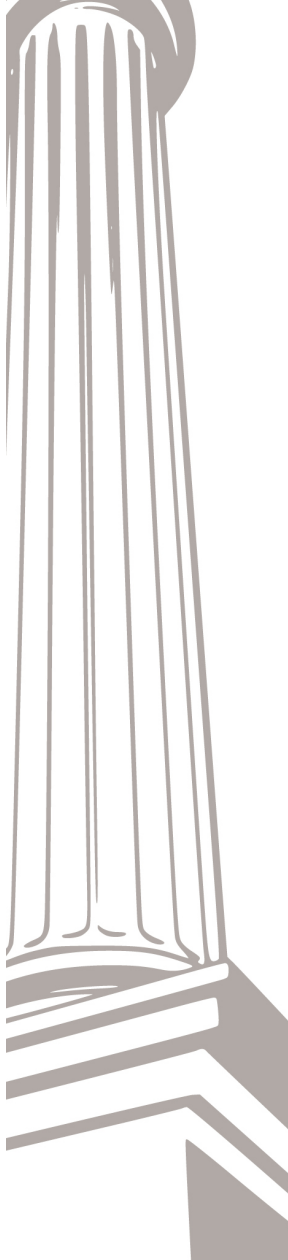


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Dean, Andrew Young School of Policy Studies

Returns to Later-Age Degrees



Overview

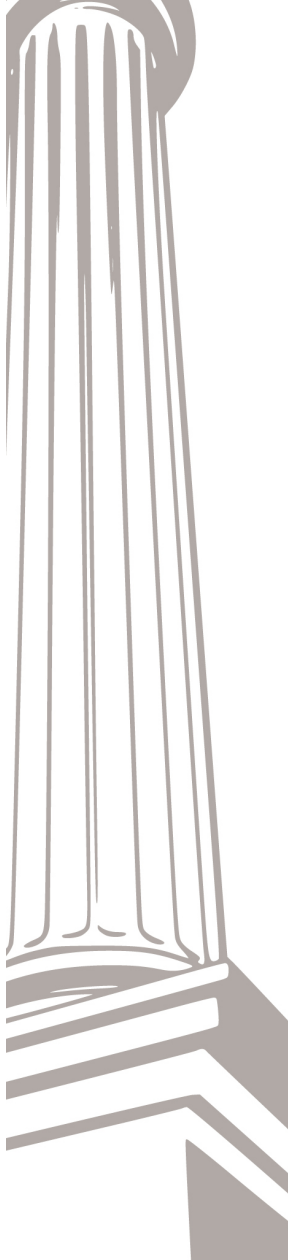
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Introduction

Project Overview

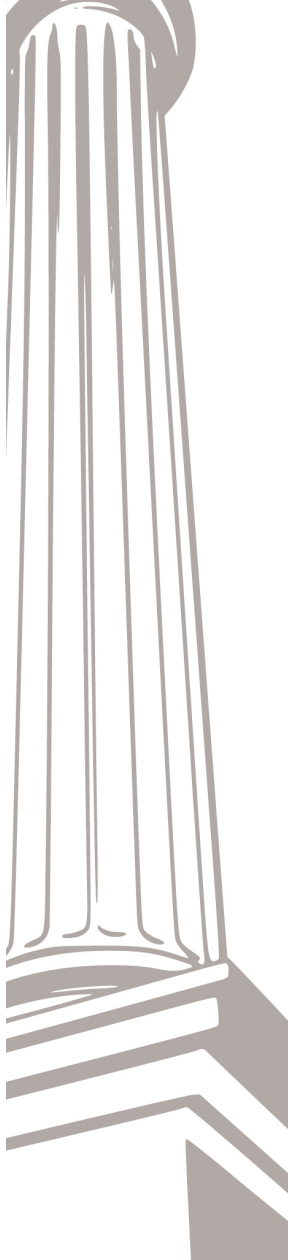
- How useful is a degree for older individuals?
- Coming years will see dramatic growth of older individuals, many of whom will remain in the labor force
- Policymakers would benefit from effective strategies to improve the labor market outcomes of older individuals

Project Overview (cont.)

- Objective: Returns to later-age degrees in USG
 - Wage premiums
 - Employment stability
 - Retirement Income
- Data from the University System of Georgia and the Georgia Department of Labor
- Funded by the Alfred P. Sloan Foundation

Generalizability of Georgia

- 5th largest public higher education system in the country
 - After California, Ohio, and New York (CUNY & SUNY)
- Georgia more similar to national averages in terms of GDP, GDP per capita, and diversity
 - CA and NY have outlier economies
 - GA is more racially diverse than OH



Review of the Literature

College Attainment for Older Workers

- Literature is sparse for older students
- Focus on barriers to enrollment and degree completion
- No consensus on what constitutes “older” or “mature” college student
- Most research looking at wage premiums or retirement effects from outside of US

Barriers to Enrollment and Completion

- Age, ability, opportunity cost
- Life roles: parent, spouse, employee
- Geography
- Breaking down the barrier
 - Strong social and family ties
 - Clear educational goals
 - Institutional contacts/mentors

Literature Results

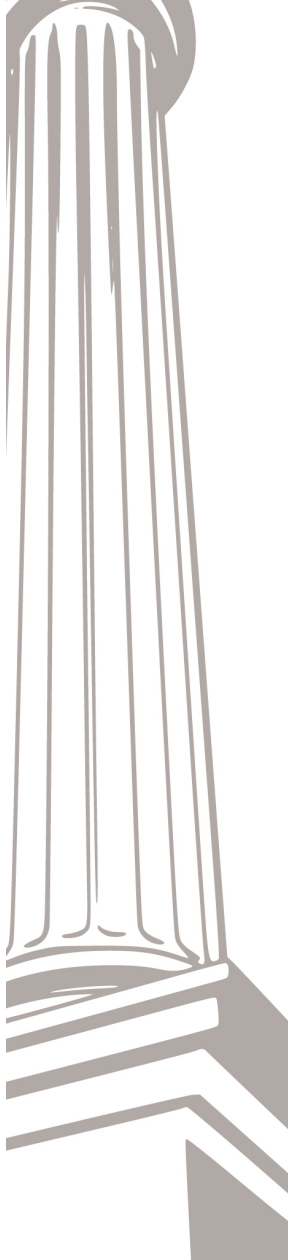
- The wage premium ROI for older-age degrees is minimal and often does not offset total costs
 - Likely due to fewer years of work after graduation
 - Break-even point?
 - Bias against older workers
- 65+ workers with some college education almost twice as likely to work compared to similar workers without HS diploma¹
- In Sweden: Attending between 42 and 55 saw 5% increase in labor market survival rates between 61 and 66²

¹Butrica, Schaner & Zedlewski 2006

²Stenberg & Westerlund 2013

Additions to the Literature

- USG data provides opportunity for larger treatment sizes than prior studies
- Wage premium ROI may be positive for some subgroups
 - Women
 - Ethnic minorities
- Almost no research on U.S. students
 - U.S. inherently different from Sweden
 - Wider dispersion of skills
 - Wider wage gap
 - Less robust safety net
 - Job polarization
 - European markets do not reflect U.S markets, particularly after Great Recession



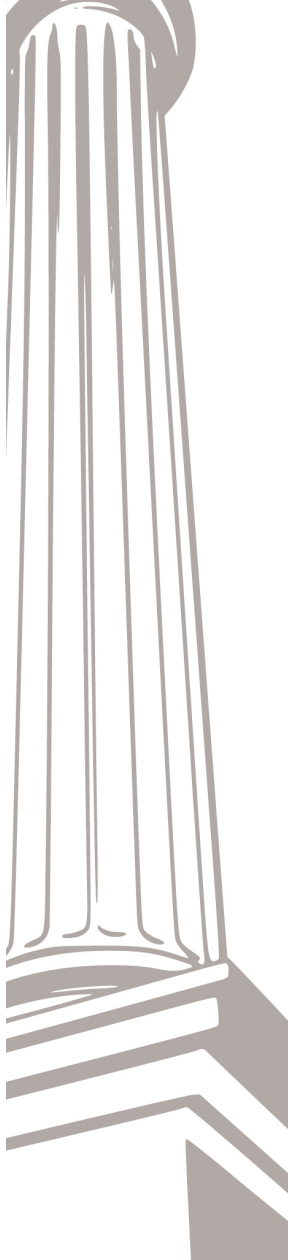
Research Outline

Data Merger

- USG administrative data for 50+, 2003 to 2017
 - Demographic and school-related information
- Georgia DOL from before 1990 to 2017
 - Quarterly Census of Employment and Wages (QCEW)
- Merge by SSN to get longitudinal view of wages and employment
 - See wages and job type before and after degree
- Comparison groups: more confident with multiple matching approaches telling the same story

Five Identification Strategies

1. **Match USG enrollee with similar non-enrollee using QCEW information**
 - Qs worked, wages, industry, county, etc.
 - QCEW does not have age
2. **Instrumental variables approach**
 - Use geographic data on employment conditions and school programs to model decision to enroll in USG institution
3. **Structural modeling approach**
 - Matched sample of USG enrollees in QCEW for 3-5 years before enrollment to 3-6 years after enrollment
 - Similar to limited information maximum likelihood estimation
4. **Match USG enrollees in QCEW with CPS/ACS individuals**
 - Benefit is detailed demographic data for both treatment and control
5. **Compare USG 50+ attendees who graduate to those who do not**
 - May be best strategy, but sample sizes may be too small



Data Challenges

Initial Data Details

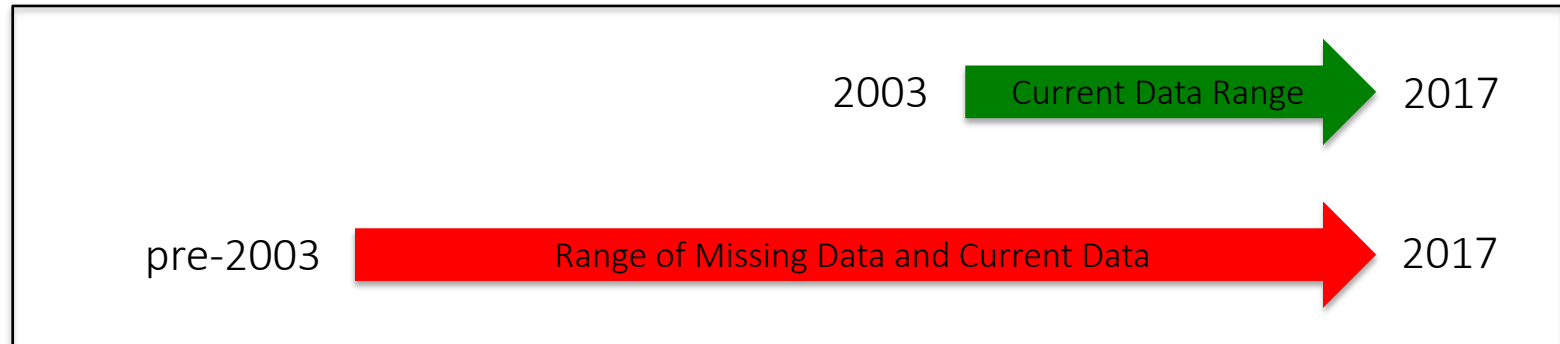
- USG administrative data for students aged 50+ who matriculated as first-time freshmen between 2003 and 2017
- Student, enrollment, and award files include demographic, academic, and graduation information
- Missing data for students aged 50+ who attended USG in this time frame but matriculated before 2003

First-Time Freshmen Definition

- A degree-seeking undergraduate student who enrolls in college for the first time in a summer, fall, or spring term. If a student is a transfer student he/she must have graduated from high school in the calendar year preceding the academic year of enrollment to be classified as FTF SER. Also included are students who attended college prior to the term of enrollment as part of a dual enrollment program while they were still high school students.
- Example 1: A student graduated from high school in May 2015. This same student enrolls at Georgia State University for fall 2015. This student is considered a SER first-time freshman.
- Example 2: A student graduated from high school in May 2015. This same student enrolls at Georgia State University for spring 2016, and has not attended any other institutions. This student is considered a SER first-time freshman.
- Example 3: A student graduated from high school in May 2015 and enrolled at Georgia State University for the Summer 2015 semester. The student then transfers to the University of Georgia for the Fall 2015 semester. This student is considered a SER first-time freshman.

Missing Data

Range of Data based on Matriculation Dates



- Current data only contains information on students who matriculated between 2003 and 2017
- Significant total population differential is due to students who started as first-time freshmen before 2003 and transfer students

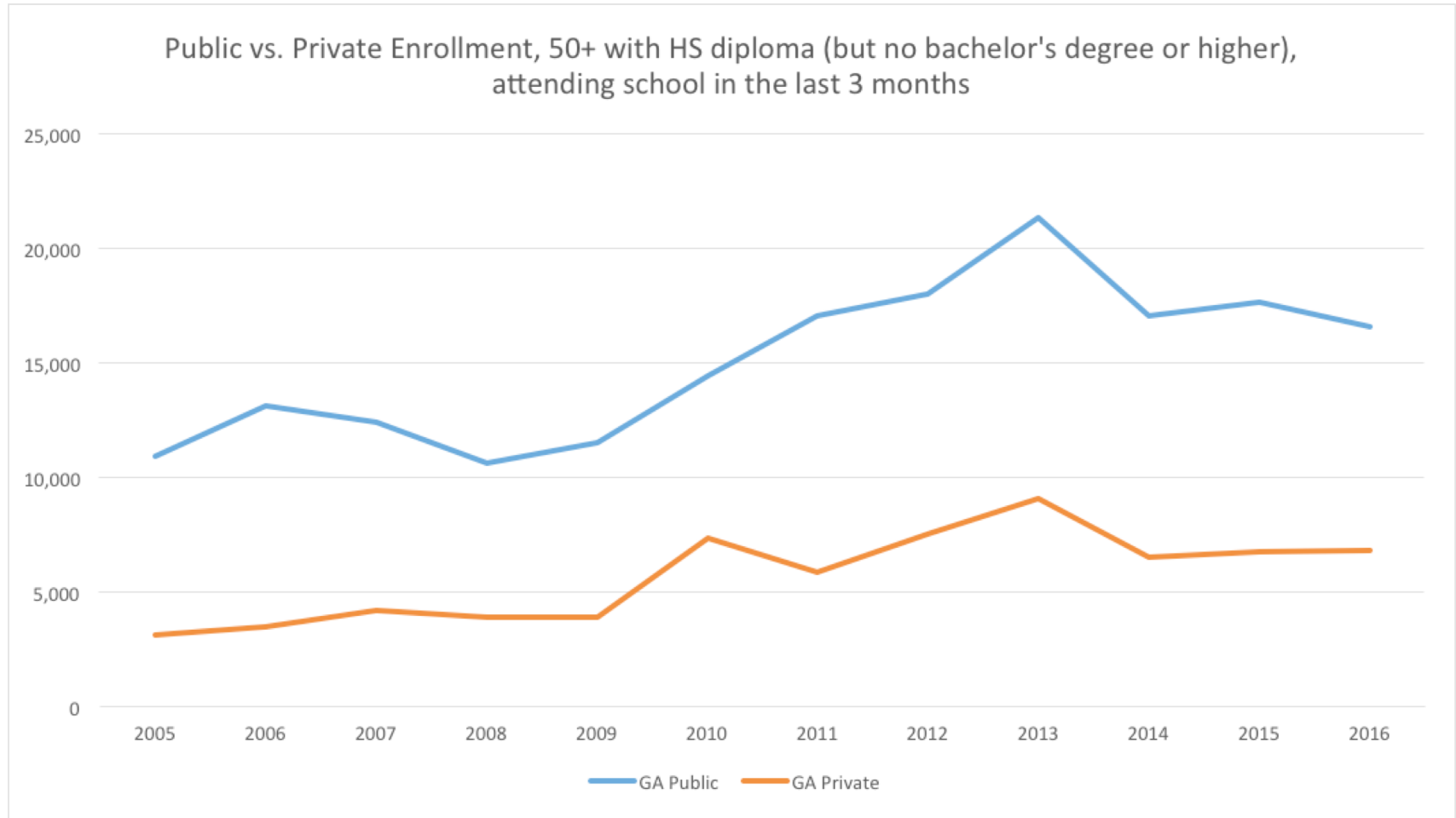
Current Total vs. USG Total

- Current data represents 20-40% of USG total

Total Aged 50+ Undergraduate Degree Seeking Population Comparison

	<i>Total Population Within Current Data Range</i>	<i>Total Population from USG</i>	<i>Total Population in Range as Percent of USG Total</i>
2002	30	-	-
2003	518	2,452	21.1%
2004	765	2,693	28.4%
2005	907	2,861	31.7%
2006	1,027	2,947	34.8%
2007	1,060	2,923	36.3%
2008	1,242	3,648	34.0%
2009	1,485	3,941	37.7%
2010	1,869	4,632	40.3%
2011	2,051	5,027	40.8%
2012	2,028	5,334	38.0%
2013	1,863	5,169	36.0%
2014	1,492	4,624	32.3%
2015	904	3,884	23.3%
2016	784	3,774	20.8%
2017	665	3,453	19.3%
2018	306	-	-
<i>Total</i>	18,996	57,362	33.1%

ACS Figures



New Data

- USG will provide broader data that includes information on all students 50+ who attended between 2003 and 2017, regardless of matriculation date
- Technically involves sorting based on academic term and not matriculation term
- Larger population numbers in each year will be more consistent with additional data provided

Tiered Approach and Cutoffs

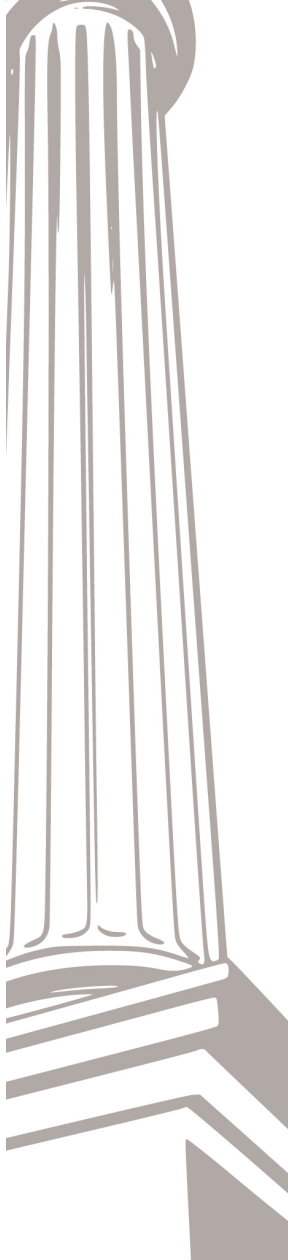
- Option to tier incoming credits
 - Example: students with 3 to 9 credits are almost beginning freshmen
- Option to implement cutoffs based on years since last contact with the university system
 - Example: students with no contact with university system for ten years are almost beginning freshmen
- Expand USG matching population

New Data Details

- USG administrative data for students aged 50+ who attended USG institutions between 2003 and 2017
- Enrollment file and student file information now merged and transfer data provided
- The total population figures are comparable to previous estimates from USG, and nearly 2.5x the figures from the first data package

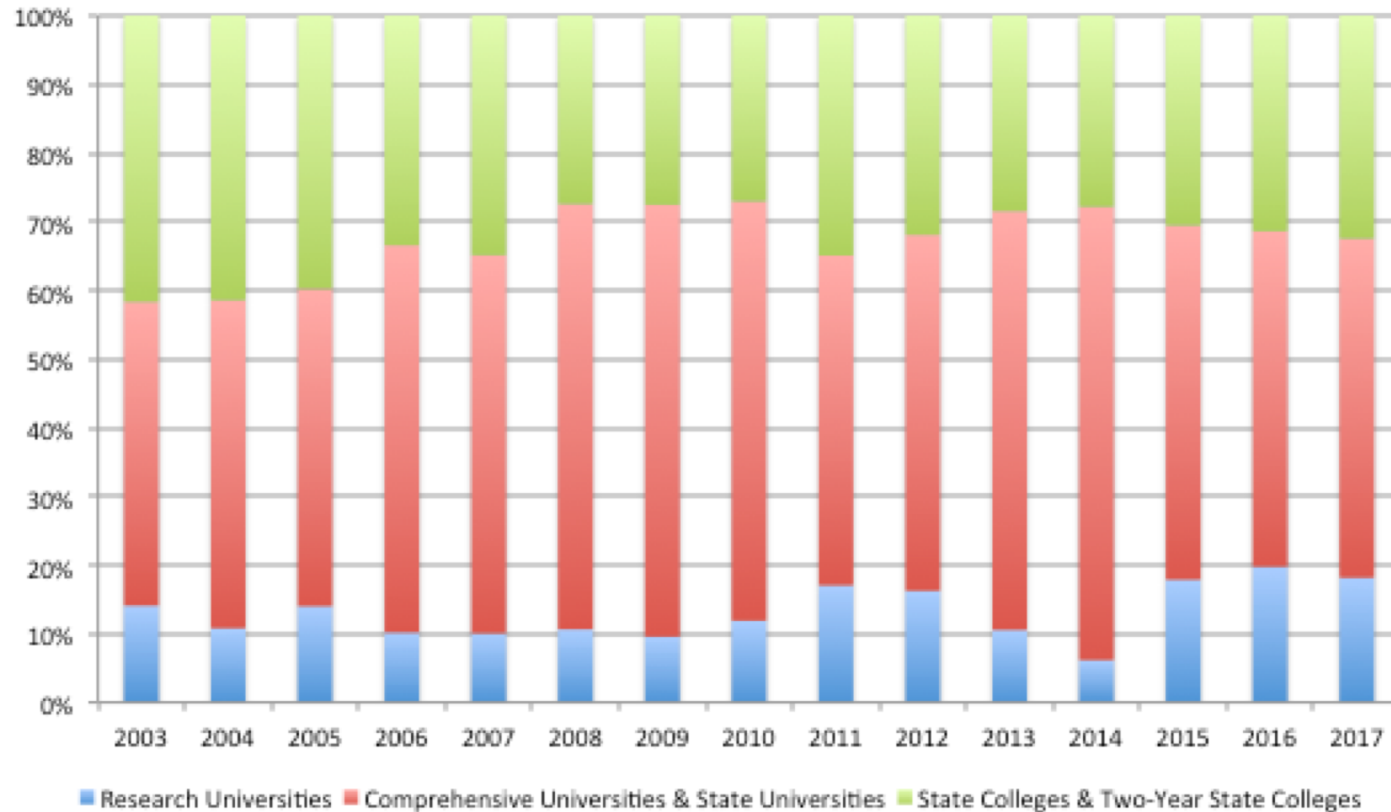
New Credit Hour Cutoff

- Credit hour measure equal to the cumulative number of credits earned at USG institutions and the cumulative number of transfer credits at “first observed” date
- New definition of first-time freshmen, based on credit hour measure, in development
- Initial analysis indicates significantly expanded USG matching population

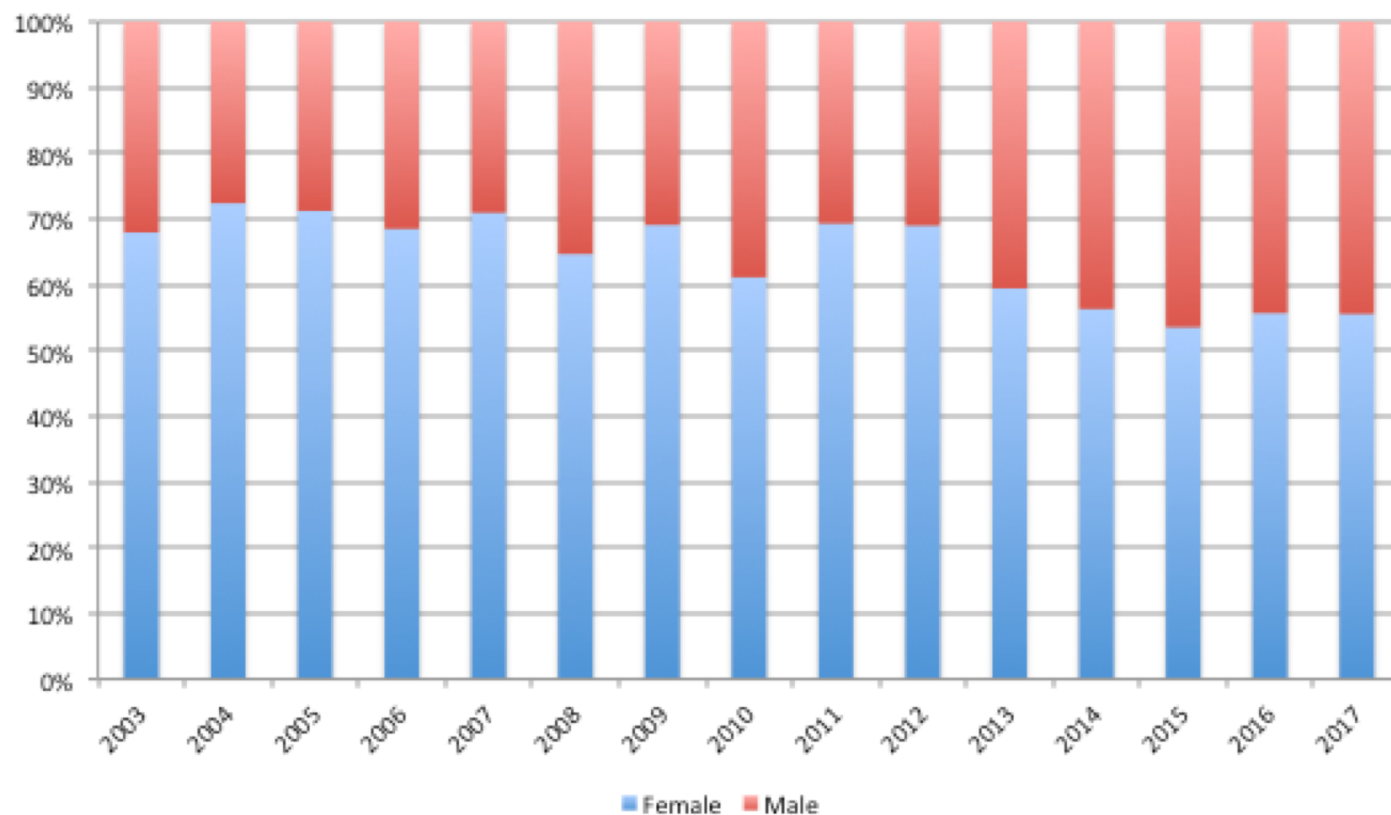


Summary of Current Data

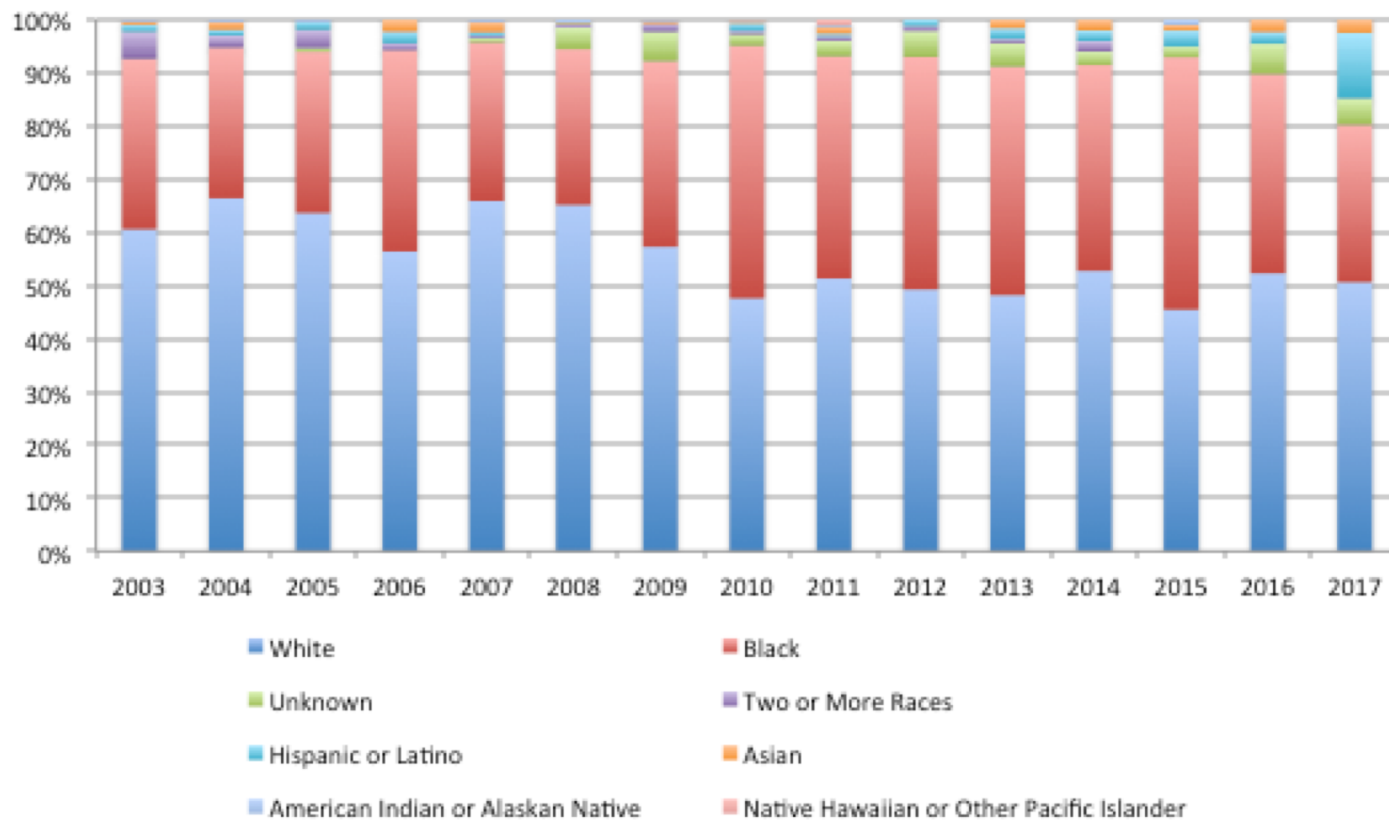
Institution Breakdown



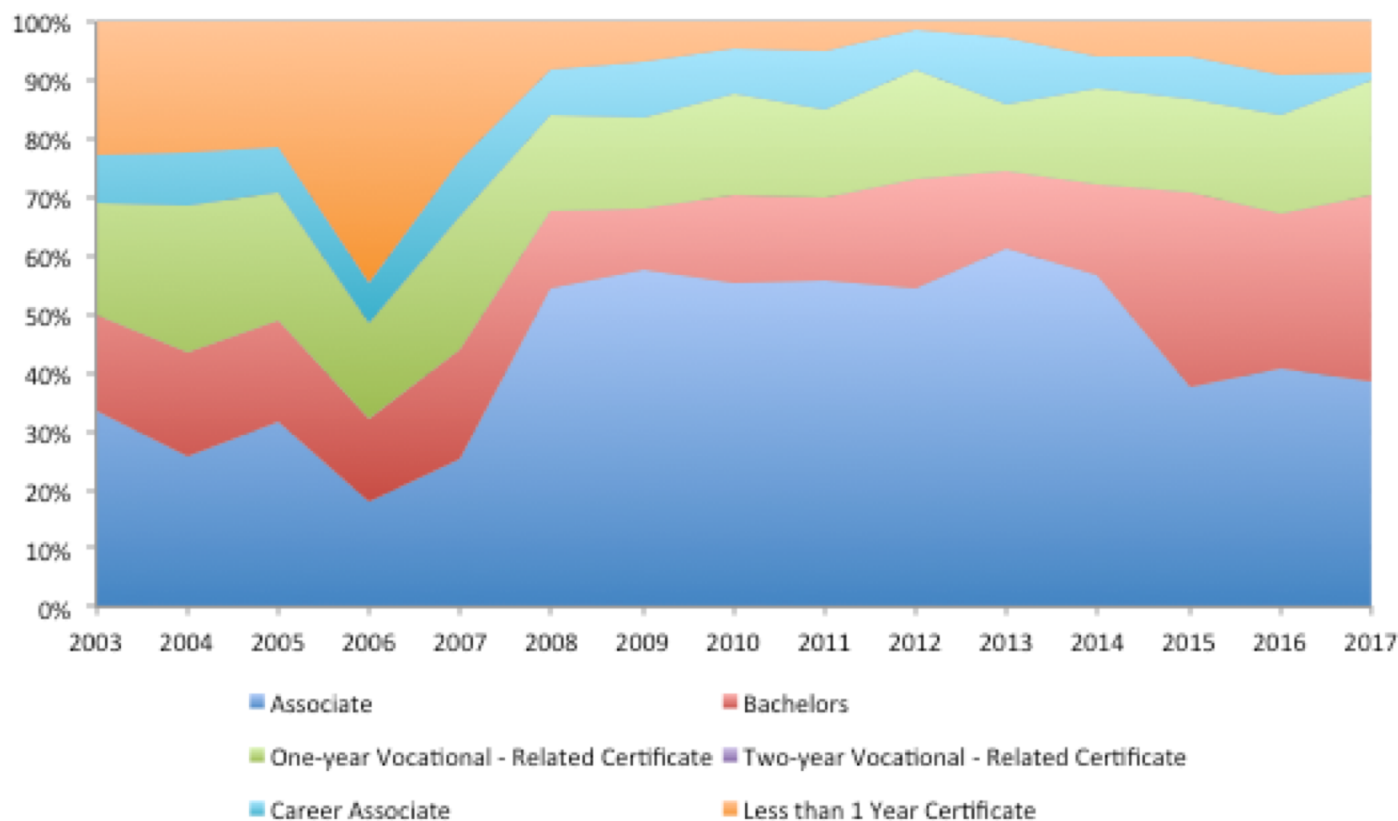
Gender Split



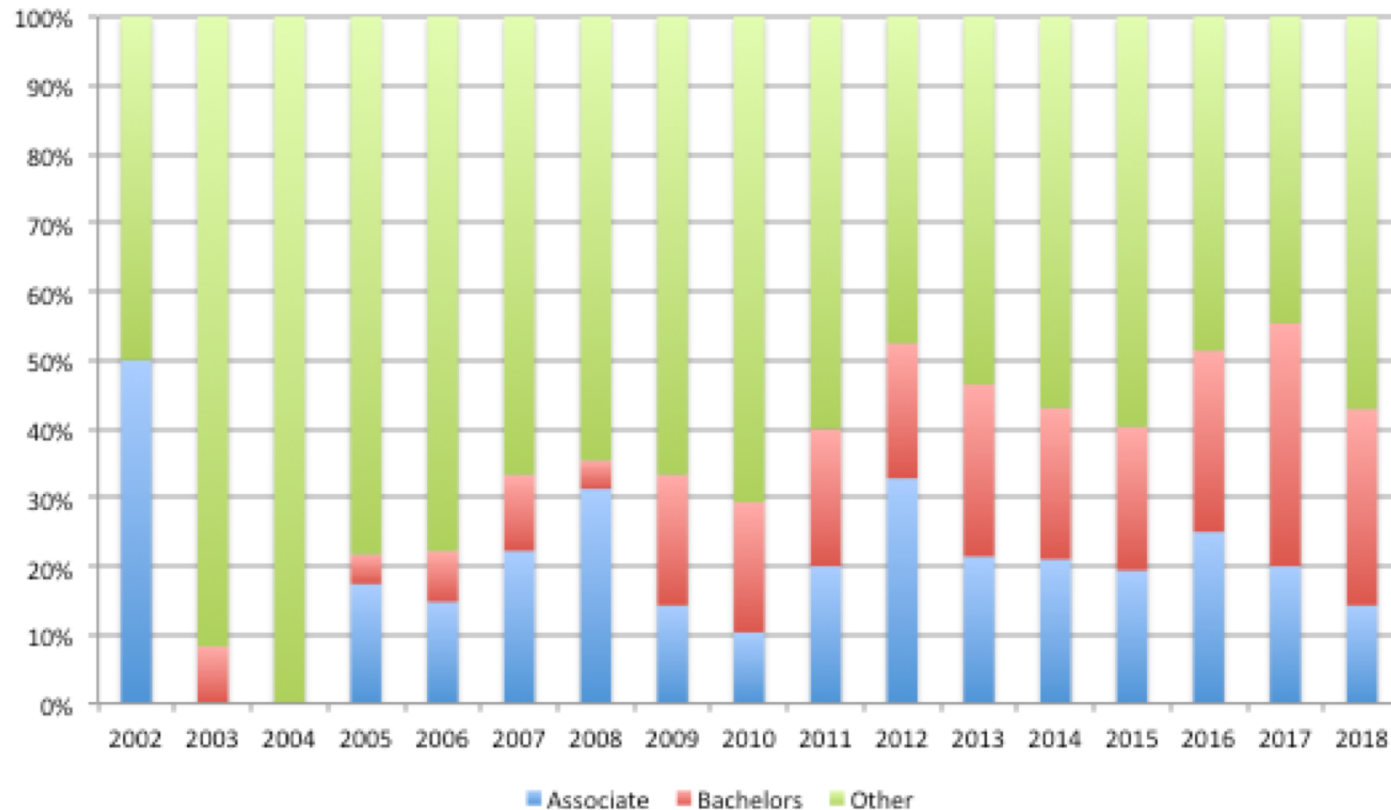
Race



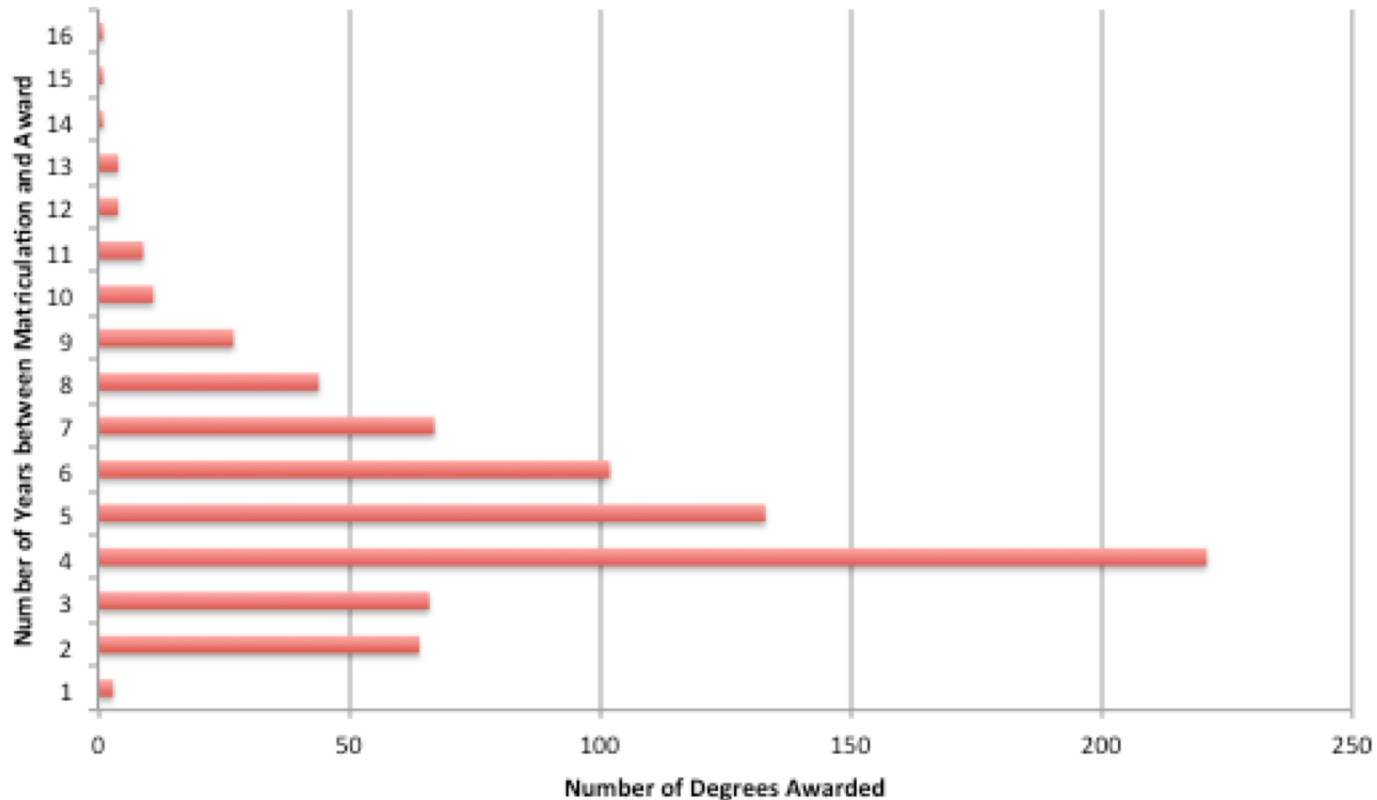
Degree Type (at matriculation)



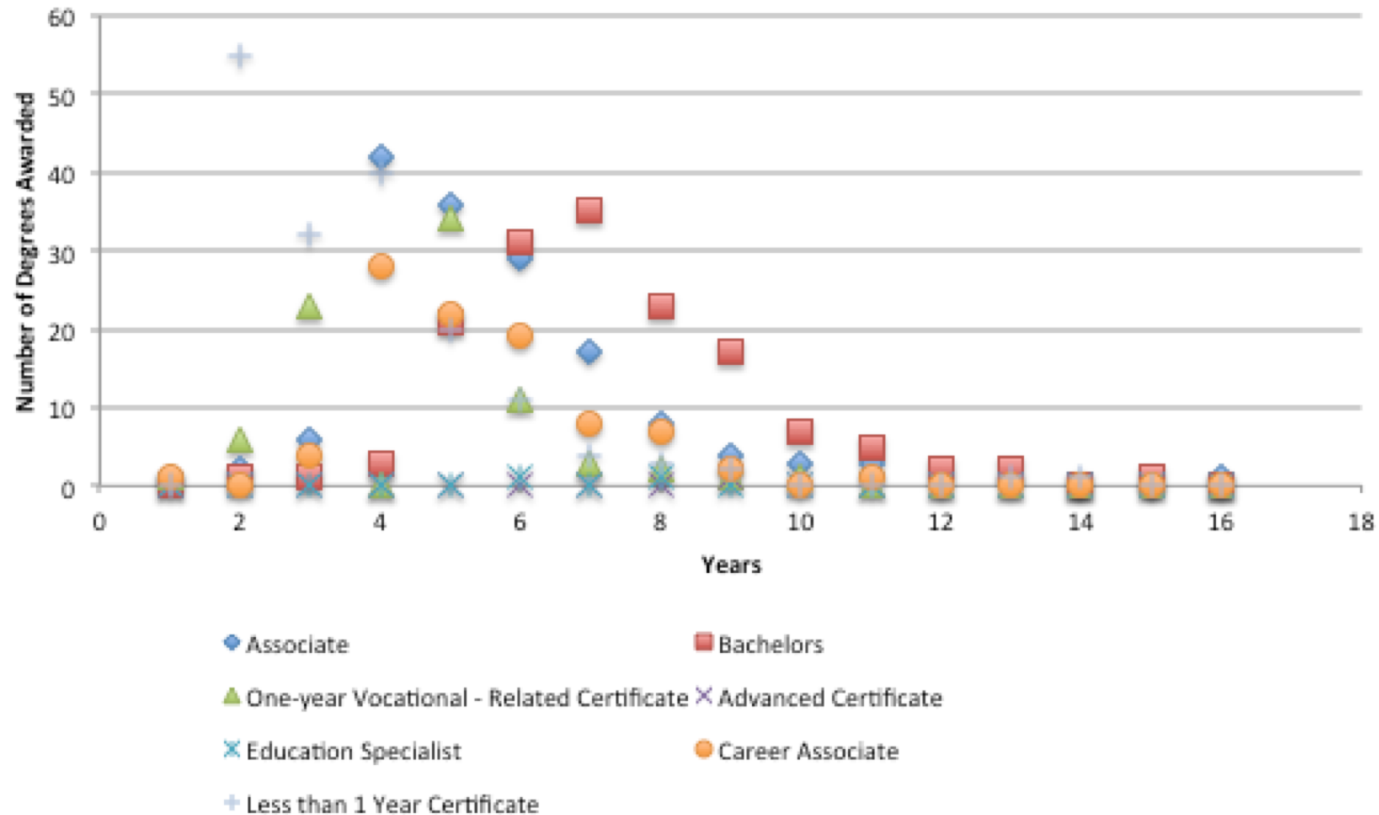
Award Type

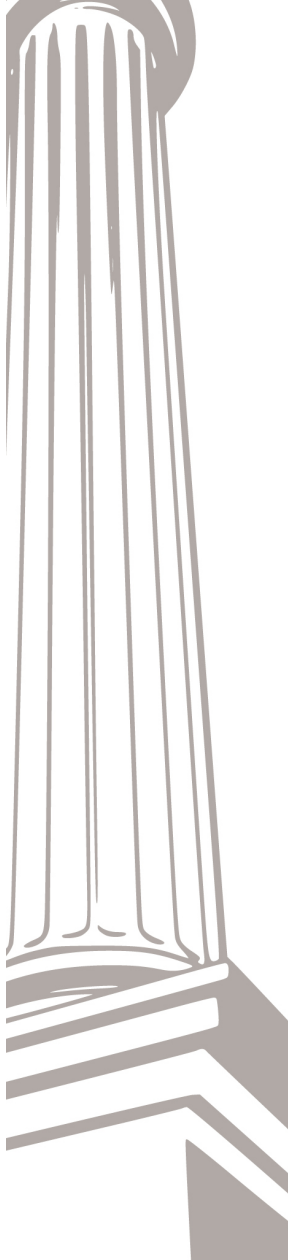


Years to Degree Completion



Year to Degree Completion by Degree





Thank you!

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