



State University System of Florida

*Presentation to the Senate Budget Subcommittee on
Higher Education Appropriations*

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Overview

■ Research

- How do Florida's universities compare to the top-ranked public research universities in the nation?

■ Technology Transfer

- To what extent are Florida's universities commercializing their research efforts?

■ Instruction

- What types of students do Florida's universities serve and are there major differences among institutions?
- How do Florida's universities compare on various productivity, efficiency, and effectiveness indicators?

■ Institutional Profiles

Florida's Universities Compared to the Top- Ranked American Research Institutions

What are the Characteristics of Research Universities?

In general, research universities

- have high quality undergraduate student bodies;
- have faculty who win national and international awards for distinction and recognition by their peers;
- produce large numbers of doctoral graduates as part of their research commitment;
- produce large volumes of quality research; and
- have engaged alumni and private supporters who contribute annually and whose gifts build endowments.

Source: The Top American Research Universities (TARU).

Overview of University Comparisons

- Carnegie Foundation for Advancement of Teaching
 - Classification of universities
- Association of American Universities (AAU)
 - Membership by invite only—includes 61 private and public institutions
 - Currently, the University of Florida is the only state university in Florida that is a member
- The Center for Measuring University Performance
 - *The Top American Research Universities (TARU)*

Carnegie Classification

Carnegie Classification	State Universities
Research Universities (very high research activity)	University of Florida Florida State University University of South Florida University of Central Florida
Research Universities (high research activity)	Florida International University Florida Atlantic University
Doctoral/Research Universities	Florida A&M University University of West Florida
Master's Colleges and Universities (larger programs)	University of North Florida Florida Gulf Coast University
Baccalaureate Colleges—Arts & Sciences	New College of Florida

Association of American Universities

- The Association of American Universities (AAU) is an association of leading comprehensive research universities distinguished by the breadth and quality of their programs of research and graduate education
 - Includes 59 U.S. and 2 Canadian public and private research universities
 - Membership in the association is by invitation
 - The association maintains a standing Membership Committee, which periodically evaluates both non-member universities for possible membership and current members for continued membership

The Center for Measuring University Performance

Top American Research Universities (TARU)

- The Center publishes an annual report, *The Top American Research Universities (TARU)*, which provides analysis and data useful for understanding research university performance
 - The Center classifies universities into groups in accordance with nine institutional characteristics or measures
 - Institutions with a certain level of federal research expenditures and that fall within the top 25 on at least one of the nine measures fall into the Center's definition of the top research universities

The Top American Research Universities (TARU) Measures

RESEARCH

- Total Research Expenditures (*National Science Foundation R&D, 2008*)*
- Federal Research Expenditures (*National Science Foundation R&D, 2008*)*

PRIVATE SUPPORT

- Endowment Assets (*2009*)
- Annual Giving (*2009*)

FACULTY

- Number of National Academy Members (*2009*)*
- Number of Faculty Awards Received (*2009*)*

ADVANCED TRAINING

- Number of Doctorates Awarded (*2009*)*
- Number of Postdoctorate Students (*2008*)*

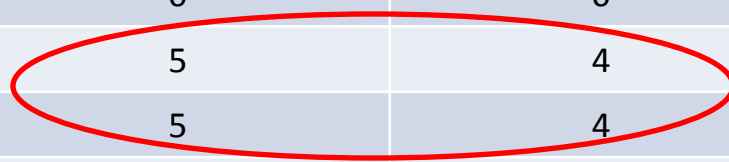
UNDERGRADUATE

- Average SAT & ACT (*2009*)

**Measure also used by the AAU Membership Committee*

How Do Florida Universities Compare to Other Public Universities Nationally?

State University	Number of Measures in Top 25 Nationally Among Public Institutions	Number of Measures in Top 26-50 Nationally Among Public Institutions	Number of Measures in Top 51-100 Nationally Among Public Institutions
University of Florida	9	0	0
Florida State University	0	5	4
University of South Florida	0	5	4
University of Central Florida	0	0	6
Florida International University	0	0	6
Florida Atlantic University	0	0	1
Florida A&M University	0	0	0
Florida Gulf Coast University	0	0	0
New College of Florida	0	0	0
University of North Florida	0	0	0
University of West Florida	0	0	0

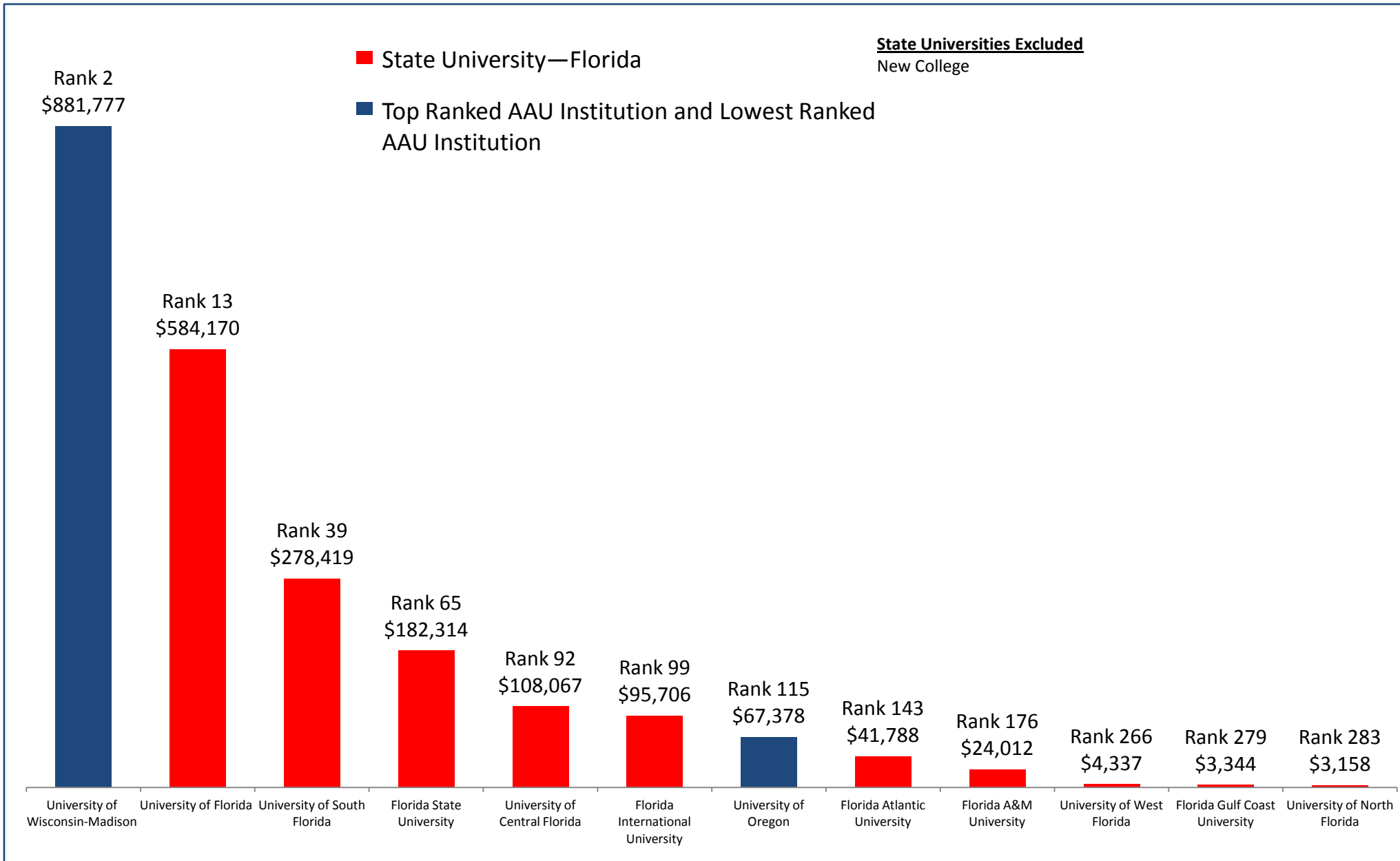


How Do Florida Universities Compare to Other AAU Institutions?

State University	Number of TARU Measures Ranked Between the Top and Bottom Ranked AAU Institutions
University of Florida	9
Florida State University	9
University of South Florida	8
University of Central Florida	3
Florida International University	3
Florida Atlantic University	1
Florida A&M University	0
Florida Gulf Coast University	0
University of North Florida	0
University of West Florida	0

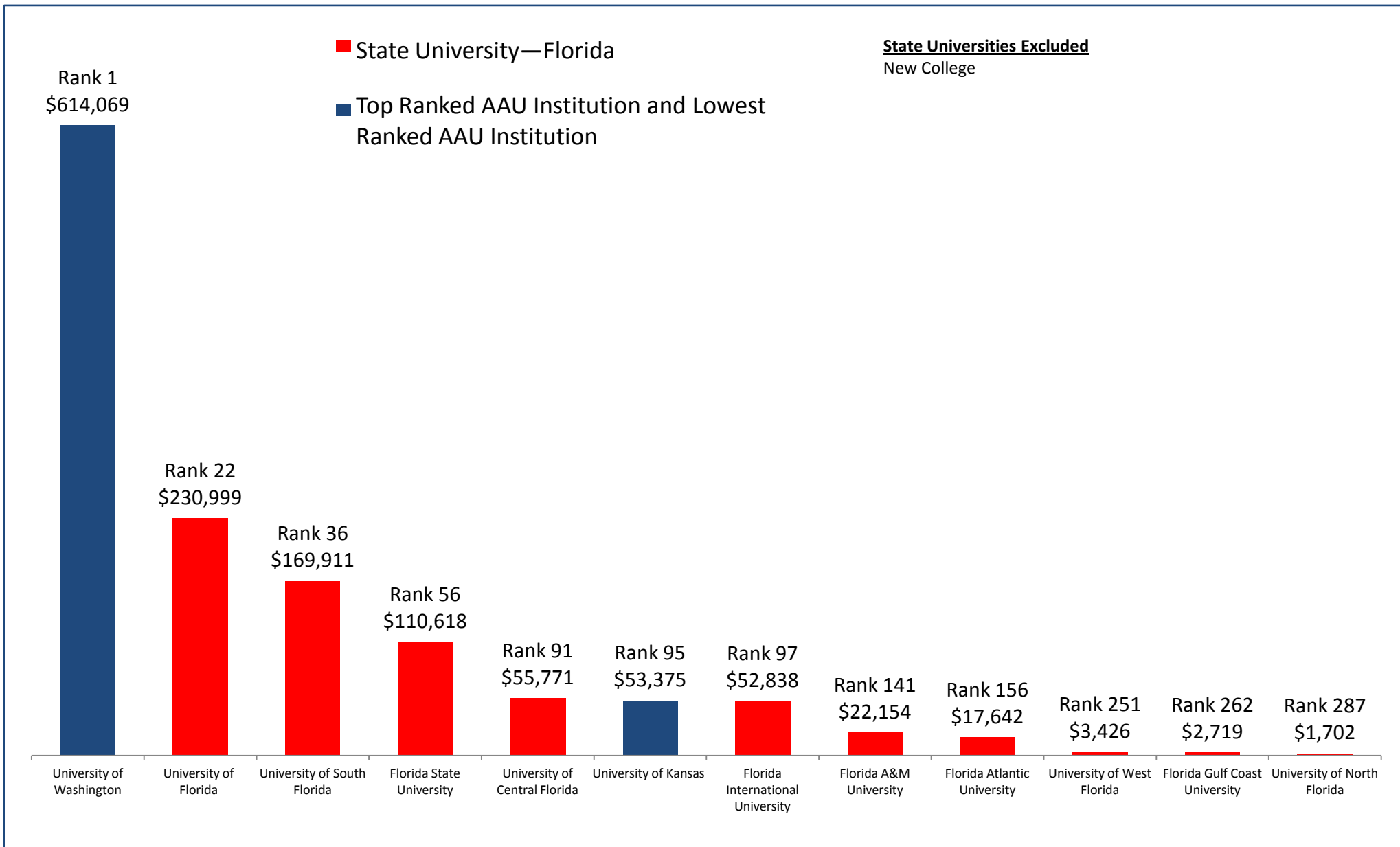
Total Research Expenditures

(in thousands)



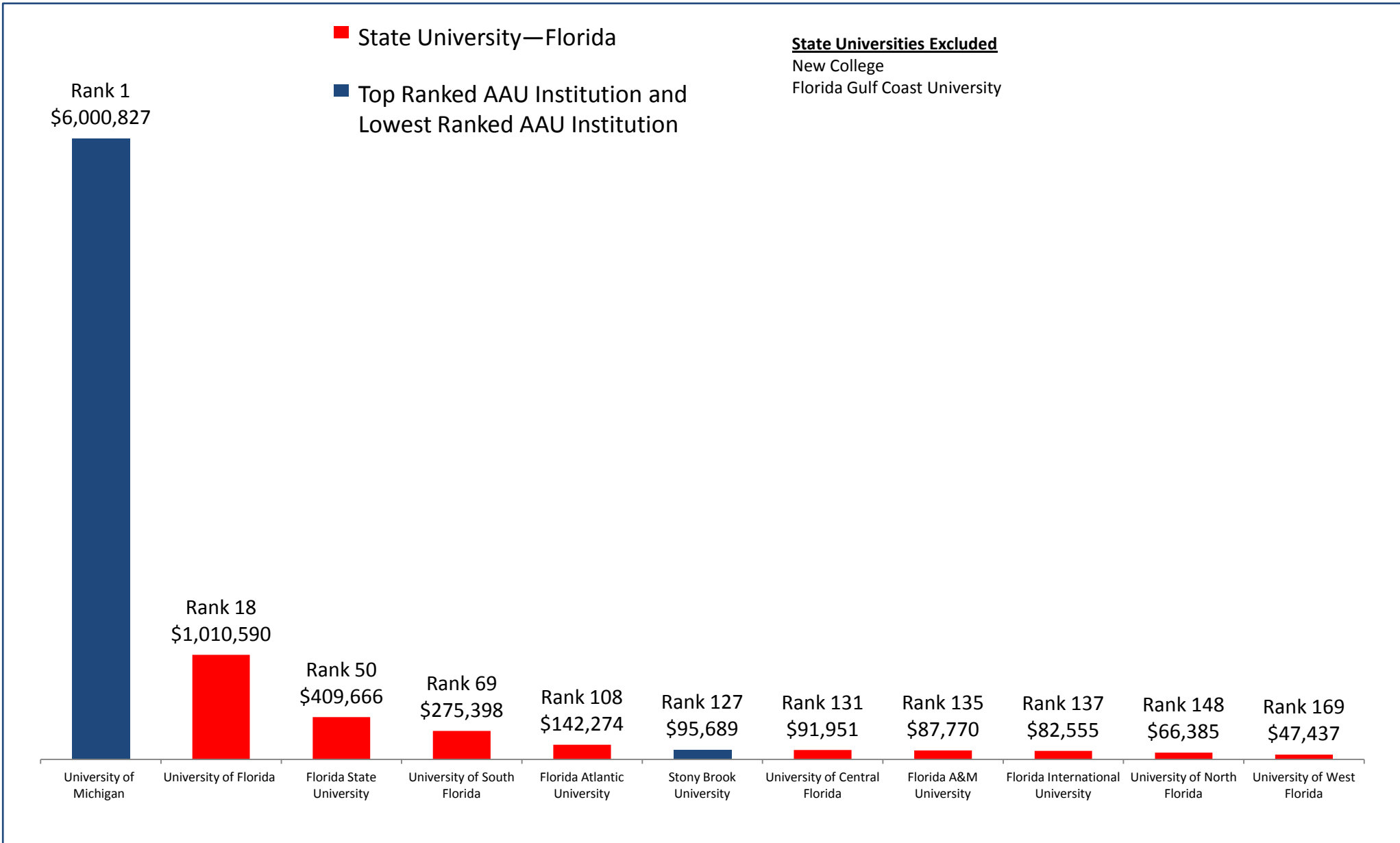
Total Federal Research Expenditures

(in thousands)



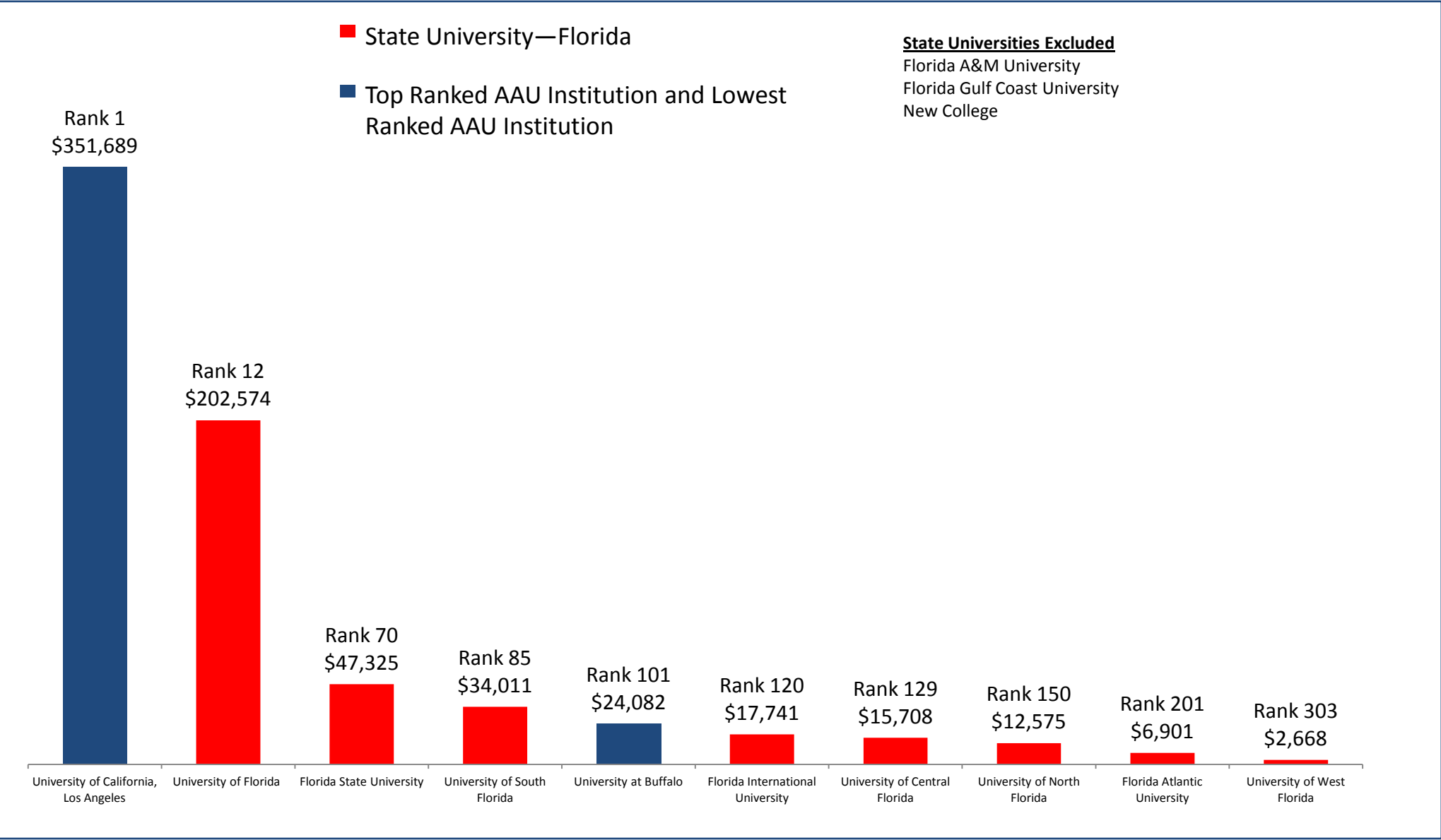
Endowment Assets

(in thousands)

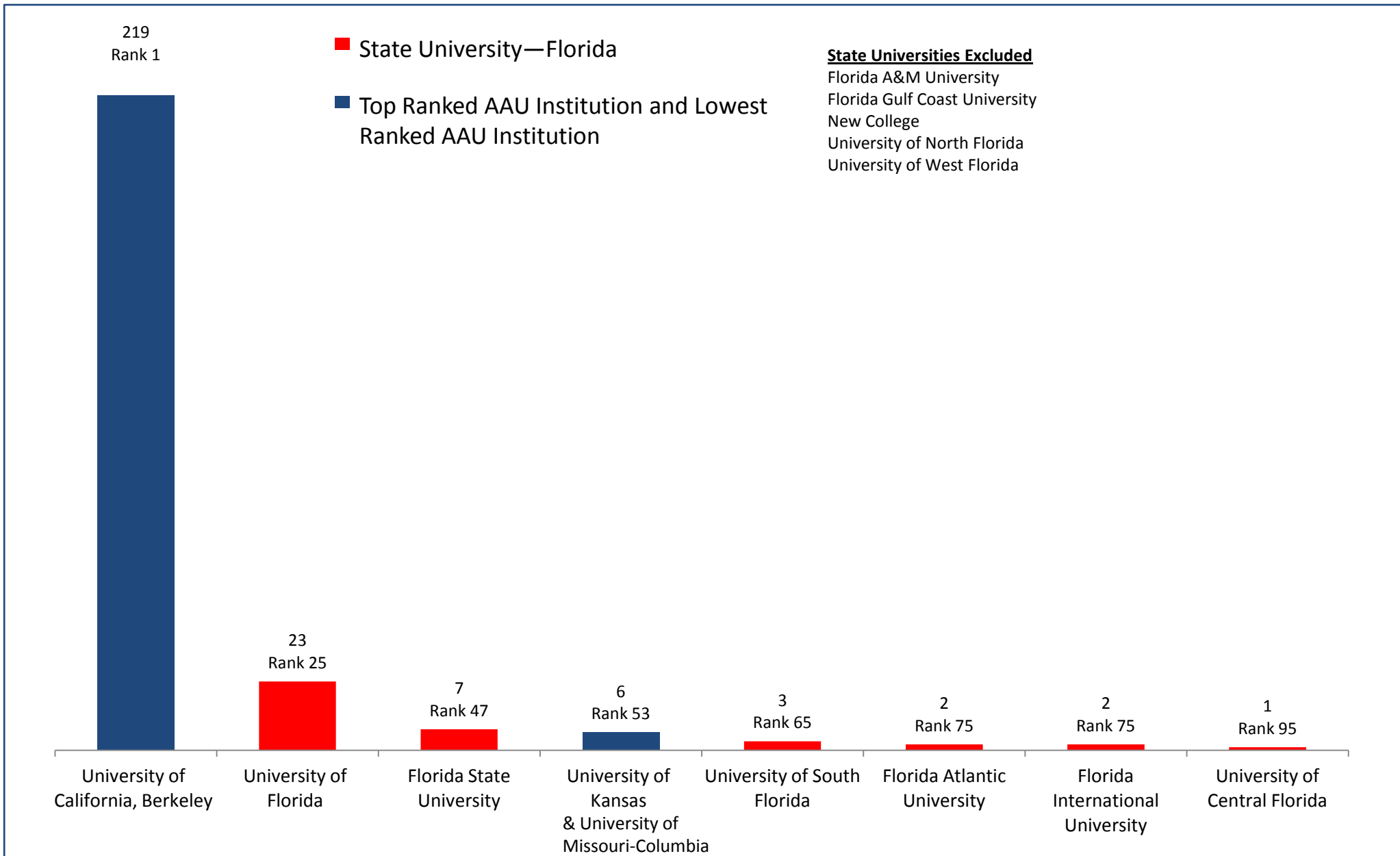


Annual Giving

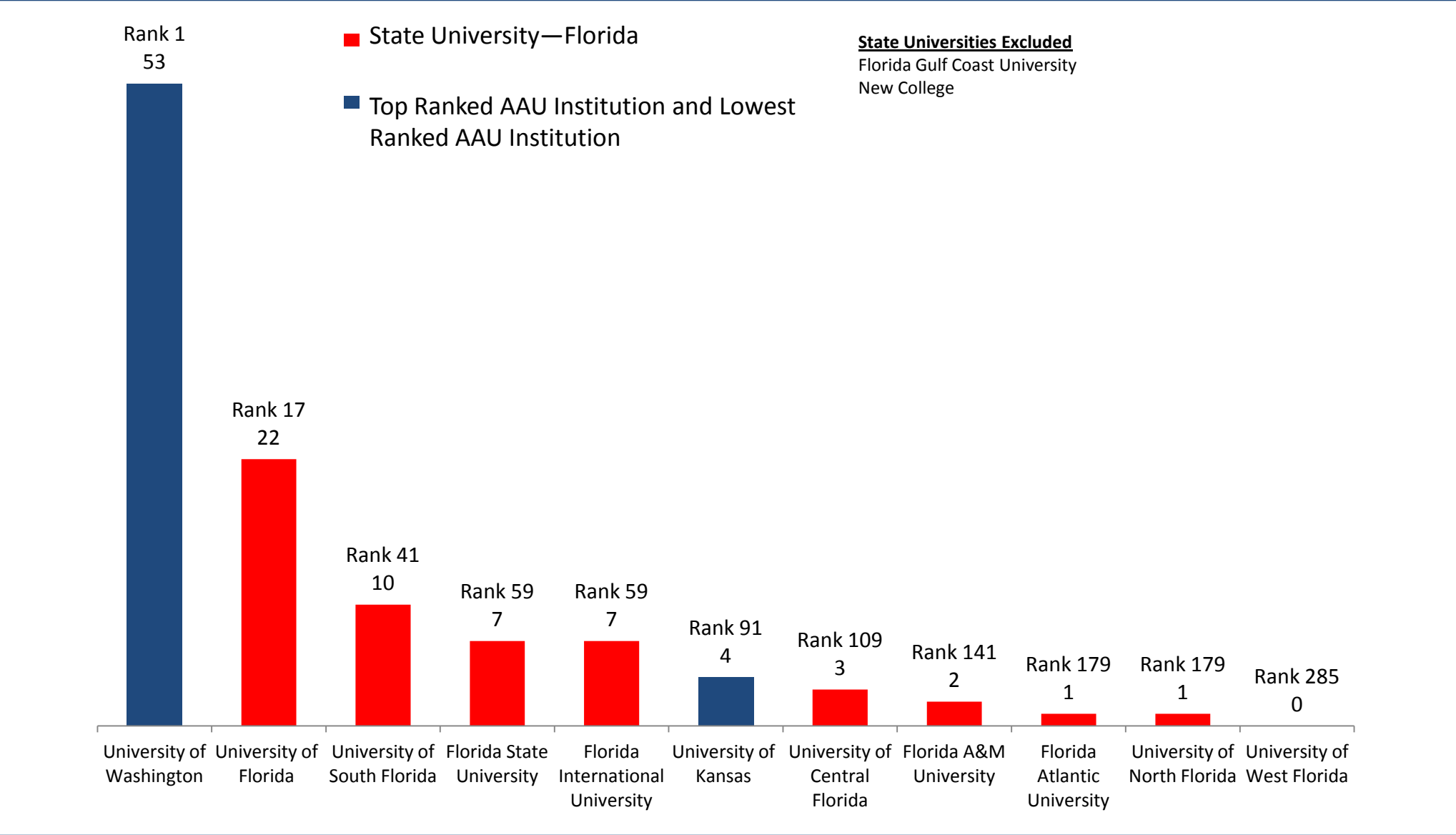
(in thousands)



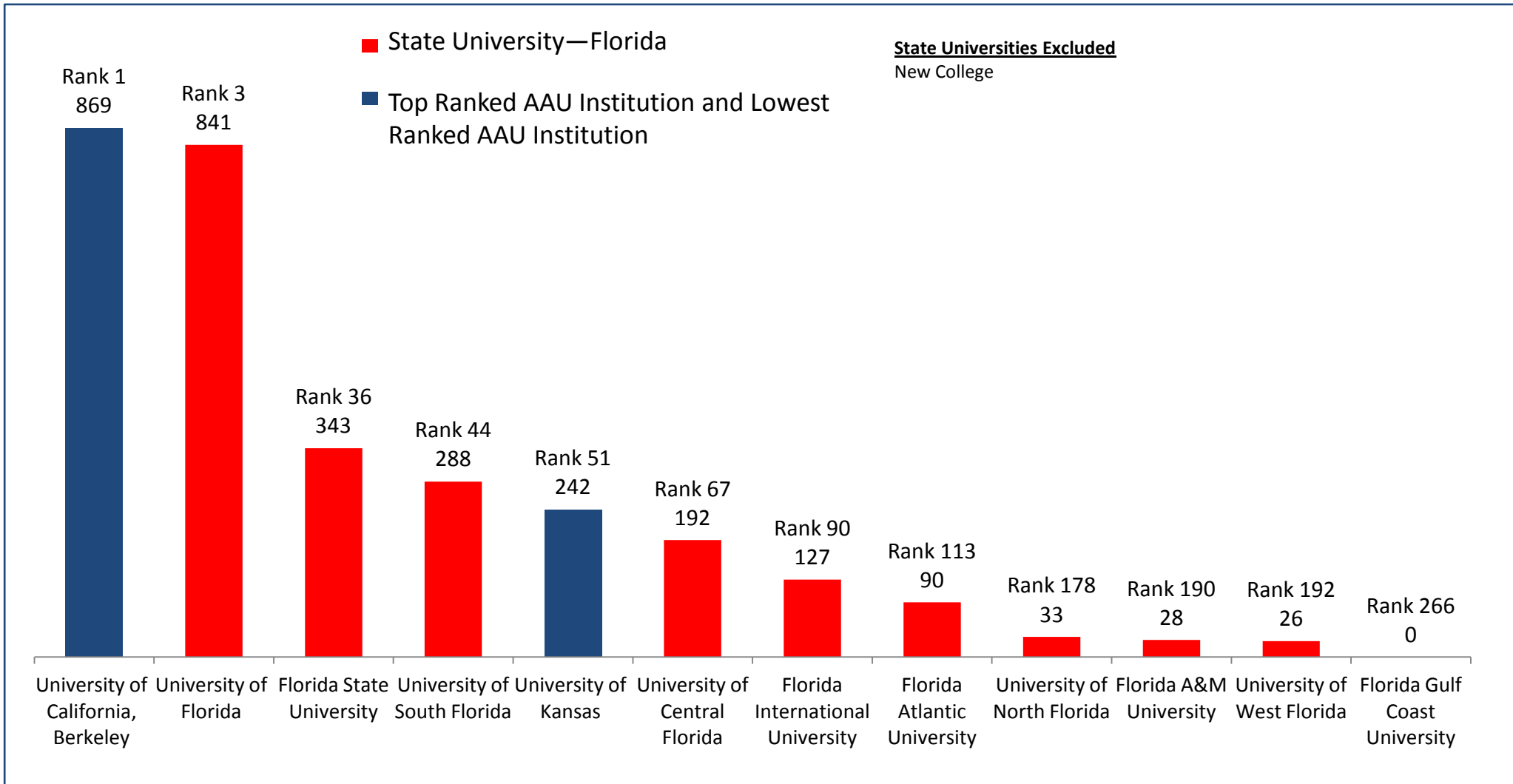
Number of National Academy Members



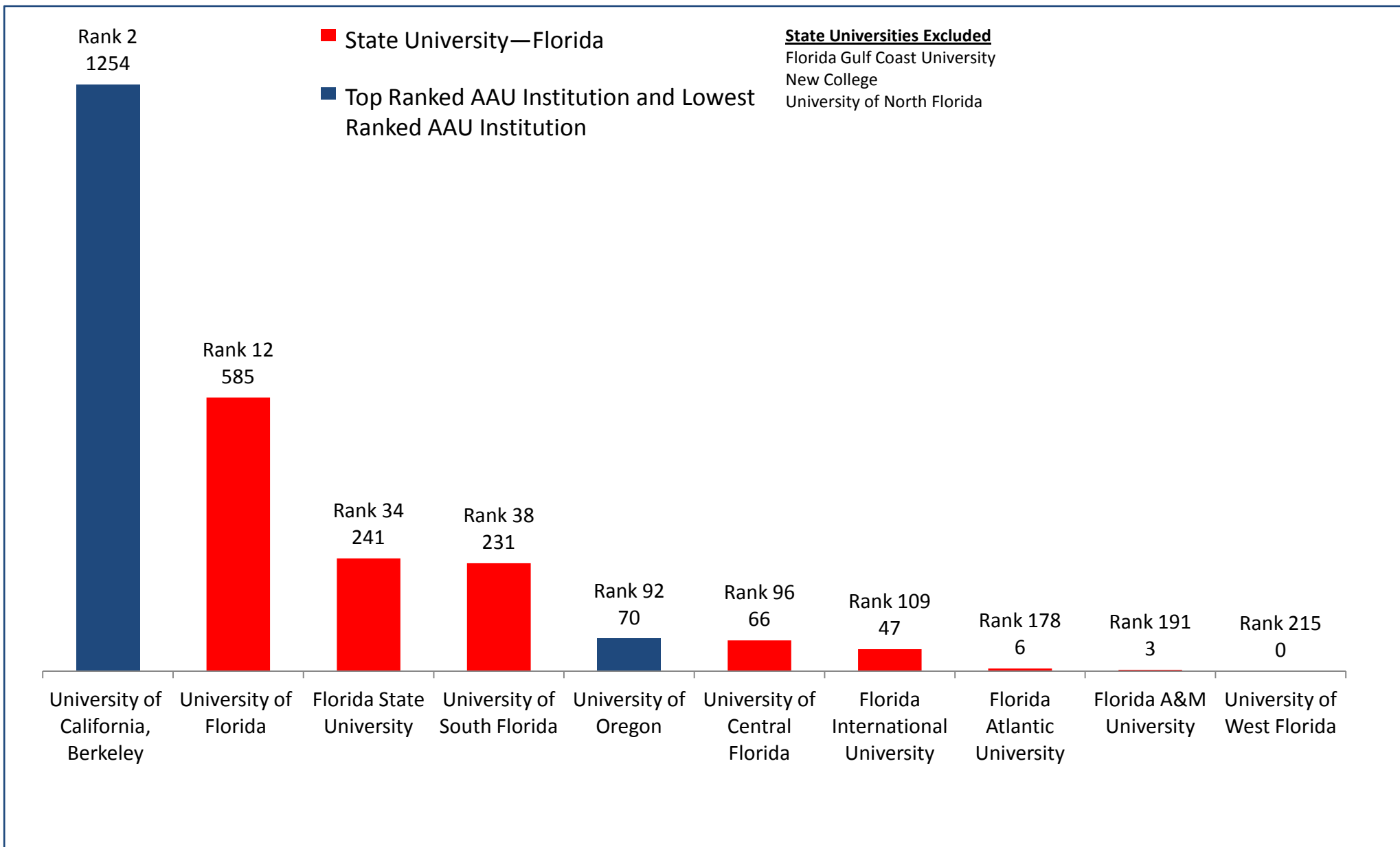
Number of Faculty Awards Received



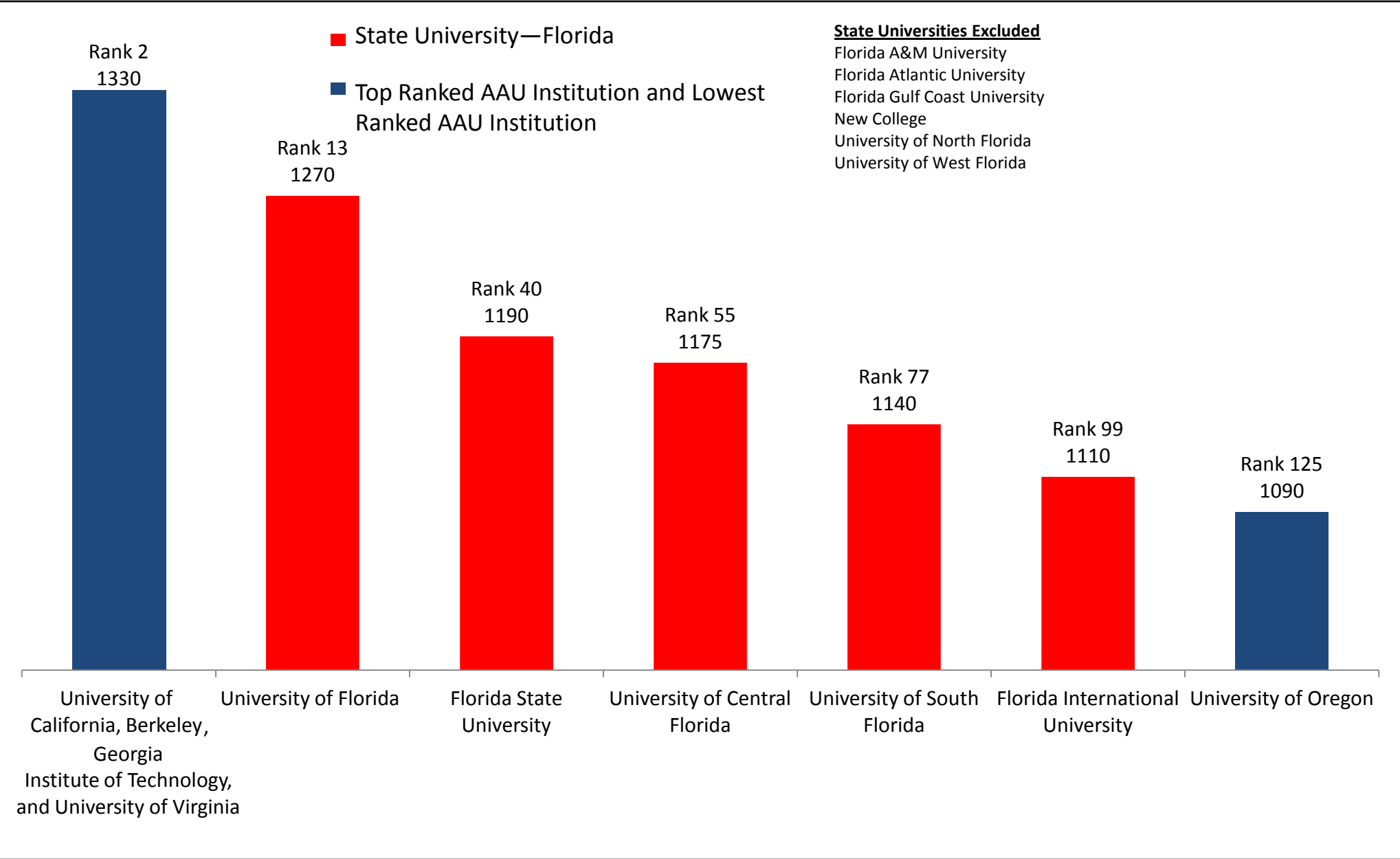
Number of Doctorates Awarded



Number of Postdoctorate Students



Average SAT and ACT Score



University Technology Transfer

Research Commercialization

- Florida's public universities have created technology transfer offices to facilitate the commercialization of faculty research
- Technology transfer offices help faculty
 - disclose inventions;
 - assess patentability and marketability of the technologies;
 - file patents; and
 - license technologies to private companies

Several Standard Measures Are Used to Evaluate Technology Transfer

- The Association of University Technology Managers annually surveys U.S. institutions to gather information on technology transfer program performance
- Data published by the association include several important measures
 - Amount of licensing income
 - Number of licenses executed
 - Number of U.S. patents issued
 - Number of start-up companies formed

Florida's Public University Technology Transfer Offices Facilitate Commercialization

Institution	Total Research Spending	New Patent Applications	U.S. Patents Issued	Total Active Licenses	Licenses Executed	Licensing Income	Start-Up Companies Formed	Licensing Income as a Percentage of Total Research Spending
Florida Atlantic University	\$41,605,782	15	4	10	6	\$145,476	1	0.3%
Florida International University	\$76,746,403	7	1	4	1	\$24,942	0	0.0%
Florida State University	\$217,441,956	34	21	65	6	\$1,314,917	2	0.6%
University of Central Florida	\$117,833,479	189	85	47	13	\$647,482	6	0.5%
University of Florida	\$535,877,029	171	59	619	92	\$29,235,006	9	5.5%
University of South Florida	\$390,850,000	84	67	155	37	\$17,411,625	5	4.5%
University of West Florida	\$16,117,797	1	0	4	0	0	0	
Total	\$1,396,472,446	501	237	904	155	\$48,779,448	23	3.5%

Note: The University of North Florida only responded to the association's survey in Fiscal Year 2008.

Source: OPPAGA Analysis of Association of University Technology Managers data.

Florida Compares Favorably to Other Large State University Systems on Some Measures

System	Total Research Spending	New Patent Applications	U.S. Patents Issued	Total Active Licenses	Licenses Executed	Licensing Income	Start-Up Companies Formed	Licensing Income as a Percentage of Total Research Spending
California	\$5,171,519,289	915	297	2,096	252	\$104,434,511	75	2.0%
Florida	\$1,396,472,446	501	237	904	155	\$48,779,448	23	3.5%
Texas	\$2,346,099,522	368	150	1,160	175	\$38,309,487	33	1.6%

Note: Data are reported for those state institutions that responded to the 2010 Association of University Technology Managers survey.

Source: OPPAGA analysis of Association of University Technology Managers data.

UF Ranked Among the Top 25 Universities in 5 Technology Transfer Performance Categories

Institution ¹	U.S. Patents Issued Rank	Licenses Executed Rank	Licensing Income Rank	Start-Up Companies Formed Rank	Licensing Income as a Percentage of Total Research Spending Rank
Florida Atlantic University	117	111	128	94	101
Florida International University	138	142	144	Not Ranked	144
Florida State University	57	111	79	73	78
University of Central Florida	8	82	100	27	83
University of Florida	15	11	17	13	19
University of South Florida	12	47	20	36	23
Institution with Highest Ranking in Category	Stanford University	University of Washington	Northwestern University	University of Utah	New York University
Public Institution with Highest Ranking in Category	University of Wisconsin	University of Washington	University of Minnesota	University of Utah	University of Minnesota

Note: We only ranked institutions that reported individually and not as a system (e.g., University of California System). The University of West Florida was not ranked because it reported having no licensing income in Fiscal Year 2010.

Source: OPPAGA Analysis of Association of University Technology Managers data.

Legislature Has Taken Additional Steps to Support Research Commercialization

- The 2007 Legislature created the Institute for the Commercialization of Public Research to support the commercialization of products developed by universities and colleges, research institutes, and publicly supported organizations in the state
- In 2011, the Institute's Research Commercialization Matching Grant Program awarded \$2.7 million to 13 companies

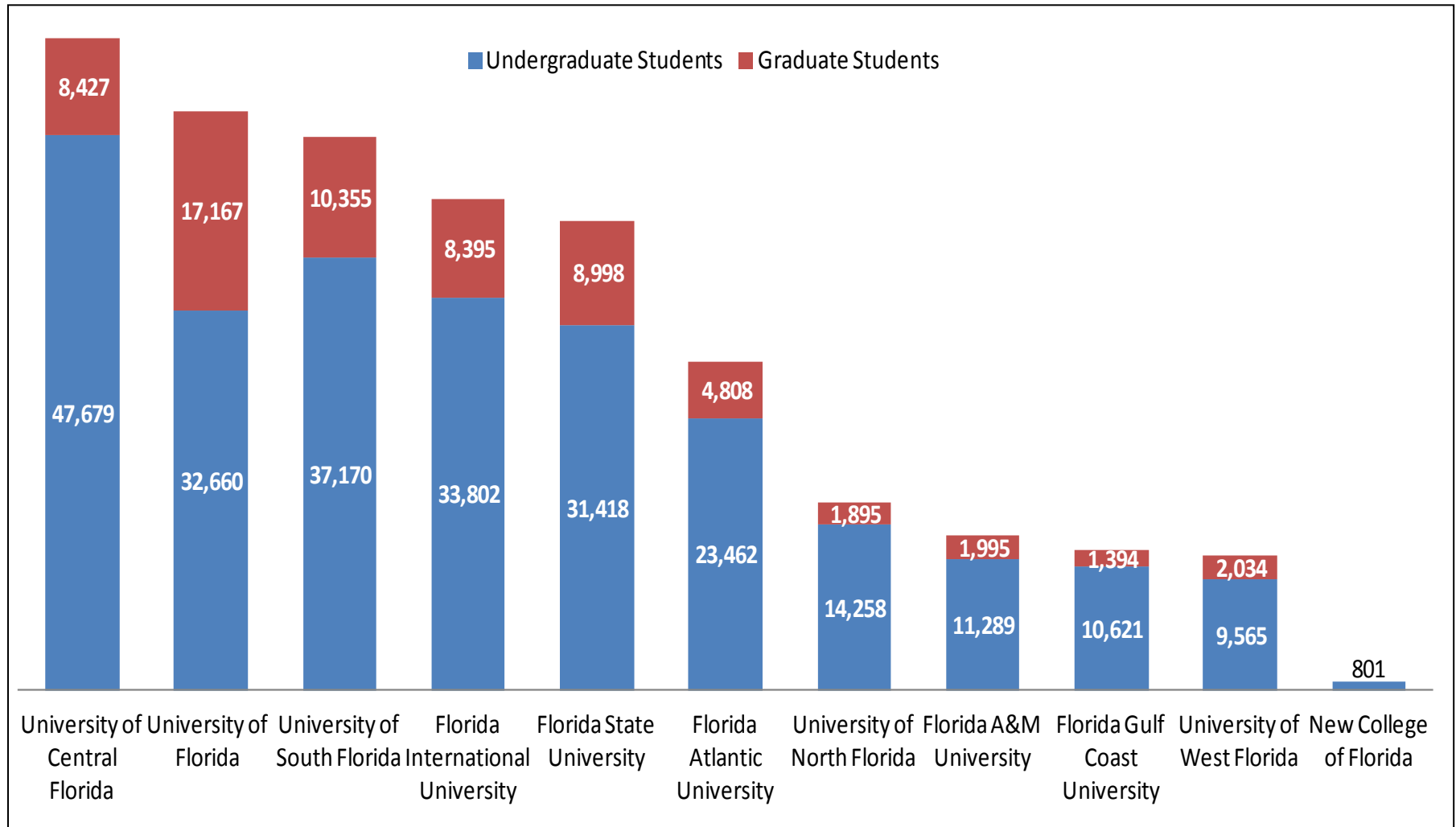
University Instruction

Student Highlights

Summary

- The overall size (student enrollment) of Florida's universities varies greatly, and some universities have very few graduate students
- The universities serve students who come in with varying levels of academic preparation and achievement
- Each university serves a different mix of undergraduate students
 - Race/ethnicity and gender
 - Student age
 - Transfer students from the State College System

The University of Central Florida Served the Most Students in 2010-11



Source: OPPAGA analysis of College Navigator and the Integrated Postsecondary Education Data System (IPEDS) and University of South Florida Common Data Set.

Students Enrolled in Florida's Universities Have Varying Levels of Academic Preparedness

University	Total Full-time FTIC Enrolled Fall 2010 ¹	Middle 50% SAT Scores for FTIC Students		Average High School GPA for FTIC Freshman
		Critical Reading	Math	
University of Florida	6,329	570-670	600-690	3.9-4.4
New College of Florida	183	640-740	580-670	4.03
Florida State University	5,933	550-640	560-650	3.76
University of Central Florida	5,993	530-630	550-650	3.72
Florida International University	2,338	500-580	490-580	3.69
University of South Florida	4,819	510-610	520-620	3.66
University of North Florida	1,926	530-620	530-610	3.64
Florida Gulf Coast University	2,217	460-550	470-570	3.35
University of West Florida	1,198	470-580	470-570	3.33
Florida Atlantic University	2,638	490-570	500-580	3.30
Florida A&M University	2,775	420-510	410-510	2.93

¹ First time in college (FTIC).

Source: OPPAGA analysis of common data set, 2010-11.

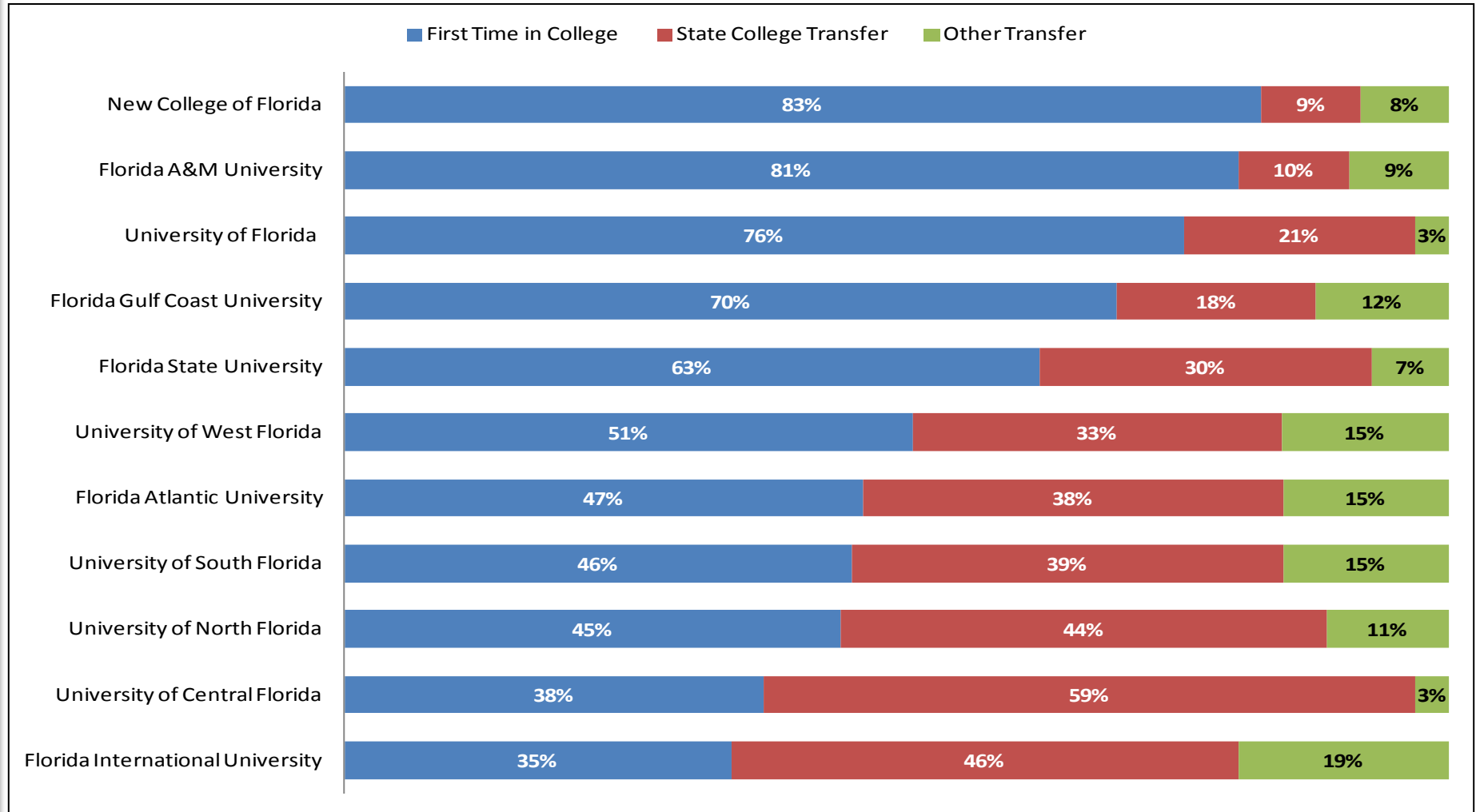
Florida Universities Serve Different Types of Undergraduate Students

University	Race/Ethnicity				Gender		Age		Residency		
	African American	Hispanic/Latino	White	Other	Male	Female	25 and Over	24 and Under	In State	Out of State	Foreign Countries
University of Florida	9%	17%	59%	15%	45%	55%	6%	94%	90%	4%	6%
Florida State University	11%	14%	69%	6%	45%	55%	8%	92%	89%	8%	3%
University of South Florida	11%	16%	62%	11%	43%	57%	26%	74%	89%	6%	5%
Florida International University	12%	65%	13%	10%	45%	55%	28%	72%	82%	3%	14%
University of Central Florida	10%	17%	64%	9%	46%	54%	18%	82%	91%	6%	3%
Florida A&M University	94%	1%	3%	2%	40%	60%	11%	89%	79%	19%	2%
Florida Atlantic University	18%	22%	51%	9%	43%	57%	32%	68%	85%	8%	7%
University of North Florida	10%	7%	73%	10%	44%	56%	22%	78%	95%	2%	3%
University of West Florida	10%	6%	75%	9%	42%	58%	30%	70%	89%	7%	3%
Florida Gulf Coast University	5%	16%	73%	6%	45%	55%	16%	84%	87%	8%	4%
New College of Florida	1%	13%	76%	10%	40%	60%	2%	98%	78%	20%	2%



Source: OPPAGA analysis of College Navigator and the Integrated Postsecondary Education Data System (IPEDS).

Florida's Universities Serve Varying Percentages of Transfer Students from the State College System



Note: Undergraduate Students Entering Fall 2010.

Source: OPPAGA analysis of the Florida Board of Governors, Factbook.

University Instruction

Productivity, Efficiency, and Effectiveness Highlights

Summary

- Florida's universities exhibit varying levels of efficiency and effectiveness
 - The percentage of degrees they award without excess hours vary
 - Undergraduate retention and graduation rates vary
 - Post-graduation outcomes for Bachelor's degree recipients vary
- There is not one particular university that stands out or rises to the top on every measure

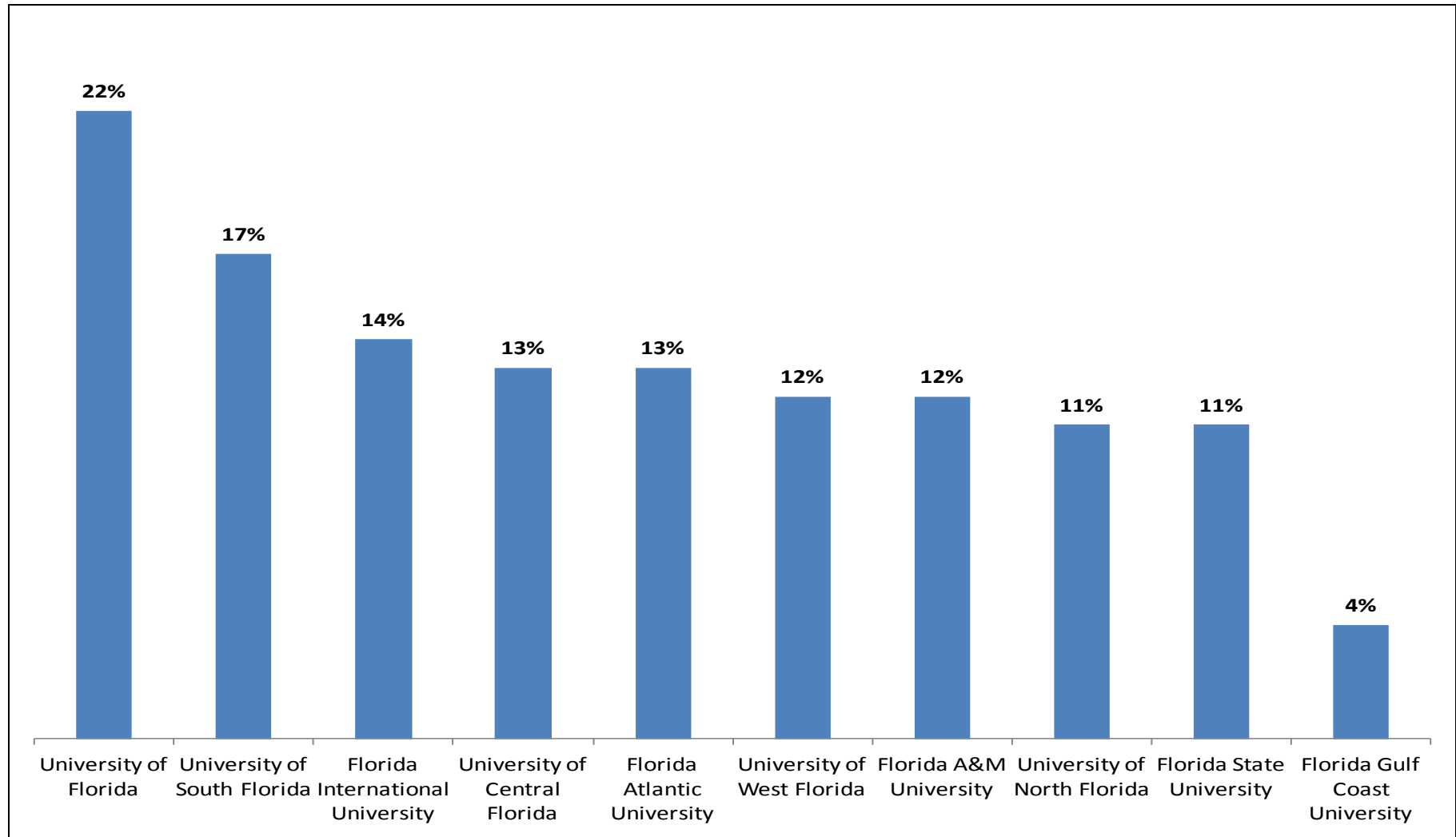
The University of Florida Awarded the Most Degrees in 2009-10

University	Bachelor's	Master's	Doctorate ¹	Total
University of Florida	9,301	3,751	2,127	15,179
University of Central Florida	9,969	1,936	260	12,165
University of South Florida	8,028	2,544	400	10,972
Florida State University	7,926	2,203	683	10,812
Florida International University	6,266	2,341	290	8,897
Florida Atlantic University	4,511	1,183	92	5,786
University of North Florida	2,967	584	46	3,597
University of West Florida	1,702	448	21	2,171
Florida A&M University	1,242	341	312	1,895
Florida Gulf Coast University	1,461	360	0	1,821
New College of Florida	153	0	0	153

¹ Doctorates include first professional degrees.

Source: OPPAGA analysis of College Navigator and the Integrated Postsecondary Education Data System (IPEDS) and University of South Florida Common Data Set.

The Percentage of Degrees Awarded in STEM Varies Across the Universities



Source: OPPAGA analysis of the Integrated Postsecondary Education Data System (IPEDS).

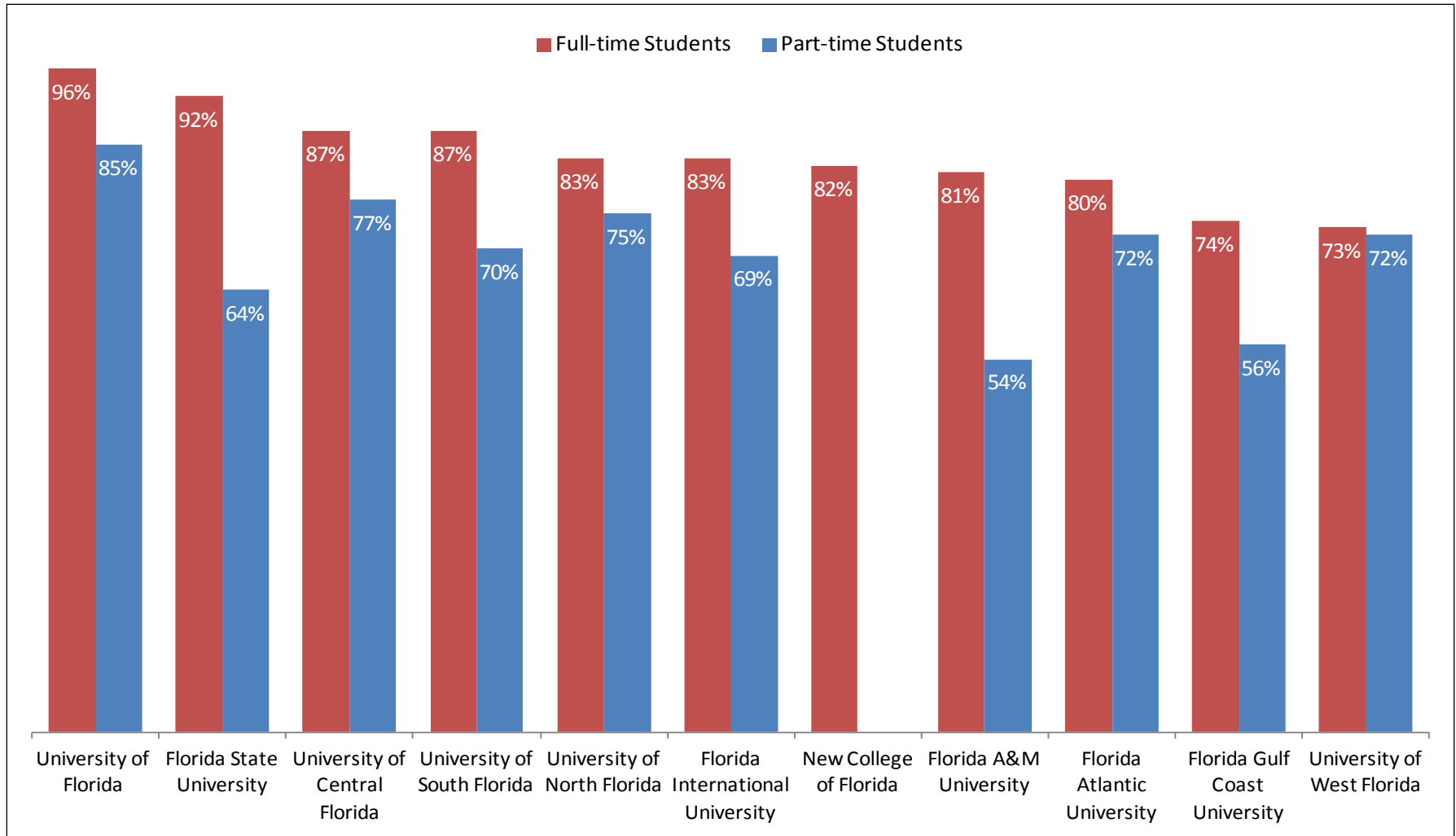
Florida State University Awarded the Highest Percentage of Degrees in 2009-10 Without Excess Hours¹

University	Percentage of Bachelor's Degrees Awarded
Florida State University	61%
University of Central Florida	60%
Florida Gulf Coast University	60%
University of West Florida	57%
Florida Atlantic University	53%
Florida International University	48%
University of North Florida	40%
University of South Florida	39%
University of Florida	39%
Florida A&M University	18%
New College of Florida	N/A

¹Within 110% of required hours as calculated by the Board of Governors.

Source: OPPAGA analysis of State University System, Florida Board of Governors.

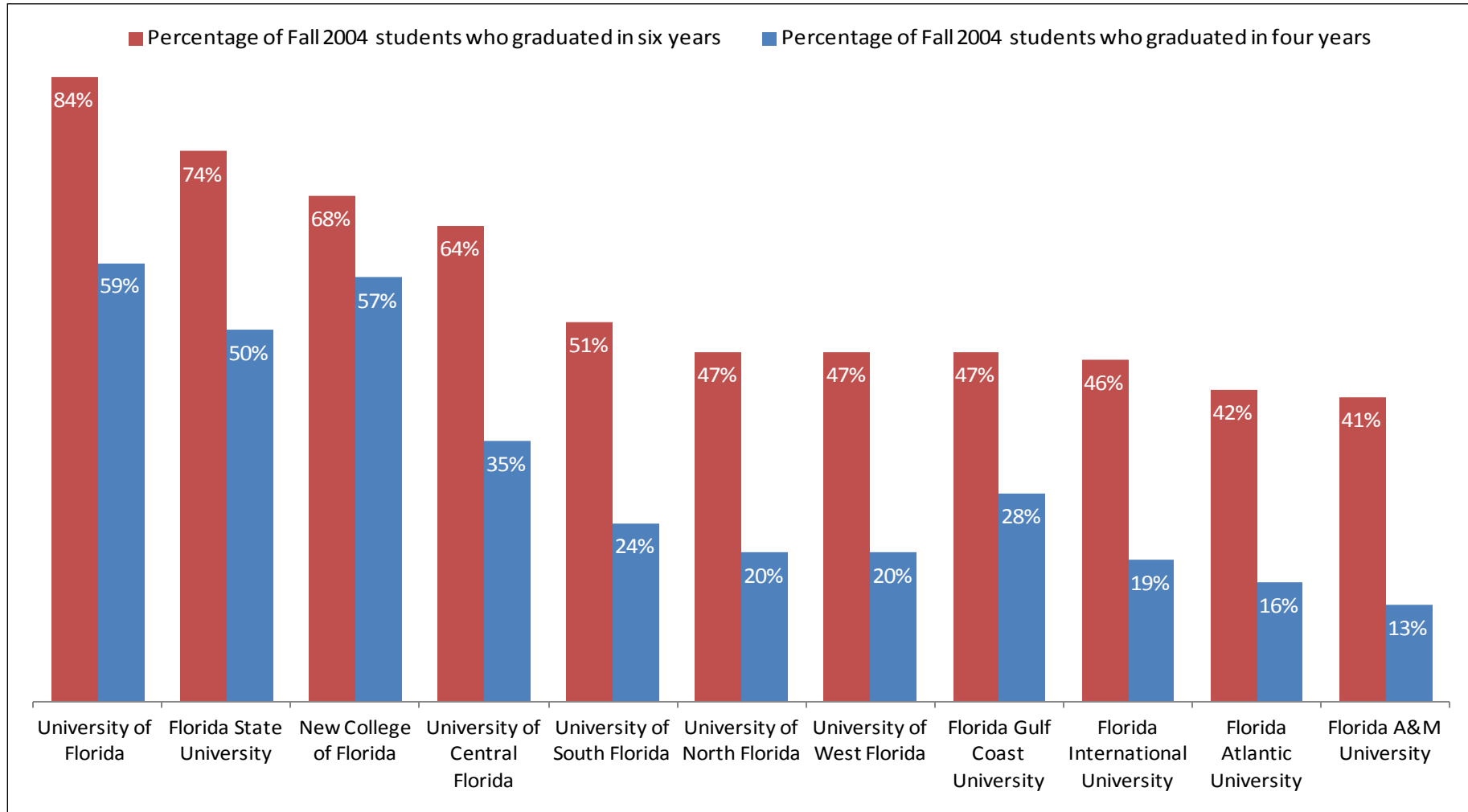
The Retention Rate for First Time in College Students Varies Across the Universities¹



¹ Percentage of students who entered Fall 2009 and returned Fall 2010.

Source: OPPAGA analysis of College Navigator and the Integrated Postsecondary Education Data System (IPEDS).

Graduation Rate for First Time in College Students (Full-time) Varies Widely Across the Universities



Note: The 2004 Cohort for the University of South Florida includes the Main and St. Petersburg campuses.

Source: OPPAGA analysis of College Navigator and the Integrated Postsecondary Education Data System (IPEDS).

Post-Graduation Outcomes for Bachelor Degree Graduates in 2008-09 Varied Considerably Among the Universities

University	Percentage of Graduates Continuing Their Education ¹	Percentage of Graduates Who Found Jobs in Florida Earning at Least a Full-time Minimum Wage (\$15,080 annually) ²	Average Annual Wages (1st Year After Graduation)
Florida International University	22%	53%	\$39,284
Florida Atlantic University	19%	53%	\$38,996
Florida Gulf Coast University	22%	52%	\$37,160
University of South Florida	20%	51%	\$36,640
University of Central Florida	19%	50%	\$36,424
University of North Florida	16%	54%	\$36,236
University of Florida ←	26%	28%	\$36,160
Florida State University ←	19%	37%	\$33,188
University of West Florida	19%	43%	\$32,964
Florida A&M University	22%	40%	\$32,260
New College of Florida ←	13%	13%	\$25,612

¹ Continuing education includes degree and non-degree programs at Florida public institutions (2009-10).

² October–December quarter of 2009. This does not include individuals who are self-employed or who found employment in other states.

Source: OPPAGA analysis of the Florida Education and Training Placement Information Program.

University Profiles

Questions?

A vertical strip on the left side of the slide features a photograph of the Florida State Capitol building under a blue sky with white clouds. The building is a large, white, neoclassical structure with a prominent dome and columns.

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