIs, by Sector and Race and Ethnicity: 2016**



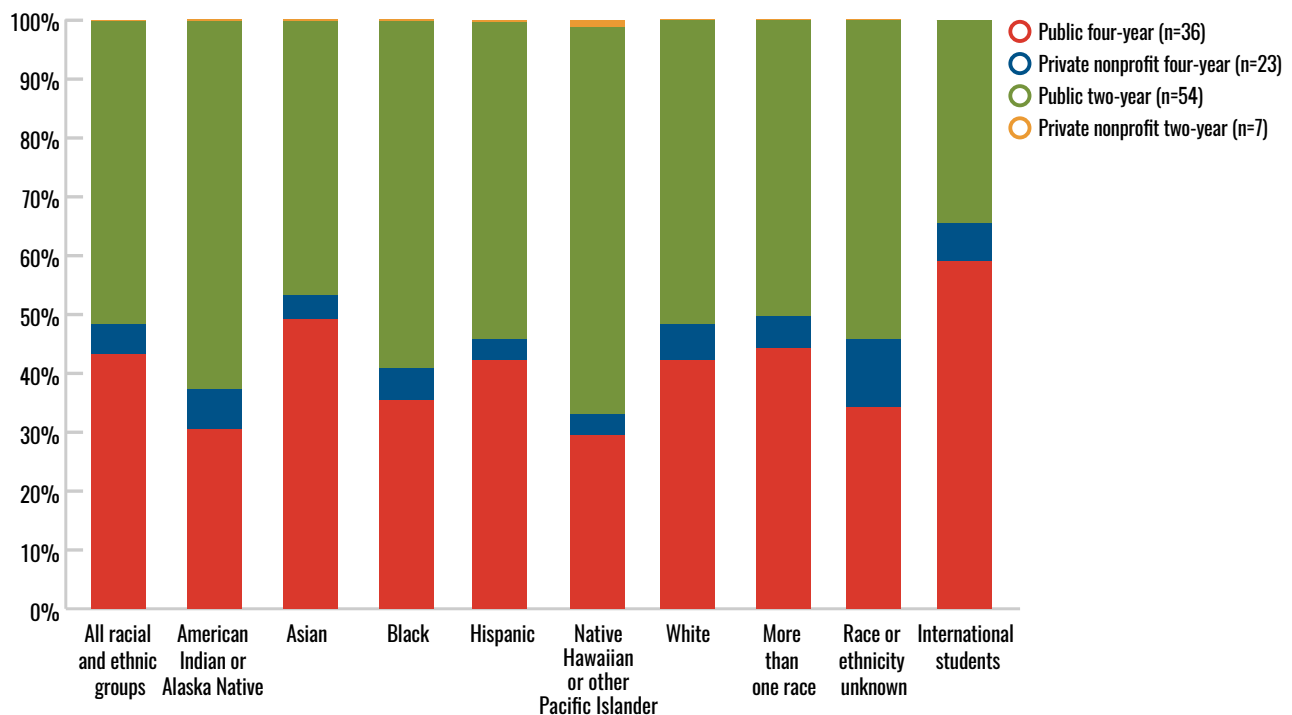
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Over half of all undergraduate students enrolled at AANAPISIs in fall 2016 were White or Hispanic (28.9 percent and 28.7 percent, respectively). Nearly one in five students at AANAPISIs were Asian or Native Hawaiian or other Pacific Islander students (20.2 percent), one in 10 were Black (9.6 percent), and the remaining 12.5 percent were from other backgrounds.
- The racial and ethnic backgrounds of students enrolled at public AANAPISIs followed a similar pattern. Differences emerge, however, among private nonprofit AANAPISIs. Asian and Native Hawaiian or other Pacific Islander students represented 16.5 percent of all students at private nonprofit four-year AANAPISIs, the third largest group behind White (35.1 percent) and Hispanic (19.8 percent) students. At private nonprofit two-year AANAPISIs, Asian and Native Hawaiian or other Pacific Islander students represented nearly 25 percent of all students, the second largest racial or ethnic group behind Hispanic students (40.1 percent).

A little more than half of all students enrolled at AANAPISIs attended a public two-year institution. This increased to nearly two-thirds of all students from Native Hawaiian or other Pacific Islander backgrounds. Nearly half of Asian students enrolled at AANAPISIs attended a public four-year institution (49.1 percent), followed by public two-year institutions (46.4 percent) and 4.5 percent who were enrolled in private nonprofit two-year and four-year institutions. Native Hawaiian or other Pacific Islander students attending AANAPISIs had a different enrollment pattern, with nearly two-thirds of these students enrolling in public two-year institutions (65.7 percent), followed by public four-year (29.4 percent) and private nonprofit four-year and two-year institutions (4.8 percent). With the exception of international students, over half of all other student groups enrolled in AANAPISIs were in two-year colleges. The majority of international students enrolled in AANAPISIs were in public four-year institutions (58.9 percent).

**Figure 9.10: Undergraduate Student Enrollment at AANAPISIs Across Sectors, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

### Public Two-Year AANAPISIs: Completion Rates

Nearly four in 10 students who started at a public two-year AANAPISI completed a credential, at their starting institution or at another institution, within six years (37.6 percent). The total completion rate for students who attended exclusively full time rose to 60.6 percent.

**Table 9.11: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year AANAPISIs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=86,330)	37.6%	24.2%	3.8%	9.6%	7.9%	21.6%	40.8%
Exclusively Full-Time (n=14,976)	60.6%	42.4%	3.2%	15.1%	21.8%	3.9%	35.5%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

Nearly one-quarter of all students who started at a public two-year AANAPISI completed their first credential at their starting institution (24.2 percent). This completion rate nearly doubled for exclusively full-time students (42.4 percent).

## Transfer and Completion

About 13 percent of students overall completed their first credential at another institution: 3.8 percent did so at another two-year institution and 9.6 percent did so at a four-year institution. About 8 percent of students completed another, subsequent degree at a four-year institution within six years (7.9 percent). Students who enrolled exclusively full time were more likely to transfer and complete their first credential within six years: 3.2 percent did so at another two-year institution and 15.1 percent did so at a four-year institution. Exclusively full-time students were also nearly three times as likely to complete a subsequent degree at a four-year institution (21.8 percent).

## Non-completion

Slightly more than one in five students who started at a public two-year AANAPISI remained enrolled in the sixth year (21.6 percent). The percent of students who had left without completing a credential was nearly double that at 40.8 percent. Students who enrolled exclusively full time were much less likely to remain enrolled in the sixth year (3.9 percent), and were less likely to have left college without a credential (35.5 percent).

## Public Four-Year AANAPISIs: Completion Rates

Roughly six in 10 students who started at a public four-year AANAPISI completed a credential within six years (61.4 percent), either at their starting institution or at another institution. The total completion rate for students who attended exclusively full time rose to 82.8 percent.

**Table 9.12: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year AANAPISIs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=87,062)	61.4%	49.4%	2.7%	9.3%	15.7%	22.9%
Exclusively Full-Time (n=35,411)	82.8%	73.3%	1.5%	7.9%	5.1%	12.1%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

Almost half of all students who started at a public four-year AANAPISI completed their first credential at their starting institution within six years (49.4 percent). This rate increased for students who enrolled exclusively full time, of whom nearly three-quarters completed at their starting institution (73.3 percent).

## Transfer and Completion

About 12 percent of students completed their first credential at another institution: 2.7 percent did so at a two-year institution and 9.3 percent did so at another four-year institution. This rate decreased for the exclusively full-time student cohort, of whom 9.4 percent completed at a different institution.

## Non-completion

Approximately 16 percent of students and 5.1 percent of exclusively full-time students remained enrolled in 2016. More than 22 percent of all students had yet to complete a credential and were no longer enrolled in the sixth year. This rate decreased to about 12 percent among students who enrolled exclusively full time.

## Private Nonprofit Four-Year AANAPISIs: Completion Rates

About seven in 10 students who started at a private nonprofit four-year AANAPISI completed a credential within six years, at their starting institution or at another institution (73.0 percent). The total completion rate for exclusively full-time students was 87.3 percent.

**Table 9.13: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year AANAPISIs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=11,274)	73.0%	60.2%	2.9%	9.9%	10.6%	16.4%
Exclusively Full-Time (n=6,956)	87.3%	77.2%	1.4%	8.7%	2.6%	10.1%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

The majority of all students who started at a private nonprofit four-year AANAPISI in 2010 completed at their starting institution within six years (60.2 percent). This rate increased to 77.2 percent among students who enrolled exclusively full time.

## Transfer and Completion

Around 13 percent of students completed their first credential at another institution: 2.9 percent did so at a two-year institution and 9.9 percent did so at another four-year institution. Students who enrolled exclusively full time were slightly less likely to complete their first credential at another institution (10.1 percent).

## Non-completion

Roughly one in 10 students overall (10.6 percent) and 2.6 percent of exclusively full-time students remained enrolled in the sixth year. A little more than 16 percent of all students and 10.1 percent of exclusively full-time students left college without completing a degree within six years.

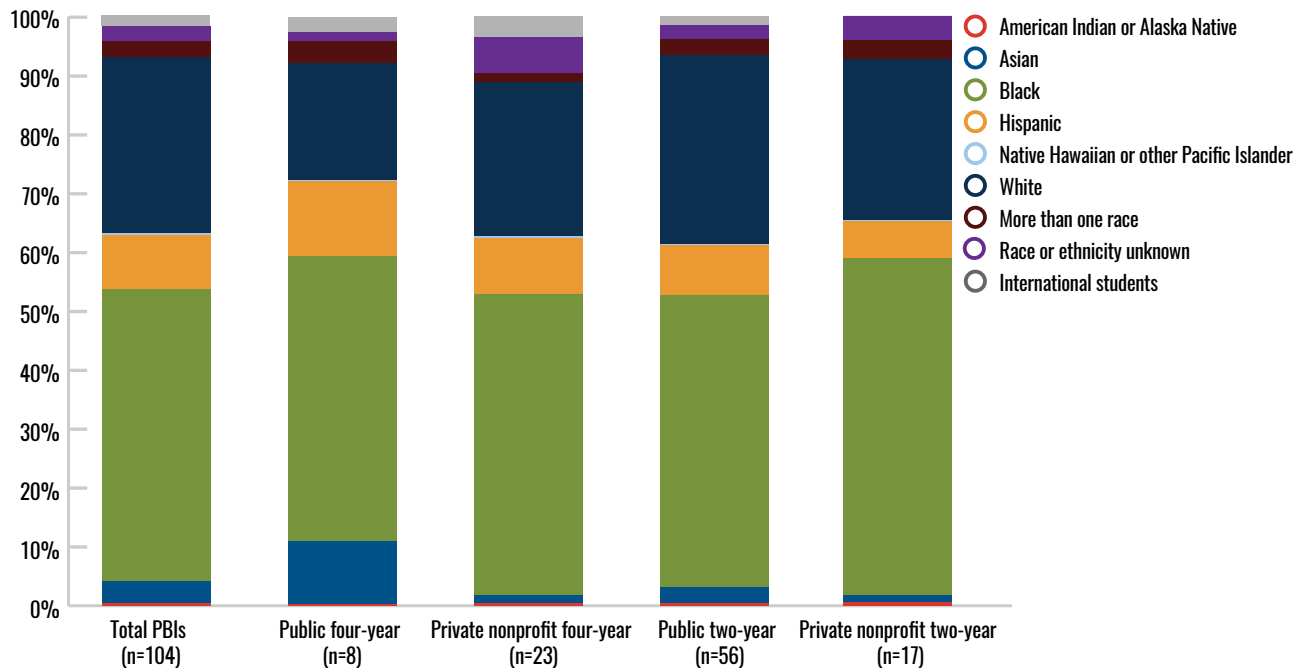
## PREDOMINANTLY BLACK INSTITUTIONS

Predominantly Black Institutions (PBIs) are those that enroll at least 1,000 undergraduate students, have at least 50 percent low-income or first-generation college degree-seeking undergraduate student enrollment, have low undergraduate expenditures in comparison with other institutions offering similar instruction, and enroll at least 40 percent African American students. PBIs are different from HBCUs in that PBIs must meet these criteria before receiving federal designation, whereas HBCUs were established for the purpose of educating Black Americans. In 2016, there were 104 PBIs enrolling over 403,982 undergraduate and 22,209 graduate students—56 were public two-year colleges, 23 were private nonprofit four-year, 17 were private nonprofit two-year institutions, and eight were public four-year institutions.

### Undergraduate Enrollment

Black students represented nearly half of all students enrolled at PBIs. This pattern continued across all sectors, with the exception of private nonprofit two-year PBIs, where Black students represented nearly six in 10 students.

**Figure 9.11: Undergraduate Student Enrollment at PBIs, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

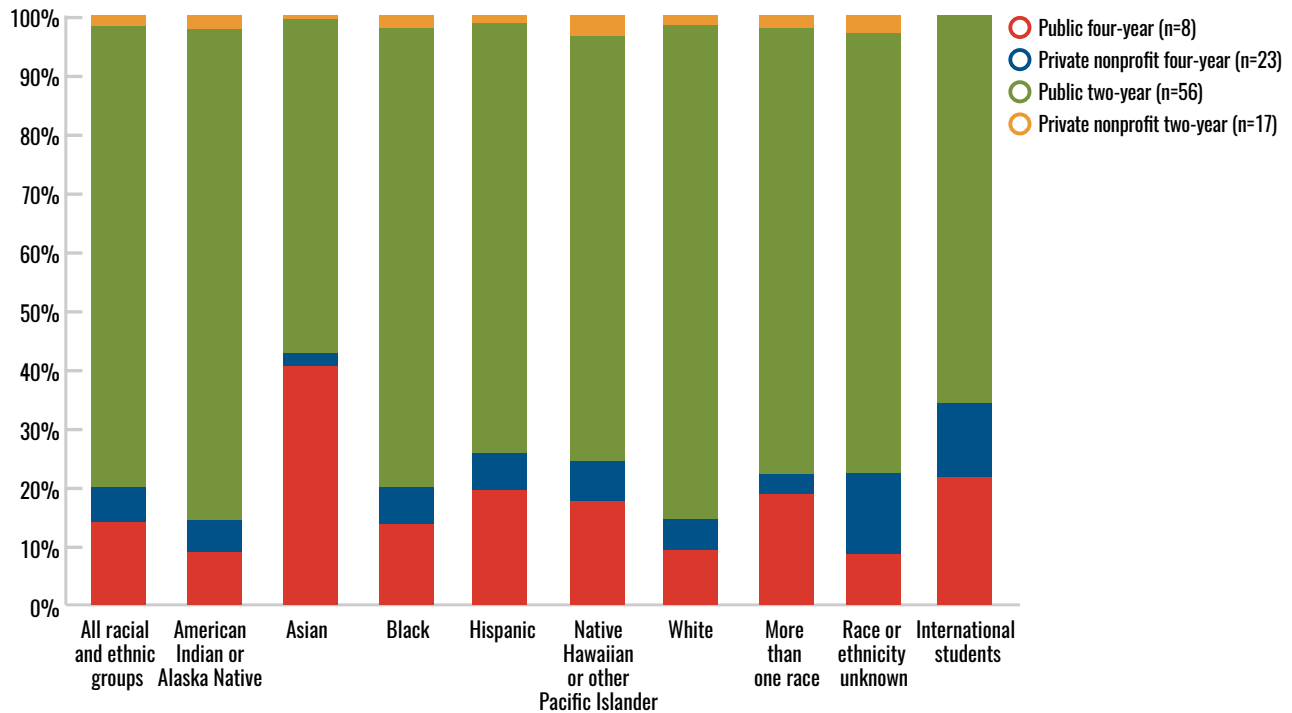
- About half of all undergraduate students enrolled at PBIs in fall 2016 were Black (49.5 percent), followed by White (30.0 percent) and Hispanic (9.2 percent) students. The remaining 11.3 percent were from other backgrounds.
- Similar enrollment patterns occurred across PBI sectors, though the share of Black students increased to nearly six in 10 at private nonprofit two-year PBIs (57.3 percent).

Across all groups, the majority of students who were enrolled at PBIs attended public two-year institutions, the dominant PBI type. Over three-quarters of all Black students attending PBIs were enrolled in a public two-year institution (78.0 percent), followed by public four-year (13.7 percent), private nonprofit four-year (6.2 percent), and private nonprofit two-year (2.2 percent).



percent) institutions. The majority of students across all other backgrounds followed a similar pattern, and were enrolled in public two-year PBIs. Asian students were more likely than their peers to enroll in public four-year PBIs (40.4 percent).

**Figure 9.12: Undergraduate Student Enrollment at PBIs Across Sectors, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

## Public Two-Year PBIs: Completion Rates

Just over one-third of students who started at a public two-year PBI completed a credential at their starting institution or at another institution within six years (33.8 percent). The total completion rate rose for students who attended exclusively full time to 45.3 percent.

**Table 9.14: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year PBIs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=62,693)	33.8%	23.5%	3.5%	6.8%	4.0%	14.8%	51.4%
Exclusively Full-Time (n=14,869)	45.3%	34.9%	2.7%	7.7%	9.3%	4.0%	50.7%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

Slightly less than one-quarter of all students who first began college at a public two-year PBI in 2010 completed at their starting institution within six years (23.5 percent). This rate increased to 34.9 percent for students who enrolled exclusively full time.

## Transfer and Completion

Approximately 10 percent of students overall (10.3 percent) and those who studied exclusively full time (10.4 percent) completed their first credential at a different institution. Four percent of all students completed another, subsequent degree at a four-year institution within six years. This rate more than doubled for students who enrolled exclusively full time (9.3 percent).

## Non-completion

About 15 percent of students overall remained enrolled in 2016 (14.8 percent), compared with only 4.0 percent of exclusively full-time students. Roughly half of students overall, as well as those who attended exclusively full time, left college without completing a credential within six years (51.4 and 50.7 percent, respectively).

## Public Four-Year PBIs: Completion Rates

Half of all students who started at a public four-year PBI completed a credential within six years (49.9 percent), either at their starting institution or at another institution. Nearly 70 percent of exclusively full-time students completed a credential at any institution in this same period (68.3 percent).

**Table 9.15: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Public Four-Year PBIs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=9,197)	49.9%	34.6%	3.6%	11.7%	20.9%	29.2%
Exclusively Full-Time (n=2,773)	68.3%	53.2%	2.1%	13.0%	7.8%	24.0%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

A little more than one-third of all students who first enrolled at a public four-year PBI completed at their starting institution within six years (34.6 percent). This rate increased to more than half of students who enrolled exclusively full time (53.2 percent).

## Transfer and Completion

Approximately 15 percent of students overall, as well as exclusively full-time students, completed their credential at a different institution (15.3 percent and 15.1 percent, respectively).

## Non-completion

About one in five students overall were still enrolled in the sixth year (20.9 percent), while nearly three in 10 students had left without completing a credential (29.2 percent). These rates decreased for students who enrolled exclusively full time, where the percent of students who remained enrolled fell to 7.8 percent, and the percent of students who left without completing decreased slightly to 24.0 percent.

## Private Nonprofit Four-Year PBIs: Completion Rates

About four in 10 students who started at a private nonprofit four-year PBI completed a credential within six years, either at their starting institution or at another institution (42.7 percent). Over half of exclusively full-time students completed in six years (55.8 percent).

**Table 9.16: Six-Year Outcomes (150% of Normal Time) for Students Who Started at Private Nonprofit Four-Year PBIs: Fall 2010 Cohort**

	<b>Total Completion Rate</b>	<b>1st Completion at Starting Institution</b>	<b>1st Completion at Different Institution: Two-Year</b>	<b>1st Completion at Different Institution: Four-Year</b>	<b>Still Enrolled (at Any Institution)</b>	<b>Not Enrolled (at Any Institution)</b>
<b>Overall Cohort (n=3,282)</b>	42.7%	28.3%	3.3%	11.0%	15.8%	41.5%
<b>Exclusively Full-Time (n=1,332)</b>	55.8%	44.2%	2.4%	9.2%	6.7%	37.5%

Source: National Student Clearinghouse Research Center

### First Completion at Starting Institution

More than one-quarter of all students who started at a private nonprofit four-year PBI completed their first credential at their starting institution (28.3 percent). This rate increased to 44.2 percent for students who enrolled exclusively full time.

### Transfer and Completion

About 14 percent of students completed at a different institution: 3.3 percent did so at a two-year institution and 11.0 percent did so at another four-year institution. Roughly 12 percent of students who enrolled exclusively full time completed at a different institution (11.6 percent).

### Non-completion

Approximately 16 percent of all students remained enrolled in the sixth year (15.8 percent), and 41.5 percent were no longer enrolled in any institution. These rates decreased for students who enrolled exclusively full time, with 6.7 percent still enrolled in the sixth year and 37.5 having left without completing a credential.

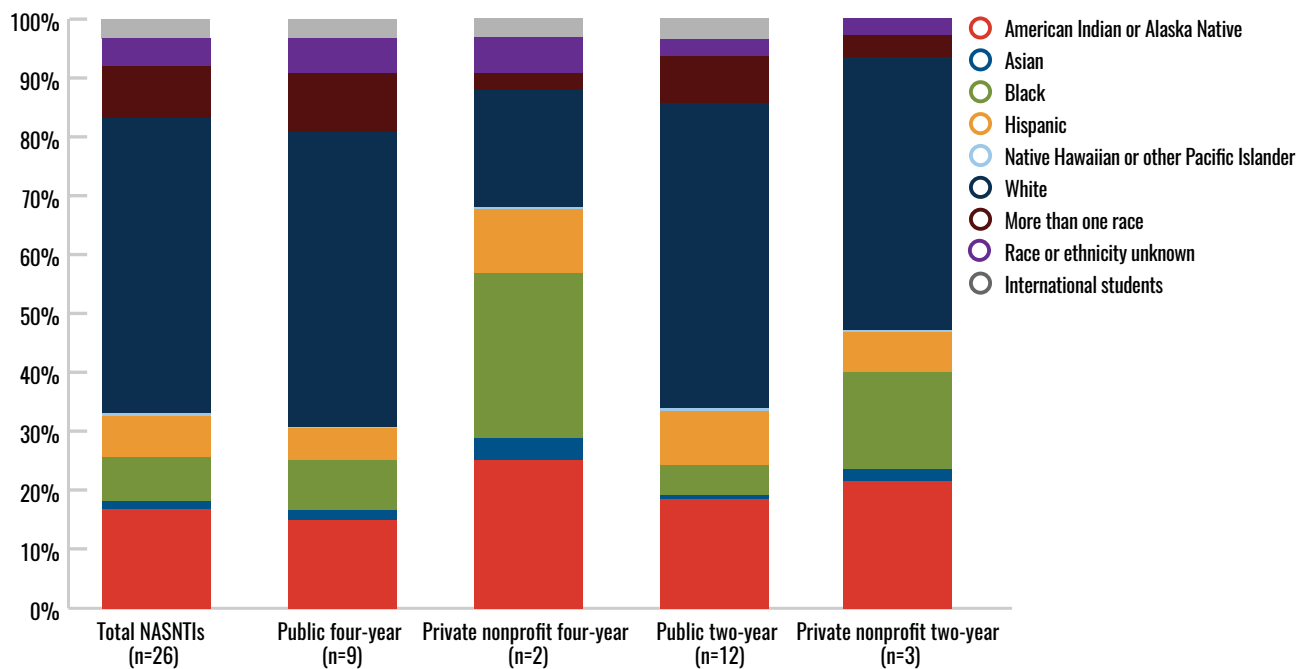
# NATIVE AMERICAN-SERVING NONTRIBAL INSTITUTIONS

Native American-Serving Nontribal Institutions (NASNTIs) are institutions that have at least 10 percent undergraduate enrollment of Native American students. These institutions are different from TCUs in that NASNTIs receive federal designation predicated on reaching the established enrollment threshold, while TCUs were established for the purpose of educating Native American students. In 2016, there were 26 NASNTIs enrolling over 63,216 undergraduate and 4,460 graduate students. Of these, 12 were public two-year colleges, nine were public four-year, three were private nonprofit two-year, and two were private nonprofit four-year institutions. Of note, due to small sample size, the NSC data presented here do not capture undergraduate outcomes at private nonprofit four-year institutions.

## Undergraduate Enrollment

Overall, American Indian or Alaska Native students were the second largest student group at these institutions. The racial and ethnic breakdown of the student body differed by sector, with private nonprofit NASNTIs having more racial and ethnic diversity than public institutions.

**Figure 9.13: Undergraduate Student Enrollment at NASNTIs, by Sector and Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

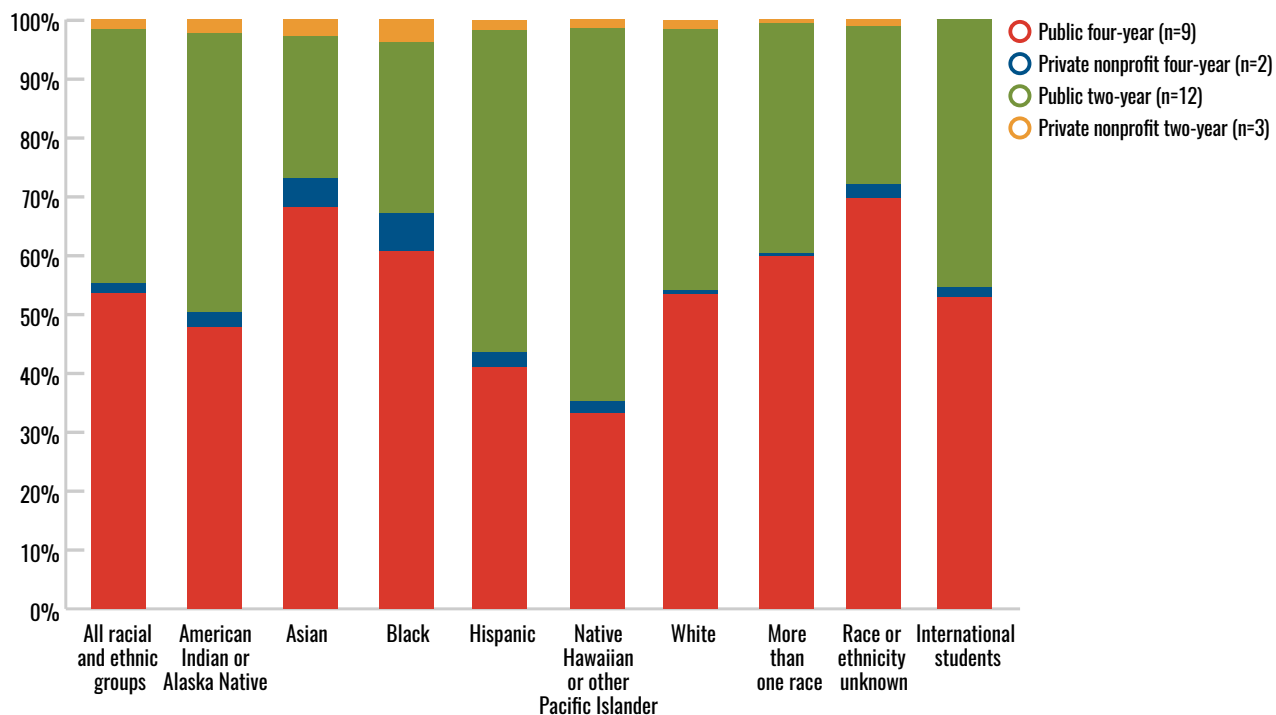
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- American Indian or Alaska Native students represented 16.8 percent of all undergraduate students enrolled in NASNTIs in fall 2016, the second largest racial or ethnic group, behind White students (50.1 percent). Combined, nearly one-quarter of students at NASNTIs were Black (7.5 percent), Hispanic (7.1 percent), or of more than one race (8.8 percent).
- At private nonprofit four-year NASNTIs, over one-quarter of all students were Black (28.1 percent), followed by American Indian or Alaska Native (25.2 percent) and White students (20.0 percent). American Indian or Alaska Native students represented about one in five students at private nonprofit two-year NASNTIs, the second largest group behind White students (46.3 percent).

A little more than half of all students enrolled at NASNTIs attended public four-year institutions (53.5 percent), followed by public two-year institutions (43.0 percent) and private nonprofit two-year and four-year institutions (3.6 percent). American

Indian or Alaska Native students attending NASNTIs were most likely to be enrolled in public four-year and public two-year institutions (47.7 percent and 47.4 percent, respectively), compared with private nonprofit four-year and two-year institutions (2.6 percent and 2.3 percent, respectively). Enrollment differed by student group when looking at NASNTIs across sector. More than half of Asian students (68.1 percent), Black students (60.6 percent), White students (53.3 percent), and students of more than one race (59.8 percent) were enrolled in public four-year NASNTIs, while Hispanic and Native Hawaiian or other Pacific Islander students were more likely to be enrolled in public two-year institutions (54.8 percent and 63.3 percent, respectively).

**Figure 9.14: Undergraduate Student Enrollment at NASNTIs Across Sectors, by Race and Ethnicity: 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

## Public Two-Year NASNTIs: Completion Rates

The total completion rate for students who started at a public two-year NASNTI was 38.2 percent for students overall, and 47.3 percent for exclusively full-time students—this rate captures completion at students’ starting institution or at another institution.

**Table 9.17: Six-Year Outcomes (300% of Normal Time) for Students Who Started at Public Two-Year NASNTIs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Subsequent Completion at a Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=3,408)	38.2%	26.0%	2.9%	9.2%	8.5%	10.6%	51.3%
Exclusively Full-Time (n=969)	47.3%	39.5%	2.1%	5.7%	18.4%	3.6%	49.1%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

More than one-quarter of all students who started at a public two-year NASNTI completed at their starting institution within six years (26.0 percent). This rate increased by 13.5 percentage points for students who enrolled exclusively full time, to 39.5 percent.

## Transfer and Completion

Over one in 10 of all students (12.2 percent) and 7.8 percent of exclusively full-time students completed their credential at a different institution. About 8 percent of all students earned another, subsequent degree at a four-year institution. This rate more than doubled for students who enrolled exclusively full time (18.4 percent).

## Non-completion

Approximately 11 percent of all students remained enrolled in the sixth year. More than half of students overall had yet to complete a credential and were no longer enrolled (51.3 percent). Students who studied exclusively full time were much less likely to remain enrolled (3.6 percent), but nearly as likely as students overall to have left without completing a credential (49.1 percent).

## Public Four-Year NASNTIs: Completion Rates

Roughly four in 10 students who started at a public four-year NASNTI in 2010 completed a degree within six years (40.3 percent), either at their starting institution or at another institution. This number increased to 60.0 percent for exclusively full-time students.

**Table 9.18: Six-Year Outcomes (150% of Normal Time) at Public Four-Year NASNTIs: Fall 2010 Cohort**

	Total Completion Rate	1st Completion at Starting Institution	1st Completion at Different Institution: Two-Year	1st Completion at Different Institution: Four-Year	Still Enrolled (at Any Institution)	Not Enrolled (at Any Institution)
Overall Cohort (n=7,971)	40.3%	28.1%	4.0%	8.2%	16.2%	43.6%
Exclusively Full-Time (n=2,546)	60.0%	49.1%	2.5%	8.5%	5.1%	34.9%

Source: National Student Clearinghouse Research Center

## First Completion at Starting Institution

More than one-quarter of students who started at a public four-year NASNTI completed at their starting institution within six years (28.1 percent). This rate increased to almost half for students who enrolled exclusively full time (49.1 percent).

## Transfer and Completion

About 12 percent of all students and 11.0 percent of exclusively full-time students completed their first credential at another institution.

## Non-completion

Around 16 percent of students overall remained enrolled in college in the sixth year, and 43.6 percent did not complete a credential and were no longer enrolled. These rates decreased for students who studied exclusively full time, with 5.1 percent still enrolled and 34.9 percent who left without completing.

## REFERENCES

- Bombardieri, Marcella. 2017. *Hidden in Plain Sight: Understanding Part-Time College Students in America*. Washington, DC: Center for American Progress.
- CARE (National Commission on Asian American and Pacific Islander Research in Education). 2013. *Partnership for Equity in Education Through Research (PEER): Findings from the First Year of Research on AANAPISIs*. Los Angeles: CARE.
- CCSSE (Center for Community College Student Engagement). 2017. *Even One Semester: Full-Time Enrollment and Student Success*. Austin, TX: The University of Texas at Austin, CCSSE.
- Dundar, Afet, and Doug Shapiro. 2016. *The National Student Clearinghouse as an Integral Part of the National Postsecondary Data Infrastructure*. Herndon, VA: National Student Clearinghouse Research Center.
- Espinosa, Lorelle L., Robert Kelchen, and Morgan Taylor. 2018. *Minority Serving Institutions as Engines of Upward Mobility*. Washington, DC: American Council on Education.
- Espinosa, Lorelle L., Jonathan M. Turk, and Morgan Taylor. 2017. *Pulling Back the Curtain: Enrollment and Outcomes at Minority Serving Institutions*. Washington, DC: American Council on Education.
- Garcia, Gina A. 2017. "Defined by Outcomes or Culture? Constructing an Organizational Identity for Hispanic-Serving Institutions." *American Educational Research Journal* 54 (15): 111S–134S.
- Garcia, Gina A., and Otgonjargal Okhidoi. 2015. "Culturally Relevant Practices that "Serve" Students at Hispanic-Serving Institutions." *Innovative Higher Education* 40 (4): 345–357.
- Hussar, William J., and Tabitha M. Bailey. 2017. *Projections of Education Statistics to 2025*. NCES 2017-019. Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Jones, Gigi. 2017. "Expanding Student Success Rates to Reflect Today's Students." *NCES Blog*, National Center for Education Statistics. October 10, 2017. <https://nces.ed.gov/blogs/nces/post/expanding-student-success-rates-to-reflect-today-s-college-students>.
- National Academies of Sciences, Engineering, and Medicine. 2018. *Minority Serving Institutions: America's Underutilized Resource for Strengthening the STEM Workforce*. Washington, DC: The National Academies Press.
- NSCRC (National Student Clearinghouse Research Center). 2018. "About Us." <https://nscresearchcenter.org/aboutus>.
- Shapiro, Doug, Afet Dundar, Faye Huie, Phoebe Khasiala Wakhungu, Xin Yuan, Angel Nathan, and Ayesha Bhimdiwali. 2017. *Completing College: A National View of Student Completion Rates—Fall 2011 Cohort*. Signature Report No. 14. Herndon, VA: National Student Clearinghouse Research Center.
- Teranishi, Robert, Margary Martin, Loni Bordoloi Pazich, Cynthia M. Alcantar, and Tu-Lien Kim Nguyen. 2014. *Measuring the Impact of MSI-Funded Programs on Student Success: Findings from the Evaluation of Asian American and Native American Pacific Islander-Serving Institutions*. Los Angeles: CARE (National Commission on Asian American and Pacific Islander Research in Education).





## CHAPTER 10



# Postsecondary Faculty and Staff





# INTRODUCTION

Conversations on diversity in higher education often focus solely on student diversity, overlooking the importance of diversity among faculty, staff, and leadership. This diversity is critical, both for the effective management of the institutions, given research that has shown that diverse companies and teams are more productive and innovative (Lorenzo and Reeves 2018; Hewlett, Marshall, and Sherbin 2013), and for their ability to educate a diverse student body. Diverse boards, presidential cabinets, research teams, and admissions offices, to name a few examples, are imperative for the twenty-first-century campus.

In academe in particular, diverse faculty attract and mentor diverse students—one argument among many for the need to diversify higher education’s faculty body. Furthermore, a diverse pool of faculty has the potential to offer a wider array of methods for inquiry, instruction, and research available within an institution (Antonio 2002). As of 2016, almost three-quarters of full-time faculty<sup>1</sup> at colleges and universities were White. The undergraduate student body was just 52.0 percent White. This imbalance appeared among all full-time faculty, from instructor to full professor, to a different extent at different types of institutions. College administrative, professional, and staff diversity varied greatly as well, depending on the area of work. There was greater racial and ethnic diversity among student affairs and academic affairs staff than in other areas. But the largest shares of employees from underrepresented groups were in service and maintenance staff positions. In the most visible positions at the top of the higher education employment hierarchy, 83.2 percent of college presidents were White in 2016.

## KEY FINDINGS

- Nearly three-quarters of all full-time faculty in 2016 were White, one in five were faculty of color,<sup>2</sup> and about 3 percent each were international faculty<sup>3</sup> or faculty of unknown racial and ethnic backgrounds.<sup>4</sup>
- Among full-time faculty across all types of institutions, larger shares of White and Asian faculty than of other groups were full professors. A larger share of American Indian or Alaska Native faculty, Hispanic faculty, Black faculty, and faculty of more than one race were instructors, lecturers, and faculty with no academic rank<sup>5</sup> than other groups.
- Among full-time faculty at public two-year institutions,<sup>6</sup> larger shares of White and Native Hawaiian or other Pacific Islander faculty were full professors than any other group. About seven in 10 American Indian or Alaska Native and Hispanic faculty were instructors, lecturers, and faculty with no academic rank—the highest percentage of any other group.
- Full-time faculty of color at public four-year institutions were more likely to hold assistant professor positions than White faculty. Approximately one-third of all Native Hawaiian or other Pacific Islander, Black, and full-time faculty of more than one race held the rank of assistant professor, compared with nearly one-quarter of White faculty.

1 Full-time faculty are those individuals reported to the Integrated Postsecondary Education Data System (IPEDS) as full-time instructional staff with faculty status.

2 The group faculty of color includes American Indians or Alaska Natives, Asians, Blacks, Hispanics, Native Hawaiians or other Pacific Islanders, and faculty of more than one race.

3 The National Center for Education Statistics (NCES) defines a nonresident alien as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely.” In this chapter, nonresident aliens are labeled as international faculty.

4 Race and ethnicity unknown is included among the racial and ethnic categories within IPEDS data, which are used in this chapter of the report. As a result, tables and figures include this group alongside other racial and ethnic categories.

5 IPEDS instructs institutions to report full-time instructional staff with faculty status as having no academic rank if their institution operates without standard academic ranks (e.g., full professor, associate professor, assistant professor).

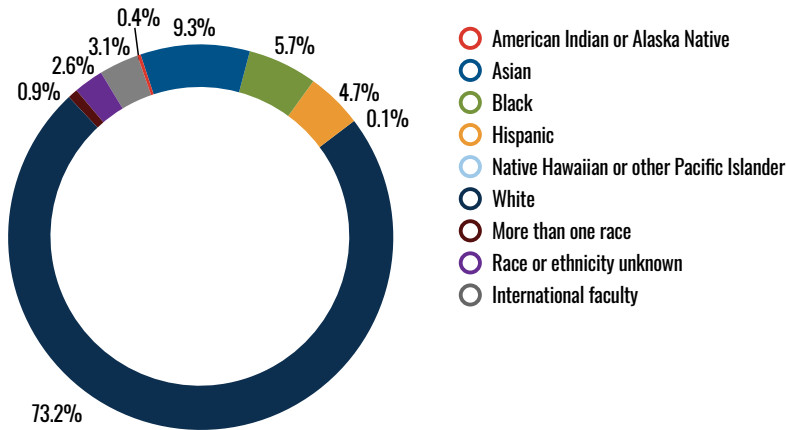
6 Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted. For more information, please refer to the report’s methods section.

- Overall, a larger share of White full-time faculty at private nonprofit four-year institutions had tenure compared with Hispanic and Black full-time faculty.
- Full-time faculty of color were more likely than White full-time faculty to hold assistant professor positions at private nonprofit four-year institutions. Over one-third of full-time faculty of more than one race, and of Asian, Black, and Hispanic full-time faculty were assistant professors, compared with about one-quarter of White full-time faculty. A larger share of White full-time faculty than of any other group were full professors.
- Almost three-quarters of full-time faculty at for-profit institutions were instructors, lecturers, and faculty with no academic rank. The shares in this category ranged from 73.7 percent of White faculty to 82.8 percent of Hispanic faculty and 84.6 percent of American Indian or Alaska Native faculty.
- A little more than one-quarter of all chief student affairs and student life officers identified as a racial or ethnic group other than White—the largest percentage across all college and university administrative positions.
- Among college and university professional staff, more than one in four student affairs professionals and slightly more than one in five academic affairs professionals identified as people of color.
- Whites represented the majority of all staff positions. However, there was greater racial and ethnic variation across staff positions than administrative or professional positions on campus.
- The percentage of college and university presidents who identified as a race or ethnicity other than White more than doubled between 1986 and 2016; however, fewer than one in five presidents identified as a person of color in 2016. Blacks represented the second largest racial or ethnic group and the largest share of non-White presidents at nearly every institution type.
- Across all Carnegie classifications, associate institutions were more likely to be led by presidents of color than any other institution type.

## HIGHER EDUCATION FACULTY

As shown in Chapter 3 of this report, “Enrollment in Undergraduate Education,” White students represented just over half of all undergraduate students in 2016. While the student body has increasingly become more diverse, the college and university faculty body remains largely White. Among the over 700,000 full-time faculty employed by higher education institutions in fall 2016, 73.2 percent were White, 21.1 percent were faculty of color, 3.1 percent were international, and 2.6 percent were of unknown racial and ethnic backgrounds.

**Figure 10.1: Total Full-Time Faculty, by Race and Ethnicity: Fall 2016**



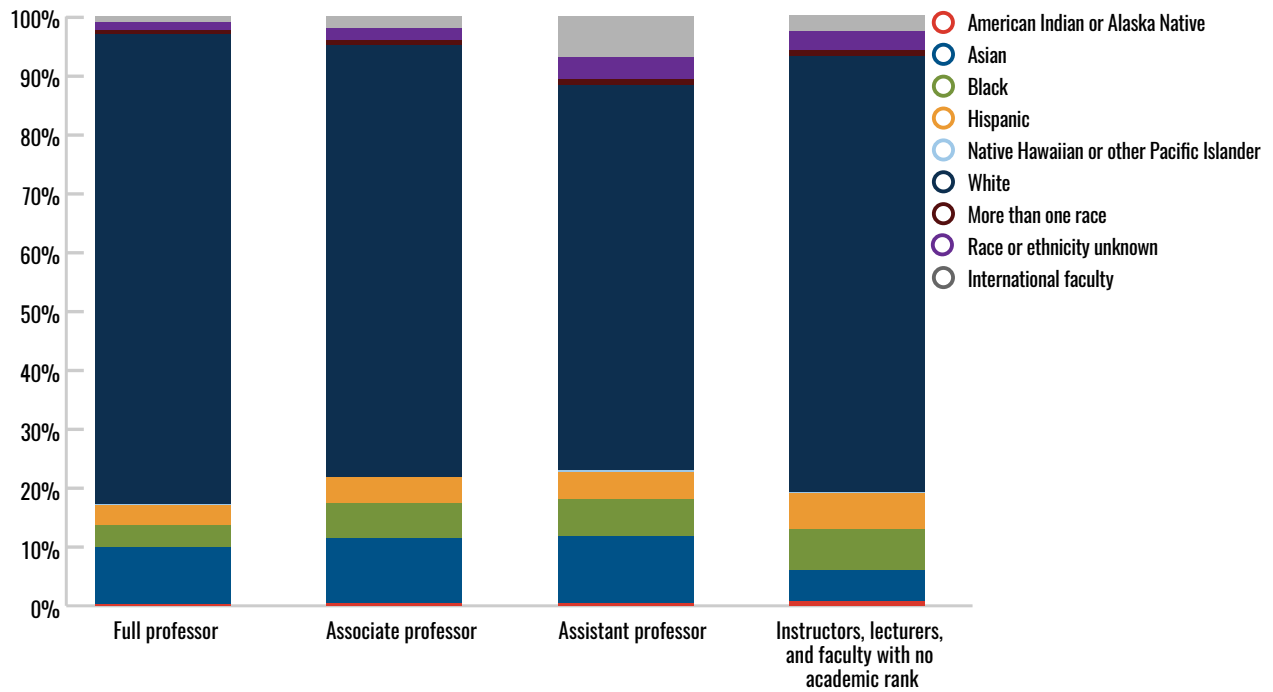
Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Data reflect full-time faculty at public four-year, private nonprofit four-year, public two-year, and for-profit institutions. Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

### Full-Time Faculty by Rank

When considering diversity of faculty, it is important to also look at faculty rank, a hierarchical structure that often represents a promotion and increase in salary with each upward step (Tien and Blackburn 1996). Across all faculty ranks, the majority of all full-time faculty were White. The total share of Whites was highest among full professors (79.8 percent), followed by instructors, lecturers, and faculty with no academic rank (73.9 percent), associate professors (73.3 percent), and assistant professors (65.4 percent).

**Figure 10.2: Full-Time Faculty, by Rank and Race and Ethnicity: Fall 2016**

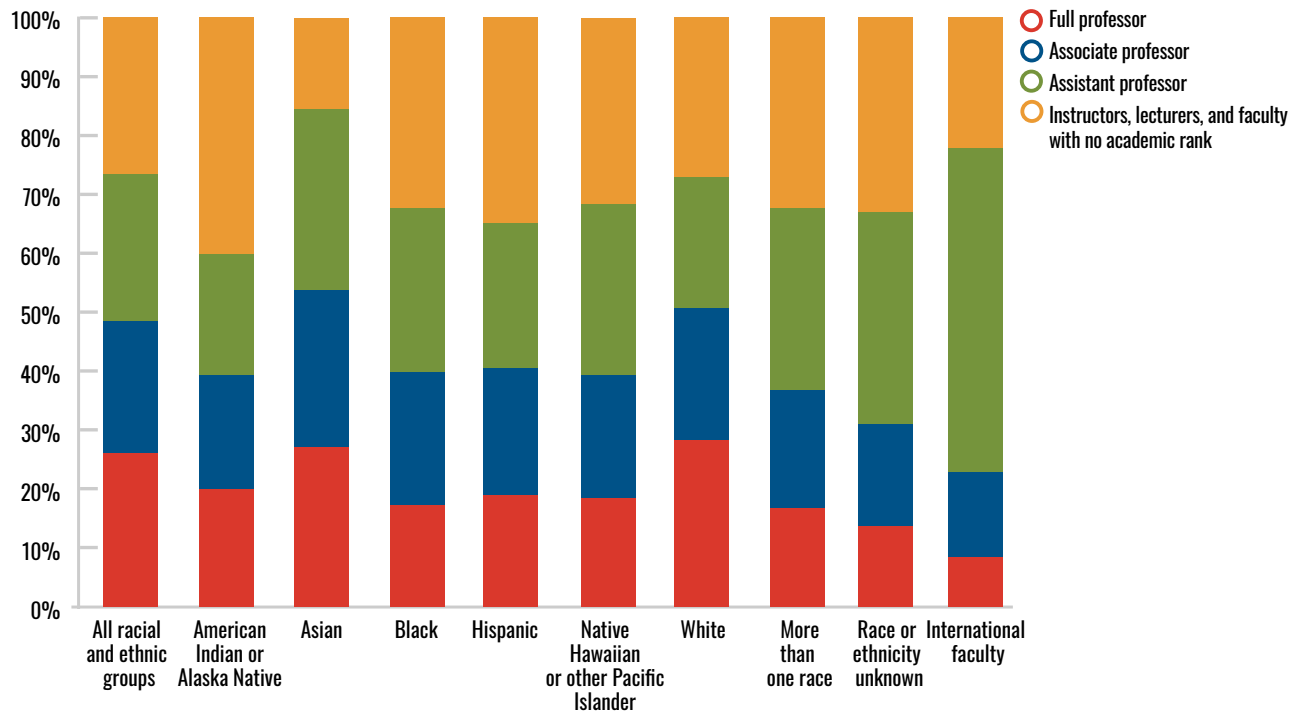


Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Data reflect full-time faculty at public four-year, private nonprofit four-year, public two-year, and for-profit institutions. Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

By rank, 26.0 percent of all full-time faculty were full professors, 22.4 percent were associate professors, 25.0 percent were assistant professors, and 26.7 percent were instructors, lecturers, and faculty who had no academic rank. Large differences emerged by race and ethnicity and international status, where American Indian or Alaska Native, Black, Hispanic, Native Hawaiian or other Pacific Islander full-time faculty and full-time faculty of more than one race were more likely to be in non-professorial ranks than White, Asian, and international full-time faculty.

**Figure 10.3: Full-Time Faculty Across Faculty Rank, by Race and Ethnicity: Fall 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Data reflect full-time faculty at public four-year, private nonprofit four-year, public two-year, and for-profit institutions. Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Among full-time faculty, a larger share of White and Asian faculty were full professors (28.3 percent and 27.0 percent, respectively) than any other group, and were roughly 10 percentage points above the proportion of Black and Hispanic faculty in these positions (17.2 percent and 18.9 percent, respectively). International faculty were the least likely to hold full professor positions (8.4 percent).
- A larger share of Asian faculty held associate professor positions than other groups (26.8 percent). American Indian or Alaska Native (19.5 percent) and international (14.5 percent) faculty were the least likely to be associate professors.
- Over half of all international full-time faculty were assistant professors (55.0 percent)—the highest of any group.
- About four in 10 American Indian or Alaska Native full-time faculty were instructors, lecturers, and in faculty positions with no academic rank (40.3 percent)—the highest of any group. Roughly one-third of all Hispanic faculty (34.9 percent), faculty of more than one race (32.5 percent), and Black faculty (32.3 percent) held these positions.

## Faculty Rank and Tenure, by Higher Education Sector

Tenure plays an important role in higher education as a means to protect the academic freedom of faculty who teach and conduct research in colleges and universities across the country. Tenure allows for the free exchange of ideas, inquiry, and expression, while also protecting open dissent, elements which are necessary for teaching and learning (AAUP, n.d.). Faculty without tenure, therefore, do not have protections for academic freedom, making them susceptible to dismissal for ideas they express (AAUP 2018). The National Center for Education Statistics (2018) uses the following categories to describe faculty tenure status:<sup>7</sup>

**Tenure:** Status of a personnel position with respect to permanence of position

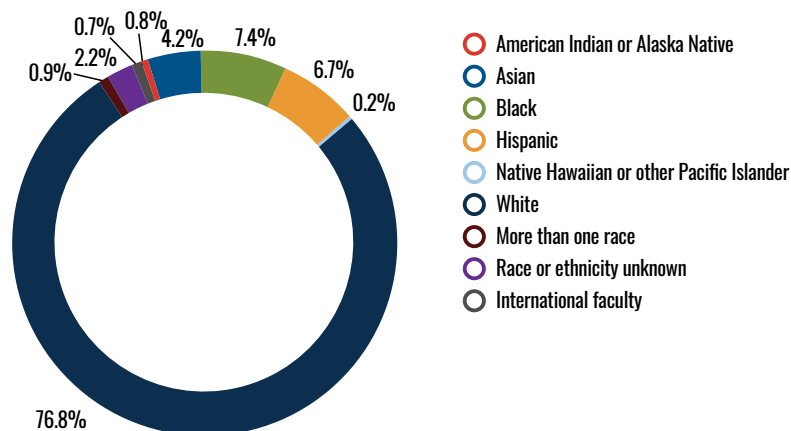
**Tenure track:** Personnel positions that lead to consideration for tenure

**Not on tenure track:** Personnel positions that are considered non-tenure earning positions

### Public Two-Year Institutions

In 2016, there were over 122,000 full-time faculty at public two-year institutions. Of these, over three-quarters were White (76.8 percent), 20.4 percent were faculty of color, 0.7 percent were international, and 2.2 percent were of unknown racial and ethnic backgrounds.

**Figure 10.4: Full-Time Faculty at Public Two-Year Institutions, by Race and Ethnicity: Fall 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

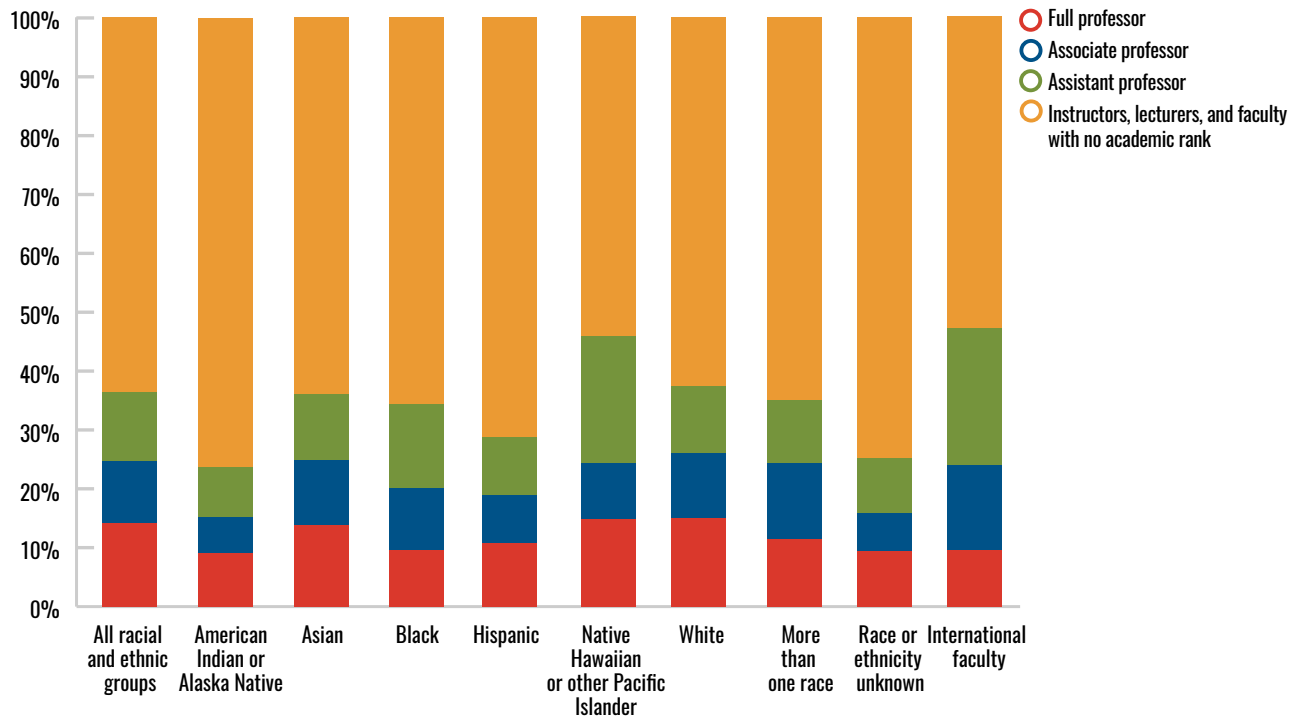
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

<sup>7</sup> IPEDS allows institutions to categorize faculty into the categories outlined as most appropriately fits their institutional structure. As a result, there may be variance in how faculty are categorized into these three groups across institutions.



Among all full-time faculty at public two-year institutions in fall 2016, 63.8 percent were instructors, lecturers, and faculty with no academic rank, 14.1 percent were full professors, 11.6 percent were assistant professors, and 10.6 percent were associate professors. Differences in academic rank emerged by race and ethnicity and international status.

**Figure 10.5: Full-Time Faculty at Public Two-Year Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- A larger share of White (15.1 percent) and Native Hawaiian or other Pacific Islander (14.9 percent) full-time faculty at public two-year institutions were full professors than any other group.
- Over three-quarters of all American Indian or Alaska Native full-time faculty were instructors, lecturers, and faculty with no academic rank (76.3 percent)—the highest percentage of any group. Comparatively, just over half of all Native Hawaiian or other Pacific Islander full-time faculty (54.2 percent) and international full-time faculty (52.8 percent) held these positions.

Among all full-time faculty at public two-year institutions, roughly four in 10 faculty held tenure (40.1 percent), 14.9 percent were on the tenure track, and 45.0 percent were not on the tenure track or were at an institution with no tenure system. Differences are apparent when examining these data by race and ethnicity.

**Table 10.1: Full-Time Faculty at Public Two-Year Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016**

	Full Professors			Associate Professors			Assistant Professors			Instructors, Lecturers, and Faculty with No Academic Rank		
	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System
All racial and ethnic groups	9.5%	0.3%	4.3%	6.3%	0.8%	3.4%	3.7%	3.8%	4.1%	20.6%	10.0%	33.1%
American Indian or Alaska Native	5.3%	0.8%	2.9%	3.5%	0.5%	2.2%	1.6%	2.7%	4.2%	18.8%	5.9%	51.7%
Asian	10.8%	0.2%	2.9%	7.2%	0.9%	2.9%	4.1%	4.4%	2.6%	29.4%	15.4%	19.3%
Black	6.2%	0.2%	3.1%	5.9%	1.0%	3.6%	4.6%	4.7%	4.9%	17.1%	9.3%	39.3%
Hispanic	7.9%	0.2%	2.6%	5.7%	0.5%	2.0%	3.7%	4.2%	2.0%	28.9%	16.5%	25.8%
Native Hawaiian or other Pacific Islander	6.2%	0.0%	8.7%	7.6%	0.7%	1.1%	14.2%	2.9%	4.4%	25.5%	11.6%	17.1%
White	10.0%	0.3%	4.7%	6.4%	0.9%	3.6%	3.6%	3.6%	4.3%	19.5%	8.8%	34.3%
More than one race	8.0%	0.1%	3.3%	9.4%	0.8%	2.8%	3.3%	2.9%	4.4%	28.1%	13.3%	23.7%
Race or ethnicity unknown	7.5%	0.3%	1.6%	4.6%	0.6%	1.3%	4.0%	3.4%	2.1%	27.6%	24.3%	22.8%
International faculty	4.7%	0.2%	4.7%	7.7%	1.8%	4.8%	2.2%	14.6%	6.6%	22.3%	13.7%	16.9%

Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

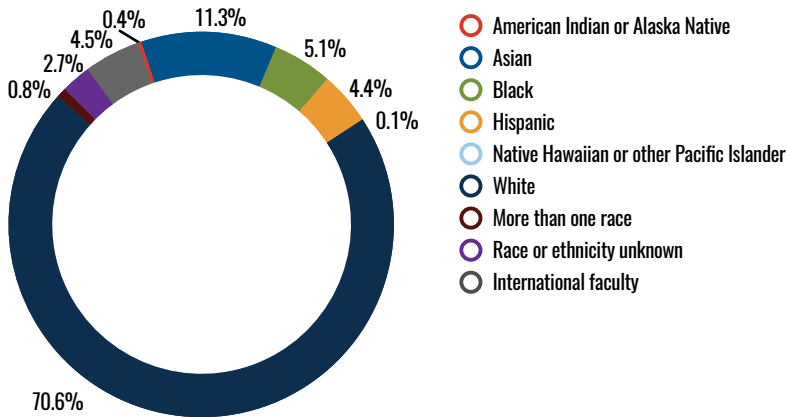
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Across rank, of the three largest groups among public two-year college full-time faculty—White, Hispanic, and Black—a larger share of Hispanics had tenure (46.1 percent), compared with 39.5 percent of Whites and 33.8 percent of Blacks.
- Over half of all American Indian or Alaska Native full-time faculty at public two-year institutions were instructors, lecturers, and faculty with no academic rank who were not on the tenure track or were at an institution without a tenure system (51.7 percent)—the highest percentage of any group. Over one-third of all Black (39.3 percent) and White (34.3 percent) full-time faculty were also in these positions.
- Among full-time faculty, over one-quarter of all Asians (29.4 percent), Hispanics (28.9 percent), faculty of more than one race (28.1 percent), and Native Hawaiians or other Pacific Islanders (25.5 percent) were instructors, lecturers, and faculty with no academic rank who had tenure.

## Public Four-Year Institutions

In 2016, there were over 345,000 full-time faculty at public four-year institutions. Of these, the majority were White (70.6 percent), 22.2 percent were faculty of color, 4.5 percent were international, and 2.7 percent were of unknown racial and ethnic backgrounds.

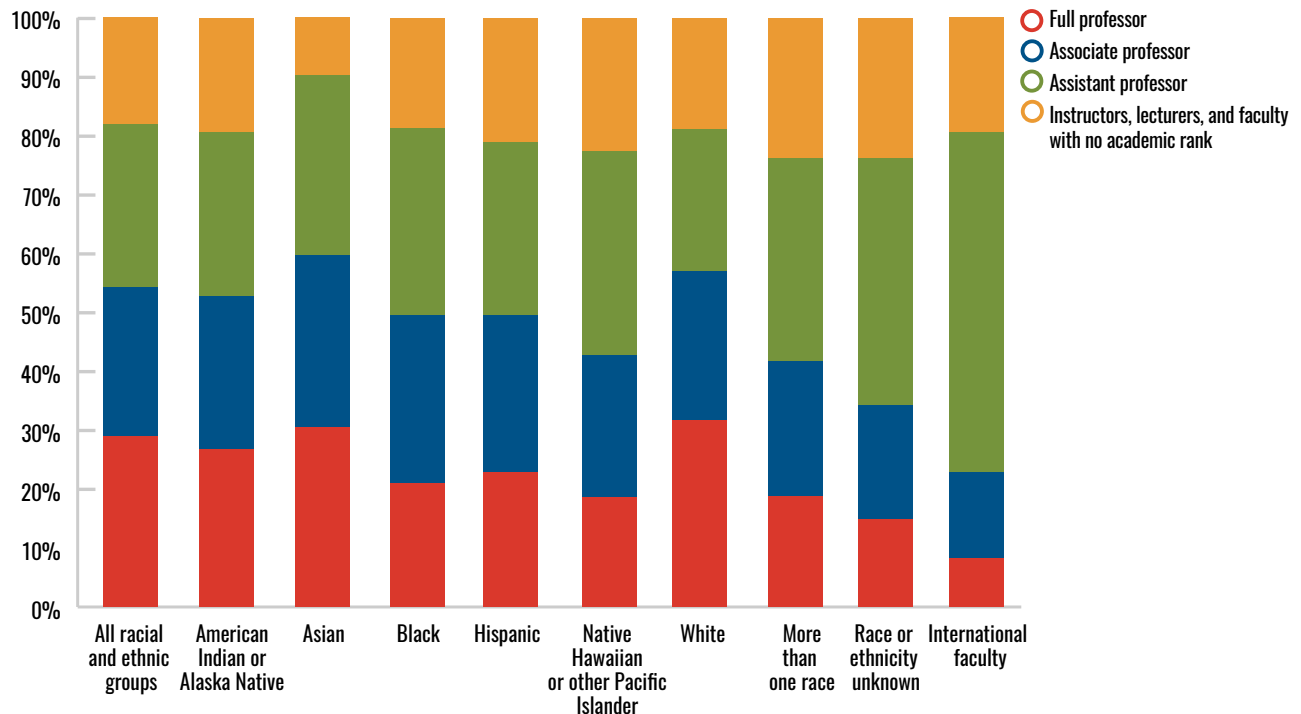
**Figure 10.6: Full-Time Faculty at Public Four-Year Institutions, by Race and Ethnicity: Fall 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

Among all full-time faculty at public four-year institutions, 29.0 percent were full professors, followed by assistant professors (27.5 percent), associate professors (25.3 percent), and instructors, lecturers, and faculty with no academic rank (18.2 percent). Large differences emerged by race and ethnicity and international status.

**Figure 10.7: Full-Time Faculty at Public Four-Year Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016  
 Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- A larger share of White (31.7 percent) and Asian (30.4 percent) full-time faculty at public four-year institutions were full professors than any other group. International full-time faculty were the least likely to hold full professor positions (8.2 percent).
- A larger share of full-time faculty of color were assistant professors than White faculty. Around one-third of all Native Hawaiians or other Pacific Islanders (34.6 percent), faculty of more than one race (34.5 percent), and Blacks (31.8 percent) were assistant professors, compared with 24.0 percent of White full-time faculty.
- Over half of all international full-time faculty were assistant professors (57.7 percent)—the highest percentage of any group.
- A smaller share of Asian full-time faculty were instructors, lecturers, and faculty with no academic rank (9.9 percent) than all other groups, who were twice as likely to hold these positions.

Overall, the majority of all full-time faculty at public four-year institutions had tenure (47.6 percent) or were in tenure track positions in 2016 (19.5 percent). A little more than one-quarter of all full-time faculty at public four-year institutions were tenured full professors (26.4 percent), followed by tenured associate professors (20.0 percent), and instructors, lecturers, and faculty with no academic rank who were not on the tenure track or were at an institution without a tenure system (17.6 percent). Large differences emerged by race and ethnicity and international status, with some groups more heavily concentrated in tenure track positions.

**Table 10.2: Full-Time Faculty at Public Four-Year Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016**

	Full Professors			Associate Professors			Assistant Professors			Instructors, Lecturers, and Faculty with No Academic Rank		
	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System
All racial and ethnic groups	26.4%	0.4%	2.2%	20.0%	1.7%	3.6%	0.9%	17.1%	9.5%	0.2%	0.4%	17.6%
American Indian or Alaska Native	25.2%	0.4%	1.1%	21.5%	1.7%	2.8%	1.8%	18.3%	7.8%	0.0%	0.2%	19.1%
Asian	27.7%	0.4%	2.4%	22.4%	2.3%	4.6%	0.5%	18.0%	12.0%	0.1%	0.1%	9.6%
Black	19.4%	0.3%	1.2%	23.1%	2.5%	3.0%	2.3%	19.0%	10.5%	0.5%	0.6%	17.6%
Hispanic	21.2%	0.2%	1.5%	21.9%	1.5%	3.3%	0.7%	18.9%	9.8%	0.3%	0.3%	20.4%
Native Hawaiian or other Pacific Islander	16.3%	0.5%	1.8%	16.7%	2.3%	5.0%	0.0%	17.2%	17.4%	0.2%	0.9%	21.6%
White	28.9%	0.4%	2.5%	20.1%	1.5%	3.7%	0.9%	14.4%	8.7%	0.3%	0.4%	18.3%
More than one race	17.3%	0.4%	1.0%	18.8%	1.9%	2.3%	0.6%	23.6%	10.3%	0.0%	0.2%	23.4%
Race or ethnicity unknown	12.7%	0.6%	1.5%	14.1%	2.7%	2.7%	0.3%	29.5%	12.0%	0.1%	0.3%	23.5%
International faculty	7.1%	0.2%	0.8%	11.6%	1.5%	1.5%	0.3%	43.3%	14.0%	0.1%	0.5%	19.0%

Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

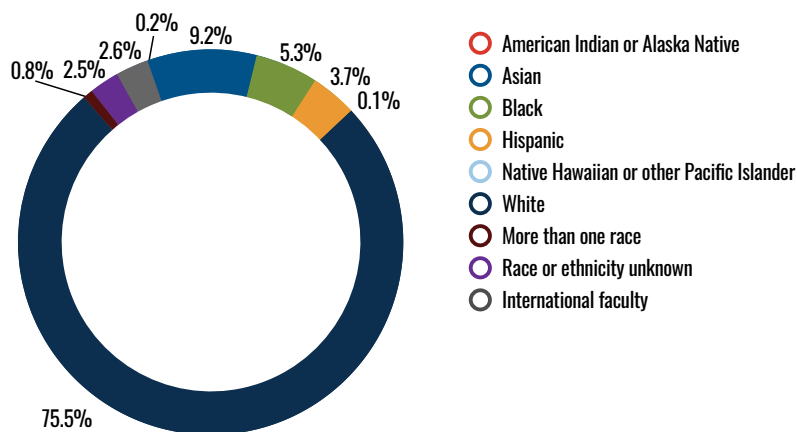
- Overall, of the three largest groups among full-time faculty at public four-year institutions—White, Asian, and Black—half of all Asian (50.6 percent) and White (50.2 percent) faculty and 45.3 percent of Black faculty had tenure.
- Over one-quarter of White (28.9 percent), Asian (27.7 percent), and American Indian or Alaska Native (25.2 percent) faculty were tenured full professors. Comparatively, only 7.1 percent of all international faculty were tenured full professors.

- A larger share of international faculty were assistant professors on the tenure track (43.3 percent)—the highest percentage of any group.
- About one in five Native Hawaiian or other Pacific Islander (21.6 percent), Hispanic (20.4 percent), American Indian or Alaska Native (19.1 percent), and international (19.0 percent) faculty were instructors, lecturers, and faculty with no academic rank who were not on the tenure track or were at an institution without a tenure system.

## Private Nonprofit Four-Year Institutions

Among the nearly 219,000 full-time faculty at private nonprofit institutions in 2016, three-quarters were White (75.5 percent), 19.4 percent were faculty of color, 2.6 percent were international, and 2.5 percent were of unknown racial and ethnic backgrounds.

**Figure 10.8: Full-Time Faculty at Private Nonprofit Four-Year Institutions, by Race and Ethnicity: Fall 2016**

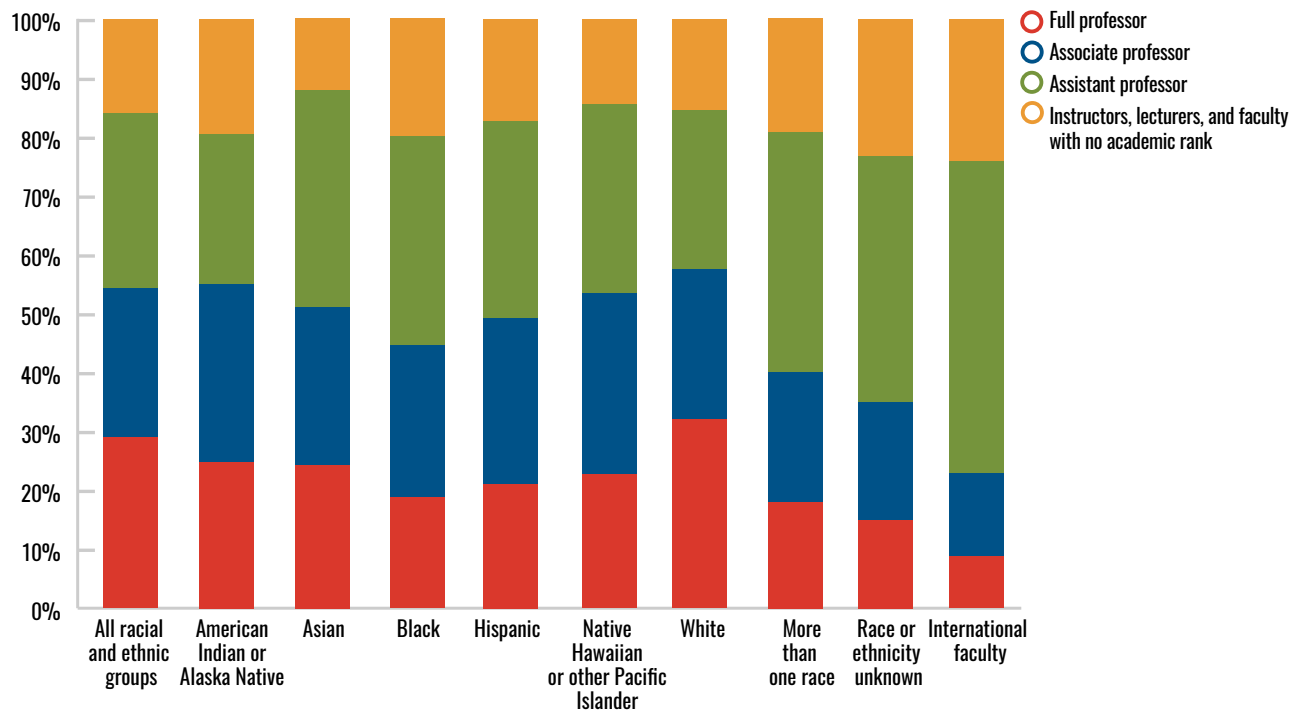


Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

Among all full-time faculty at private nonprofit four-year institutions in 2016, 29.7 percent were assistant professors, followed by full professors (29.0 percent), associate professors (25.3 percent), and instructors, lecturers, and faculty with no academic rank (15.9 percent). Large differences in academic rank emerged by race and ethnicity and international status.

**Figure 10.9: Full-Time Faculty at Private Nonprofit Four-Year Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Nearly one-third of White full-time faculty at private nonprofit four-year institutions were full professors (32.0 percent)—the highest percentage of any group. In contrast, 18.8 percent of all Black full-time faculty, 18.0 percent of all faculty of more than one race, and 8.8 percent of all international faculty held full professor positions.
- Over half of all international faculty were assistant professors (52.8 percent)—the highest percentage of any group. A larger share of international faculty were instructors, lecturers, and faculty with no academic rank (24.2 percent) than any other group.
- Full-time faculty of color were more likely than White full-time faculty to hold assistant professor positions at these institutions. Over one-third of faculty of more than one race (40.8 percent), Asian (36.7 percent), Black (35.5 percent), and Hispanic (33.5 percent) faculty were assistant professors, compared with 26.9 percent of White faculty.

Similar to public four-year institutions, in 2016, the majority of full-time faculty at private nonprofit four-year institutions had tenure (39.8 percent) or were in tenure track positions (19.7 percent). Slightly less than one-quarter of all full-time faculty at private nonprofit four-year institutions were tenured full professors (23.2 percent), followed by tenured associate professors (15.8 percent), and assistant professors who were on the tenure track (15.4 percent). Large differences emerged by race and ethnicity and international status, with some groups more heavily concentrated in tenure track positions.

**Table 10.3: Full-Time Faculty at Private Nonprofit Four-Year Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016**

	Full Professors			Associate Professors			Assistant Professors			Instructors, Lecturers, and Faculty with No Academic Rank		
	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System
All racial and ethnic groups	23.2%	0.7%	5.2%	15.8%	3.1%	6.4%	0.7%	15.4%	13.6%	0.1%	0.5%	15.3%
American Indian or Alaska Native	18.1%	0.6%	6.1%	19.6%	2.4%	8.1%	0.4%	13.4%	11.8%	0.0%	1.0%	18.7%
Asian	19.7%	0.7%	3.8%	15.8%	4.7%	6.3%	0.3%	21.5%	14.9%	0.1%	0.9%	11.3%
Black	13.8%	0.5%	4.5%	15.8%	3.6%	6.3%	0.9%	17.2%	17.3%	0.1%	1.0%	18.9%
Hispanic	16.8%	0.6%	3.7%	18.0%	3.5%	6.5%	0.5%	17.9%	15.1%	0.1%	0.7%	16.6%
Native Hawaiian or other Pacific Islander	14.8%	0.4%	7.6%	16.3%	3.8%	10.6%	0.4%	17.4%	14.4%	0.0%	0.8%	13.6%
White	25.7%	0.7%	5.6%	16.1%	2.9%	6.5%	0.7%	13.3%	12.8%	0.1%	0.4%	14.9%
More than one race	14.2%	0.7%	3.1%	14.1%	2.5%	5.4%	0.8%	23.5%	16.5%	0.2%	0.4%	18.5%
Race or ethnicity unknown	11.1%	0.5%	3.5%	10.7%	2.8%	6.4%	0.4%	21.2%	20.2%	0.0%	0.7%	22.5%
International faculty	5.9%	0.3%	2.6%	9.1%	2.6%	2.5%	0.3%	37.9%	14.5%	0.0%	0.4%	23.8%

Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

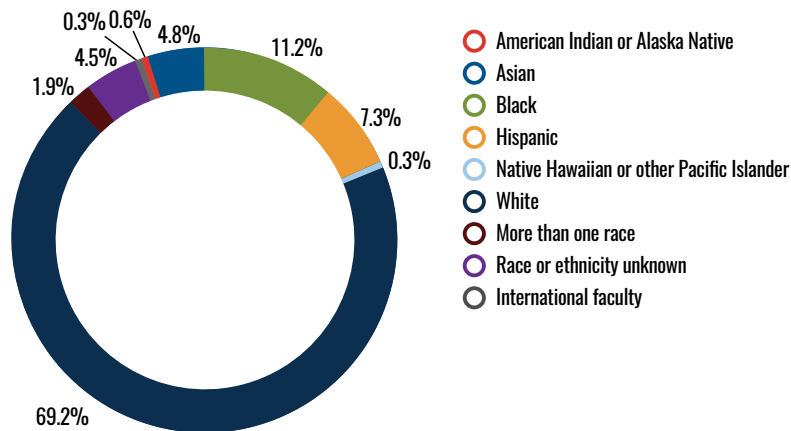
Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

- Overall, of the three largest groups among private nonprofit four-year institutions—Whites, Blacks, and Hispanics—a larger share of Whites had tenure (about 43 percent), compared with 35.4 percent of Hispanics and 30.7 percent of Blacks.
- About one-quarter of all White full-time faculty were tenured full professors (25.7 percent)—6 percentage points higher than Asians, the next highest group.
- Over one-third of all international faculty were assistant professors on the tenure track (37.9 percent)—the highest percentage of any group.
- A larger share of American Indian or Alaska Native full-time faculty than of any other group were tenured associate professors (19.6 percent), while all other full-time faculty of color were most likely to be assistant professors on the tenure track.

## For-Profit Institutions

Among the nearly 16,000 full-time faculty at for-profit institutions in 2016, the majority were White (69.2 percent), 26.0 percent were faculty of color, 0.3 percent were international, and 4.5 percent were of unknown racial and ethnic backgrounds.

**Figure 10.10: Full-Time Faculty at For-Profit Institutions, by Race and Ethnicity: Fall 2016**

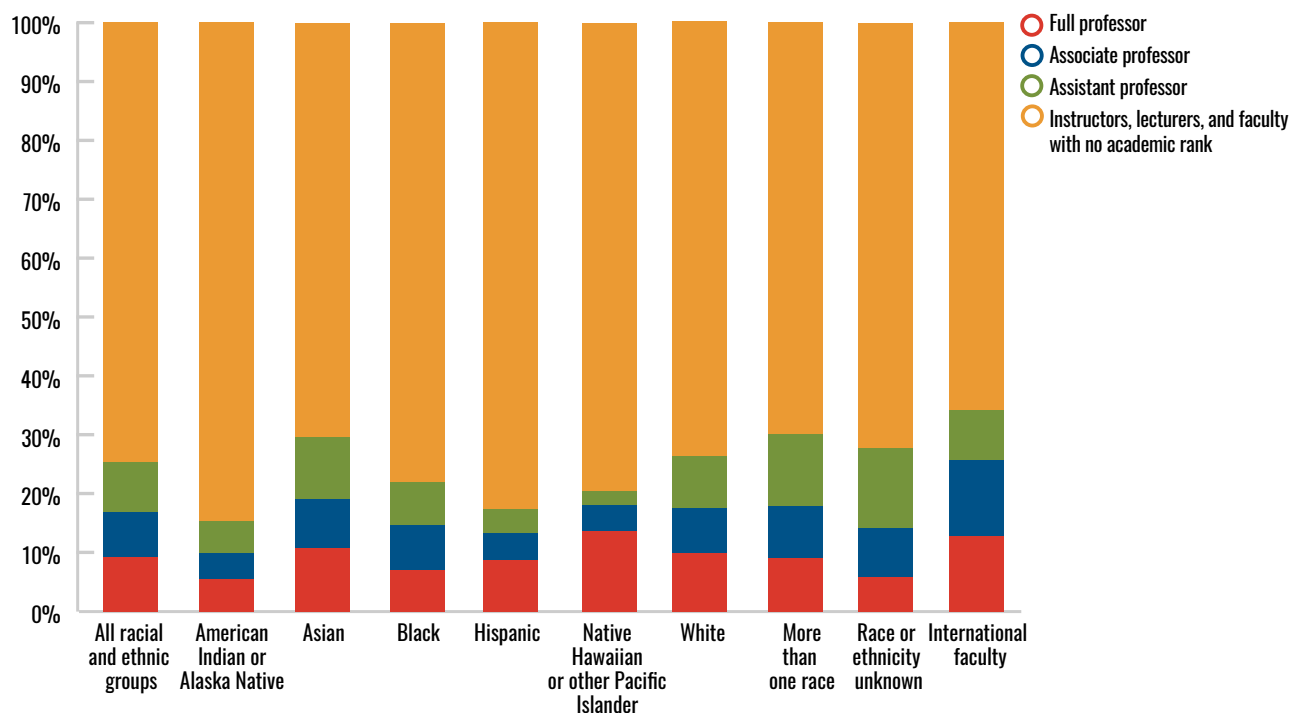


Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

Nearly three-quarters of all full-time faculty at for-profit institutions in 2016 were instructors, lecturers, and faculty with no academic rank (74.6 percent), followed by full professors (9.3 percent), assistant professors (8.6 percent), and associate professors (7.5 percent). Slight differences in academic rank emerged by race and ethnicity and international status.

**Figure 10.11: Full-Time Faculty at For-Profit Institutions, by Faculty Rank and Race and Ethnicity: Fall 2016**



Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.



- Across all groups, the majority of all full-time faculty at for-profit institutions were instructors, lecturers, and faculty with no academic rank. However, a larger share of American Indian or Alaska Native (84.6 percent) and Hispanic (82.8 percent) faculty held these positions than other groups.
- International faculty were more likely than any other group to hold associate professor positions at for-profit institutions (12.8 percent).

The majority of all full-time faculty at for-profit institutions were instructors, lecturers, and faculty with no academic rank who were not on the tenure track or were at an institution without a tenure system (74.5 percent). Although slight differences emerged by race and ethnicity and international status, full-time faculty at for-profit institutions were more likely than other sectors to work at institutions without tenure systems or not be on the tenure track.

**Table 10.4: Full-Time Faculty at For-Profit Institutions, by Faculty Rank, Tenure Status, and Race and Ethnicity: Fall 2016**

	Full Professors			Associate Professors			Assistant Professors			Instructors, Lecturers, and Faculty with No Academic Rank		
	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System	Tenured	On Tenure Track	Not on Tenure Track or No Tenure System
All racial and ethnic groups	0.3%	0.0%	9.0%	0.2%	0.1%	7.2%	0.0%	0.1%	8.5%	0.1%	0.0%	74.5%
American Indian or Alaska Native	1.1%	0.0%	4.4%	0.0%	0.0%	4.4%	0.0%	0.0%	5.5%	0.0%	0.0%	84.6%
Asian	0.3%	0.1%	10.4%	0.0%	0.1%	8.2%	0.0%	0.0%	10.4%	0.0%	0.0%	70.4%
Black	0.2%	0.0%	6.9%	0.2%	0.3%	7.1%	0.0%	0.0%	7.3%	0.0%	0.0%	78.0%
Hispanic	0.0%	0.0%	8.8%	0.1%	0.0%	4.4%	0.0%	0.0%	4.0%	0.0%	0.0%	82.8%
Native Hawaiian or other Pacific Islander	0.0%	0.0%	13.6%	2.3%	0.0%	2.3%	0.0%	0.0%	2.3%	0.0%	2.3%	77.3%
White	0.4%	0.0%	9.5%	0.2%	0.1%	7.3%	0.0%	0.1%	8.6%	0.1%	0.0%	73.6%
More than one race	0.7%	0.0%	8.5%	0.3%	0.0%	8.5%	0.0%	0.0%	12.1%	0.0%	0.0%	70.0%
Race or ethnicity unknown	0.0%	0.0%	5.8%	0.0%	0.1%	8.2%	0.0%	0.0%	13.6%	0.0%	0.0%	72.2%
International faculty	0.0%	0.0%	12.8%	0.0%	0.0%	12.8%	0.0%	0.0%	8.5%	0.0%	0.0%	66.0%

Source: U.S. Department of Education, Integrated Postsecondary Education Data System, 2016

Note: Institutions were categorized into sectors based upon control of the institution and the length of the predominant award granted.

## HIGHER EDUCATION STAFF AND ADMINISTRATION

The College and University Professional Association for Human Resources (CUPA-HR) conducts an annual survey of individuals employed at institutions of higher education across the country. Data presented in this report come from CUPA-HR's 2017–18 academic year surveys of administrators, professionals, and staff in higher education. The *Administrators in Higher Education Annual Report* reflects responses of nearly 50,000 individuals in approximately 200 senior-level administrator positions at more than 1,100 institutions. The *Professionals in Higher Education Annual Report* includes responses from nearly 200,000 individuals in about 350 mid-level professional positions from more than 1,100 institutions. The *Staff in Higher Education Annual Report* reflects responses from nearly 175,000 individuals in 150 staff positions at more than 800 institutions. CUPA-HR uses the following definitions in its surveys:

**Administrative positions** include top executive officers; senior institutional officers; academic deans; institutional administrators; heads of divisions, departments, and centers; and academic associate and assistant deans (Bichsel, Pritchard, Li, and McChesney 2018a). The administrative positions highlighted in this report include 11 of the most common administrators found in colleges and universities and are typically considered top executive officers.

**Professional positions** include institutional affairs, student affairs, fiscal affairs, external affairs, facilities, information technology, research professionals, athletic affairs, and safety professionals, among others (Bichsel, Li, Pritchard, and McChesney 2018). Positions covered in this category include those with supervisory responsibilities that do not represent the majority of their time and effort. Additionally, all positions require at least a baccalaureate degree or equivalent in the field, and may require a terminal degree and/or professional licensure in the field (CUPA-HR 2018).

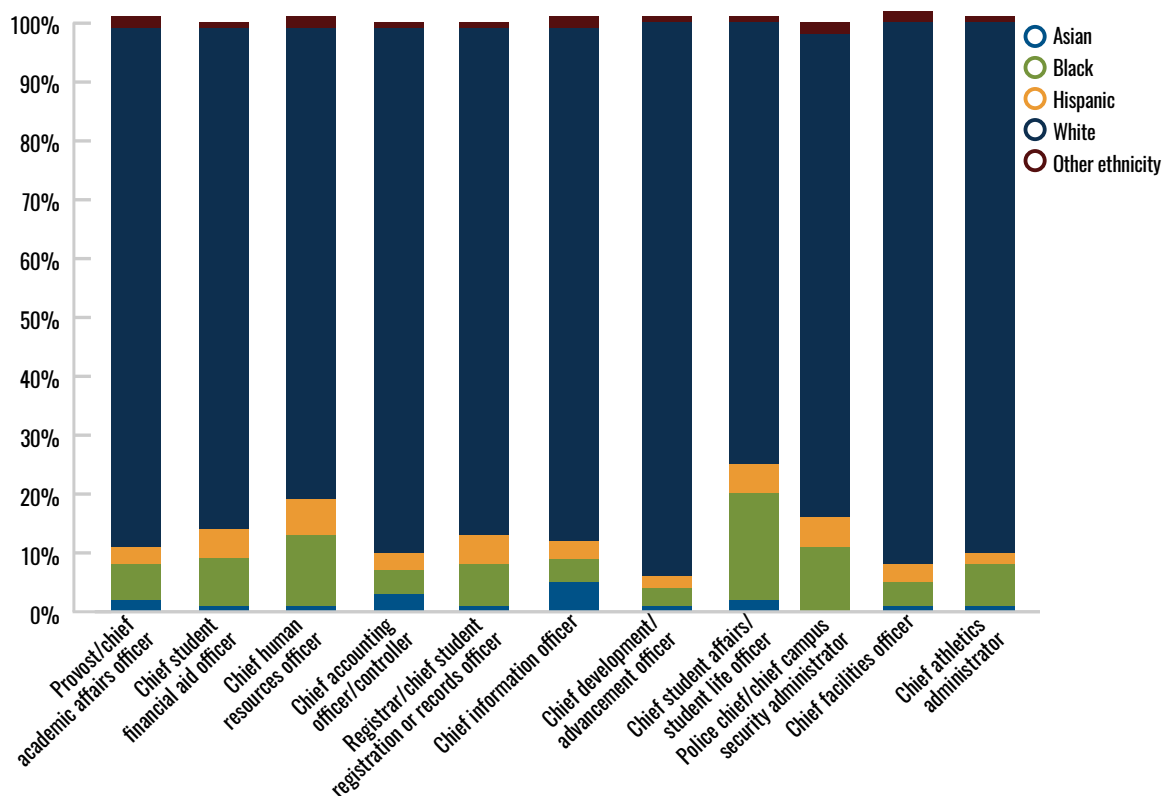
**Staff positions** include office and clerical staff, service and maintenance staff, technical and paraprofessional staff, and skilled craft staff. These positions usually receive an hourly wage and are generally eligible for overtime pay and do not require a college degree (Bichsel, Pritchard, Li, and McChesney 2018b).

## Administrative, Professional, and Staff Positions

### Administrative<sup>8</sup>

According to the CUPA-HR data, in 2017, Whites represented the majority of all administrative positions, although some positions had a larger percentage of people of color<sup>9</sup> than others.

**Figure 10.12: College and University Administrators, by Position and Race and Ethnicity: 2017**



Source: Bichsel, Jacqueline, Adam Pritchard, Jingyun Li, and Jasper McChesney. 2018. *Administrators in Higher Education Annual Report: Key Findings, Trends, and Comprehensive Tables for 2017-18 Academic Year*. Research Report. Knoxville, TN: CUPA-HR.

Note: Some totals may not add to 100% due to rounding.

- A smaller share of chief student affairs and student life officers than of other types of administrators were White (75.0 percent). About one-quarter of individuals in these positions identified as people of color (26.0 percent).
- Nearly one in five chief human resources officers identified as people of color, the group with the second largest share of people of color among all administrative roles.
- Police chiefs or chief campus security administrators made up the group with the third most racial and ethnic variation, with 18.0 percent of individuals in these roles identifying as people of color.
- Whites represented the vast majority of chief development officers (94.0 percent White), chief facilities officers (92.0 percent White), and chief athletics administrators (90.0 percent White).

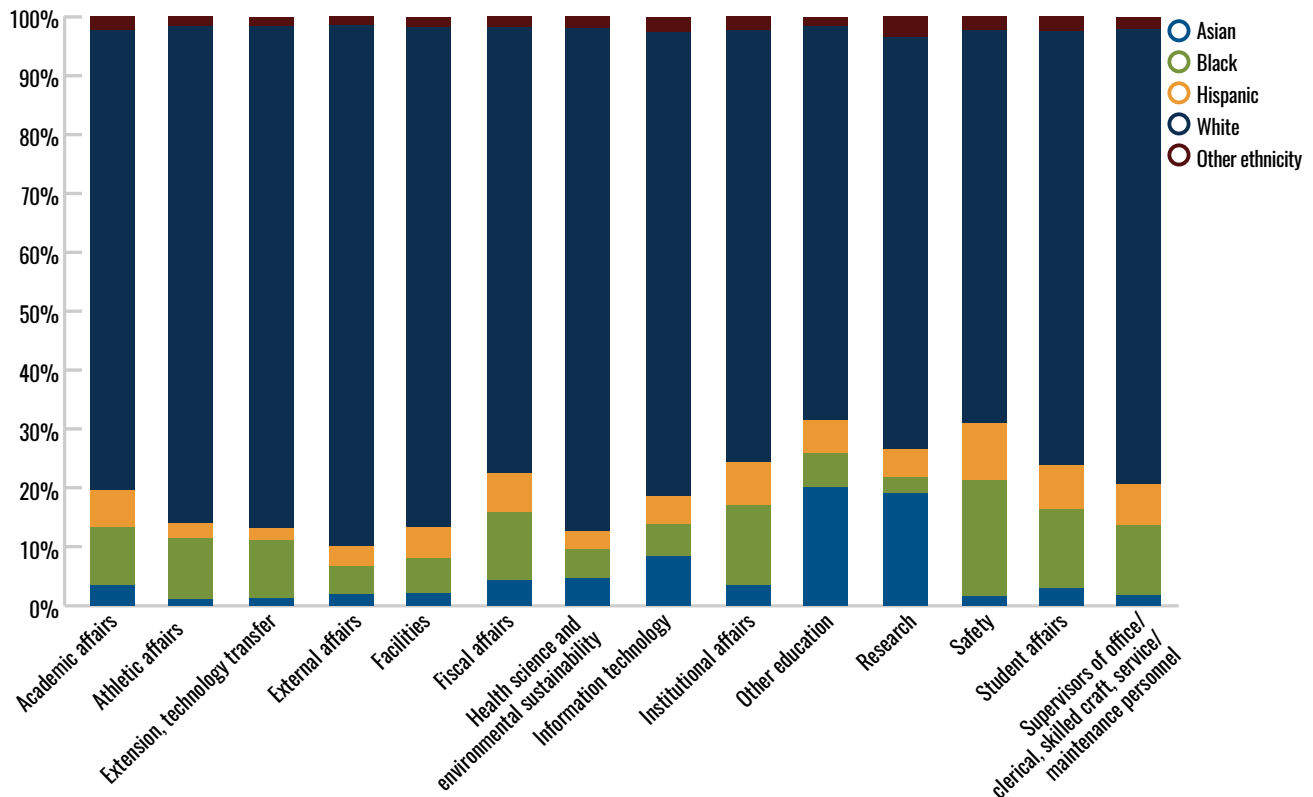
<sup>8</sup> Totals may not add to 100 percent due to rounding.

<sup>9</sup> People of color include individuals who identified as Asian, Black, Hispanic, or an ethnicity other than White.

## Professional

Whites also represented the majority of all professional positions, although there was great variation in the shares of people of color across different professional areas.

**Figure 10.13: College and University Professionals, by Position and Race and Ethnicity: 2017**



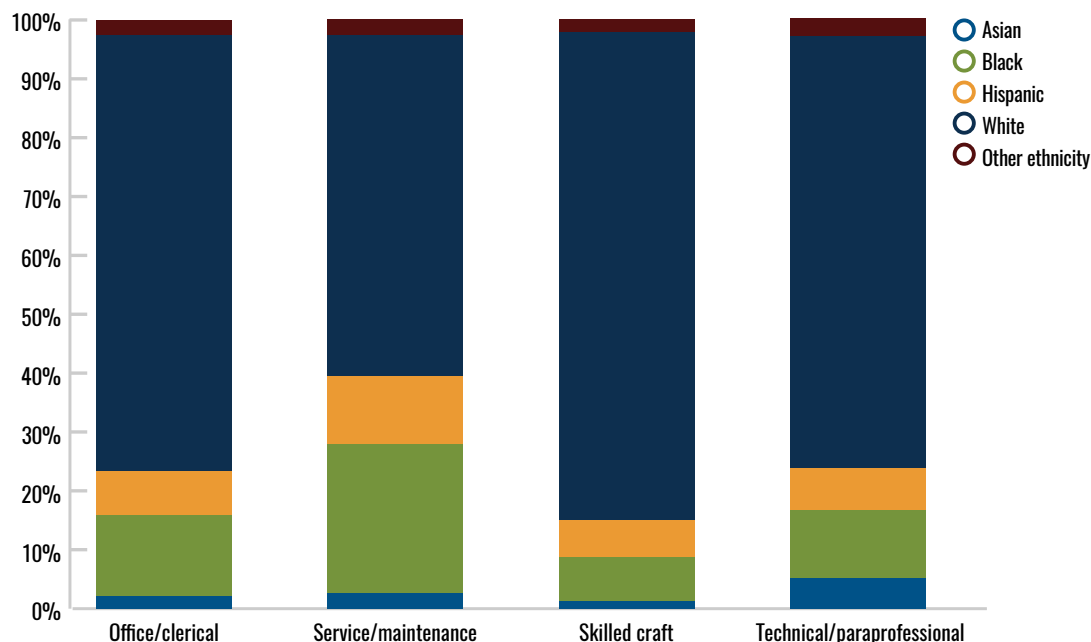
Source: Bichsel, Jacqueline, Jingyun Li, Adam Pritchard, and Jasper McChesney. 2018. *Professionals in Higher Education Annual Report: Key Findings, Trends, and Comprehensive Tables for 2017-18 Academic Year*. Knoxville, TN: CUPA-HR.

- People of color represented more than 30 percent of positions in the professional areas of safety (33.4 percent), other education (e.g., statistician and data analyst) (33.2 percent), and research (30.1 percent). However, safety and other education positions represented less than 1 percent of all professional positions in higher education.
- Student affairs (e.g., student programming and housing) and academic affairs (e.g., advisors and librarians) professionals made up the largest share of the professional workforce (19.2 percent and 16.2 percent, respectively). Over one in five academic affairs professionals identified as a race or ethnicity other than White (22.1 percent), and slightly more than one in four student affairs professionals identified as people of color (26.5 percent).
- External affairs professionals (e.g., advancement services and alumni relations) were the least racially and ethnically diverse, with Whites representing 88.3 percent of all individuals in this role.

## Staff

Whites represented the majority of all staff positions. However, there was more racial and ethnic variation among staff than other positions on campus, with the percentage of people of color ranging from 17 percent to over 42 percent.

**Figure 10.14: College and University Staff, by Position and Race and Ethnicity: 2017**



Source: Bichsel, Jacqueline, Jingyun Li, Adam Pritchard, and Jasper McChesney. 2018. *Professionals in Higher Education Annual Report: Key Findings, Trends, and Comprehensive Tables for 2017-18 Academic Year*. Knoxville, TN: CUPA-HR.

- The largest group of staff on campus were office and clerical staff (e.g., administrative assistants and records clerks). Roughly one-quarter of all office and clerical staff identified as people of color (25.9 percent), with 13.7 percent identifying as Black, 7.4 percent as Hispanic, 2.5 percent as another racial or ethnic group, and 2.2 percent as Asian.
- About 42 percent of service and maintenance staff (e.g., construction and facilities) identified as people of color, with 25.2 percent identifying as Black, 11.6 percent as Hispanic, 2.7 percent as Asian, and 2.7 percent as another race or ethnicity.
- More than one-quarter of all technical and paraprofessional staff (e.g., paralegals and IT systems specialists) identified as a race or ethnicity other than White, with 11.7 percent identifying as Black, 7.1 percent as Hispanic, 5.1 percent as Asian, and 2.9 percent as another race or ethnicity.
- Skilled crafts (e.g., electricians and carpenters) had the largest share of staff that identified as White (82.8 percent).

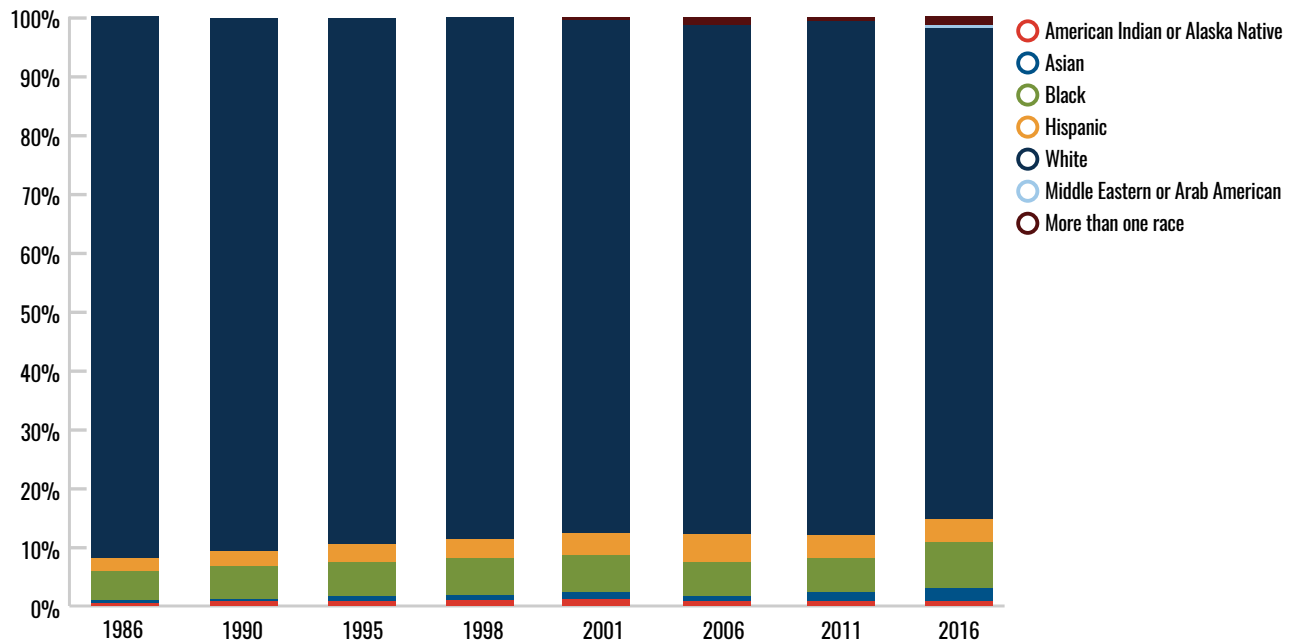
## COLLEGE AND UNIVERSITY PRESIDENTS

The American College President Study (ACPS), administered by the American Council on Education (ACE), is the longest-running and most comprehensive survey of college and university presidents across the United States. ACE first conducted the survey in 1986, and subsequently published the ACPS in 1988, 1993, 1998, 2000, 2002, 2007, 2012, and 2017. The data featured here were published in the *American College President Study 2017*, and represent responses from more than 1,500 presidents and chancellors. For more information, see [www.aceacps.org](http://www.aceacps.org).

### College and University Presidents: 1986 to 2016

In 1986, Whites represented 91.9 percent of all college and university presidents. While Whites remained the majority in 2016, their representation declined as the presidency became more racially and ethnically diverse. In 2016, 83.2 percent of all presidents identified as White, and 16.8 percent identified as people of color.

**Figure 10.15: College and University Presidents, by Race and Ethnicity, Select Years: 1986 to 2016**



Source: American Council on Education, *American College President Study 2017*

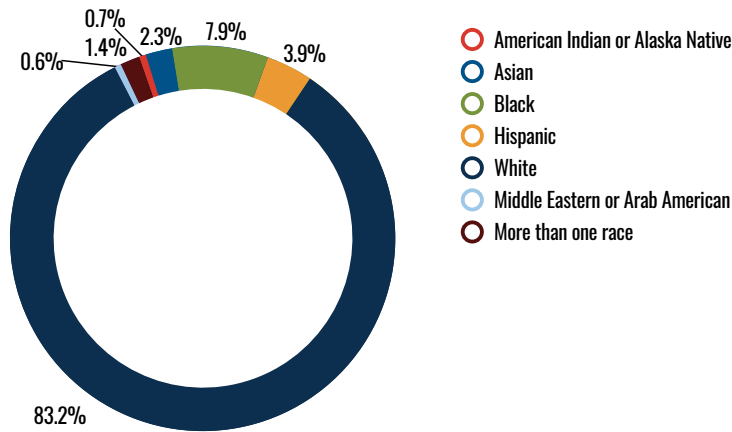
Notes: Data on individuals of more than one race were not collected prior to 2001. | In 2016, ACE introduced a new racial and ethnic category to allow presidents to identify as Middle Eastern or Arab American.

### College and University Presidents: 2016

Whites represented the majority of presidents in 2016, followed by Blacks (7.9 percent), Hispanics (3.9 percent), Asians (2.3 percent), and individuals of more than one race (1.4 percent). American Indians or Alaska Natives (0.7 percent) and Middle Eastern or Arab Americans<sup>10</sup> (0.6 percent) made up the smallest fraction of all college and university presidents.

<sup>10</sup> The *American College President Study 2017* included a broader set of racial and ethnic categories to allow respondents the ability to select the group with which they most closely identify.

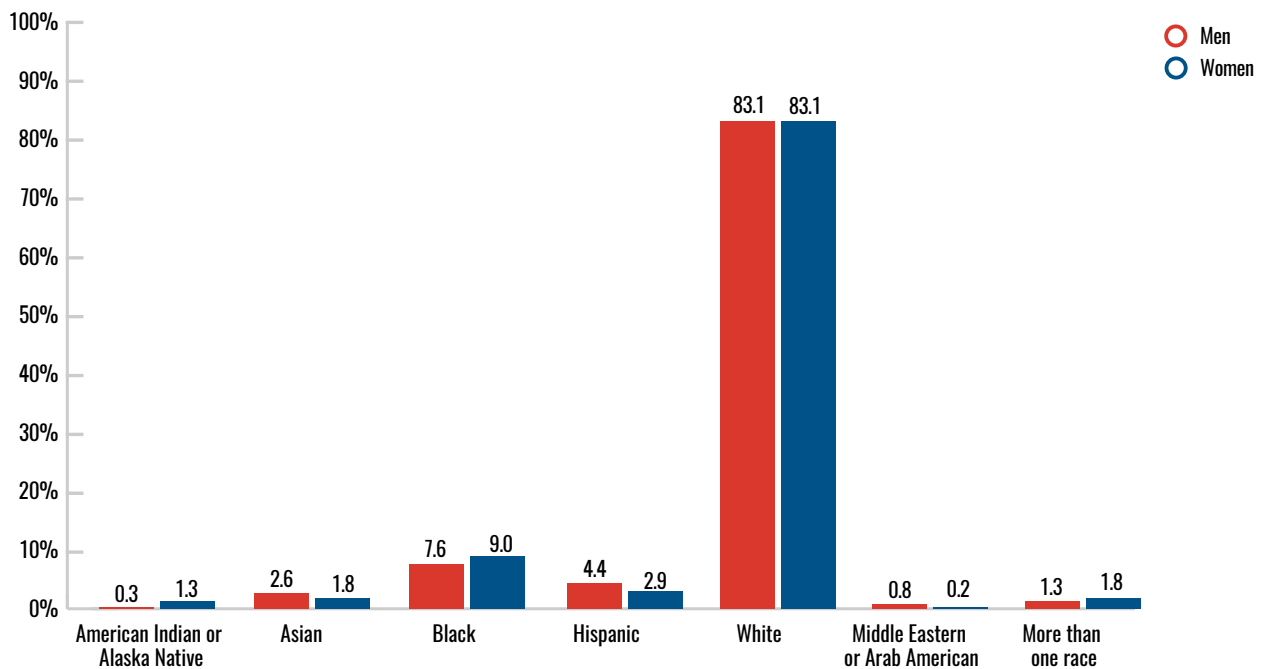
**Figure 10.16: College and University Presidents, by Race and Ethnicity: 2016**



Source: American Council on Education, *American College President Study 2017*

In 2016, women represented only 30.1 percent of all college and university presidents, while men represented 69.9 percent. Women of color represented only 5 percent of all college and university presidents, while men of color represented just 12 percent (Gagliardi et al. 2017). Approximately 83 percent of men and 83 percent of women presidents were White. A larger share of men presidents identified as either Asian or Hispanic (2.6 percent and 4.4 percent, respectively) than did women presidents (1.8 percent and 2.9 percent, respectively). A slightly larger share of women presidents identified as Black (9.0 percent), compared with men (7.6 percent).

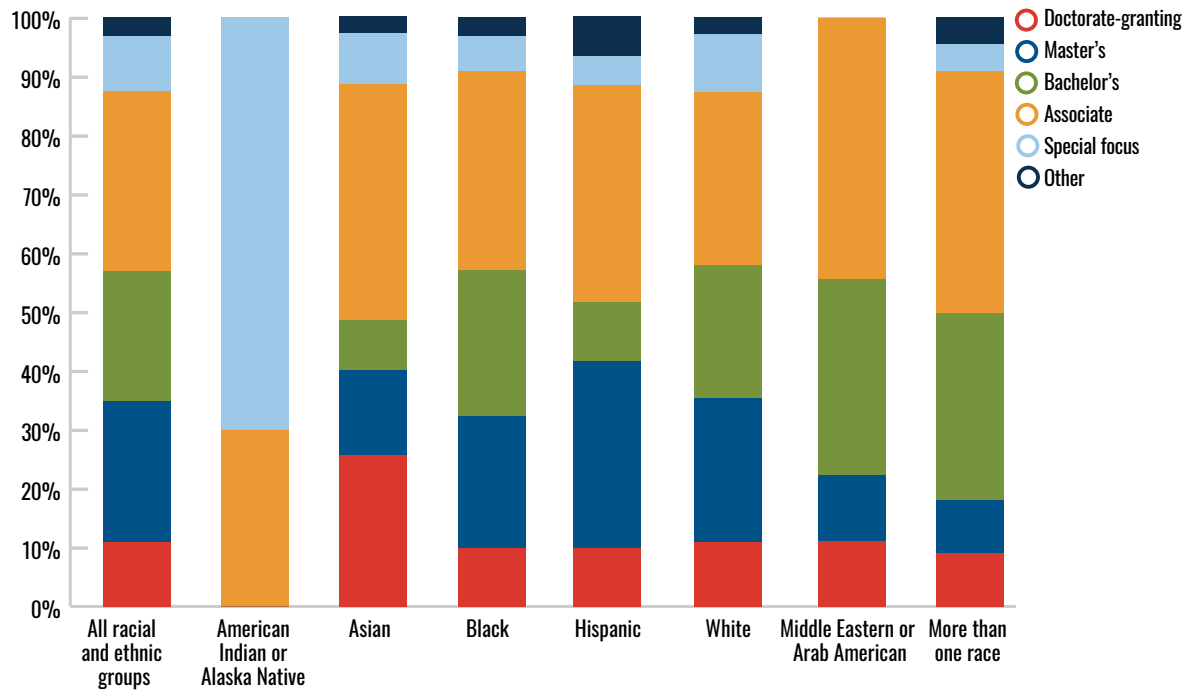
**Figure 10.17: College and University Presidents, by Gender and Race and Ethnicity: 2016**



Source: American Council on Education, *American College President Study 2017*

About three in 10 presidents led associate institutions (30.5 percent), followed by master’s (23.9 percent), bachelor’s (22.0 percent), doctorate-granting (11.0 percent), special focus (9.4 percent), and “other”<sup>11</sup> (3.2 percent) institutions.

**Figure 10.18: College and University Presidents Across Carnegie Classification, by Race and Ethnicity: 2016**



Source: American Council on Education, *American College President Study 2017*

Note: “Other” includes institutions and systems not included in Carnegie Classification, including some state higher education systems.

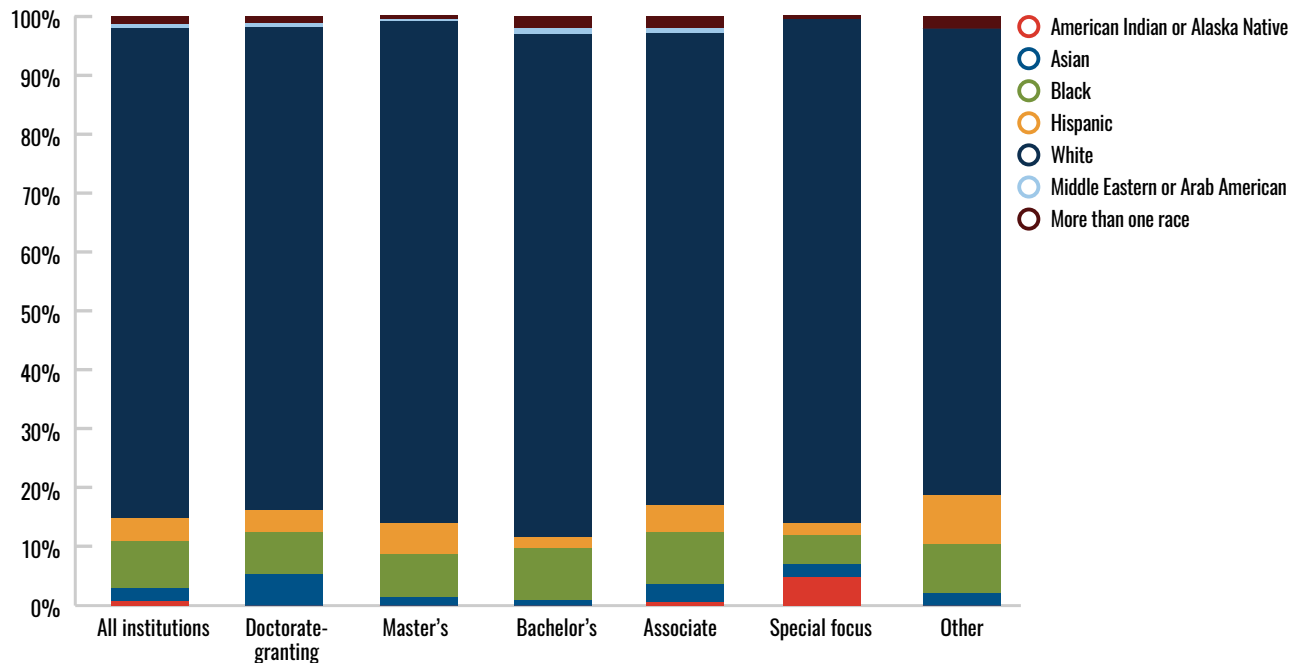
- A larger share of Middle Eastern or Arab American presidents (44.4 percent), Asian presidents (40.0 percent), presidents of more than one race (40.9 percent), Hispanic presidents (36.7 percent), and Black presidents (33.9 percent) led associate institutions than American Indian or Alaska Native (30.0 percent) and White (29.4 percent) presidents.
- American Indian or Alaska Native presidents were by far most likely to lead special focus institutions (70.0 percent), with the share of other groups leading these institutions in the single digits. Of note is that the classification of special focus includes Tribal Colleges and Universities.
- Nearly one-third of all Hispanic presidents led master’s institutions (31.7 percent), compared with 9.0 percent of presidents of more than one race.
- Nearly 26 percent of Asian presidents led doctorate-granting institutions, more than double any other group.

<sup>11</sup> Includes institutions and systems not included in the Carnegie Classification, including some state higher education systems.



Making up 83.2 percent of presidents nationally, Whites represented the majority in all Carnegie Classification types; however, some institutions had more racial and ethnic diversity in the presidency than others.

**Figure 10.19: College and University Presidents, by Carnegie Classification and Race and Ethnicity: 2016**



Source: American Council on Education, *American College President Study 2017*

Note: "Other" includes institutions and systems not included in Carnegie Classification, including some state higher education systems.

- Associate institutions and institutions classified as "other" were the most diverse, where about one out of five presidents were non-White (19.9 percent and 20.8 percent, respectively).
- Blacks represented the second largest racial or ethnic group and the largest share of non-White presidents at every institution type, with the exception of institutions classified as "other," where Blacks and Hispanics held the same share (8.3 percent each).
- American Indians or Alaska Natives represented 4.9 percent of all presidents at special focus institutions—the highest share of any institution type.
- Asians were most represented at doctorate-granting institutions, at 5.4 percent of all presidents.

## REFERENCES

- AAUP (American Association of University Professors). 2018. *Data Snapshot: Contingent Faculty in US Higher Ed*. <https://www.aaup.org/sites/default/files/10112018%20Data%20Snapshot%20Tenure.pdf>.
- AAUP (American Association of University Professors). n.d. "Tenure." Issues. Accessed October 4, 2018. <https://www.aaup.org/issues/tenure>.
- Antonio, Anthony L. 2002. "Faculty of Color Reconsidered." *The Journal of Higher Education* 73 (5): 582–602. DOI: 10.1080/00221546.2002.11777169.
- Bichsel, Jacqueline, Jingyun Li, Adam Pritchard, and Jasper McChesney. 2018. *Professionals in Higher Education Annual Report: Key Findings, Trends, and Comprehensive Tables for 2017–18 Academic Year*. Knoxville, TN: CUPA-HR.
- Bichsel, Jacqueline, Adam Pritchard, Jingyun Li, and Jasper McChesney. 2018a. *Administrators in Higher Education Annual Report: Key Findings, Trends, and Comprehensive Tables for 2017–18 Academic Year*. Knoxville, TN: CUPA-HR.
- Bichsel, Jacqueline, Adam Pritchard, Jingyun Li, and Jasper McChesney. 2018b. *Staff in Higher Education Annual Report: Key Findings, Trends, and Comprehensive Tables for 2017–18 Academic Year*. Knoxville, TN: CUPA-HR.
- CUPA-HR (College and University Professional Association for Human Resources). 2018. "Professionals Survey Participation and Information Template." <https://www.cupahr.org/surveys/survey-participation/templates>.
- Gagliardi, Jonathan S., Lorelle L. Espinosa, Jonathan M. Turk, and Morgan Taylor. 2017. *American College President Study 2017*. Washington, DC: American Council on Education.
- Hewlett, Sylvia Ann, Melinda Marshall, and Laura Sherbin. 2013. "How Diversity Can Drive Innovation." *Harvard Business Review*, December. <https://hbr.org/2013/12/how-diversity-can-drive-innovation>.
- Lorenzo, Rocio, and Martin Reeves. 2018. "How and Where Diversity Drives Financial Performance." *Harvard Business Review*, January 30, 2018. <https://hbr.org/2018/01/how-and-where-diversity-drives-financial-performance>.
- National Center for Education Statistics. 2018. "IPEDS 2018–19 Survey Materials: Glossary." Washington, DC: U.S. Department of Education, National Center for Education Statistics. <https://surveys.nces.ed.gov/ipeds/Downloads/Forms/IPEDSGlossary.pdf>.
- Tien, Flora F., and Robert T. Blackburn. 1996. "Faculty Rank System, Research Motivation, and Faculty Research Productivity." *Journal of Higher Education* 67 (1): 2–22.

## INVITED ESSAY



### **Redoubling Our Efforts: How Institutions Can Affect Faculty Diversity**

Kimberly A. Griffin



# Redoubling Our Efforts: How Institutions Can Affect Faculty Diversity

Kimberly A. Griffin, Associate Professor, University of Maryland

While the American professoriate has long been predominantly White and male, there has been an increased emphasis on the lack of faculty diversity in higher education, particularly in the last five years. As students across the country protested incidents of racism and discrimination on and off campus in 2015–16, they called attention to the small numbers of Black, Latinx,<sup>1</sup> and Native American professors on their campuses, and faculty diversity has consistently appeared on activists' lists of demands (Chessman and Wayt 2016; Flaherty 2015). National agencies such as the National Science Foundation and National Institutes of Health have also widely noted the lack of national progress in diversifying the professoriate, and have developed new funding initiatives to support the training and development of scholars from underrepresented populations.

Concerns about a lack of progress in faculty diversity are well founded. As evidenced in this volume, the numbers of underrepresented minority faculty<sup>2</sup> on college and university campuses remain small, and racial and ethnic diversity of the professoriate remains significantly out of alignment with the nation's undergraduate student body. According to data presented in this report, about three-quarters of all full-time faculty at degree-granting postsecondary institutions are White, while those who identify as Black, Latinx, and Native American *collectively* represent approximately 11 percent. Comparatively, over one-third of all students enrolled in college are Black, Latinx, or Native American, and 52 percent are White.

In response to these trends, internal protests, and external pressures, colleges and universities have voiced both their struggles with and commitment to hiring a faculty body that looks more like their students. Some have instituted new recruitment strategies, policies, and programs directed at increasing the presence of Black, Latinx, and Native American professors, with varying levels of success. Given the challenges and opportunities inherent in efforts to move the needle on faculty diversity, it is important to consider and better understand the barriers that limit progress toward increased representation, as well as the efficacy of solutions at hand.

To make substantive progress, colleges and universities must innovate, test, and replicate new strategies. This includes attending to the multiple ways that academic environments limit the success of talented scholars of color. Research shows that academic contexts and structures often result in decreased interest in entering, and increased levels of departure from, faculty positions (Gibbs et al. 2014; Kayes 2006; Tuitt, Sagaria, and Turner 2007). Recent discourse and research point to three specific areas that need to be addressed to catalyze progress: 1) attractiveness of faculty positions; 2) hiring, tenure, and promotion processes; and 3) departmental and campus climates for faculty of color.

## Extending Conversations About the Underrepresentation of Black, Latinx, and Native American Faculty

As the data in this report show, demographics of the U.S. professoriate suggest a mixed story of progress and stagnation in faculty diversity over the last 20 years. In many cases, newly hired professors are more diverse than the faculty body as a whole (e.g., Finkelstein, Conley, and Schuster 2016; Li and Koedel 2017); thus, it may be tempting to assume that the shifting demography of the U.S. population will eventually translate to a more diverse faculty body. It is important to view these data

- 
- 1 "Latinx" is a gender-neutral version of Latino that is being used more widely. It includes Latina and Latino, which are usually used to refer to women and men within the community. It also is inclusive of individuals who are trans, queer, gender fluid, or do not identify with the gender binary.
  - 2 Black, Latinx, and Native American individuals have been identified as underrepresented minorities given that their representation in higher education is smaller than in the broader U.S. population. While Asian Americans experience marginalization in the academy and are not equally represented across all ethnic subgroups or in all disciplines (Poon et al. 2016), they are not usually considered underrepresented in the professoriate.

with a critical eye; the rate of change in the faculty body is not consistent with increases in diversity among undergraduates or even PhD recipients.

Further, much of the shift in the demographics of the academy has been due to increases in the number of faculty from underrepresented backgrounds in non-tenure track and part-time positions (Finkelstein, Conley, and Schuster 2016). Although part-time and non-tenure track positions still provide students with exposure to faculty from a more diverse range of backgrounds, these positions do not have access to the protections of tenure, are more likely to be on temporary contracts, and are at the lowest ranks of the academic hierarchy. In other words, increasing faculty diversity in the most vulnerable academic positions does not solve the overall problem; rather, it creates new, pernicious inequities.

Black, Latinx, and Native American faculty are also more scarce in particular academic disciplines. For example, much (and well-deserved) attention has been focused on science, technology, engineering, and math (STEM) fields, where Black, Latinx, and Native American scholars were less than 9 percent of all faculty members in 2013. Looking beyond STEM, an analysis of selective U.S. research universities revealed that Black scholars are 2.7 percent and Latinx scholars are 5 percent of all economics professors, and under 2 percent of all English professors at these institutions identify as Black (Li and Koedel 2017). Finally, it is important to note that while Asian American faculty are rarely viewed as underrepresented within the professoriate, there are substantive differences across disciplines. Asian American faculty are more present in biology (13 percent), chemistry (14 percent), and economics (21 percent) departments; however, they appear in much smaller numbers in humanities and social science disciplines such as English (6 percent) and sociology (8 percent) (Li and Koedel 2017).

Increasing faculty diversity in the most vulnerable academic positions does not solve the overall problem; rather, it creates new, pernicious inequities.

We must acknowledge that much of the discourse on increasing faculty diversity has focused on research universities, which may be rooted in the significant underrepresentation of Black, Latinx, and Native American professors in these environments. According to a TIAA Institution report (Finkelstein, Conley, and Schuster 2016), Black, Latinx, and Native American scholars are most underrepresented at research universities; White faculty outnumber underrepresented minority tenured professors 9.3 to 1, and 6.1 to 1 among tenure-track faculty. Disparities are also notable at master's comprehensive institutions; underrepresented minority faculty are outnumbered by White faculty by 8 to 1 among tenured faculty and 5.9 to 1 for those on the tenure track. Disparities remain at baccalaureate and two-year institutions, but their faculties are more diverse. Analyses also reveal smaller differences between the representation of Black, Latinx, and Native American faculty when comparing those who are tenured and on the tenure track (Finkelstein, Conley, and Schuster 2016).

## Higher Education's Faculty "Pipeline Problem"

As institutions and national organizations have developed interventions to promote the increased representation of faculty of color, there has been an emphasis on increasing the number of potential candidates available. This is particularly true for faculty positions at research universities given the disparities described above and their role in the creation of new knowledge and the next generation of scholars. Some argue that outstanding Black, Latinx, and Native American faculty candidates are in short supply, and are frequently sought and hired away by institutions able to make more lucrative or otherwise attractive offers (Smith, Wolf, and Busenberg 1996; Tuitt, Sagaria, and Turner 2007), thus making it difficult for certain schools to build a diverse faculty body. Others argue that most Black, Latinx, and Native American applicants are uncompetitive or a poor fit for their available positions (Smith et al. 2004; Tuitt, Sagaria, and Turner 2007).

In response, attention has been focused on increasing the number and quality of potential candidates of color—preparing diverse students to enter and complete graduate programs, compete for faculty positions, and successfully navigate tenure and promotion processes. These strategies intend to address what is commonly referred to as the “pipeline problem,” or the sheer unavailability of scholars of color (e.g., Knowles and Harleston 1997; Patel 2015).

This framing is not wrong—we absolutely must increase the number of Black, Latinx, and Native American graduate students and PhDs as part of a larger strategy to increase faculty diversity. However, focusing on the pipeline offers incomplete solutions to a complex problem. Blaming a lack of faculty diversity on the number and quality of candidates alone is short-sighted and ignores the many qualified candidates who report that they are not being recruited to available positions (Smith et al. 2004) or choose to leave the academy. It is equally important to ensure the professoriate becomes a more attractive option for Black, Latinx, and Native American scholars. As a field, higher education must refocus its attention on understanding and addressing how faculty—especially full-time and tenure track faculty—are recruited and hired, and the culture and climate of the environments in which they ultimately work.

## Addressing Aspirations, Hiring, and Retention to Promote Faculty Diversity

As institutions develop new strategies to promote faculty diversity, a first step is to consider whether doctoral students from underrepresented minority backgrounds are interested in and will ultimately apply for faculty positions. Recent research suggests that students' interest in pursuing academic careers—particularly at research institutions—significantly decreases as they make their way through their graduate programs (Fuhrmann et al. 2011; Sauermann and Roach 2012). Importantly, declines are greater for Black, Latinx, and Native American graduate students, with underrepresented minority women showing the lowest levels of interest in faculty careers by the end of their graduate training (Gibbs et al. 2014).

Multiple factors shape students' interest in becoming faculty, and may account for steeper declines among underrepresented minority scholars. Negative racial climates and marginalization by faculty and peers have an influence on these trends (e.g., Felder, Stevenson, and Gasman 2014; Griffin et al. 2015; Robinson et al. 2016), creating a discriminatory environment that may translate to less interest in staying in the academy long term. Scholars have further connected disinterest in faculty careers to a perceived lack of alignment with the culture of the academy and the nature of faculty life and work. Graduate students generally report a disconnect between their personal values and the structural dynamics of the academy. Namely, they express concern about a heavy workload with limited time for personal interests and commitments, and an emphasis on publishing and getting grants over mentorship, teaching, and unfettered intellectual exploration as particularly discouraging (Fuhrmann et al. 2011; Gibbs and Griffin 2013).

Black, Latinx, and Native American students may be particularly invested in doing work that addresses persistent social problems, serves their home and institutional communities, or diversifies higher education. They may not see faculty life and work as a way to reach these goals, particularly if they are seeking positions at research universities that emphasize obtaining funding and conducting research that is linked to more abstract discoveries (Gibbs and Griffin 2013; Johnson 2007). Thus, we must consider whether we will have any success increasing faculty diversity without addressing the contexts within which students are trained. One solution is to rethink whether and how institutions recognize the importance and value of multiple forms of scholarly and other contributions to make faculty positions more appealing, and to address the issue of work-life balance.

It is also critical for institutions to examine how potential candidates are recruited and how hiring decisions are made; this is an area of particular relevance given recent research on the ways that bias can infiltrate the faculty search and selection processes (Carnes et al. 2015; Tuitt, Sagaria, and Turner 2007). Multiple studies suggest that myths about stiff competition and bidding wars for a small number of underrepresented minority scholars are overinflated. Black, Latinx, and Native American faculty candidates do not feel sought after or in demand; rather, they feel overlooked and less desirable in academic searches (Smith, Wolf, and Busenberg 1996; Smith et al. 2004; Tuitt, Sagaria, and Turner 2007).

One solution is to rethink whether and how institutions recognize the importance and value of multiple forms of scholarly and other contributions to make faculty positions more appealing, and to address the issue of work-life balance.

Increasing faculty diversity requires attention to departmental and campus climates and environments, including the provision of support and resources necessary for faculty retention.

While many institutional leaders and search committees assert that they are doing their best to identify and encourage scholars of color to apply to open positions, their efforts often do not reach Black, Latinx, and Native American scholars. Experts suggest that institutions should go beyond a few well-placed position descriptions and general affirmative action statements. Pre-search campus visits with potential candidates, cluster hires (i.e., targeted resources toward hiring a group of faculty at one time), and strategic placement of advertisements in resources targeting people of color are necessary to make progress in diversifying applicant pools (Kayes 2006; Smith et al. 2004). Tuitt and colleagues (2007) assert that institutions also must find new ways to send scholars of color signals that they will be welcomed into a hospitable climate and have access to community beyond the campus, offering critical career development resources and holistic support.

It is also important to consider the characteristics and criteria on which search committees place value as they engage in the hiring process. Researchers have called attention to how implicit bias can manifest in the applicant review process. Search committee members (who are often White and/or male) often unconsciously give preference to individuals that remind them of themselves, and more critically assess the qualifications and scholarly pursuits of those that do not (Smith et al. 2004; Tuitt, Sagaria, and Turner 2007). Another common practice used by search committees is to lean heavily on their own networks—often consisting of individuals who were educated at the same or similar institutions or otherwise represent a similar profile—again resulting in a homogeneous candidate pool (Tuitt, Sagaria, and Turner 2007). This is especially true at highly selective institutions that favor academic pedigree above all else (Tugend 2018). While institutions may articulate a broad commitment to promoting diversity and equity in higher education, search committees may instead focus on recruiting faculty with well-established research agendas from top-ranked institutions, overlooking scholars focused on teaching, mentoring, or community-based research that aims to address the very social problems that institutions and departments study and care about. Implicit bias training and requiring search committees to complete anti-bias checklists may be helpful in shifting the hiring process and making real progress on faculty diversity goals (Tugend 2018).

Finally, increasing faculty diversity requires attention to departmental and campus climates and environments, including the provision of support and resources necessary for faculty retention. Some describe a revolving-door phenomenon, noting that higher education makes little progress in faculty diversity because Black, Latinx, and Native American new hires often simply replace scholars of color who did not persist. A growing body of research has documented the multiple challenges that faculty of color generally, and underrepresented minority faculty in particular, face in the academy, which can ultimately lead to their departure (see Turner, Gonzalez, and Wood 2008 for a comprehensive review). Faculty members of color face subtle and overt racism from their colleagues, navigating stereotypes, microaggressions, and racist comments on a regular basis (Jayakumar et al. 2009; Pittman 2012; Stanley 2007). Studies show that faculty members of color face questions about their legitimacy as scholars, the quality and contributions of their scholarship (especially if focused on communities of color), and exclusion from informal social networks that are often an invaluable source of support (Griffin et al. 2011; Stanley 2007).

Research suggests classroom contexts can also be challenging, and students are described as questioning the authority and expertise of scholars of color in ways that they do not question White faculty. Students' stereotypes and negative perceptions appear to translate to lower teaching evaluation scores, which can have negative implications for tenure and promotion reviews (Griffin, Bennett, and Harris 2013; Pittman 2010; Stanley 2007). Faculty of color also carry a heavier service burden than their colleagues, more often engaging in committee work, community engagement activities, and mentorship of students (Padilla 1994; Turner, González, and Wood 2008). While many find this work fulfilling and central to their mission as faculty members, it can also be emotionally draining and time-consuming (Baez 2000; Diggs et al. 2009; Joseph and Hirshfield 2011; Stanley 2007). Perhaps most importantly, engagement in service is often undervalued as faculty are considered for tenure and promotion, particularly at research universities (O'Meara 2016; Tierney and Bensimon 1996). Retaining a more diverse professoriate requires attention to distinctions in experiences once scholars become faculty, particularly those that translate to lower rates of success and satisfaction, and higher rates of departure.



## Conclusion

Increases in faculty diversity will not just happen as the nation's demographics shift (Gibbs et al. 2014). Rather, there are multiple factors and forces within the academy that must be addressed to make substantive gains in the number of professors from underrepresented groups in the academy. Campus leaders, consortia of institutions, and national organizations must work individually and collaboratively to develop new, innovative strategies that address the multiple factors that have limited progress in diversifying the professoriate.

There have been several initiatives of note that are attempting to promote change. The National Institutes of Health and the National Science Foundation have issued statements and funded initiatives focused on increasing diversity in science, with specific attention focused on expanding access to faculty positions. The Consortium for Faculty Diversity in Liberal Arts Colleges offers residential postdoctoral fellowship awards, fostering the ability of member institutions to build relationships and recruit young scholars to their institutions. Institutions such as Harvard University (MA), Brown University (RI), and Boston College have developed comprehensive strategies to recruit, hire, and retain a more diverse faculty body. California Lutheran University, a liberal arts college, contracted with the University of Southern California's Center for Urban Education to increase inclusion and mitigate bias in their faculty search and hiring processes.

National agencies and consortia such as the Association of Public and Land-grant Universities and the Center for the Integration of Teaching, Research, and Learning have encouraged discourse, provided resources, and offered training focused on expanding access to and increasing diversity in the academy at research universities and community colleges, respectively. Philanthropic entities such as the Kresge Foundation, Mellon Foundation, and ECMC Foundation have partnered with the Penn Center for Minority Serving Institutions to support faculty and increase access to positions at minority serving institutions, collaborating to offer mentorship, leadership development, and workshops focused on faculty success. These efforts are a promising start, and should be encouraged, evaluated, and expanded to promote meaningful progress toward a more diverse academy.

## References

- Baez, Benjamin. 2000. "Race-Related Service and Faculty of Color: Conceptualizing Critical Agency in Academe." *Higher Education* 39 (3): 363–391.
- Carnes, Molly, Patricia G. Devine, Linda Baier Manwell, Angela Byars-Winston, Eve Fine, Cecilia Ford, Patrick Forscher, Carol Isaac, Anna Katz, Wairimu Magua, Mari Palta, and Jennifer Sheridan. 2015. "Effect of an Intervention to Break the Gender Bias Habit for Faculty at One Institution: A Cluster Randomized, Controlled Trial." *Academic Medicine: Journal of the Association of American Medical Colleges* 90 (2): 221–230.
- Chessman, Hollie, and Lindsay Wayt. 2016. "What Are Students Demanding?" *Higher Education Today* (blog), American Council on Education. January 13, 2016. <https://www.higheredtoday.org/2016/01/13/what-are-students-demanding>.
- Diggs, Gregory A., Dorothy F. Garrison-Wade, Diane Estrada, and Rene Galindo. 2009. "Smiling Faces and Colored Spaces: The Experiences of Faculty of Color Pursing Tenure in the Academy." *The Urban Review* 41 (4): 312–333.
- Felder, Pamela Petrease, Howard C. Stevenson, and Marybeth Gasman. 2014. "Understanding Race in Doctoral Student Socialization." *International Journal of Doctoral Studies* 9: 21–42.
- Finkelstein, Martin J., Valerie Martin Conley, and Jack H. Schuster. 2016. *Taking the Measure of Faculty Diversity*. New York: TIAA Institute.
- Flaherty, Colleen. 2015. "Demanding 10 Percent." *Inside Higher Education*, November 30, 2015. <https://www.insidehighered.com/news/2015/11/30/student-activists-want-more-black-faculty-members-how-realistic-are-some-their-goals>.

- Fuhrmann, Cynthia N., Dina G. Halme, Patricia S. O'Sullivan, and Bill Lindstaedt. 2011. "Improving Graduate Education to Support a Branching Career Pipeline: Recommendations Based on a Survey of Doctoral Students in the Basic Biomedical Sciences." *CBE—Life Sciences Education* 10 (3): 239–249.
- Gibbs, Kenneth D., Jr., and Kimberly A. Griffin. 2013. "What Do I Want to Be with My PhD? The Roles of Personal Values and Structural Dynamics in Shaping the Career Interests of Recent Biomedical Science PhD Graduates." *CBE Life Sciences Education* 12 (4): 711–723.
- Gibbs, Kenneth D., Jr., John McGready, Jessica C. Bennett, and Kimberly Griffin. 2014. "Biomedical Science PhD Career Interest Patterns by Race/Ethnicity and Gender." *PLOS ONE* 9 (12): 1–18.
- Griffin, Kimberly A., Jessica C. Bennett, and Jessica Harris. 2013. "Marginalizing Merit?: Gender Differences in Black Faculty D/discourses on Tenure, Advancement, and Professional Success." *The Review of Higher Education* 36 (4): 489–512.
- Griffin, Kimberly A., Kenneth D. Gibbs Jr., Jessica Bennett, Candice Staples, and Tykeia Robinson. 2015. "'Respect Me for My Science': A Bourdieuan Analysis of Women Scientists' Interactions with Faculty and Socialization into Science." *Journal of Women and Minorities in Science and Engineering* 21 (2): 159–179.
- Griffin, Kimberly A., Meghan J. Pifer, Jordan R. Humphrey, and Ashley M. Hazelwood. 2011. "(Re)Defining Departure: Exploring Black Professors' Experiences with and Responses to Racism and Racial Climate." *American Journal of Education* 117 (4): 495–526.
- Jayakumar, Uma M., Tyrone C. Howard, Walter R. Allen, and June C. Han. 2009. "Racial Privilege in the Professoriate: An Exploration of Campus Climate, Retention, and Satisfaction." *The Journal of Higher Education* 80 (5): 538–563.
- Johnson, Angela C. 2007. "Unintended Consequences: How Science Professors Discourage Women of Color." *Science Education* 91 (5): 805–821.
- Joseph, Tiffany D., and Laura E. Hirshfield. 2011. "'Why Don't You Get Somebody New to Do It?' Race and Cultural Taxation in the Academy." *Ethnic and Racial Studies* 34 (1): 121–141.
- Kayes, Pauline E. 2006. "New Paradigms for Diversifying Faculty and Staff in Higher Education: Uncovering Cultural Biases in the Search and Hiring Process." *Multicultural Education* 14 (2): 65–69.
- Knowles, Marjorie F., and Bernard W. Harleston. 1997. *Achieving Diversity in the Professoriate: Challenges and Opportunities*. Washington DC: American Council on Education.
- Li, Diyi, and Cory Koedel. 2017. "Representation and Salary Gaps by Race-Ethnicity and Gender at Selective Public Universities." *Educational Researcher* 46 (7): 343–354.
- National Science Foundation, National Center for Science and Engineering Statistics. 2013. *Survey of Doctorate Recipients*, Table 9-27. <https://www.nsf.gov/statistics/2017/nsf17310/static/data/tab9-27.pdf>.
- O'Meara, KerryAnn. 2016. "Whose Problem Is It? Gender Differences in Faculty Thinking About Campus Service." *Teachers College Record* 118 (8): 1–38.
- Padilla, Amado M. 1994. "Ethnic Minority Scholars, Research, and Mentoring: Current and Future Issues." *Educational Researcher* 23 (4): 24–27.
- Patel, Vimal. 2015. "Dearth of Black PhD Recipients Will Complicate Efforts to Diversify Faculty." *The Chronicle of Higher Education*, December 4, 2015. <https://www.chronicle.com/article/Dearth-of-Black-PhD/234469>.
- Pittman, Chavella T. 2010. "Race and Gender Oppression in the Classroom: The Experiences of Women Faculty of Color with White Male Students." *Teaching Sociology* 38 (3): 183–196.
- Pittman, Chavella T. 2012. "Racial Microaggressions: The Narratives of African American Faculty at a Predominantly White University." *The Journal of Negro Education* 81 (1): 82–92.

- Poon, OiYan, Dian Squire, Corinne Kodama, Ajani Byrd, Jason Chan, Lester Manzano, Sara Furr, and Devita Bishundat. 2016. "A Critical Review of the Model Minority Myth in Selected Literature on Asian Americans and Pacific Islanders in Higher Education." *Review of Educational Research* 86 (2): 469–502.
- Robinson, William H., Ebony O. McGee, Lydia C. Bentley, Stacey L. Houston, and Portia K. Botchway. 2016. "Addressing Negative Racial and Gendered Experiences That Discourage Academic Careers in Engineering." *Computing in Science & Engineering* 18 (2): 29–39.
- Sauermann, Henry, and Michael Roach. 2012. "Science PhD Career Preferences: Levels, Changes, and Advisor Encouragement." *PLOS ONE* 7 (5): 1–9. doi: 10.1371/journal.pone.0036307.
- Smith, Daryl G., Caroline S. Turner, Nana Osei-Kofi, and Sandra Richards. 2004. "Interrupting the Usual: Successful Strategies for Hiring Diverse Faculty." *The Journal of Higher Education* 75 (2): 133–160.
- Smith, Daryl G., Lisa E. Wolf, and Bonnie E. Busenberg. 1996. *Achieving Faculty Diversity: Debunking the Myths*. Washington, DC: Association of American Colleges and Universities.
- Stanley, Christine A. 2007. "When Counter Narratives Meet Master Narratives in the Journal Editorial-Review Process." *Educational Researcher* 36 (1): 14–24.
- Tierney, William G., and Estela Mara Bensimon. 1996. *Promotion and Tenure: Community and Socialization in Academe*. Frontiers in Education. Albany, NY: SUNY Press.
- Tugend, Alina. 2018. "How Serious Are You About Diversity Hiring?" *The Chronicle of Higher Education*, June 17, 2018. <https://www.chronicle.com/article/How-Serious-Are-You-About/243684>.
- Tuitt, Franklin A., Mary Ann Danowitz Sagaria, and Caroline Sotello Viernes Turner. 2007. "Signals and Strategies in Hiring Faculty of Color." In *Higher Education: Handbook of Theory and Research*, vol. 22, edited by John C. Smart, 497–535. Dordrecht, Netherlands: Springer.
- Turner, Caroline Sotello Viernes, Juan Carlos González, and Luke Wood. 2008. "Faculty of Color in Academe: What 20 Years of Literature Tells Us." *Journal of Diversity in Higher Education* 1 (3): 139–168.



# CHAPTER 11



## Employment and Earnings





# INTRODUCTION

A postsecondary education provides an opportunity to millions of Americans to improve their futures and those of their families. Recent research has shown that attaining a postsecondary credential results in both individual and public benefits, such as living healthier lives and active civic engagement (McMahon 2009; Ma, Pender, and Welch 2016; Turk 2019). However, examining employment and earnings after postsecondary graduation provides a complex picture of racial and ethnic inequities that permeate our nation. Research has shown persistent gaps in college enrollment, attainment, and earnings based upon race and ethnicity (Farley and Allen 1987). These findings persist today. A study of economic opportunity and upward mobility found disparities in economic outcomes by race and ethnicity when comparing White children with both Black<sup>1</sup> and Hispanic children. As the findings show, Hispanics move up in income distribution from generation to generation, while Black children have higher rates of downward income mobility and lower rates of upward income mobility when compared with White children (Chetty et al. 2018).

As shown in previous chapters of this report, there are substantial differences across racial and ethnic groups in the completion rates of students who enroll in postsecondary education, the types of credentials students earn, and the institutions at which they complete.<sup>2</sup> In addition, there are differences in how students finance their education and how much educational debt they accumulate. These factors contribute to post-graduation employment and earnings.<sup>3</sup> Overall, Census data show that median annual earnings and the likelihood of being in the labor force, of being employed, and of working full time, increase with each additional level of educational attainment. While these patterns appear across all racial and ethnic groups, there is variation across groups. For example, American Indians or Alaska Natives, African Americans, and Hispanics have lower median annual earnings than other groups, even within the same levels of educational attainment. These gaps are troubling and prompt critical questions regarding the access and opportunities afforded to members of different racial and ethnic groups.

## KEY FINDINGS

- Across age groups, those who had earned a college degree were more likely to be employed full time in 2016 than those who had not completed a degree.
- In 2016, the unemployment rate for White graduates ages 35 to 44 whose highest degree was a bachelor's degree was lower than that for Black graduates (2.7 percent and 5.1 percent, respectively).
- Overall, Whites and Asians had the highest median annual earnings, while American Indians or Alaska Natives and Hispanics had the lowest overall median annual earnings.
- For adults ages 25 and older whose highest credential was a bachelor's degree, the median annual earnings ranged from about \$41,000 for American Indians or Alaska Natives to over \$57,000 for Asians.
- Median annual earnings for Asians in STEM<sup>4</sup> occupations with a bachelor's degree were roughly \$22,000 higher than those of Asians whose highest degree was an associate degree, while this difference for Blacks in STEM occupations was \$13,000.

1 The terms Black and African American are used interchangeably.

2 For more information on undergraduate student completion, please see Chapter 5 of this report, "Undergraduate Persistence and Completion." For more information on graduate student completion, please see Chapter 6 of this report, "Graduate School Completion."

3 Research also shows that choice of majors also plays an integral role in labor market outcomes (Carnevale and Cheah 2018).

4 STEM occupations were defined as having a two-digit Standard Occupation Classification (SOC) code of 15 (Computer or Mathematical Occupations), 17 (Architecture and Engineering Occupations), or 19 (Life, Physical, and Social Science Occupations).

- Adults in education occupations saw modest gains with an associate degree, but their median annual earnings relative to high school graduates increased to nearly \$40,000 once they completed a bachelor's degree.
- Among adults in health occupations, Asians, Hispanics, and Whites with graduate degrees all had median annual earnings \$30,000 more than their peers whose highest degree was a bachelor's degree.

This chapter analyzes data from the U.S. Census Bureau's American Community Survey (ACS). The ACS is a yearly 1 percent sample of all Americans; it includes a little over 3 million observations each year. ACS also releases a five-year sample, which includes all observations from the most recent five years, and has a sample size of around 16 million. The very large sample size of the five-year sample allows for the measurement of characteristics of small subgroups with good precision. This chapter analyzes data from the 2016 five-year sample, making them representative of Americans during 2012 to 2016.



## EMPLOYMENT STATUS, BY AGE

Employment status varies by educational attainment, with those who have attained higher levels of education more likely to be in the labor force, to have lower rates of unemployment, and to be employed full time.

This section presents information on employment status. Individuals are considered to be in the labor force if they are either employed or actively seeking a job. Individuals working at least 35 hours per week are categorized as having full-time employment. The unemployment rate is the share of people in the labor force who are not employed. People without jobs who are not actively seeking employment—who are not in the labor force—do not affect this measure. Individuals not in the labor force include a host of categories, including students, retired workers, and stay-at-home parents (U.S. Census Bureau 2018).

### Ages 25 to 34

In 2016, among adults who were employed, those with an associate degree were 2.4 percentage points more likely than adults with only a high school diploma or alternative credential to be employed full time (84.0 percent compared with 81.6 percent). Roughly 89 percent of adults whose highest degree was a bachelor’s degree were employed full time, 7.8 percentage points higher than among those with only a high school credential. The unemployment rate of all 25- to 34-year-olds whose highest level of education was high school was 11.1 percent, double that of adults whose highest level of education was an associate degree (5.5 percent) and more than triple that of adults whose highest level of education was a bachelor’s degree (3.5 percent). Among adults ages 25 to 34,<sup>5</sup> 22.4 percent of those whose highest level of education was high school were not in the labor force, compared with 11.4 percent of adults whose highest degree was an associate degree and 8.6 percent of adults whose highest degree was a bachelor’s degree.

**Table 11.1: Employment Status of Adults Ages 25 to 34, by Educational Attainment and Race and Ethnicity: 2016**

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Not Enrolled, Not High School Graduate	All racial and ethnic groups	34.6%	15.0%	78.3%
	American Indian or Alaska Native	50.1%	32.3%	73.2%
	Asian	34.4%	9.1%	79.2%
	Black	46.8%	31.3%	67.2%
	Hispanic	28.1%	9.8%	81.8%
	Native Hawaiian or other Pacific Islander	43.4%	13.7%	74.8%
	White	38.8%	18.5%	75.0%
	More than one race	41.8%	21.1%	72.2%
High School Graduate or Equivalent	All racial and ethnic groups	22.4%	11.1%	81.6%
	American Indian or Alaska Native	32.5%	19.6%	82.0%
	Asian	23.6%	8.1%	80.6%
	Black	26.3%	18.6%	78.0%
	Hispanic	21.1%	8.8%	83.4%
	Native Hawaiian or other Pacific Islander	22.8%	11.4%	83.8%
	White	21.5%	10.0%	81.8%
	More than one race	25.0%	12.9%	77.7%

<sup>5</sup> Adults ages 25 to 34 are among those most likely to be enrolled in graduate education. The U.S. Census classifies students in the category “not in the labor force.”

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Some College but No Degree	All racial and ethnic groups	15.5%	8.1%	82.5%
	American Indian or Alaska Native	23.7%	14.0%	81.2%
	Asian	17.2%	7.8%	81.0%
	Black	14.6%	13.1%	80.8%
	Hispanic	15.4%	7.5%	82.9%
	Native Hawaiian or other Pacific Islander	15.6%	9.1%	81.7%
	White	15.6%	6.7%	83.0%
	More than one race	17.1%	10.2%	80.2%
Associate Degree	All racial and ethnic groups	11.4%	5.5%	84.0%
	American Indian or Alaska Native	16.4%	7.1%	85.8%
	Asian	17.6%	5.8%	80.9%
	Black	10.2%	9.4%	83.1%
	Hispanic	11.6%	6.0%	85.0%
	Native Hawaiian or other Pacific Islander	17.0%	10.3%	85.1%
	White	11.1%	4.6%	84.2%
	More than one race	12.9%	7.0%	79.7%
Bachelor's Degree	All racial and ethnic groups	8.6%	3.5%	89.4%
	American Indian or Alaska Native	10.3%	4.9%	91.3%
	Asian	16.2%	4.3%	90.6%
	Black	6.3%	5.8%	89.8%
	Hispanic	9.2%	5.0%	87.8%
	Native Hawaiian or other Pacific Islander	8.9%	8.8%	85.9%
	White	7.7%	2.9%	89.5%
	More than one race	8.9%	4.8%	87.9%
Master's Degree	All racial and ethnic groups	7.6%	2.5%	91.7%
	American Indian or Alaska Native	7.8%	0.6%	91.1%
	Asian	17.4%	3.3%	94.4%
	Black	4.0%	4.2%	93.3%
	Hispanic	6.5%	3.0%	91.7%
	Native Hawaiian or other Pacific Islander	3.6%!	3.9%	86.5%
	White	5.8%	2.1%	91.0%
	More than one race	8.3%	3.3%	90.4%
Professional Degree	All racial and ethnic groups	5.5%	2.7%	92.4%
	American Indian or Alaska Native	5.3%!!	1.8%	83.7%
	Asian	9.2%	3.0%	92.7%
	Black	5.0%	4.4%	93.8%
	Hispanic	10.6%	4.3%	90.0%
	Native Hawaiian or other Pacific Islander	7.6%!!	4.0%	83.6%
	White	4.2%	2.4%	92.5%
	More than one race	4.7%	3.9%	91.2%

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Doctoral Degree	All racial and ethnic groups	4.0%	1.8%	92.2%
	American Indian or Alaska Native	10.7%!!	#	58.0%
	Asian	6.2%	1.4%	93.8%
	Black	4.4%	2.2%	93.4%
	Hispanic	5.7%	2.2%	90.9%
	Native Hawaiian or other Pacific Islander	#	#	96.0%
	White	3.0%	1.8%	91.9%
	More than one race	8.1%	4.0%	90.7%

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: This table includes all individuals, including those in the military, incarcerated, or enrolled in school. Those in the military are counted as employed. Those incarcerated are counted as not in the work force. Those enrolled in school are counted the same way as individuals who are not enrolled. Employed includes individuals employed either full or part time. Individuals working at least 35 hours per week are categorized as having full-time employment. The unemployment rate is the share of people in the labor force who are not employed. People without jobs who are not actively seeking employment—who are not in the labor force—do not affect this measure. Individuals not in the labor force include a host of categories, including students, retired workers, and stay-at-home parents. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%. | # Zero observations.

- Among adults whose highest degrees were associate and bachelor's degrees, Blacks and Native Hawaiians or other Pacific Islanders ages 25 to 34 had higher unemployment rates than their peers in other groups, while White adults had the lowest unemployment rates. For example, the unemployment rate for those whose highest degree was a bachelor's degree ranged from 2.9 percent for White graduates to 8.8 percent for Native Hawaiian or other Pacific Islander graduates.
- The unemployment rate of Black adults who had completed only high school was more than triple that of Black adults whose highest degree was a bachelor's degree (18.6 percent and 5.8 percent, respectively). Whites followed a similar pattern, where the unemployment rate of White adults who had completed only high school was more than triple that of those whose highest degree was a bachelor's degree (10.0 percent and 2.9 percent, respectively).
- In 2016, among college graduates whose highest level of education was an associate degree or bachelor's degree, Black adults ages 25 to 34 were least likely to be out of the labor force (10.2 percent and 6.3 percent, respectively).

## Ages 35 to 44

Across all levels of educational attainment, the majority of adults ages 35 to 44 who were employed had full-time employment, although adults with higher levels of educational attainment were more likely to be employed full time. The unemployment rate decreased with each additional level of educational attainment, where adults who had completed only high school had an unemployment rate of 8.2 percent, compared with 4.7 percent for adults whose highest degree was an associate degree and 3.1 percent for adults whose highest degree was a bachelor's degree. The share of the population out of the labor force declined as level of education increased. Roughly 22 percent of adults ages 35 to 44 whose highest level of education was high school were not in the labor force, compared with 13.1 percent of adults whose highest degree was an associate degree and 12.0 percent of adults whose highest degree was a bachelor's degree.

**Table 11.2: Employment Status of Adults Ages 35 to 44, by Educational Attainment and Race and Ethnicity: 2016**

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Not Enrolled, Not High School Graduate	All racial and ethnic groups	31.9%	10.5%	80.9%
	American Indian or Alaska Native	50.1%	19.7%	77.2%
	Asian	26.9%	6.5%	79.7%
	Black	45.4%	23.5%	73.8%
	Hispanic	25.7%	7.4%	82.5%
	Native Hawaiian or other Pacific Islander	32.4%	10.1%	80.9%
	White	38.9%	14.0%	79.7%
	More than one race	40.3%	14.8%	75.0%
High School Graduate or Equivalent	All racial and ethnic groups	21.8%	8.2%	84.7%
	American Indian or Alaska Native	32.0%	14.0%	83.1%
	Asian	21.6%	5.9%	83.2%
	Black	25.8%	13.5%	83.9%
	Hispanic	20.3%	6.9%	84.9%
	Native Hawaiian or other Pacific Islander	19.2%	10.6%	86.0%
	White	21.0%	7.3%	85.0%
	More than one race	27.3%	10.4%	82.5%
Some College but No Degree	All racial and ethnic groups	16.6%	6.3%	85.7%
	American Indian or Alaska Native	24.6%	11.8%	86.2%
	Asian	18.1%	5.2%	84.4%
	Black	16.4%	9.7%	86.3%
	Hispanic	15.9%	6.1%	86.4%
	Native Hawaiian or other Pacific Islander	15.2%	9.8%	87.2%
	White	16.5%	5.4%	85.5%
	More than one race	21.3%	8.9%	83.6%
Associate Degree	All racial and ethnic groups	13.1%	4.7%	85.5%
	American Indian or Alaska Native	19.0%	8.8%	85.4%
	Asian	19.2%	4.9%	84.7%
	Black	11.8%	6.9%	87.4%
	Hispanic	13.3%	5.1%	86.1%
	Native Hawaiian or other Pacific Islander	13.1%	4.5%	88.2%
	White	12.7%	4.1%	85.1%
	More than one race	14.7%	5.7%	84.9%
Bachelor's Degree	All racial and ethnic groups	12.0%	3.1%	88.2%
	American Indian or Alaska Native	12.4%	3.8%	90.8%
	Asian	16.9%	3.7%	89.1%
	Black	7.5%	5.1%	91.8%
	Hispanic	12.8%	4.0%	88.6%
	Native Hawaiian or other Pacific Islander	11.9%	3.1%	91.3%
	White	11.7%	2.7%	87.6%
	More than one race	11.9%	4.0%	86.9%

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Master's Degree	All racial and ethnic groups	8.6%	2.4%	90.1%
	American Indian or Alaska Native	9.0%	4.7%	92.6%
	Asian	12.8%	2.9%	92.5%
	Black	4.6%	3.7%	93.9%
	Hispanic	8.3%	2.7%	91.7%
	Native Hawaiian or other Pacific Islander	6.7%!	0.2%	90.4%
	White	8.2%	2.0%	89.0%
	More than one race	8.9%	4.3%	90.1%
Professional Degree	All racial and ethnic groups	6.8%	1.7%	89.2%
	American Indian or Alaska Native	1.3%!!	2.6%	91.7%
	Asian	8.0%	1.8%	88.1%
	Black	5.8%	2.7%	92.6%
	Hispanic	12.1%	2.3%	87.8%
	Native Hawaiian or other Pacific Islander	19.7%!!	#	77.8%
	White	6.0%	1.5%	89.3%
	More than one race	7.7%	3.5%	90.5%
Doctoral Degree	All racial and ethnic groups	5.6%	2.0%	91.5%
	American Indian or Alaska Native	13.6%!	4.1%	86.8%
	Asian	7.1%	2.4%	93.5%
	Black	5.8%	2.6%	92.0%
	Hispanic	7.1%	2.3%	90.9%
	Native Hawaiian or other Pacific Islander	41.5%!	#	76.2%
	White	4.8%	1.7%	90.9%
	More than one race	6.2%	2.7%	91.6%

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: This table includes all individuals, including those in the military, incarcerated, or enrolled in school. Those in the military are counted as employed. Those incarcerated are counted as not in the labor force. Those enrolled in school are counted the same way as individuals who are not enrolled. Employed includes individuals employed either full or part time. Individuals working at least 35 hours per week are categorized as having full-time employment. The unemployment rate is the share of people in the labor force who are not employed. People without jobs who are not actively seeking employment—who are not in the labor force—do not affect this measure. Individuals not in the labor force include a host of categories, including students, retired workers, and stay-at-home parents. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%. | # Zero observations.

- Among employed adults ages 35 to 44 whose highest degree was a bachelor's degree, Black and Native Hawaiian or other Pacific Islander adults were more likely than those in other groups to be working full time (91.8 percent and 91.3 percent, respectively).
- Among adults ages 35 to 44 whose highest degree was an associate degree, the unemployment rate of American Indians or Alaska Natives was more than double that of Whites (8.8 percent and 4.1 percent, respectively).
- Among adults whose highest degree was a bachelor's degree, Blacks had the highest unemployment rate (5.1 percent), while White adults had the lowest unemployment rate (2.7 percent).
- In 2016, among college graduates whose highest level of education was an associate degree, bachelor's degree, or master's degree, Black adults ages 35 to 44 were least likely to be out of the labor force, while Asians were the most likely to be out of the labor force. Among professional and doctoral degree<sup>6</sup> recipients, Asian and Hispanic adults were more likely than their Black or White peers to be out of the labor force.

<sup>6</sup> Professional degrees reflect those classified as doctorate-professional practice, including chiropractic, dentistry, law, medicine, pharmacy, veterinary medicine, and other degrees for which a credential or license is required for professional practice. Doctoral degrees reflect those classified as doctorate-research/scholarship degrees, including PhD, EdD, DMA, and other research-based degrees.

## Ages 45 to 54

Across all levels of educational attainment, the majority of all adults ages 45 to 54 who were employed had full-time employment, although the share of those with full-time employment increased with educational attainment. Roughly 90 percent of employed adults who completed a graduate degree had full-time employment, compared with 85.2 percent of adults with only a high school credential. The unemployment rate of adults ages 45 to 54 who had completed only high school was almost twice that of those whose highest degree was a bachelor's degree (6.7 percent and 3.5 percent, respectively). Nearly one-quarter of adults ages 45 to 54 whose highest level of education was high school were not in the labor force (23.8 percent), compared with 15.3 percent of adults whose highest degree was an associate degree and 12.3 percent of adults whose highest degree was a bachelor's degree.

**Table 11.3: Employment Status of Adults Ages 45 to 54, by Educational Attainment and Race and Ethnicity: 2016**

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Not Enrolled, Not High School Graduate	All racial and ethnic groups	37.5%	9.9%	80.6%
	American Indian or Alaska Native	55.4%	18.5%	73.4%
	Asian	29.3%	7.3%	78.7%
	Black	52.0%	18.8%	75.4%
	Hispanic	27.2%	7.5%	82.5%
	Native Hawaiian or other Pacific Islander	34.0%	14.0%	77.2%
	White	44.7%	11.1%	79.8%
	More than one race	48.2%	13.5%	78.1%
High School Graduate or Equivalent	All racial and ethnic groups	23.8%	6.7%	85.2%
	American Indian or Alaska Native	34.8%	12.4%	84.3%
	Asian	21.0%	5.7%	83.2%
	Black	29.5%	10.7%	85.2%
	Hispanic	21.3%	6.4%	85.0%
	Native Hawaiian or other Pacific Islander	22.4%	9.4%	87.7%
	White	23.0%	5.9%	85.4%
	More than one race	29.6%	9.2%	83.2%
Some College but No Degree	All racial and ethnic groups	19.0%	5.4%	86.1%
	American Indian or Alaska Native	30.2%	9.8%	84.8%
	Asian	17.6%	5.1%	85.9%
	Black	22.0%	8.1%	87.6%
	Hispanic	17.9%	5.6%	86.0%
	Native Hawaiian or other Pacific Islander	21.1%	6.2%	85.6%
	White	18.2%	4.8%	85.9%
	More than one race	28.2%	8.1%	83.2%
Associate Degree	All racial and ethnic groups	15.3%	4.4%	85.5%
	American Indian or Alaska Native	21.5%	7.5%	88.2%
	Asian	17.1%	4.6%	83.9%
	Black	16.5%	6.7%	88.2%
	Hispanic	15.4%	5.3%	86.4%
	Native Hawaiian or other Pacific Islander	16.0%	6.0%	84.9%
	White	14.9%	3.8%	85.1%
	More than one race	20.5%	6.8%	85.1%

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Bachelor's Degree	All racial and ethnic groups	12.3%	3.5%	87.4%
	American Indian or Alaska Native	15.4%	4.1%	89.7%
	Asian	15.3%	3.9%	87.4%
	Black	10.4%	5.1%	91.8%
	Hispanic	12.6%	4.6%	87.0%
	Native Hawaiian or other Pacific Islander	11.7%	10.1%	85.6%
	White	12.1%	3.2%	87.0%
	More than one race	15.0%	5.7%	86.9%
Master's Degree	All racial and ethnic groups	8.6%	2.9%	90.2%
	American Indian or Alaska Native	15.5%	3.4%	91.1%
	Asian	11.1%	3.5%	90.7%
	Black	6.4%	4.5%	92.8%
	Hispanic	8.6%	3.4%	90.1%
	Native Hawaiian or other Pacific Islander	14.9%	3.1%	91.4%
	White	8.5%	2.5%	89.9%
	More than one race	11.0%	4.9%	89.1%
Professional Degree	All racial and ethnic groups	7.6%	1.9%	88.8%
	American Indian or Alaska Native	13.2%	4.5%	91.9%
	Asian	7.5%	1.9%	88.5%
	Black	7.0%	2.6%	91.8%
	Hispanic	10.6%	2.7%	87.6%
	Native Hawaiian or other Pacific Islander	4.6%!!	#	80.8%
	White	7.3%	1.7%	88.9%
	More than one race	7.6%	2.3%	84.7%
Doctoral Degree	All racial and ethnic groups	6.0%	2.3%	91.8%
	American Indian or Alaska Native	10.8%!	6.0%	85.1%
	Asian	5.7%	2.9%	94.5%
	Black	6.2%	4.1%	92.7%
	Hispanic	7.9%	3.3%	88.6%
	Native Hawaiian or other Pacific Islander	7.4%!!	#	#
	White	5.7%	1.9%	91.3%
	More than one race	10.8%	3.4%	91.5%

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: This table includes all individuals, including those in the military, incarcerated, or enrolled in school. Those in the military are counted as employed. Those incarcerated are counted as not in the work force. Those enrolled in school are counted the same way as individuals who are not enrolled. Employed includes individuals employed either full or part time. Individuals working at least 35 hours per week are categorized as having full-time employment. The unemployment rate is the share of people in the labor force who are not employed. People without jobs who are not actively seeking employment—who are not in the labor force—do not affect this measure. Individuals not in the labor force include a host of categories, including students, retired workers, and stay-at-home parents. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | !! Interpret with caution. Ratio of standard error is >50%. | # Zero observations.

- Among employed adults ages 45 to 54 whose highest level of education was a bachelor's degree, Blacks were more likely than any other group to be working full time (91.8 percent), while Native Hawaiians or other Pacific Islanders were the least likely to have full-time employment (85.6 percent).

- The unemployment rate of American Indians or Alaska Natives who completed only high school was three times that of those whose highest degree was a bachelor's degree (12.4 percent and 4.1 percent, respectively). The unemployment rate for Blacks who had completed only high school was more than twice that of those whose highest degree was a bachelor's degree (10.7 percent and 5.1 percent, respectively).
- Regardless of educational attainment, American Indians or Alaska Natives were more likely than all other groups to be out of the labor force.

## Ages 55 to 64

Employment status among adults ages 55 to 64 followed a slightly different pattern than among younger adults. While the majority of all employed adults in each college degree category were employed full time, this share was lower than in the younger age brackets. The unemployment rate of adults whose highest level of education was a high school credential (5.5 percent) was higher than that of adults whose highest degree was an associate or bachelor's degree (4.5 percent and 4.2 percent, respectively). Over four in 10 adults whose highest level of education was a high school credential were not in the labor force (40.3 percent), compared with 31.2 percent of adults whose highest degree was an associate degree and 27.5 percent of adults whose highest degree was an bachelor's degree.

**Table 11.4: Employment Status of Adults Ages 55 to 64, by Educational Attainment and Race and Ethnicity: 2016**

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Not Enrolled, Not High School Graduate	All racial and ethnic groups	53.7%	8.2%	77.2%
	American Indian or Alaska Native	67.3%	10.7%	75.0%
	Asian	48.0%	7.3%	74.0%
	Black	63.2%	12.3%	74.7%
	Hispanic	45.1%	7.8%	79.2%
	Native Hawaiian or other Pacific Islander	52.9%	15.6%	79.2%
	White	57.7%	7.3%	76.7%
	More than one race	60.7%	9.8%	74.8%
High School Graduate or Equivalent	All racial and ethnic groups	40.3%	5.5%	81.3%
	American Indian or Alaska Native	50.7%	8.8%	80.9%
	Asian	36.9%	6.2%	79.6%
	Black	47.3%	8.3%	81.9%
	Hispanic	38.3%	6.7%	80.8%
	Native Hawaiian or other Pacific Islander	45.8%	9.2%	80.8%
	White	39.3%	4.9%	81.4%
	More than one race	46.1%	6.7%	79.1%
Some College but No Degree	All racial and ethnic groups	35.8%	5.3%	81.7%
	American Indian or Alaska Native	46.1%	7.0%	83.3%
	Asian	31.4%	5.5%	82.1%
	Black	42.4%	7.3%	82.9%
	Hispanic	33.8%	6.4%	82.8%
	Native Hawaiian or other Pacific Islander	37.1%	4.8%	86.3%
	White	34.7%	4.8%	81.5%
	More than one race	46.6%	7.5%	80.1%



		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Associate Degree	All racial and ethnic groups	31.2%	4.5%	81.5%
	American Indian or Alaska Native	40.6%	5.5%	81.4%
	Asian	30.3%	4.7%	81.8%
	Black	35.7%	6.4%	85.2%
	Hispanic	31.8%	5.3%	82.8%
	Native Hawaiian or other Pacific Islander	35.4%	3.8%	84.9%
	White	30.4%	4.1%	80.9%
	More than one race	39.6%	6.9%	82.0%
Bachelor's Degree	All racial and ethnic groups	27.5%	4.2%	83.4%
	American Indian or Alaska Native	33.5%	6.2%	85.1%
	Asian	28.2%	4.6%	85.2%
	Black	29.0%	6.3%	86.8%
	Hispanic	26.6%	5.4%	85.7%
	Native Hawaiian or other Pacific Islander	34.1%	5.7%	84.7%
	White	27.3%	3.9%	82.8%
	More than one race	30.3%	6.9%	83.5%
Master's Degree	All racial and ethnic groups	25.6%	3.6%	84.1%
	American Indian or Alaska Native	30.6%	4.5%	89.7%
	Asian	23.1%	4.6%	87.3%
	Black	25.4%	5.2%	86.6%
	Hispanic	23.1%	4.4%	86.5%
	Native Hawaiian or other Pacific Islander	26.7%	3.5%	90.9%
	White	25.9%	3.3%	83.5%
	More than one race	24.3%	5.1%	86.3%
Professional Degree	All racial and ethnic groups	17.1%	2.0%	85.8%
	American Indian or Alaska Native	26.7%	2.0%	89.9%
	Asian	16.2%	2.5%	86.5%
	Black	22.1%	4.2%	88.7%
	Hispanic	18.8%	3.9%	84.5%
	Native Hawaiian or other Pacific Islander	18.5%!!	#	84.0%
	White	16.8%	1.7%	85.6%
	More than one race	17.5%	2.2%	83.6%

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Doctoral Degree	All racial and ethnic groups	14.8%	2.4%	87.3%
	American Indian or Alaska Native	19.1%	1.4%	83.1%
	Asian	14.2%	2.6%	92.3%
	Black	16.6%	4.0%	88.0%
	Hispanic	17.3%	3.6%	85.2%
	Native Hawaiian or other Pacific Islander	15.4%!!	6.2%	#
	White	14.4%	2.1%	86.8%
	More than one race	21.4%	3.6%	86.3%

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: This table includes all individuals, including those in the military, incarcerated, or enrolled in school. Those in the military are counted as employed. Those incarcerated are counted as not in the work force. Those enrolled in school are counted the same way as individuals who are not enrolled. Employed includes individuals employed either full or part time. Individuals working at least 35 hours per week are categorized as having full-time employment. The unemployment rate is the share of people in the labor force who are not employed. People without jobs who are not actively seeking employment—who are not in the labor force—do not affect this measure. Individuals not in the labor force include a host of categories, including students, retired workers, and stay-at-home parents. | !! Interpret with caution. Ratio of standard error is >50%. | # Zero observations.

- Among employed adults ages 55 to 64 whose highest degree was a bachelor's degree, the share of full-time employment ranged from 82.8 percent of Whites to 86.8 percent of Blacks.
- Blacks and adults of more than one race had the highest unemployment rates among adults whose highest degree was an associate degree (6.4 percent and 6.9 percent, respectively) or bachelor's degree (6.3 percent and 6.9 percent, respectively).
- Among adults whose highest degree was an associate degree, about four in 10 American Indians or Alaska Natives and adults of more than one race were not in the labor force (40.6 percent and 39.6 percent), compared with 31.2 percent of all adults in this age group who had this degree.

## Ages 65 and Older

The majority of adults ages 65 and older were not in the labor force in 2016. Among adults who remained employed, differences emerged by level of educational attainment, with those with higher levels of education being more likely to work full time. Among all adults ages 65 and older who were employed, more than 60 percent of all professional degree holders and doctoral degree holders had full-time employment, compared with roughly half of all adults without a college degree who were employed.

**Table 11.5: Employment Status of Adults Ages 65 and Older, by Educational Attainment and Race and Ethnicity: 2016**

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Not Enrolled, Not High School Graduate	All racial and ethnic groups	90.9%	6.4%	53.7%
	American Indian or Alaska Native	91.9%	4.6%	56.4%
	Asian	91.5%	4.9%	61.9%
	Black	91.0%	9.1%	51.9%
	Hispanic	88.4%	7.5%	62.6%
	Native Hawaiian or other Pacific Islander	90.0%	8.1%	43.6%
	White	91.7%	5.1%	48.4%
	More than one race	90.2%	7.4%	56.5%

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
High School Graduate or Equivalent	All racial and ethnic groups	86.4%	4.4%	51.6%
	American Indian or Alaska Native	85.5%	7.2%	59.6%
	Asian	86.5%	4.7%	64.3%
	Black	85.3%	5.9%	56.3%
	Hispanic	83.6%	5.3%	61.3%
	Native Hawaiian or other Pacific Islander	86.3%	2.1%	61.9%
	White	86.7%	4.1%	49.8%
	More than one race	85.3%	7.2%	58.1%
Some College but No Degree	All racial and ethnic groups	81.0%	5.1%	54.9%
	American Indian or Alaska Native	79.3%	7.7%	66.9%
	Asian	80.1%	5.3%	66.1%
	Black	80.8%	7.9%	58.1%
	Hispanic	77.9%	5.9%	63.2%
	Native Hawaiian or other Pacific Islander	74.6%	10.5%	63.7%
	White	81.2%	4.7%	53.7%
	More than one race	80.0%	8.0%	53.9%
Associate Degree	All racial and ethnic groups	78.8%	5.0%	56.9%
	American Indian or Alaska Native	76.1%	7.0%	80.1%
	Asian	79.7%	4.8%	67.3%
	Black	78.2%	6.9%	60.6%
	Hispanic	77.4%	5.7%	63.2%
	Native Hawaiian or other Pacific Islander	83.8%	1.2%	50.0%
	White	78.8%	4.7%	55.3%
	More than one race	80.2%	7.3%	60.0%
Bachelor's Degree	All racial and ethnic groups	77.3%	4.3%	59.5%
	American Indian or Alaska Native	75.7%	4.4%	65.7%
	Asian	78.1%	5.4%	70.2%
	Black	77.3%	6.4%	62.3%
	Hispanic	75.1%	5.9%	66.4%
	Native Hawaiian or other Pacific Islander	75.0%	3.5%	74.3%
	White	77.3%	4.0%	58.2%
	More than one race	74.4%	6.1%	63.4%
Master's Degree	All racial and ethnic groups	75.4%	3.8%	55.5%
	American Indian or Alaska Native	68.7%	5.3%	68.0%
	Asian	72.4%	4.9%	66.8%
	Black	76.0%	5.9%	60.0%
	Hispanic	71.4%	6.3%	64.0%
	Native Hawaiian or other Pacific Islander	69.9%	15.6%	74.0%
	White	75.6%	3.5%	54.3%
	More than one race	72.5%	6.8%	55.6%

		Percent Not in Labor Force	Unemployment Rate	Share of Employed Working Full Time
Professional Degree	All racial and ethnic groups	60.9%	2.0%	63.4%
	American Indian or Alaska Native	68.3%	5.0%	82.2%
	Asian	61.3%	1.6%	69.5%
	Black	63.3%	5.5%	62.0%
	Hispanic	62.2%	2.7%	69.1%
	Native Hawaiian or other Pacific Islander	55.7%	#	70.2%
	White	60.7%	1.8%	62.6%
	More than one race	63.0%	3.0%	65.5%
Doctoral Degree	All racial and ethnic groups	64.7%	2.7%	64.7%
	American Indian or Alaska Native	64.3%	0.8%	79.7%
	Asian	66.7%	3.4%	76.2%
	Black	61.5%	5.1%	69.1%
	Hispanic	61.9%	4.1%	68.1%
	Native Hawaiian or other Pacific Islander	75.2%	#	76.5%
	White	64.9%	2.4%	63.3%
	More than one race	61.1%	4.6%	70.5%

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: This table includes all individuals, including those in the military, incarcerated, or enrolled in school. Those in the military are counted as employed. Those incarcerated are counted as not in the work force. Those enrolled in school are counted the same way as individuals who are not enrolled. Employed includes individuals employed either full or part time. Individuals working at least 35 hours per week are categorized as having full-time employment. The unemployment rate is the share of people in the labor force who are not employed. People without jobs who are not actively seeking employment—who are not in the labor force—do not affect this measure. Individuals not in the labor force include a host of categories, including students, retired workers, and stay-at-home parents. | # Zero observations.

- Within all postsecondary degree categories, with the exception of professional and doctoral degree holders, Hispanic adults were more likely than White, Black, and Asian adults to be in the labor force and more likely to be employed.
- Within all postsecondary degree categories, with the exception of professional degree holders, White employed adults were less likely than Black, Hispanic, and Asian employed adults to be working full time.

## Employment Status Patterns Across Age Groups

- Labor force participation was lower for adults ages 55 to 64 than for those ages 45 to 54 across all levels of education and all racial and ethnic groups. The decline in labor force participation was much smaller for professional and doctoral degree holders in the 55 to 64 age group than for those with lower levels of educational attainment, but in each degree category, the declines were smaller among White, Asian, and Hispanic graduates than among those from other groups.
- Among American Indian or Alaska Native and Black graduates whose highest degree was a bachelor's degree, the unemployment rate was at least 1 percentage point higher among adults 55 to 64 years old than among those 45 to 54 years old. The same is true of American Indian or Alaska Native, Asian, and Hispanic graduates whose highest degree is a master's degree and among Black and Hispanic professional degree recipients.
- Among Native Hawaiians or other Pacific Islanders whose highest degree was a bachelor's degree, the unemployment rate of adults ages 45 to 54 was more than 4 percentage points higher than those 55 to 64 years old.

## MEDIAN ANNUAL EARNINGS, BY EDUCATIONAL ATTAINMENT

Overall, median annual earnings increased with each additional level of educational attainment, with adults with master's, doctoral, and professional degrees having higher median annual earnings than those with undergraduate degrees or less. While all racial and ethnic groups followed a similar pattern, differences emerged based upon race and ethnicity; Asians and Whites had higher median annual earnings than other racial and ethnic groups both overall (\$44,307 and \$41,216, respectively) and within each postsecondary degree category. Overall, American Indians or Alaska Natives and Hispanics had the lowest median annual earnings (\$28,995 and \$27,179, respectively), roughly \$10,000 less than the overall median annual earnings.

**Table 11.6: Median Annual Earnings of Adults Ages 25 and Older, by Educational Attainment and Race and Ethnicity: 2016**

	Not Enrolled, Not High School Graduate	High School Graduate or Equivalent	Some College but No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Profes- sional Degree	Doctoral Degree	All Education Levels
All racial and ethnic groups	\$20,800	\$29,100	\$34,430	\$39,493	\$52,000	\$64,809	\$95,000	\$84,049	\$37,094
American Indian or Alaska Native	\$18,248	\$24,331	\$28,851	\$32,404	\$41,316	\$50,690	\$67,948	\$61,842	\$28,995
Asian	\$20,253	\$25,089	\$32,442	\$37,308	\$57,495	\$81,104	\$101,380	\$92,735	\$44,307
Black	\$17,517	\$25,000	\$30,000	\$33,452	\$45,337	\$56,000	\$79,000	\$75,000	\$30,379
Hispanic	\$20,608	\$25,345	\$30,912	\$35,442	\$44,607	\$60,758	\$69,952	\$74,000	\$27,179
Native Hawaiian or other Pacific Islander	\$21,638	\$29,166	\$31,570	\$35,542	\$48,000	\$52,859	\$77,279	\$75,948	\$31,392
White	\$23,699	\$30,912	\$36,100	\$40,552	\$53,670	\$63,796	\$100,000	\$85,000	\$41,216
More than one race	\$20,253	\$27,000	\$31,200	\$36,455	\$50,000	\$61,823	\$80,000	\$78,063	\$36,000

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Note: Only earnings for employed adults are included. All employed adults (both full and part time) are included.

- American Indians or Alaska Natives had the lowest median annual earnings across most levels of educational attainment. Blacks had the lowest median annual earnings among those who did not have a high school credential (\$17,517).
- Whites had the highest median earnings among all groups for those who had not graduated from high school (\$23,699), had only a high school credential (\$30,912), had some college but no degree (\$36,100), and whose highest degree was an associate degree (\$40,552). Asians had the highest median earnings among those with a bachelor's degree or above.
- The median annual earnings among those whose highest degree was a bachelor's degree ranged from \$41,316 for American Indians or Alaska Natives to \$57,495 for Asians, a difference of more than \$16,000 (39.2 percent). The earnings gap between these two groups was more than \$30,000 (60.0 percent) among adults whose highest degree was a master's degree.

### Median Annual Earnings, by Educational Attainment and Age

Overall, median annual earnings increased with educational attainment within each age group. Median annual earnings varied across age, with 45- to 54-year-old adults having higher earnings overall than other age groups. However, earnings peaked for Asians between the ages of 35 and 44 and for American Indians or Alaska Natives between the ages of 55 and 64.

#### Ages 25 to 34

In 2016, the median annual earnings among adults ages 25 to 34 were \$30,414. Median annual earnings among adults in this age group increased with educational attainment, with bachelor's degree holders earning 79.3 percent more (about \$19,000) than high school graduates. Overall, Asians had the highest median annual earnings (\$40,505) among all racial and ethnic groups, while American Indians or Alaska Natives had the lowest (\$22,304).

**Table 11.7: Median Annual Earnings of Adults Ages 25 to 34, by Educational Attainment and Race and Ethnicity: 2016**

	Not Enrolled, Not High School Graduate	High School Graduate or Equivalent	Some College but No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Profes- sional Degree	Doctoral Degree	All Education Levels
All racial and ethnic groups	\$18,248	\$24,000	\$27,373	\$31,428	\$43,037	\$52,268	\$62,722	\$62,854	\$30,414
American Indian or Alaska Native	\$13,281	\$20,000	\$22,304	\$28,225	\$35,124	\$43,905	\$31,361!	\$59,746	\$22,304
Asian	\$18,547	\$22,998	\$28,225	\$30,912	\$51,520	\$70,000	\$62,722	\$62,000	\$40,505
Black	\$12,983	\$20,000	\$23,317	\$26,790	\$36,588	\$46,000	\$59,000	\$62,722	\$24,331
Hispanic	\$19,026	\$22,998	\$26,329	\$30,379	\$40,000	\$50,690	\$54,611	\$52,268	\$25,000
Native Hawaiian or other Pacific Islander	\$17,235	\$25,345	\$25,345	\$30,000	\$40,000	\$40,000	\$67,948	\$60,828!	\$26,936
White	\$18,547	\$25,345	\$29,881	\$33,797	\$44,307	\$51,520	\$64,812	\$64,915	\$34,430
More than one race	\$16,728	\$22,481	\$26,134	\$30,379	\$41,216	\$51,000	\$60,000	\$55,759	\$30,000

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Hispanics had the highest median annual earnings among all adults who had not completed high school (\$19,026), while Blacks had the lowest (\$12,983).
- Median annual earnings among adults whose highest degree was an associate degree ranged from \$26,790 for Blacks to \$33,797 for Whites, a difference of more than \$7,000 (26.2 percent).
- The median annual earnings of Asians whose highest degree was a bachelor's degree (\$51,520) were substantially higher than those of Blacks (\$36,588) and American Indians or Alaska Natives (\$35,124) with this degree.
- The largest earnings gap among all racial and ethnic groups with a doctoral degree was between Whites and Hispanics (24.2 percent). Whites had the highest median annual earnings of all groups with this degree (\$64,915)—over \$12,000 more than the median for Hispanics with the same degree (\$52,268).

## Ages 35 to 44

The median annual earnings of adults ages 35 to 44 were \$40,552. Median annual earnings varied by level of educational attainment, with bachelor's degree holders earning 93.6 percent more (about \$28,000) than high school graduates. Professional degree holders had the highest median annual earnings (\$104,070). Overall, Asians had the highest median annual earnings (\$55,000) among all racial and ethnic groups, while Hispanics had the lowest (\$29,366).

**Table 11.8: Median Annual Earnings of Adults Ages 35 to 44, by Educational Attainment and Race and Ethnicity: 2016**

	Not Enrolled, Not High School Graduate	High School Graduate or Equivalent	Some College but No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Profes- sional Degree	Doctoral Degree	All Education Levels
All racial and ethnic groups	\$21,000	\$30,379	\$36,455	\$40,552	\$58,800	\$70,000	\$104,070	\$84,674	\$40,552
American Indian or Alaska Native	\$18,248	\$25,345	\$30,379	\$31,361	\$42,580	\$52,000	\$65,000	\$60,828	\$30,414
Asian	\$20,276	\$25,760	\$35,442	\$40,505	\$70,000	\$91,242	\$121,656	\$90,674	\$55,000
Black	\$17,980	\$25,345	\$30,912	\$35,000	\$48,607	\$60,000	\$85,000	\$78,402	\$32,949
Hispanic	\$20,907	\$26,359	\$34,827	\$38,480	\$50,000	\$65,821	\$80,000	\$75,000	\$29,366
Native Hawaiian or other Pacific Islander	\$24,000	\$30,400	\$32,847	\$40,000	\$51,520	\$60,000	\$70,966!	\$75,948	\$35,033
White	\$25,089	\$32,615	\$39,155	\$41,870	\$60,758	\$68,000	\$106,327	\$84,674	\$45,787
More than one race	\$20,608	\$30,379	\$35,542	\$40,505	\$57,495	\$68,006	\$100,000	\$89,000	\$41,814

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Whites ages 35 to 44 had the highest median annual earnings among all adults whose highest degree was an associate degree or less. Whites with an associate degree had median annual earnings of \$41,870, roughly \$10,500 (33.5 percent) more than American Indian or Alaska Native adults with this degree (\$31,361).
- Asians whose highest degree was a bachelor's degree had substantially higher median annual earnings (\$70,000) than American Indians or Alaska Natives (\$42,580) with this same degree (roughly \$27,400 or 64.4 percent). This earnings gap between these two groups was 75.5 percent (nearly \$40,000) for master's degree holders.
- Asians, Whites, and adults of more than one race who had earned a professional degree all had median annual earnings of \$100,000 or more.

## Ages 45 to 54

The overall median annual earnings of adults ages 45 to 54 were \$42,580. Median annual earnings increased with each level of educational attainment, with bachelor's degree holders earning 91.2 percent more (about \$30,000) than high school graduates. Across educational attainment levels, professional degree recipients had the highest median annual earnings (\$114,373), followed by doctoral degree recipients (\$99,309). Overall, Whites had the highest median annual earnings (\$48,428) among all racial and ethnic groups, while Hispanics had the lowest (\$30,379).

**Table 11.9: Median Annual Earnings of Adults Ages 45 to 54, by Educational Attainment and Race and Ethnicity: 2016**

	Not Enrolled, Not High School Graduate	High School Graduate or Equivalent	Some College but No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Profes- sional Degree	Doctoral Degree	All Education Levels
All racial and ethnic groups	\$23,317	\$32,809	\$40,505	\$44,556	\$62,722	\$76,035	\$114,373	\$99,309	\$42,580
American Indian or Alaska Native	\$20,907	\$26,790	\$31,942	\$37,468	\$49,676	\$60,000	\$81,011	\$66,975	\$32,404
Asian	\$20,580	\$26,126	\$36,692	\$41,216	\$60,000	\$93,163	\$131,794	\$110,000	\$45,569
Black	\$20,253	\$28,354	\$35,442	\$38,678	\$52,718	\$65,000	\$93,000	\$80,493	\$35,483
Hispanic	\$22,304	\$28,995	\$36,455	\$40,000	\$50,000	\$70,885	\$81,011	\$85,061	\$30,379
Native Hawaiian or other Pacific Islander	\$23,317	\$30,414	\$36,455	\$35,000	\$57,495	\$61,000	\$91,242	\$87,583	\$35,000
White	\$27,179	\$35,542	\$42,000	\$46,368	\$65,945	\$77,279	\$120,000	\$99,948	\$48,428
More than one race	\$24,729	\$31,392	\$37,569	\$41,216	\$57,495	\$72,127	\$101,380	\$85,000	\$41,518

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Among adults ages 45 to 54 whose highest degree was an associate degree, Whites had median annual earnings 32.5 percent higher (roughly \$11,000) than Native Hawaiians or other Pacific Islanders (\$46,368 and \$35,000, respectively).
- Among adults whose highest degree was a bachelor's degree, Blacks (\$52,718), Hispanics (\$50,000), and American Indians or Alaska Natives (\$49,676) had lower median annual earnings than Whites (\$65,945).
- Asians and Whites who had earned a professional degree had the highest median annual earnings, of \$120,000 or more.

## Ages 55 to 64

The median annual earnings of adults ages 55 to 64 were \$41,216. Median annual earnings increased with each additional level of educational attainment, with those whose highest degree was a bachelor's degree earning 80.0 percent (over \$25,000 per year) more than high school graduates. Overall, Whites had the highest median annual earnings (\$45,000) among all racial and ethnic groups, while Hispanics had the lowest (\$29,270).

**Table 11.10: Median Annual Earnings of Adults Ages 55 to 64, by Educational Attainment and Race and Ethnicity: 2016**

	Not Enrolled, Not High School Graduate	High School Graduate or Equivalent	Some College but No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Profes- sional Degree	Doctoral Degree	All Education Levels
All racial and ethnic groups	\$23,521	\$31,942	\$39,000	\$42,860	\$57,495	\$67,948	\$108,000	\$96,173	\$41,216
American Indian or Alaska Native	\$25,000	\$27,388	\$32,302	\$36,455	\$46,368	\$53,670	\$76,035	\$58,733	\$32,442
Asian	\$20,276	\$25,316	\$35,483	\$40,552	\$51,223	\$78,402	\$113,343	\$109,763	\$38,480
Black	\$21,000	\$27,821	\$33,455	\$37,633	\$50,000	\$60,828	\$86,765	\$77,357	\$33,455
Hispanic	\$21,638	\$27,821	\$35,033	\$38,480	\$45,569	\$62,722	\$76,035	\$83,629	\$29,270
Native Hawaiian or other Pacific Islander	\$25,345	\$30,379	\$39,600	\$40,000	\$51,520	\$66,975	\$75,000!	\$82,431!	\$35,442
White	\$27,900	\$34,000	\$40,505	\$44,950	\$60,000	\$68,994	\$112,313	\$96,857	\$45,000
More than one race	\$22,000	\$30,379	\$35,442	\$42,531	\$50,690	\$65,000	\$100,000	\$86,000	\$39,493

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%.

- Among all adults who had completed only a high school credential or had not completed high school, Asians had the lowest median annual earnings of all racial and ethnic groups (\$25,316 and \$20,276, respectively). In contrast, Asians had the highest median annual earnings in each graduate degree category.
- Among adults whose highest degree was a bachelor's degree, Hispanics had the lowest median annual earnings (\$45,569), 24.1 percent (about \$14,000) less than Whites, who had the highest median annual earnings of bachelor's degree holders (\$60,000).
- Among adults ages 55 to 64 whose highest degree was a master's degree, Asians had the highest median annual earnings, while American Indians or Alaska Natives had the lowest. Asians had median annual earnings of \$78,402, nearly \$25,000 (46.1 percent) more than the median annual earnings of American Indians or Alaska Natives with this degree (\$53,670).

## Ages 65 and Older

Median annual earnings of adults who were at or approaching retirement age were lower than those of younger workers. The median annual earnings of adults 65 and older were \$23,291 in 2016. While median annual earnings were lower across all levels of educational attainment for all racial and ethnic groups, those ages 65 or older who had earned professional and doctoral degrees had much higher earnings than adults with lower levels of educational attainment. Overall, Asians had the highest median annual earnings (\$30,718) among all racial and ethnic groups, while Blacks and Hispanics had the lowest (nearly \$21,000 each).



**Table 11.11: Median Annual Earnings of Adults Ages 65 and Older, by Educational Attainment and Race and Ethnicity: 2016**

	Not Enrolled, Not High School Graduate	High School Graduate or Equivalent	Some College but No Degree	Associate Degree	Bachelor's Degree	Master's Degree	Profes- sional Degree	Doctoral Degree	All Education Levels
All racial and ethnic groups	\$15,680	\$17,517	\$22,000	\$25,000	\$31,361	\$31,839	\$78,000	\$65,858	\$23,291
American Indian or Alaska Native	\$15,471	\$19,262	\$25,000	\$27,848	\$31,942	\$44,607	\$106,000	\$48,800	\$23,699
Asian	\$19,262	\$21,226	\$26,134	\$30,912	\$36,064	\$51,520	\$101,380	\$86,173	\$30,718
Black	\$15,353	\$18,600	\$21,000	\$23,802	\$28,233	\$32,000	\$52,657	\$50,489	\$20,608
Hispanic	\$17,200	\$20,253	\$25,089	\$26,359	\$30,379	\$39,016	\$57,787	\$65,000	\$20,907
Native Hawaiian or other Pacific Islander	\$15,400	\$25,345	\$30,912	\$50,632!	\$49,400	\$19,200!!	\$69,000!	\$56,773!!	\$27,373
White	\$15,000	\$16,810	\$21,638	\$24,729	\$31,361	\$30,912	\$78,402	\$65,821	\$23,521
More than one race	\$15,000	\$18,248	\$21,722	\$27,373	\$33,100	\$31,988	\$50,000	\$58,800	\$23,696

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | ! Interpret with caution. Ratio of standard error to estimate is >30% but <50%. | | !! Interpret with caution. Ratio of standard error is >50%.

- The median annual earnings of White adults ages 65 and older whose highest degree was a bachelor's degree were nearly twice the median annual earnings of those who had completed only high school (\$31,361 and \$16,810, respectively).
- Blacks in this age group whose highest degree was an associate degree or a bachelor's degree had lower median annual earnings in 2016 (\$23,802 and \$28,233, respectively) than other racial and ethnic groups with the same degrees.

## Median Annual Earnings Across Age Groups

- Overall, Asians had the highest median annual earnings among adults 25 to 34 years old, 35 to 44 years old, and ages 65 and older; Whites had the highest median annual earnings among adults 45 to 54 years old and among adults 55 to 64 years old. Black, Hispanic, and American Indian or Alaska Native adults had lower earnings in each age group.
- Across all age groups and all levels of educational attainment, median annual earnings in 2016 ranged from \$27,179 for Hispanic adults ages 25 and older to \$44,307 (63.0 percent higher) for Asians. The gap was smallest for adults ages 55 to 64, among whom the median earnings for Asians was 31.5 percent higher than the median for Hispanics (\$38,480 and \$29,270, respectively). The gap was largest for adults 35 to 44 years old, among whom the median annual earnings level for Asians was 87.3 percent higher than the median for Hispanics (\$55,000 and \$29,366, respectively).

## Median Annual Earnings, by Educational Attainment and Select Fields

Median annual earnings within fields increased with each additional level of educational attainment. It is important to note that the jobs within occupational fields differ with educational attainment. For example, someone with a bachelor's degree who works in health occupations could be a registered nurse, nutritionist, or researcher, whereas those in these fields whose highest degree is an associate degree are more likely to be medical technicians or licensed practical nurses. Someone with a graduate degree in education could be a teacher, principal, or reading specialist, whereas those with lower levels of attainment are more likely to be early childhood teachers or classroom assistants. The sections below provide examples of the relationship between education and earnings within select occupational fields.

### Business, Management, and Financial Occupations

Among adults in business, management, and financial occupations, median annual earnings of all adults whose highest degree was a bachelor's degree were \$70,966, almost \$20,000 (37.7 percent) more per year than those who had some college but no degree or an associate degree (\$51,520 each). Adults who had completed a graduate degree in these fields had median annual earnings of \$91,242, over \$20,000 (28.6 percent) more than those with a bachelor's degree.

**Table 11.12: Median Annual Earnings of Adults in Business, Management, and Financial Occupations, by Educational Attainment and Race and Ethnicity: 2016**

	High School Diploma or Less	Some College but No Degree	Associate Degree	Bachelor's Degree	Graduate Degree
All racial and ethnic groups	\$44,050	\$51,520	\$51,520	\$70,966	\$91,242
American Indian or Alaska Native	\$42,556	\$43,276	\$45,000	\$59,814	\$70,000
Asian	\$40,505	\$50,177	\$50,000	\$70,000	\$97,325
Black	\$38,124	\$43,905	\$45,000	\$60,000	\$75,000
Hispanic	\$38,000	\$46,368	\$47,391	\$60,828	\$83,132
Native Hawaiian or other Pacific Islander	\$42,531	\$41,814	\$42,246	\$61,823	\$81,104
White	\$46,581	\$53,580	\$53,580	\$74,007	\$94,082
More than one race	\$43,593	\$49,459	\$50,000	\$65,000	\$83,132

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | Business, Management, and Financial Occupations were defined as having a two-digit Standard Occupation Classification (SOC) code of 11 (Management Occupations) or 13 (Business and Financial Operations Occupations).

- Bachelor's degrees had the largest dollar earnings increase over associate degrees for Whites and Asians in business, management, and financial occupations (a \$20,427 difference for Whites and \$20,000 difference for Asians). The largest percentage difference was 46.3 percent (\$19,577) for Native Hawaiians or other Pacific Islanders.
- Hispanics and Asians had the largest differences in median annual earnings between those with a graduate degree and those whose highest degree was a bachelor's degree (a \$27,325 or 39.0 percent difference for Asians and \$22,304 or 36.7 percent difference for Hispanics).

## STEM Occupations

Among adults in STEM occupations, adults whose highest degree was a bachelor's degree had median annual earnings of \$78,402, about \$17,500 (28.9 percent) more than those whose highest degree was an associate degree. Adults with graduate degrees in STEM occupations had median annual earnings of \$90,125, roughly \$12,000 (15.0 percent) more than bachelor's degree holders.

**Table 11.13: Median Annual Earnings of Adults in STEM Occupations, by Educational Attainment and Race and Ethnicity: 2016**

	High School Diploma or Less	Some College but No Degree	Associate Degree	Bachelor's Degree	Graduate Degree
All racial and ethnic groups	\$52,000	\$60,793	\$60,828	\$78,402	\$90,125
American Indian or Alaska Native	\$45,569	\$48,087	\$46,784	\$65,897	\$70,000
Asian	\$54,745	\$60,828	\$60,828	\$82,431	\$94,283
Black	\$50,000	\$52,000	\$55,000	\$68,000	\$79,998
Hispanic	\$47,040	\$53,313	\$55,404	\$70,885	\$82,000
Native Hawaiian or other Pacific Islander	\$50,690	\$64,915	\$68,938	\$75,000	\$73,175
White	\$53,313	\$62,722	\$61,823	\$79,000	\$90,000
More than one race	\$55,000	\$55,759	\$56,449	\$74,000	\$83,629

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | STEM Occupations were defined as having a two-digit Standard Occupation Classification (SOC) code of 15 (Computer or Mathematical Occupations), 17 (Architecture and Engineering Occupations), or 19 (Life, Physical, and Social Science Occupations).

- Median annual earnings for Asians in STEM occupations whose highest degree was a bachelor's degree were 35.5 percent (roughly \$22,000) higher than the median for Asians whose highest degree was an associate degree; this difference for Blacks was only 23.6 percent (\$13,000) and for Native Hawaiians or other Pacific Islanders, it was 8.8 percent (about \$6,000).
- Blacks and Hispanics had the largest differences in median annual earnings between those with a graduate degree and those whose highest degree was a bachelor's degree (a \$11,998, or 17.6 percent, difference for Blacks and a \$11,115, or 15.7 percent, difference for Hispanics).

## Education Occupations

Among adults in education occupations, median annual earnings for those whose highest degree was an associate degree were slightly higher than the median for those with some college but no degree (\$18,248 versus \$19,262). The median annual earnings of adults whose highest degree was a bachelor's degree were \$38,000, roughly twice as high (about \$19,000 more) as the median for those with an associate degree. Adults with a graduate degree in this field had median earnings 42.1 percent (\$16,000) higher than the median for those with bachelor's degrees.

**Table 11.14: Median Annual Earnings of Adults in Education Occupations, by Educational Attainment and Race and Ethnicity: 2016**

	High School Diploma or Less	Some College but No Degree	Associate Degree	Bachelor's Degree	Graduate Degree
All racial and ethnic groups	\$17,316	\$18,248	\$19,262	\$38,000	\$54,000
American Indian or Alaska Native	\$20,276	\$22,278	\$23,287	\$35,000	\$48,662
Asian	\$23,216	\$20,907	\$20,000	\$30,379	\$55,695
Black	\$20,000	\$20,608	\$20,608	\$37,105	\$51,644
Hispanic	\$19,059	\$19,700	\$20,759	\$41,216	\$53,731
Native Hawaiian or other Pacific Islander	\$28,000	\$28,225	\$20,608	\$36,588	\$51,520
White	\$16,000	\$17,215	\$18,547	\$38,000	\$54,359
More than one race	\$20,000	\$20,608	\$20,608	\$37,500	\$51,644

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | Education Occupations were defined as having a two-digit Standard Occupation Classification (SOC) code of 25 (Education, Training, and Library Occupations).

- The median annual earnings of Hispanics and Whites in education occupations whose highest degree was a bachelor's degree were approximately twice as high as the medians for members of these groups with an associate degree (about \$20,000 and \$19,000 more, respectively). These were the largest differences across all racial and ethnic groups.
- Asians had the largest difference in median annual earnings between those with graduate degrees and those whose highest degree was a bachelor's degree (\$55,695 compared with \$30,379).

## Health Occupations

Among adults in health occupations, median annual earnings of those whose highest degree was an associate degree were \$43,543, roughly \$13,000 (43.6 percent) more than the median for adults who had some college but no degree. Median annual earnings for those whose highest degree was a bachelor's degree (\$55,404) were about \$12,000 (27.2 percent) more than the median for adults with an associate degree (\$43,543). The largest increase in median annual earnings was for those who earned graduate degrees. Adults with a graduate degree earned 55.4 percent (about \$31,000) more than those whose highest degree was a bachelor's degree (\$86,074 compared with \$55,404).

**Table 11.15: Median Annual Earnings of Adults in Health Occupations, by Educational Attainment and Race and Ethnicity: 2016**

	<b>High School Diploma or Less</b>	<b>Some College but No Degree</b>	<b>Associate Degree</b>	<b>Bachelor's Degree</b>	<b>Graduate Degree</b>
<b>All racial and ethnic groups</b>	\$24,303	\$30,315	\$43,543	\$55,404	\$86,074
<b>American Indian or Alaska Native</b>	\$24,331	\$26,359	\$40,505	\$50,000	\$65,821
<b>Asian</b>	\$24,043	\$33,452	\$48,662	\$65,897	\$101,380
<b>Black</b>	\$23,317	\$28,225	\$38,000	\$52,657	\$78,402
<b>Hispanic</b>	\$22,669	\$29,270	\$40,505	\$50,690	\$81,000
<b>Native Hawaiian or other Pacific Islander</b>	\$28,851	\$34,003	\$40,100	\$55,695	\$82,431
<b>White</b>	\$25,089	\$30,414	\$45,000	\$54,359	\$85,061
<b>More than one race</b>	\$24,729	\$30,000	\$42,246	\$53,731	\$81,538

Source: U.S. Census Bureau, American Community Survey, 2016 5-Year Estimates (2012–2016)

Notes: Only earnings for employed adults are included. All employed adults (both full and part time) are included. | Health Occupations were defined as having a two-digit Standard Occupation Classification (SOC) code of 29 (Healthcare Practitioners and Technical Occupations) or 31 (Healthcare Support Occupations).

- Asians, Hispanics, and Whites with graduate degrees all had median annual earnings 53.8 percent to 59.8 percent (at least \$30,000) more than those in these groups whose highest degree was a bachelor's degree. The earnings increase was 31.6 percent (just \$15,821) for American Indians or Alaska Natives.

## REFERENCES

- Carnevale, Anthony P., and Ban Cheah. 2018. *Five Rules of the College and Career Game*. Washington, DC: Georgetown University Center on Education and the Workforce. <https://cew.georgetown.edu/cew-reports/5rules>.
- Chetty, Raj, Nathaniel Hendren, Maggie R. Jones, and Sonya R. Porter. 2018. *Race and Economic Opportunity in the United States: An Intergenerational Perspective*. NBER Working Paper No. 24441. Cambridge, MA: National Bureau of Economic Review.
- Farley, Reynolds, and Walter R. Allen. 1987. *The Color Line and the Quality of Life in America*. New York: Russell Sage Foundation.
- Ma, Jennifer, Matea Pender, and Meredith Welch. *Education Pays 2016: The Benefits of Higher Education for Individuals and Society*. Trends in Higher Education Series. Washington, DC: College Board.
- McMahon, Walter W. 2009. *Higher Learning, Greater Good: The Private and Social Benefits of Higher Education*. Baltimore: Johns Hopkins University Press.
- Turk, Jonathan M. 2019. *A Look at Five Key Outcomes in Early Adulthood for Associate Degree Earners*. Washington, DC: American Council on Education; Arlington, VA: Hobsons.
- U.S. Census Bureau. 2018. "Glossary." <https://www.census.gov/glossary>.



# METHODS







*Race and Ethnicity in Higher Education: A Status Report* provides an in-depth examination of the educational journeys of students, from secondary to postsecondary and graduate education, first and foremost by race and ethnicity. In addition to exploring student access and attainment, this report presents data on the racial and ethnic makeup of college and university faculty, staff, and chief executives. To tell these stories, the report presents over 200 indicators drawn from 11 principal data sources. Many of the report's indicators present a snapshot of data, drawn from the most current data source, while others were expanded to show changes over time.

The purpose of this section is threefold: first, to familiarize the reader with the various data sources used throughout the report; second, to clarify how key concepts were defined; and finally, to provide guidance on how to interpret the findings contained in this report. Additionally, helpful methodological notes are included throughout the report both in the text and in table and figure notes.

## Principal Data Sources

Data for this report were drawn from 11 principal sources. The majority of these data were collected by federal agencies—the U.S. Department of Education, U.S. Bureau of Labor Statistics, and U.S. Census Bureau. When federally collected data were insufficient to address a particular indicator, non-federally collected data were sought and included. Each of the principal data sources used in this report is described below, with notes indicating the chapters where data were presented.

### Current Population Survey (CPS)

The Current Population Survey (CPS), sponsored jointly by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics, is the primary source of labor force statistics for the population of the United States. The CPS is used to collect data for a variety of other studies that keep the nation informed of the economic and social well-being of its people. Providing information on many of the things that shape American life—work, earnings, and education—the CPS also conducts supplemental inquiries that vary month to month, covering a wide variety of topics such as child support, volunteerism, health insurance coverage, and school enrollment. The CPS is representative of the civilian noninstitutionalized population, which includes civilians in households, people in non-institutional group quarters (other than military barracks), and military in households living off post or with their families. Other military in households and in group barracks and people living in institutions are excluded. Data from the CPS has been published since 1947. The survey also has one of the highest response rates among government household surveys, averaging around 90 percent. Data from CPS were presented in Chapters 1 and 3.

### GED® Test

The GED® test is made up of four subjects, broken into separate exams. By collecting information on Mathematical Reasoning, Reasoning Through Language Arts, Social Studies, and Science, the GED Testing Service has compiled comprehensive data on prospective students in higher education. With college readiness being an integral issue of equity for American higher education, these nationwide data provide information to assess current curricula and work toward more coherent and relevant instruction that better aligns with students' career goals and provides an entrance for students into higher education and the U.S. labor market. Data from the GED® were presented in Chapter 2.

### Digest of Education Statistics

The primary purpose of the Digest of Education Statistics is to provide a compilation of statistical information covering the broad field of American education from pre-kindergarten through graduate school. The Digest includes a selection of data from government and private sources in addition to the survey results carried out by the National Center for Education Statistics (NCES). The publication contains information on a number of schools and colleges, teachers, enrollments, and graduates, in addition to educational attainment, finances, federal funds for education, libraries, and international education. Additionally, supplemental information is collected on population trends, attitudes on education, education characteristics of the labor force, government finances, and economic trends to provide context for evaluating education data. Data from the Digest of Education Statistics were presented in Chapters 2 and 3.

## **National Postsecondary Student Aid Study (NPSAS)**

The National Postsecondary Student Aid Study (NPSAS) examines the characteristics of students in postsecondary education, with a special focus on how they finance their education. NPSAS sample surveys provide access to nationally representative data for undergraduate and graduate students. NPSAS is a comprehensive research dataset, based on student-level records and financial aid provided by the federal government, the states, postsecondary institutions, employers, and private agencies, along with student demographic and enrollment data. NPSAS is the primary source of information used by the federal government (and others, such as researchers and higher education associations) to analyze student financial aid and to inform public policy on such programs as Pell Grants and Direct/Stafford loans. Data from NPSAS were presented in Chapters 3, 4, 7, and 8.

## **Baccalaureate and Beyond Longitudinal Study (B&B)**

The Baccalaureate and Beyond Longitudinal Study (B&B) examines students' education and work experiences after they complete a bachelor's degree. The study draws its cohorts from NPSAS. The B&B sample is representative of graduating seniors in all majors, with a special emphasis on the experiences of new elementary and secondary teachers. Following several cohorts of students over time, B&B looks at bachelor's degree recipients' workforce participation, income and debt repayment, and entry into and persistence through graduate school programs, among other indicators. B&B also gathers extensive information on bachelor's degree recipients' undergraduate experience, demographic backgrounds, expectations regarding graduate study and work, and participation in community service. Data from B&B were presented in Chapter 4.

## **Beginning Postsecondary Students (BPS)**

The Beginning Postsecondary Students (BPS) Longitudinal Study currently surveys cohorts of first-time, beginning students at three points in time: at the end of their first year, and then three and six years after first starting in postsecondary education. The study draws its cohorts from NPSAS and collects data on a variety of topics, including student demographic characteristics, school and work experiences, persistence, transfer, and degree attainment. BPS tracks students' paths through postsecondary education to allow for a more in-depth exploration of what academic fields students pursue, how financial aid influences their persistence and completion, and in some cases, why students leave higher education without an award. Data from BPS were presented in Chapter 5.

## **Integrated Postsecondary Education Data System (IPEDS)**

The Integrated Postsecondary Education Data System (IPEDS) is the primary source for information on U.S. colleges, universities, and technical and vocational institutions. IPEDS is a system of interrelated surveys conducted annually by the U.S. Department of Education's NCES. IPEDS gathers information from more than 7,500 colleges, universities, and technical and vocational institutions that participate in the federal student aid programs in fundamental areas such as enrollment, program completion and graduation rates, institutional costs, student financial aid, and human resources. Data collected through IPEDS are publicly released and can be accessed through the IPEDS Data Center. Data from IPEDS were presented in Chapters 5, 6, 9, and 10.

## **National Student Clearinghouse (NSC)**

The National Student Clearinghouse (NSC) is a nonprofit and nongovernmental organization that contracts with colleges and universities to provide educational reporting, data exchange, verification, and research services. Given its direct relationship with college enrollment, completion, and tracking, NSC has an expansive network of information, data, and resources about student-level educational outcomes nationwide. With increasing participation from colleges and universities, as of spring 2018 the NSC data account for 97 percent of the enrollments at U.S. Title IV, degree-granting institutions. By tracking students across institutions, NSC data are robust and can be used to more fully understand trends in college enrollment and completion. The research arm of NSC works with higher education institutions, states, districts, high schools, and educational organizations to better inform practitioners and policymakers about student educational pathways and enable informed decision making. Data from NSC were presented in Chapters 5 and 9.

## American College President Study (ACPS)

Since it was first published in 1988, the American Council on Education's American College President Study (ACPS) has remained the most comprehensive source of information about the college presidency and higher education leadership pipeline. The report provides information on the demographics, career paths, and experiences of college and university presidents. College and university presidents occupy a leadership role unlike any other, and ACPS includes insight into key areas, including diversity and inclusion, state funding and political climate, relationships with governmental officials, political constituencies, and governing boards, as well as presidential perspectives on matters concerning performance measures, evaluation, and other topics shaping the future of higher education. The *American College President Study 2017* analyzed responses from 1,546 college and university presidents. Data from ACPS were presented in Chapter 10.

## College and University Professional Association for Human Resources (CUPA-HR)

With the most reliable and comprehensive higher education salary and benefits data available, CUPA-HR collects data on salaries for administrators, faculty, and professionals and staff, along with data on health care and other benefits. The collection of surveys includes administrators, faculty, professionals, and staff in higher education. Additionally, benchmarking data on voluntary and involuntary turnover rates; student, staff, and faculty ratios; collective bargaining for faculty, staff, and graduate students; chief human resource officer reporting relationship; diversity data; and comparison groups are available to assist leaders in planning for budgets; salary increases; and creating equity in the hiring and human resources processes. Data from CUPA-HR were presented in Chapter 10.

## American Community Survey (ACS)

The American Community Survey (ACS), a product of the U.S. Census Bureau, is an ongoing survey that supplies vital information about the U.S. and its people. Information from the survey generates data that is used to inform a variety of state and federal policy decisions. As a robust source for detailed population and housing information in the U.S., the ACS disseminates information about jobs and occupations, educational attainment, veterans, whether people own or rent their homes, and other topics. The ACS is representative of both the civilian and military population in households and in group quarters. The group quarters includes individuals in correctional institutions or nursing homes and noninstitutionalized individuals. Data from the ACS have been published since 2005. Data from the ACS were presented in Chapter 11.

## Key Definitions

With various data sources, it is important to be clear about how key terms were defined throughout the report. The following section provides an overview as well as definitions of some of the key terms used throughout the report.

### Race and Ethnicity

Race and ethnicity are complex social constructions. As the United States has grown more diverse, the language and methods used to identify groups of people have changed substantially. This is perhaps most evident in the changes made over time in the collection of race, ethnicity, and origin data by the U.S. Census Bureau.<sup>1</sup> These changes include new racial categories, the collection of information on ethnicity (defined as whether an individual is of Hispanic origin or not), and allowing individuals to self-identify their race and ethnicity, as well as to identify as being of more than one race. These changes made by Census have informed the data collection efforts of other federal agencies, including the U.S. Department of Education.

While the language used to identify race and ethnicity varies by data source, this report primarily uses the race and ethnicity categories as currently defined by IPEDS. In doing so, the report identifies individuals as “Hispanic” if they reported being of Hispanic or Latino origin, regardless of race. We also refer to students identified as nonresident aliens as “international students.” The racial and ethnic categories used throughout the report are defined below:

---

1 [http://www.pewsocialtrends.org/wp-content/uploads/sites/3/2015/06/ST\\_15.06.11\\_MultiRacial-Timeline.pdf](http://www.pewsocialtrends.org/wp-content/uploads/sites/3/2015/06/ST_15.06.11_MultiRacial-Timeline.pdf)

**American Indian or Alaska Native:** A person having origins in any of the original peoples of North and South America (including Central America) who maintains cultural identification through tribal affiliation or community attachment.

**Asian:** A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

**Black (or African American):** A person having origins in any of the Black racial groups of Africa.

**Hispanic (or Latino):** A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

**Native Hawaiian or other Pacific Islander:** A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

**White:** A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

**More than one race:** Category used by institutions to report persons who selected more than one race. This is the IPEDS' category "two or more races."

**International student:** A person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely. This is the IPEDS' category "nonresident alien."

## Gender

Throughout this report data are disaggregated by gender. This report uses the gender terms of "men" and "women" rather than the sex terms of "male" and "female." While the authors recognize gender to be a complex construct with psychological, social, and behavioral dimensions, the analysis presented in this report is bound by the limitations in the data collected by federal agencies such as the U.S. Census Bureau and the U.S. Department of Education. As a result, many other identities associated with gender, including transgender and gender non-conforming, could not be addressed in this report.

## Higher Education Institutions

In this report, higher education was broadly defined as any formal education beyond high school offered at public and private, nonprofit and for-profit colleges and universities. In Chapters 3 through 10, higher education institutions were defined as colleges and universities that are degree-granting, located in the 50 states, the District of Columbia, and Puerto Rico,<sup>2</sup> and eligible to receive Title IV federal funds. The term sector is used throughout the report to describe both the control of an institution and the most common type of award it confers.<sup>3</sup> In this report, institutions were classified into one of four sectors based on their control and the length of the predominant credential awarded. Those categories are defined below:

**Public Four-Year Institutions:** Colleges or universities whose programs and activities are operated by publicly elected or appointed school officials and which are supported primarily by public funds. More than 50 percent of the total number of degrees and certificates awarded by these institutions are at or above the bachelor's level. Institutions that confer only graduate degrees with no undergraduate programs were also included here.

**Private Nonprofit Four-Year Institutions:** Colleges or universities in which the individual(s) or agency in control receives no compensation, other than wages, rent, or other expenses for the assumption of risk. More than 50 percent of the total number of degrees and certificates awarded by these institutions are at or above the bachelor's level. Institutions that confer only graduate degrees with no undergraduate programs were also included here.

---

2 Chapter 9 of this report provides a snapshot of minority serving institutions (MSIs). The analysis of MSIs includes institutions located in other U.S. territories, including American Samoa, Federated States of Micronesia, Guam, Marshall Islands, Northern Marianas, and the Virgin Islands.

3 The choice to classify institutions this way, rather than by the length of the longest program offered was made in order to more accurately classify community colleges that award a small number of bachelor's degrees. Because these institutions award predominantly associate degrees and certificates, in this report, they are classified as two-year institutions and not four-year institutions.

**Public Two-Year Institutions:** Colleges or universities whose programs and activities are operated by publicly elected or appointed school officials and which is supported primarily by public funds. A college or university was classified as being a two-year institution if it (1) offers only associate degrees and other postsecondary certificates, awards, or diplomas of less than four academic years or (2) less than 50 percent of the total number of degrees and certificates awarded by the institution are at or above the bachelor's level.

**For-Profit Institutions:** Colleges or universities in which the individual(s) or agency in control receives compensation other than wages, rent, or other expenses for the assumption of risk. These institutions are degree-granting and may offer both undergraduate and graduate credentials.

## Postsecondary Credentials

The U.S. Department of Education's definitions of postsecondary awards, as defined in IPEDS, were used throughout this report. While IPEDS recognizes three types of undergraduate certificates, this report aggregates the data into two categories: short-term and long-term certificates. Similarly, IPEDS recognizes two types of graduate certificates. In this report we aggregate those awards into a single category called post-baccalaureate certificates. Finally, IPEDS classifies doctoral degrees into one of three categories: professional practice, research/scholarship, and other. In this report, doctor's degrees-research/scholarship and doctor's degrees-other were aggregated into a single category called doctoral degrees. Doctor's degrees-professional practice were renamed professional degrees. The postsecondary credentials presented on throughout the report were defined as follows:

**Short-Term Certificate:** An award that requires completion of an organized program of study at the postsecondary level, below the baccalaureate degree, of less than two academic years.

**Long-Term Certificate:** An award that requires completion of an organized program of study at the postsecondary level, below the bachelor's degree, of at least two but less than four academic years.

**Associate Degree:** An award that normally requires at least two but less than four years of full-time equivalent college work.

**Bachelor's Degree:** An award that normally requires at least four but not more than five years of full-time equivalent college-level work.

**Post-baccalaureate Certificate:** An award that requires completion of an organized program of study beyond the bachelor's or master's degree.

**Master's Degree:** An award that requires the successful completion of a program of study of at least the full-time equivalent of one but not more than two academic years beyond the bachelor's degree.

**Professional Degree:** A doctor's degree that is conferred upon completion of a program providing the knowledge and skills for the recognition, credential, or license required for professional practice. Some examples include law (JD), medicine (MD), veterinary medicine (DVM), pharmacy (PharmD), and others, as designated by the awarding institution.

**Doctoral Degree:** A PhD or other doctor's degree that requires advanced work beyond the master's level, including the preparation and defense of a dissertation based on original research, or the planning and execution of an original project demonstrating substantial artistic or scholarly achievement. Some examples include doctor of education (EdD), doctor of business administration (DBA), doctor of science (DSc), and others, as designated by the awarding institution.

## Fields of Study

The Classification of Instructional Programs (CIP) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity. CIP was originally developed by the U.S. Department of

Education's NCES in 1980, with revisions occurring in 1985, 1990, 2000, and 2010. In this report, the 2010 CIP was used to group academic programs into fields of study in line with the variables MAJORS2Y, MAJORS4Y, and GRADMAJ in the 2015–16 National Postsecondary Student Aid Study.<sup>4</sup> These variables aggregate fields of study into categories most appropriate for analyzing students in sub-baccalaureate programs, baccalaureate programs, and graduate programs, respectively. The table below presents the field of study categories used throughout the report. Additional details about fields of study can be found in Chapters 3–6.

Sub-baccalaureate Credential Programs	Baccalaureate Credential Programs	Graduate Credential Programs
STEM Fields	STEM Fields	STEM Fields
Business and Personal and Consumer Services	Business	Business and Management
Health Care Fields	Education	Education
Social Sciences and Humanities	Health Care Fields	Health Care Fields
General Studies and Other Fields	Social Sciences	Humanities
Manufacturing, Military Technology, and Other Applied Fields	Humanities	Social and Behavioral Sciences
Undecided	General Studies and Other Fields	Law
	Other Applied Fields	Other Fields
	Undecided	

## Occupations

The Standard Occupational Classification (SOC) is a federal statistical standard used by federal agencies to classify workers into one of 867 detailed occupations.<sup>5</sup> These detailed occupations are combined to form 459 broad occupations, 98 minor groups, and 23 major groups. Using the SOC's 23 major groups, identified by two-digit numerical codes, Chapter 11 of this report presents data on four occupations groups defined below:

**Management, Business, and Financial Occupations:** Any occupation classified into the following major groups: Management occupations (11) or Business and Financial Operations occupations (13).

**STEM Occupations:** Any occupation classified into the following major groups: Computer or Mathematical occupations (15), Architecture and Engineering occupations (17), or Life, Physical, and Social Science occupations (19).

**Education Occupations:** Any occupation classified as an Education, Training, and Library occupation (25).

**Health Occupations:** Any occupation classified into the following major groups: Healthcare Practitioners and Technical occupations (29) or Healthcare Support occupations (31)

## Notes on Interpreting the Data

This study presents a descriptive analysis of key data to provide readers with an in-depth picture of the educational journeys of students disaggregated by race and ethnicity. Descriptive analysis is used to describe or summarize data and to identify meaningful patterns. While descriptive analysis can provide important insights into data, it cannot be used to explain why a pattern may or may not exist. It is important to note that this study **does not discuss causality and readers should not interpret our findings as being causal.**

Furthermore, much of the data analyzed in this study come from complex surveys that rely on statistical analysis weights to make the data representative of the populations of interest (e.g., the United States, all students enrolled in undergraduate education). Data derived and presented from ACS, CPS, B&B, BPS, and NPSAS are weighted estimates. As a result, some

<sup>4</sup> Each variable aggregates students' fields of study into categories most appropriate to analyze students in sub-baccalaureate, baccalaureate, and graduate certificate and degree programs, respectively.

<sup>5</sup> For more information on SOC, see <https://www.bls.gov/soc>.



data point estimates in the report were flagged as “unstable” and others could not be reported at all due to small sample sizes.<sup>6</sup> Data were flagged or suppressed most frequently when multiple levels of disaggregation were presented, particularly among American Indian or Alaska Native and Native Hawaiian or other Pacific Islander groups.

In the book *Beyond the Asterisk*, Shotton, Lowe, and Waterman (2013) note that the continued use of quantitative research has perpetuated a long history of educational research that excluded American Indian and Alaska Native populations, ultimately making them invisible. The same could be said for Native Hawaiians or other Pacific Islanders. While not an exhaustive list, the following books may provide readers a deeper understanding of the characteristics and challenges of American Indian, Alaska Native, and Asian American and Pacific Islander groups enrolled in higher education, along with examples of how to serve these students through to completion.

Brayboy, Bryan McKinley Jones, Amy J. Fann, Angelina E. Castagno, and Jessica A. Solyom, eds. 2012. *Postsecondary Education for American Indian and Alaska Natives: Higher Education for Nation Building and Self-Determination*. Hoboken, NJ: John Wiley & Sons.

Museus, Samuel D., Amefil Agbayani, and Doris Ching, eds. 2017. *Focusing on the Underserved: Immigrant, Refugee, and Indigenous Asian American and Pacific Islanders in Higher Education*. Charlotte, NC: Information Age Publishing.

Shotton, Heather J., Shelly C. Lowe, and Stephanie J. Waterman. 2013. *Beyond the Asterisk: Understanding Native Students in Higher Education*. Sterling, VA: Stylus.

Finally, while this report presents over 200 indicators, these indicators alone cannot provide a complete picture of race and ethnicity in higher education. Future iterations of this work, will seek to include additional data and analyses to further illuminate the racial and ethnicity diversity of students, faculty, and staff.

---

<sup>6</sup> Throughout the report, NCES data reporting guidelines were followed to suppress cases with too few respondents and to flag estimates as unstable when the standard error represented more than 30 percent of a given estimate.







