

Higher Ed Spotlight /

Infographic Brief



PIPELINES, PATHWAYS, and INSTITUTIONAL LEADERSHIP

An Update on the Status of Women in Higher Education

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Center for Policy Research and Strategy

ACE's Center for Policy Research and Strategy (CPRS) provides thought leadership at the intersection of public policy and institutional strategy. The center produces papers, briefs, infographics, and convenings that shed light on diverse student populations and explore emergent practices in higher education with an emphasis on long-term and systemic solutions for an evolving higher education landscape and changing American demographic.

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Suggested citation: Johnson, Heather L. 2016. *Pipelines, Pathways, and Institutional Leadership: An Update on the Status of Women in Higher Education*. Washington, DC: American Council on Education.



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BACKGROUND

In 2009, The White House Project: Benchmarking Women's Leadership was released. This groundbreaking report examined the leadership roles of women across 10 sectors of the workforce in the United States. Key findings illustrated that women in academia make up more than half of all college students, but only slightly more than a quarter of all full professors and less than 15 percent of the presidents at doctoral degreegranting intuitions. It also documented that female faculty members have not made progress in closing the salary gap—women made 83 percent of what male faculty made in 1972 and only 82 percent of what male faculty made in 2009. In 2013, the Colorado Women's College at the University of Denver released the follow-up report Benchmarking Women's Leadership in the United States, expanding the depth and breadth of the original report.

This infographic brief seeks to continue the conversation by offering an update of key descriptive statistics on women in higher education in an effort to promote dialogue on how to move the needle and increase the number of women leaders. Next steps are provided from the important work at the University of Denver.

The pipeline myth is the persistent idea that there are too few women qualified (e.g., degree holding) for leadership positions. However, the data indicate that there are more than enough qualified women to fill available leadership positions. In fact, the pipeline is preparing women at a greater rate than it does men. For example, female students have earned half or more of all baccalaureate degrees for the past three decades and of all doctoral degrees for almost a decade.

2016

Women have earned more than

50% of all doctoral degrees

since 2006.*

2000

Women have earned more than

50% of all bachelor's degrees since 1981.*

1990

Women have earned more than

50% of all master's degrees since 1991.*

1980

Women have earned more than 50% of all associate degrees since 1978.*

* See Figures 1 a-d on pages 18-19.

1970

The glass ceiling is a long-standing metaphor for the intangible systemic barriers that prevent women from obtaining senior-level positions. Despite the number of female graduates available for leadership positions, women do not hold associate professor or full professor positions at the same rate as their male peers. The data show that women are not ascending to leadership roles, given that they hold a greater share of the entry-level, service, and teaching-only positions than their male counterparts. This is true for all women when looking across degreegranting postsecondary institutions; the trend is exacerbated for women of color.*

^{*} See Figure 2 on page 19.

As of 2014, women hold

31% of the full professor positions at degree-granting postsecondary institutions.*

The higher the academic rank, from other faculty (service or research only) to tenured full professor, the fewer women one finds.*

Women of color often outnumber men of color in lower-ranking faculty positions, but men of color hold full professor positions more often than women of color.**

^{*} See Figure 2 on page 19.

^{**} See Table 1 on page 20.

The phrase "the higher the fewer" is used to recognize the fact that even though women have higher education attainment levels than men, this is not reflected in the number of women holding positions with high faculty rank, salary, or prestige. This characterization is apt when it comes to the percentage of full-time instructional faculty with tenure. Women of all races and ethnicities are more likely to hold lower ranking faculty positions.





members held a higher %



of tenure positions at every type of



institution even though they did not hold the



highest number of faculty positions at every rank.*

^{*} See Table 2 on page 20.

GAP D



One of the clearest indicators of the glass ceiling is the persistent **pay gap** between men and women at the same faculty rank. Overall, during the 2013–14 academic year, male faculty members made an average of \$85,528, and female faculty members made an average of \$70,355.* No matter the academic rank, men make more than women and are more likely to hold a tenure track position.

^{*} See Figure 3 on page 20.

Men outearn women by:

\$13,616 at public institutions

\$17,843 at private institutions*



Men make more than women at every rank, in every discipline, and in every institution type except two-year private institutions. At two-year private institutions, women make slightly more than their male peers, earning \$44,769 compared to \$44,234.*

^{*} See Figure 4 on page 21.

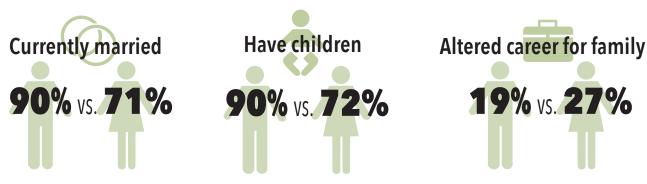
Setting aside the many myths and metaphors that address the paucity of women in postsecondary leadership positions, data on college and university presidents, chief academic officers, and governing boards provide the field an understanding of the pathways that women have taken to achieve such positions in the academy. The following pages present these important data.

Data on college and university presidents—powerful and visible leaders in American society—come from ACE's seminal survey study on this population. Also presented are ACE data on chief academic officers or CAOs—an important position of study given their role in setting the academic direction of an institution and the fact that many CAOs aspire to the college presidency. Association of Governing Boards of Universities and Colleges data benchmark the important role of these bodies, which determine the strategic direction of higher education institutions and have oversight in selecting, hiring, and appointing key academic leaders.

PRESIDENTS

73% **27**%

While the number of women presidents has increased since 1986, as of 2011, women only hold 27 percent of presidencies across all institutions of higher education.*



Women presidents are less likely to be married, less likely to have children, and more likely to have altered their career for family.**

Women presidents are more likely to have a PhD or EdD than their male peers.

Education, humanities, and the social sciences were the top three fields of study among all presidents.***

Women presidents are more likely to have served as a CAO/provost or other senior executive in academic affairs. Male presidents are more likely to have never been a faculty member, come from outside higher education, or had a different senior campus executive role than women presidents.****

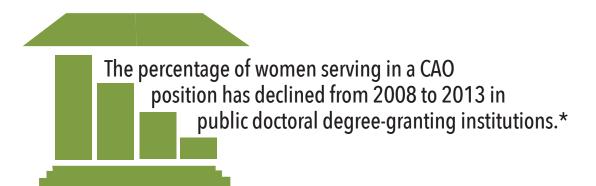
^{*} See Table 3 on page 21.

^{**} See Figure 5 on page 22.

^{***} See Figure 6 on page 22.

^{****} See Figure 7 on page 22.

CHIEF ACADEMIC OFFICERS



Currently married





Women CAOs are not married and do not have children at the same rates as their male counterparts.**

Unlike presidencies, where more women possess a PhD or EdD, male CAOs slightly lead women CAOs on possessing a doctorate.****

Similar to college presidents, the top three fields of study for CAOs are education, humanities, and social sciences.***



to have served as a senior academic officer or other senior executive outside of academic affairs. Male CAOs are more likely to previously have served as an academic dean or other campus executive in academic affairs.****

A woman CAO is more

likely to have previous

CAO experience and

See Table 4 on page 23.

^{**} See Figure 8 on page 23.

GOVERNING BOARDS

The preliminary data indicate that men outnumbered women on both public and independent governing boards by more than



The number of women holding the position of board chair has increased from 2010 and is slightly higher at public institutions when compared to private institutions.**

But, previous steady progress on governing boards has slowed with the number of female board members standing at roughly 30 percent for what has been nearly two decades.***

^{*} See Table 5 on page 24.

^{**} See Table 6 on page 24.

^{***} Association of Governing Boards 2010.

SUMMARY

Collecting and reporting on data that reveal patterns of bias is imperative to increasing the number of women in higher education leadership positions including tenured professors, deans, chief academic officers, presidents, board members, and chairs. The types of data in this infographic brief need to be tracked and reviewed regularly to help individuals, organizations, and policies from perpetuating bias. Further, search, promotion, and tenure committees and governing boards can use this information and related research to inform the hiring and promotion of faculty and administrators in an effort to chip away at the glass ceiling and engage the brains, talents, and resources of half of our population—women—in leading our nation's colleges and universities.

MOVING FORWARD

Moving the Needle: Advancing Women Leaders in Higher Education

ACE's Division of Leadership Programs is committed to increasing the number of women in higher education senior leadership positions through programs, research, and resources. Its Moving the Needle initiative is centered on the vision of having half of the chief executives at higher education institutions be women by 2030. For more information about the goals of the initiative please visit www.acenet.edu/mtn.

New ACE Data in 2016-17

ACE's Center for Policy Research and Strategy is launching the next American College President Study (ACPS), the oldest and most comprehensive national survey of college and university presidents. These data will continue to contribute to a better understanding of the personal and professional characteristics, experiences, and trajectories of women leaders in higher education. For more information about ACPS please visit www.acenet.edu/acps.

ACTION STEPS

RECOMMENDED FROM COLORADO WOMEN'S COLLEGE

Benchmarking Women's Leadership in the United States, a report published by the University of Denver's Colorado Women's College, offered the following as suggestions for areas of future action to help close the leadership gap:

- The governing board and the senior staff Insist that pools of candidates for facshould annually review the institution's commitment to diversity to evaluate how well it is working.
- · Identify, support, and advance women and women of color to become chief academic officers, provosts, and senior executives. These positions are stepping-stones to the presidency.
- Look beyond sitting presidents in order to increase the pool of potential presidential selections. Because women are more likely to have followed a nontraditional career path, the best candidates may come from farther afield.
- · Review hiring and promotion policies to ensure they are fair and equitable and do not disproportionately encumber women. For example, if the majority of non-tenure track positions do not have equal standing in promotion, and women predominantly occupy these positions, then the university must critically evaluate its hiring process.
- Evaluate the lack of tenure track hires and consider how promotion may be re-evaluated.

- ulty and senior leadership positions be diverse. Women cannot get hired if they are not in the pool of candidates.
- Diversify search committees for presidential, senior leadership, and faculty positions. Often diversification on the committee helps ensure a search will be expanded to the broadest range of qualified candidates.
- Make certain search committees have data on the status and benefits of women. and women of color candidates.
- If universities hire search firms, they should ensure the firms have a reputation for providing diverse pools of candidates.
- Public institutions should pay particular attention to the declining number of women leaders. Among all the sectors, academia is the only one that has this trend. Typically, public organizations, entities, and offices have a better representation of women overall.

SELECT RESOURCES

- Legal scholar Joan Williams details how to recognize bias patterns
 and the economic realities and high costs of failing to retain women
 in the academy through the WorkLife Law Project at UC Hastings
 College of the Law (CA). More information can be found at:
 http://worklifelaw.org/womens-leadership/gender-bias-academia/
 retaining-women/
- Higher education scholars Ann Austin and Sandra Laursen authored
 a set of Strategic Intervention Briefs as a part of their StratEGIC
 Toolkit funded by the National Science Foundation's Increasing the
 Participation and Advancement of Women in Academic Science and
 Engineering Careers (ADVANCE) program. The briefs offer tips on
 how to recognize power disparities between men and women and
 provide concrete action plans to foster a culture of inclusion and
 promote organizational change. The strategic toolkit can be found at:
 http://www.colorado.edu/eer/research/strategic.html
- Organizations like Catalyst and McKinsey & Company also provide a
 wide range of resources on gender, leadership, and talent management
 by offering the research-based rationale along with the business and
 economic justifications for parity at every organizational level. The
 Catalyst website hosts content on a wide range of sectors and topics,
 including a Women in Academia page located at: http://www.catalyst.
 org/knowledge/women-academia

McKinsey & Company has a Women Matter site located at: http://www.mckinsey.com/features/women_matter

Sources

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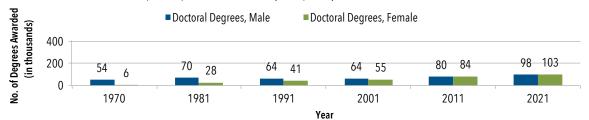
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The White House Project. 2009. *The White House Project: Benchmarking Women's Leadership*. Washington, DC: The White House Project. http://www.in.gov/icw/files/benchmark_wom_leadership.pdf.

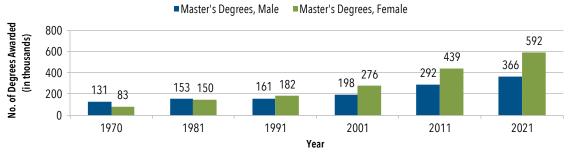
Figures and Tables

FIGURE 1 A: DEGREES AWARDED, BY SEX, 1970-2021* PROJECTED (IPEDS, 2014)



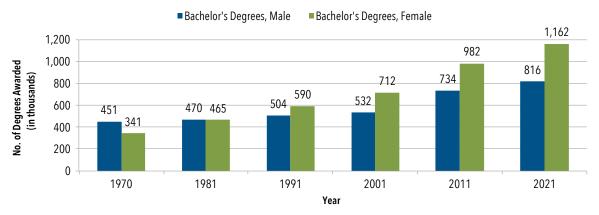
Source: U.S. Department of Education, National Center for Education Statistics, Earned Degrees Conferred, 1869–70 through 1964–65; Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, 1965–66 through 1985–86; Integrated Postsecondary Education Data System (IPEDS), "Completions Survey" (IPEDS-C:87–99); IPEDS Fall 2000 through Fall 2012, Completions component; and Degrees Conferred Projection Model, 1980–81 through 2023–24. (This table was prepared March 2014.)

FIGURE 1 B: DEGREES AWARDED, BY SEX, 1970-2021* PROJECTED (IPEDS, 2014)



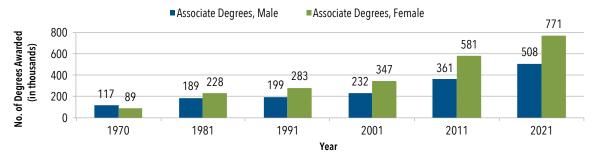
Source: U.S. Department of Education, National Center for Education Statistics, Earned Degrees Conferred, 1869–70 through 1964–65; Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, 1965–66 through 1985–86; Integrated Postsecondary Education Data System (IPEDS), "Completions Survey" (IPEDS-C:87–99); IPEDS Fall 2000 through Fall 2012, Completions component; and Degrees Conferred Projection Model, 1980–81 through 2023–24. (This table was prepared March 2014.)

FIGURE 1 C: DEGREES AWARDED, BY SEX, 1970-2021* PROJECTED (IPEDS, 2014)



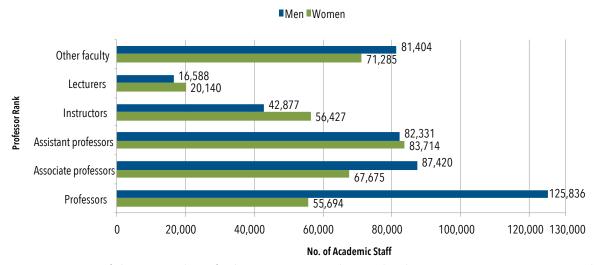
Source: U.S. Department of Education, National Center for Education Statistics, Earned Degrees Conferred, 1869–70 through 1964–65; Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, 1965–66 through 1985–86; Integrated Postsecondary Education Data System (IPEDS), "Completions Survey" (IPEDS-C:87–99); IPEDS Fall 2000 through Fall 2012, Completions component; and Degrees Conferred Projection Model, 1980–81 through 2023–24. (This table was prepared March 2014.)

FIGURE 1 D: DEGREES AWARDED, BY SEX, 1970–2021* PROJECTED (IPEDS, 2014)



Source: U.S. Department of Education, National Center for Education Statistics, Earned Degrees Conferred, 1869–70 through 1964–65; Higher Education General Information Survey (HEGIS), "Degrees and Other Formal Awards Conferred" surveys, 1965–66 through 1985–86; Integrated Postsecondary Education Data System (IPEDS), "Completions Survey" (IPEDS-C:87–99); IPEDS Fall 2000 through Fall 2012, Completions component; and Degrees Conferred Projection Model, 1980–81 through 2023–24. (This table was prepared March 2014.)

FIGURE 2: NUMBER OF ACADEMIC STAFF MEMBERS BY RANK AND SEX (IPEDS, 2014)



Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2009-10 and Winter 2011–12, Human Resources component, Fall Staff section. (This table was prepared March 2015.)

TABLE 1: NUMBER OF FULL-TIME FACULTY IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS, BY RACE/ETHNICITY, SEX, AND ACADEMIC RANK (IPEDS, 2014)

Rank	Black Male	Black Female	Hispanic Male	Hispanic Female	Asian Male	Asian Female	Native American Male	Native American Female	Total (All Races)
Professors	4,018	2,647	3,669	1,935	11,772	3,475	350	223	181,509
Associate Professors	4,321	4,491	3,533	2,848	9,810	5,816	287	304	155,201
Assistant Professors	4,169	6,373	3,506	3,624	9,725	8,345	304	379	174,052
Instructors	2,714	4,734	2,888	3,452	2,179	2,771	430	449	109,042
Lecturers	760	968	834	1,181	983	1,420	39	78	34,473
Other faculty	2,923	5,070	2,768	2,979	8,459	6,283	326	369	107,837

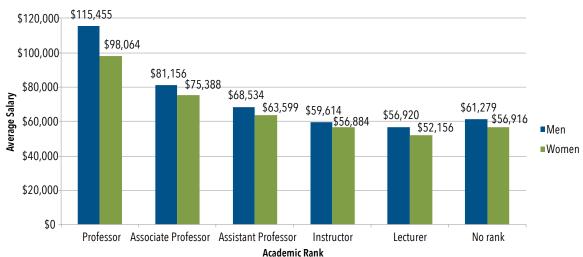
Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Winter 2009–10 and Winter 2011–12, Human Resources component, Fall Staff section; and IPEDS Spring 2014, Human Resources component, Fall Staff section. (This table was prepared March 2015.)

TABLE 2: FULL-TIME INSTRUCTIONAL FACULTY WITH TENURE AT DEGREE-GRANTING POSTSECONDARY INSTITUTIONS WITH A TENURE SYSTEM, BY ACADEMIC RANK, SEX, AND CONTROL FOR LEVEL OF INSTITUTION (IPEDS, 2014)

Control and level of institutions	% of insititutions with tenure system	% of Males	% of Females
All institutions	49.3	56.8	43.3
Public institutions	74.6	58.8	45.9
Four-year Four-year	95.8	57.2	41.2
Doctoral	99.7	56.2	38.4
Master's	97.0	62.4	49.7
Other	86.9	56.3	51.2
Two-year	58.9	69.6	65.0
Nonprofit institutions	59.8	52.8	37.6
Four-year	61.9	52.8	37.6
Doctoral	77.4	50.4	33.5
Master's	61.7	57.0	45.2
Other	46.6	62.2	49.3
Two-year	12.5	36.7	26.4
For-profit institutions	1.2	21.7	18.3

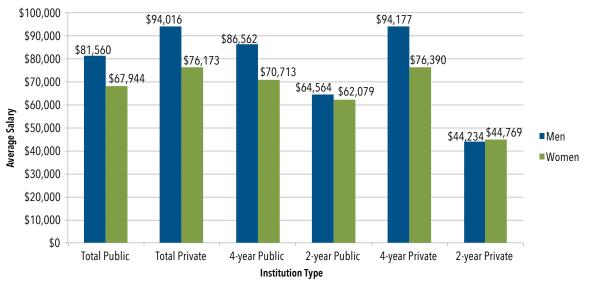
Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), "Fall Staff Survey" (IPEDS-S:93-99); and IPEDS Winter 2003-04 through Winter 2011-12 and Spring 2014, Human Resources component, Fall Staff section. (This table was prepared February 2015.)

FIGURE 3: 2013–2014 AVERAGE SALARY OF FULL-TIME INSTRUCTIONAL FACULTY ON NINE-MONTH CONTRACTS IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS, BY ACADEMIC RANK AND SEX (IPEDS, 2014)



Source: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Faculty Salaries, Tenure, and Fringe Benefits" surveys, 1970–71 through 1985–86; Integrated Postsecondary Education Data System (IPEDS), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey" (IPEDS-SA:87–99); and IPEDS Winter 2001-02 through Winter 2011–12, Spring 2013, and Spring 2014, Human Resources component, Salaries section. (This table was prepared February 2015.)

FIGURE 4: 2013-2014 AVERAGE SALARY OF FULL-TIME INSTRUCTIONAL FACULTY ON NINE-MONTH CONTRACTS IN DEGREE-GRANTING POSTSECONDARY INSTITUTIONS, BY INSTITUTION TYPE AND SEX (IPEDS, 2014)



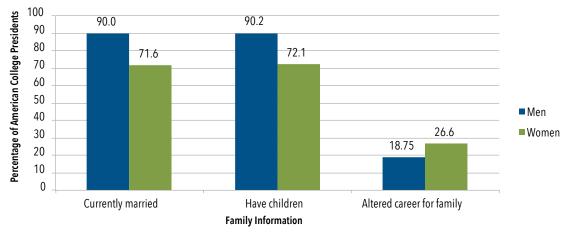
Source: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), "Faculty Salaries, Tenure, and Fringe Benefits" surveys, 1970–71 through 1985–86; Integrated Postsecondary Education Data System (IPEDS), "Salaries, Tenure, and Fringe Benefits of Full-Time Instructional Faculty Survey" (IPEDS-SA:87–99); and IPEDS Winter 2001-02 through Winter 2011–12, Spring 2013, and Spring 2014, Human Resources component, Salaries section. (This table was prepared February 2015.)

TABLE 3: PERCENTAGE OF PRESIDENCIES HELD BY WOMEN, BY INSTITUTIONAL TYPE (1986-2011) (ACP, 2011)

Institutional Type	1986	1998	2001	2006	2011
Public and Private	'	,		,	
Doctorate-Granting	3.8	13.2	13.3	13.8	21.6
Master's	10.0	18.7	20.3	21.5	23.7
Baccalaureate	16.1	20.4	18.7	23.2	22.6
Associate	7.9	22.4	26.8	28.8	33.6
Special Focus	6.6	14.8	14.8	16.6	26.0
All Institutional Types	9.5	19.3	21.1	23.0	27.0
Public					
Doctorate-Granting	4.3	15.2	15.7	16.2	24.7
Master's	8.2	17.8	20.9	22.7	23.0
Baccalaureate	8.6	23.4	18.2	34.4	25.0
Associate	5.8	22.1	27.0	29.1	32.6
Special Focus	4.8	14.9	22.0	29.7	40.0
All Institutional Types	6.0	20.2	23.9	26.6	29.5
Private					
Doctorate-Granting	2.9	9.5	8.7	7.6	17.0
Master's	12.4	19.7	19.6	20.3	24.2
Baccalaureate	16.6	20.0	18.8	21.1	22.2
Associate	21.8	25.0	27.6	32.6	45.0
Special Focus	7.0	14.8	13.7	13.6	23.9
All Institutional Types	13.9	18.4	17.5	18.7	24.1

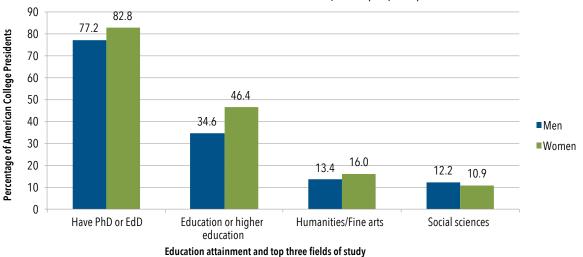
Source: 2012, American Council on Education, American College President: Executive Summary

FIGURE 5: FAMILY CHARACTERISTICS OF PRESIDENTS, BY SEX (ACP, 2011)



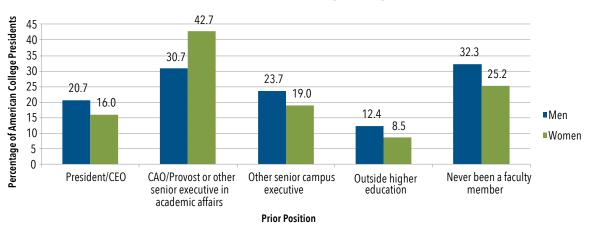
Source: 2012, American Council on Education, American College President: Executive Summary

FIGURE 6: PRESIDENT'S EDUCATION ATTAINMENT AND TOP FIELDS OF STUDY, BY SEX (ACP, 2011)



Source: 2012, American Council on Education, American College President: Executive Summary

FIGURE 7. CAREER HISTORY: POSITION PRIOR TO BEING PRESIDENT, BY SEX (ACP, 2011)



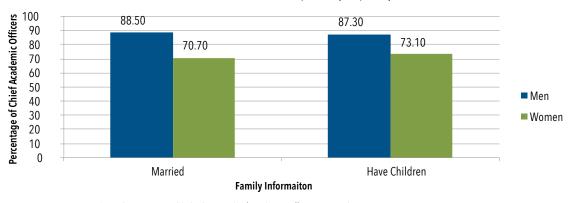
Source: 2012, American Council on Education, American College President: Executive Summary

TABLE 4: PERCENTAGE OF CAO POSITIONS HELD BY WOMEN, BY INSTITUTIONAL TYPE (ACP, 2008; 2013)

Institutional Type	2008	2013		
Public and Private				
Doctorate-Granting	33.3	26.1		
Master's	37.2	43.6		
Baccalaureate	36.6	38.2		
Associate	49.8	54.7		
Special Focus	30.2	35.8		
All Institutional Types	40.2	43.6		
Public				
Doctorate-Granting	40.0	25.3		
Master's	33.6	42.0		
Baccalaureate	27.8	40.8		
Associate	49.9	54.1		
Special Focus	39.1	63.6		
All Institutional Types	44.02	47.69		
Private				
Doctorate-Granting	25.9	27.9		
Master's	40.2	44.8		
Baccalaureate	38.2	36.9		
Associate	60.0	48.4		
Special Focus	26.6	30.2		
All Institutional Types	34.95	37.66		

Source: American Council on Education, unpublished 2013 Chief Academic Officers Survey data

FIGURE 8: FAMILY CHARACTERISTICS OF CHIEF ACADEMIC OFFICERS, BY SEX (CAO, 2013)



Source: American Council on Education, unpublished 2013 Chief Academic Officers Survey data

FIGURE 9: CHIEF ACADEMIC OFFICERS' EDUCATION ATTAINMENT AND TOP FIELDS OF STUDY, BY SEX (CAO, 2013)

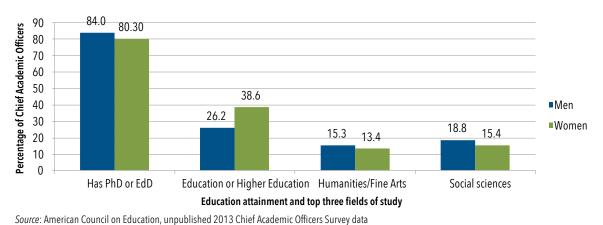
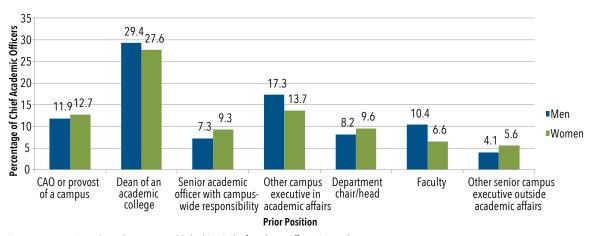


FIGURE 10: CAREER HISTORY: POSITION PRIOR TO BEING CAO, BY SEX (CAO, 2013)



Source: American Council on Education, unpublished 2013 Chief Academic Officers Survey data

TABLE 5: OVERALL BOARD SEX COMPOSITION

Institutional Type	2015	2010			
Independent					
Female	31.7	30.2			
Male	68.2	69.8			
Public					
Female	31.5	28.4			
Male	68.5	71.6			

Source: Association of Governing Boards of Universities and Colleges, 2010, 2010 Policies, Practices, and Composition of Governing Boards of Independent Colleges and Universities.

TABLE 6: BOARD CHAIRS

Institutional Type	2015	2010
Private		
Female	22.6	19.0
Male	77.4	81.0
Public		
Female	24.1	17.4
Male	75.9	82.6

Source: Association of Governing Boards of Universities and Colleges, 2010, 2010 Policies, Practices, and Composition of Governing Boards of Independent Colleges and Universities.



