

Kentucky Student Success Summit
Louisville, Kentucky April 3, 2017

Creating a Student-Ready and Student-Centered University Through Data and Analytics

Timothy M. Renick, Ph.D.
Vice President for Enrollment Management
& Student Success and Vice Provost

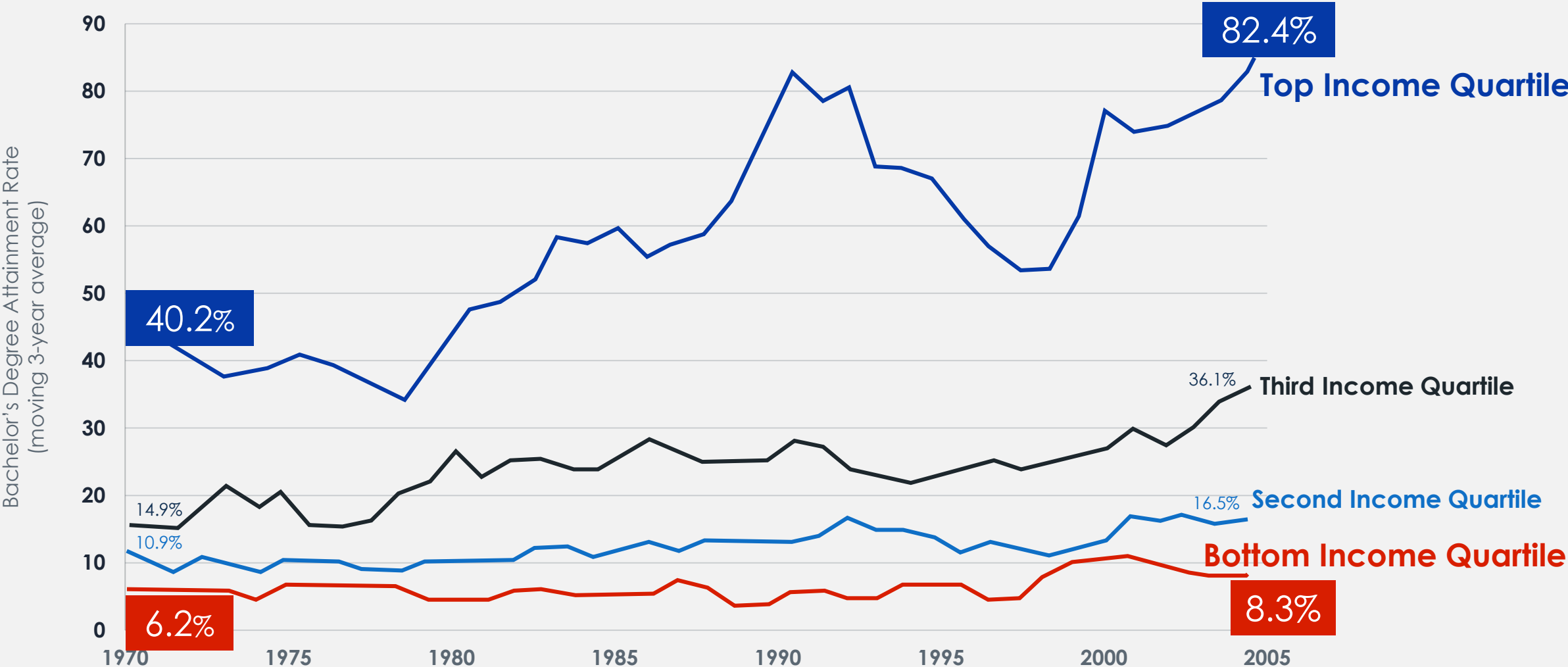


Georgia State
University®

The Challenge in Front of Us



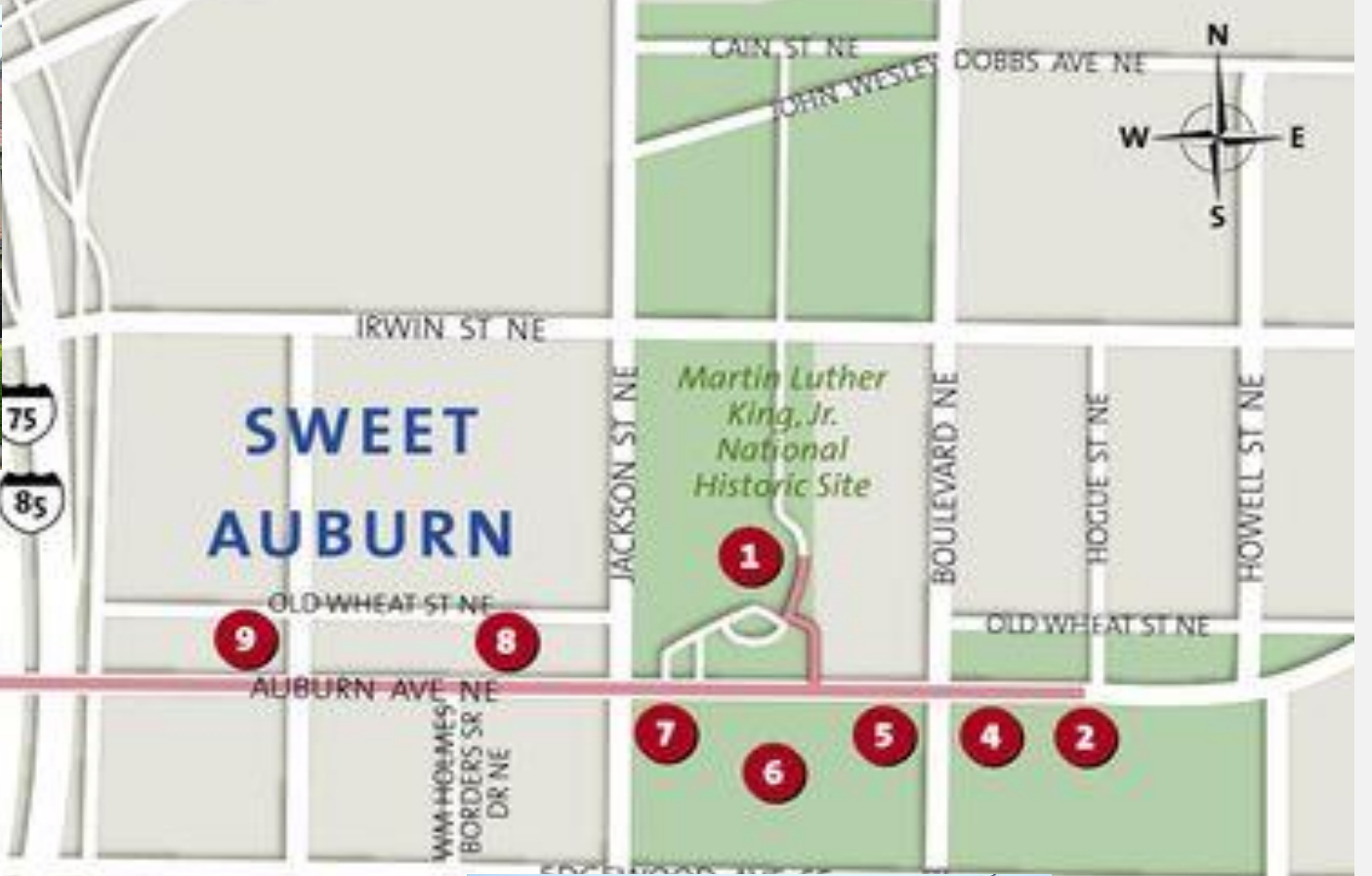
Baccalaureate Degree Attainment by Age 24 by Family Income Quartile



Source: New York Times, "The Reproduction of Privilege," March 12, 2012

- 32,500 Students on the Atlanta campus
 - Research University status achieved in 1995
 - 50,000+ Students as of 2016 with Perimeter College Consolidation
-





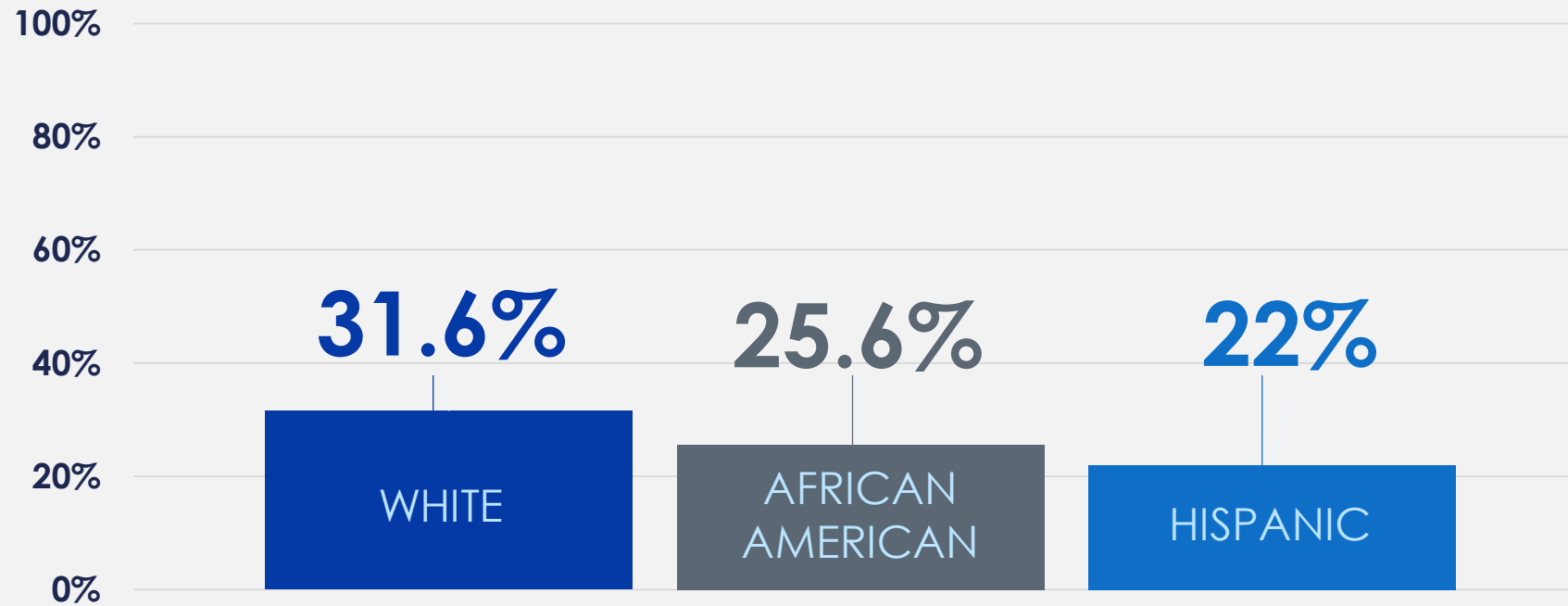
TRAVELER



Graduation Rates by Race & Ethnicity



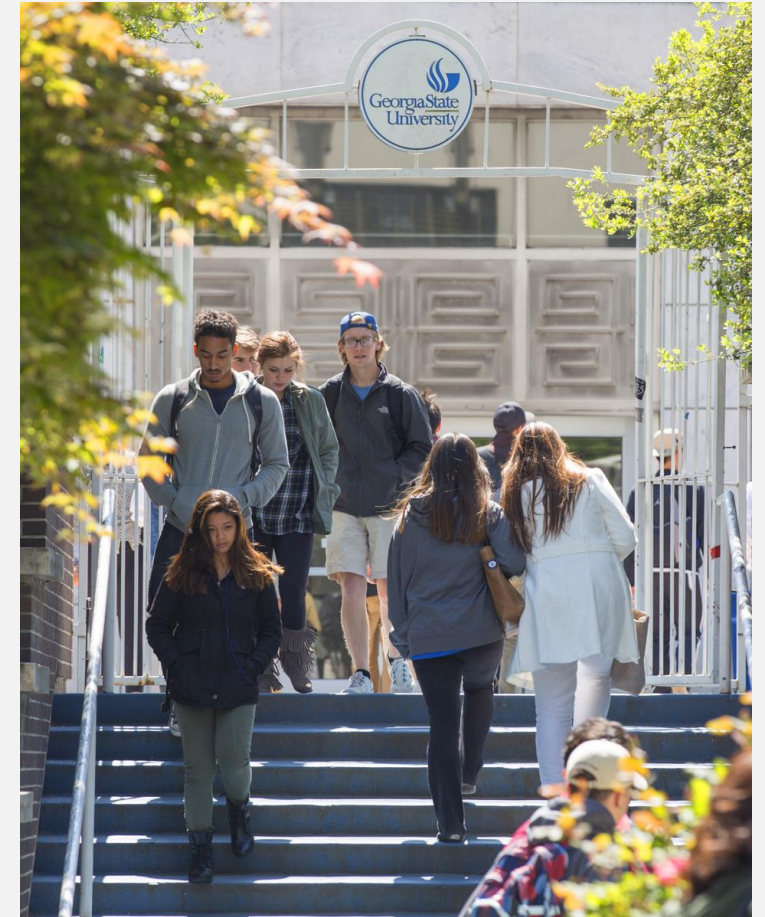
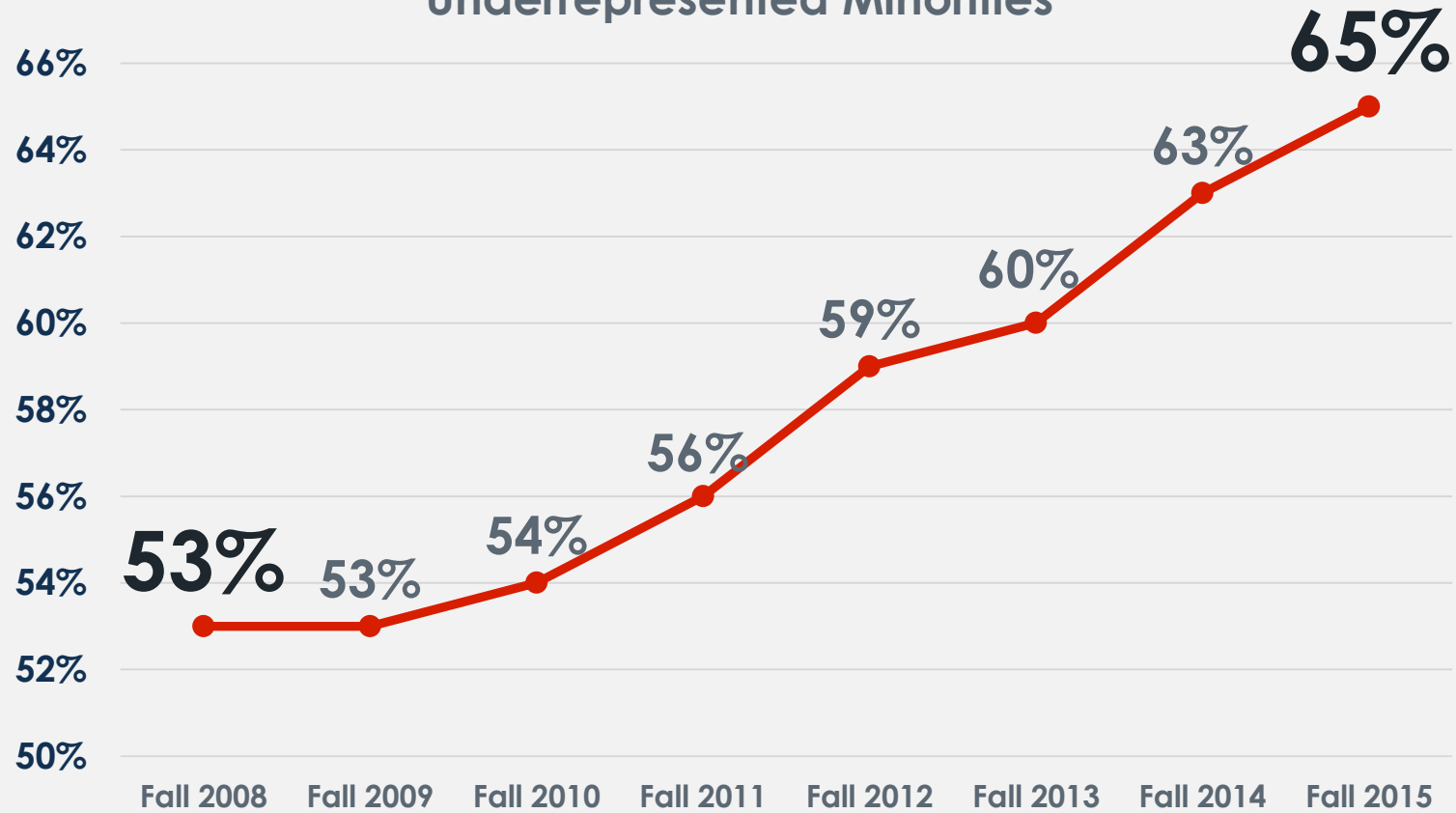
Where we were: 2003



Changing Demographics: Race & Ethnicity



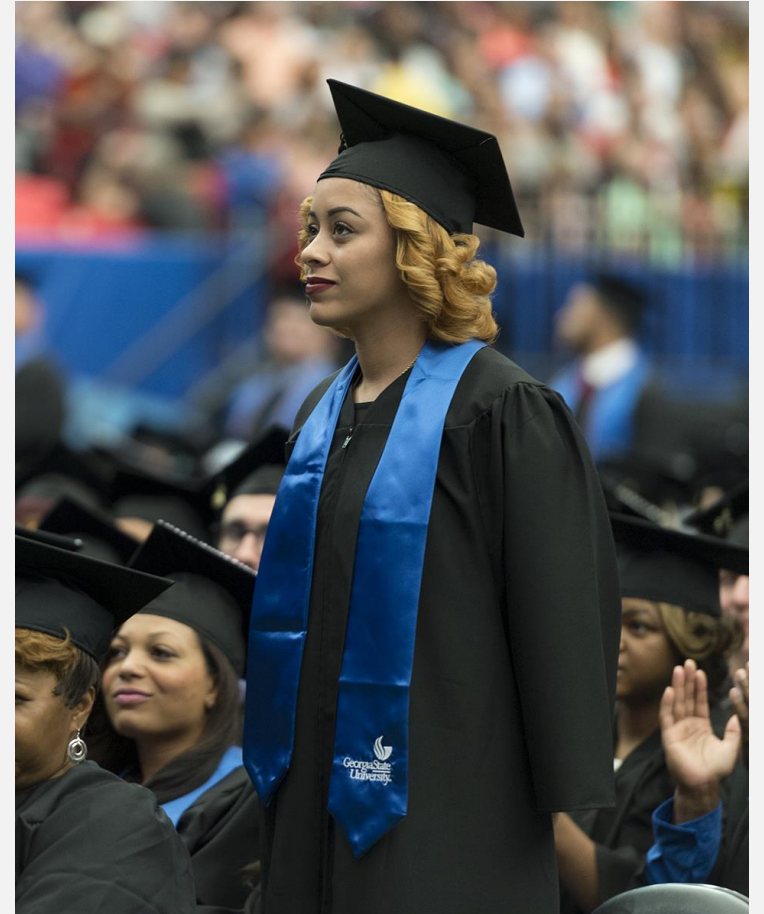
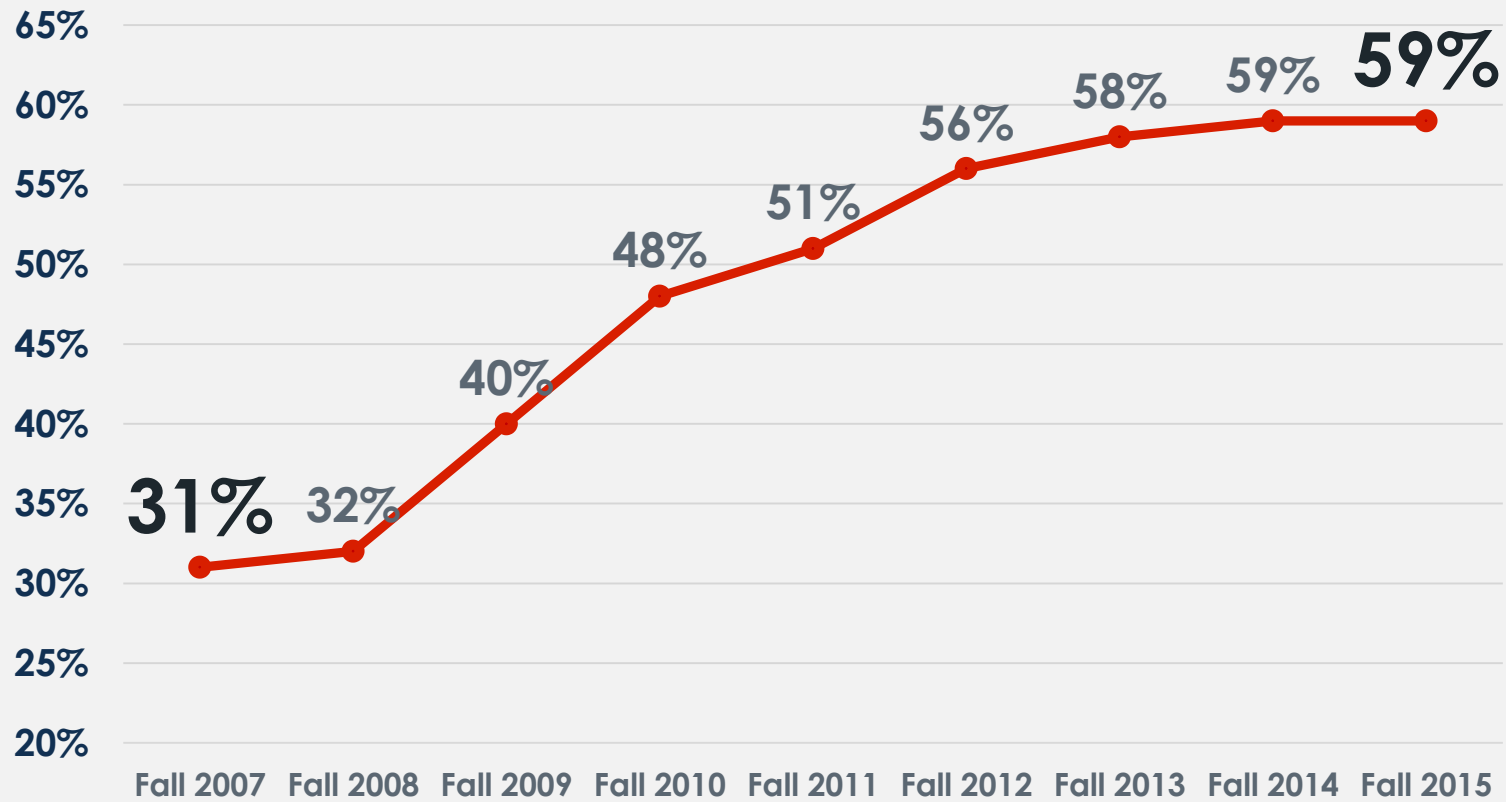
Underrepresented Minorities



Low-Income Students



Percent of Georgia State Undergraduates on PELL



A background image of a classroom with several students sitting at desks, focused on their work. The students are diverse in age and ethnicity. The room has large windows in the background, letting in natural light. A blue semi-transparent box is overlaid on the center of the image, containing text and a downward-pointing arrow.

SAT SCORES

-28 points



FORECLOSURE

Appropriations Cuts

-\$40 million

SALE





Are We the
Problem?



Fall 2015

Confirmed GSU Freshman Who
Never Attended Any College: **278**

Non-white **76%**

First Generation **45%**

Low Income **71%**

Avg. High School GPA **3.34**



The Hidden Obstacles to Enrollment



- Federal Financial Aid Application
- Verification Request
- State of Georgia Immunization Proof
- Taking Placement Exams
- Registering for Classes





All Items ▾

This... Week Month Term

This Week

- Resource
Connect with campus resources that matter most to you.
- Resource
Explore services designed specifically for first-generation students.
- To Do
Meet with an academic advisor before your first term
- To Do
Take and review your Assessment Examination
- To Do
Pick your courses and schedule your first term
- Appointment
Open House: Campus Day Care

My Path **My Plan** **My Profile**

Which resources matter most to you?

- Select any of our student services that interest you, and we'll add appropriate information to your path.

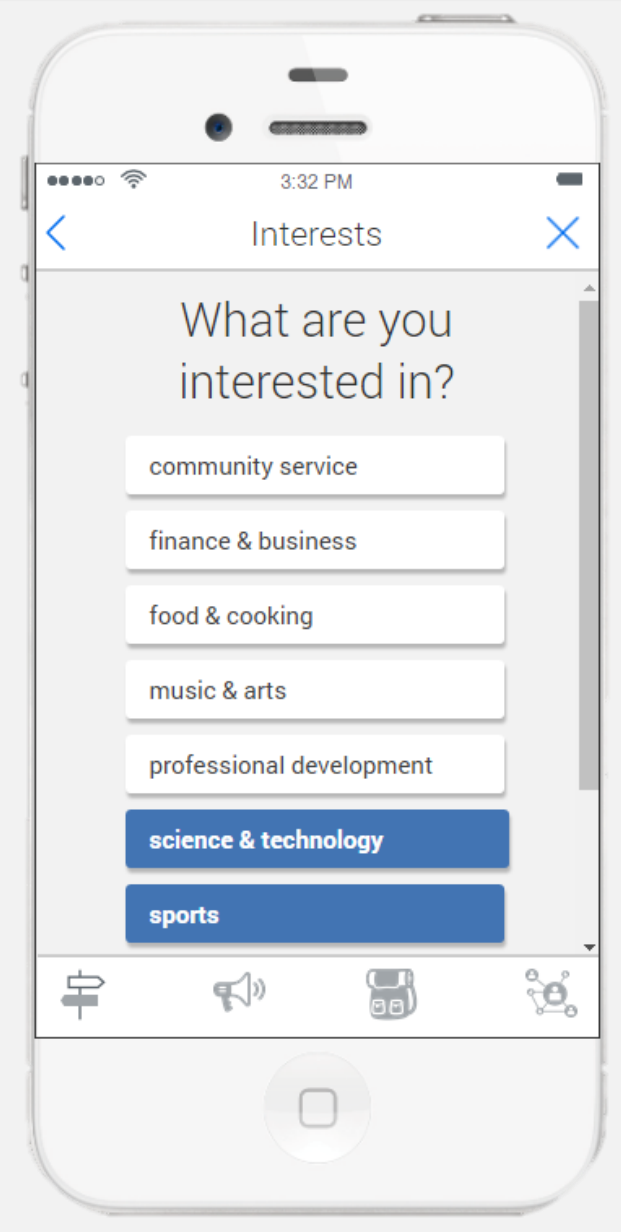
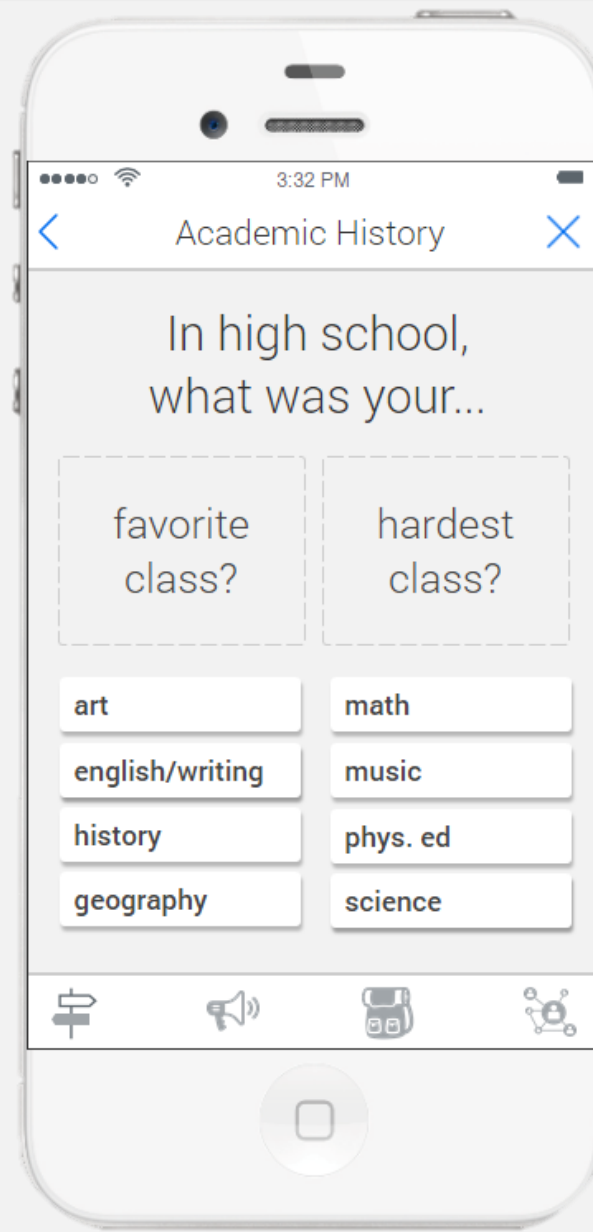
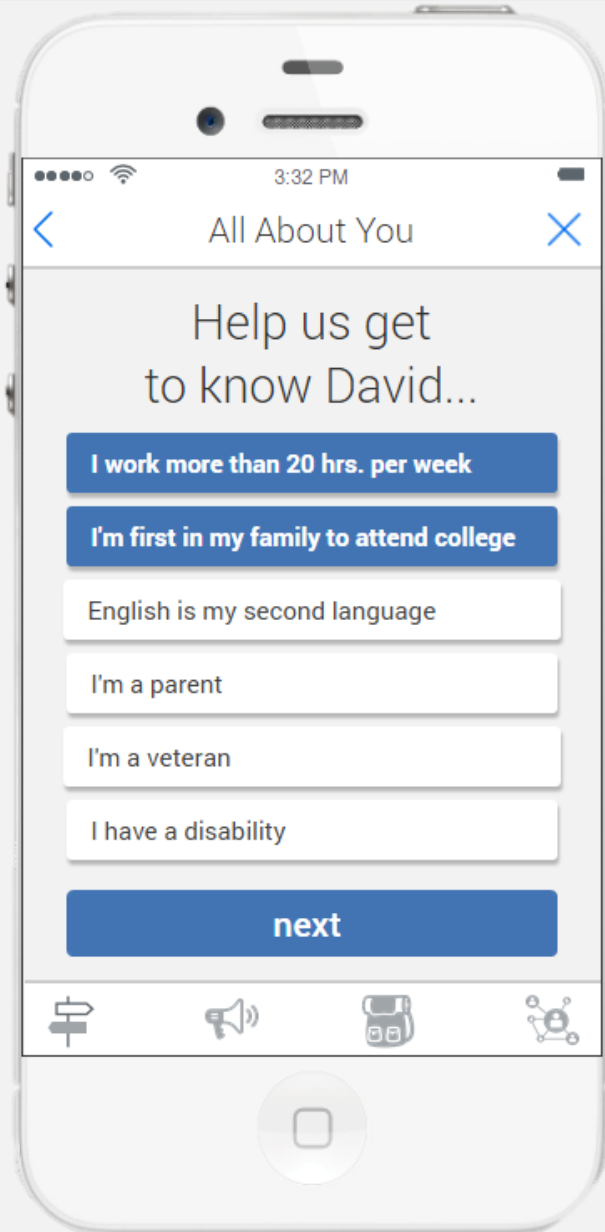
A Few Recommendations:

- Child Care**
On campus and nearby child care options to help while you are in class.
- First Generation to Attend College**
Resources to help new students learn the ropes and lingo of college.
- Commuting Services**
Learn the different ways you can get to and from campus.
- Student Technologies**
Get help with all apps, gadgets, and sites that can enhance your campus experience.

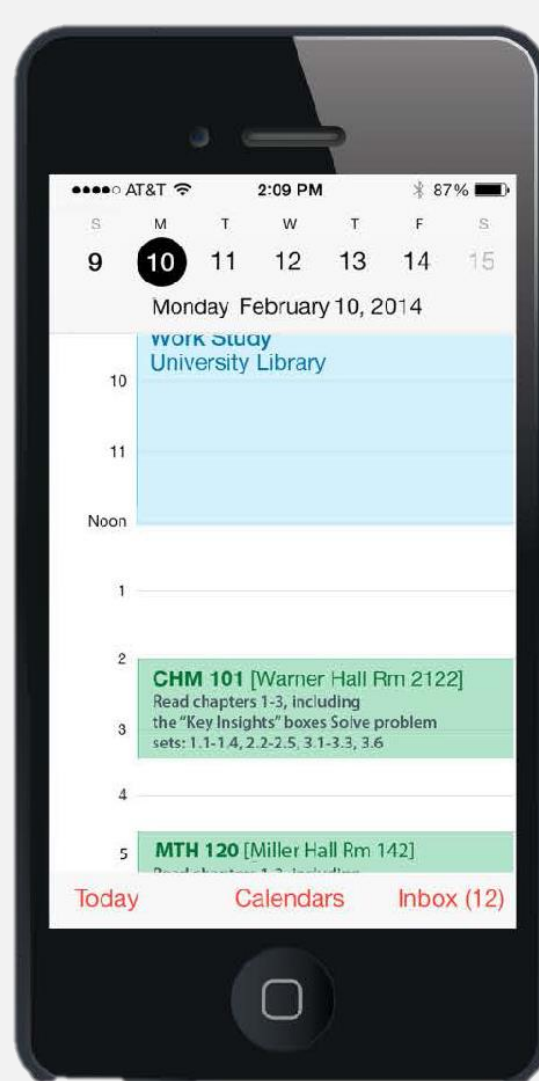
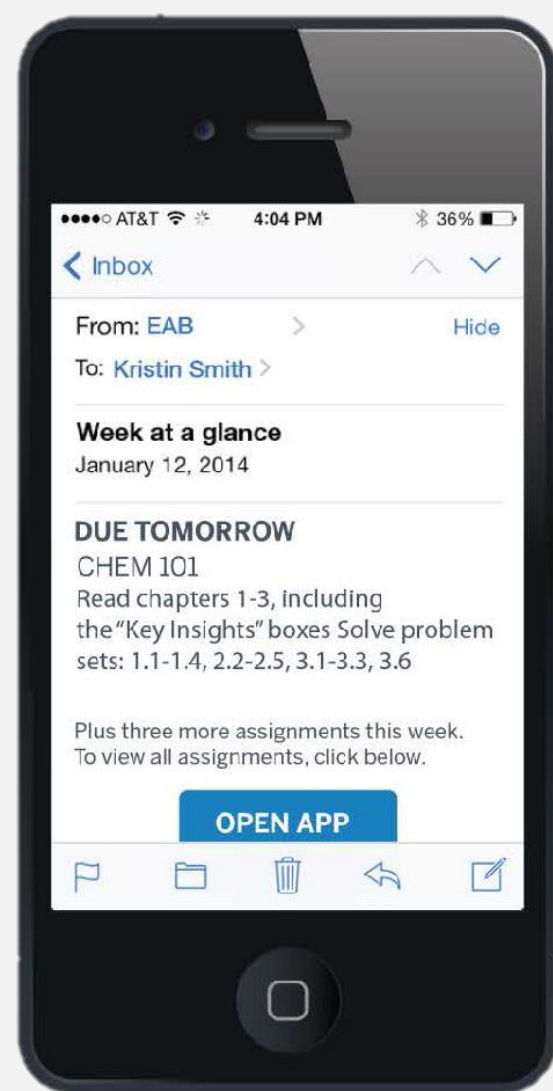
All Student Services:

- Tutoring & Academic Support**
A great resource for help outside the classroom for your work inside the classroom.
- Career Guidance**
Helping you find the right career path and prepare you for the job market. It's never too early to start!
- Mentorships**
Helping you connect with experience students who can help guide your way.
- Housing Services**
Resources to help you find a place to stay near campus.
- Clubs and Activities**
Grow and have fun! Get involved in one of our many on-campus activities.
- Disability Services**
Providing support and equipment to qualified students with physical, mental, or educational needs.

Personalized Interactions Before Enrollment



Nudges and Chat-bots on Smart Devices



NUMBER OF
KNOWLEDGE
- BASED
TEXTS SENT
OVER FIRST
3 MONTHS:
201,000



2015: 18% **2016: 14%** (-22%)

For students receiving the full suite of new interventions, Melt was reduced by **51%**



Before Freshman Fall



Summer Success Academy

- 420 highest at-risk freshmen (academic analytics)
- Summer session before freshman fall with 7 credit hours of bachelor's-level work
- Intensive advisement
- Academic skills
- Financial literacy training
- Team building

Retention Rate 2011: 50%

Retention Rate today: 87%



Overwhelming Choices



Academic Guides with Live Job Data



<h2>Program Picker</h2> <p>Take control of your future! Explore majors and certificates that work for you.</p>				
<p>You chose this... on your application</p>		<p>Would you consider... Explore these possibilities for you based on your interests and priorities</p> <p style="text-align: right;">Find more options</p>		
	<p>Nursing A.S.</p> <p>Learn More</p> <p><input checked="" type="checkbox"/> Selected</p>	<p>Medical Office Assistant Certificate</p> <p>Learn More</p> <p><input type="checkbox"/> Explore</p>	<p>Radiologic Technology A.A.S</p> <p>Learn More</p> <p><input type="checkbox"/> Explore</p>	<p>Health Studies A.S.</p> <p>Learn More</p> <p><input type="checkbox"/> Explore</p>
<i>Classes/Credits</i>	20 classes / 60 credits	8 classes / 24 credits	20 classes / 55 credits	20 classes / 62 credits
<i>Time to Complete</i>	2 years	1 year	2 years	2.25 years
<i>Financial Aid</i>	<input checked="" type="checkbox"/>	May not be Financial Aid eligible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Total Tuition</i>	\$9,176 in state	\$3,641 in state	\$8,850 in state	\$9,427 in state
<i>Outcomes</i>	High rate of transfer to 4-year colleges	Students seek employment or another stackable certificate	Most students seek employment post-graduation	High rate of transfer to 4-year colleges
<i>Average Salary</i>	\$38,500 \$51,100 with BA degree	\$29,129	\$37,819	\$42,774 \$51,553 with BS degree
<i>Hiring Demand</i>	129 job posts	137 job posts	459 job posts	661 job posts
	<input checked="" type="checkbox"/> Selected	<input type="checkbox"/> Explore	<input type="checkbox"/> Explore	<input type="checkbox"/> Explore

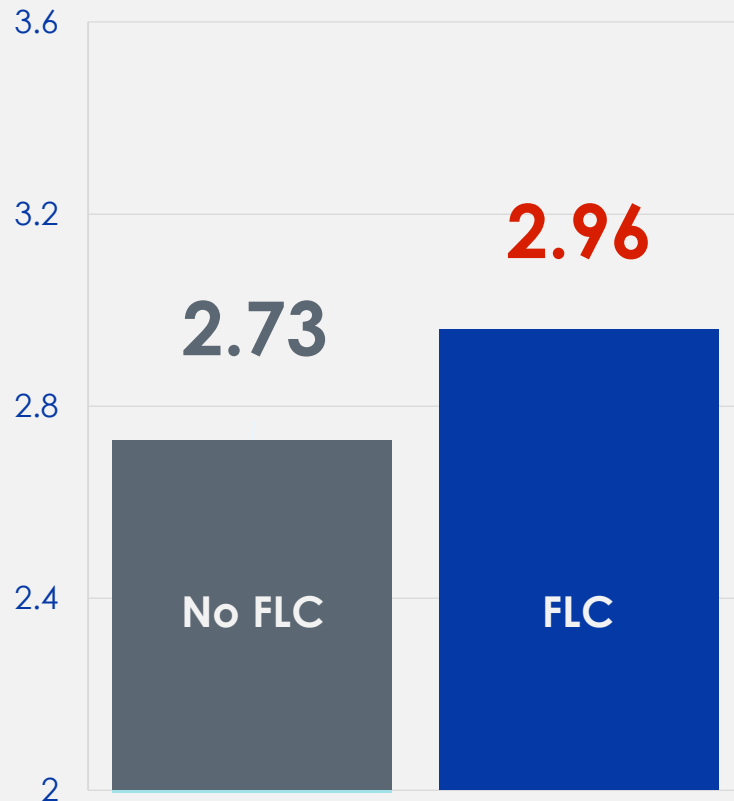
Est. Time

Freshman Learning Communities & Meta Majors

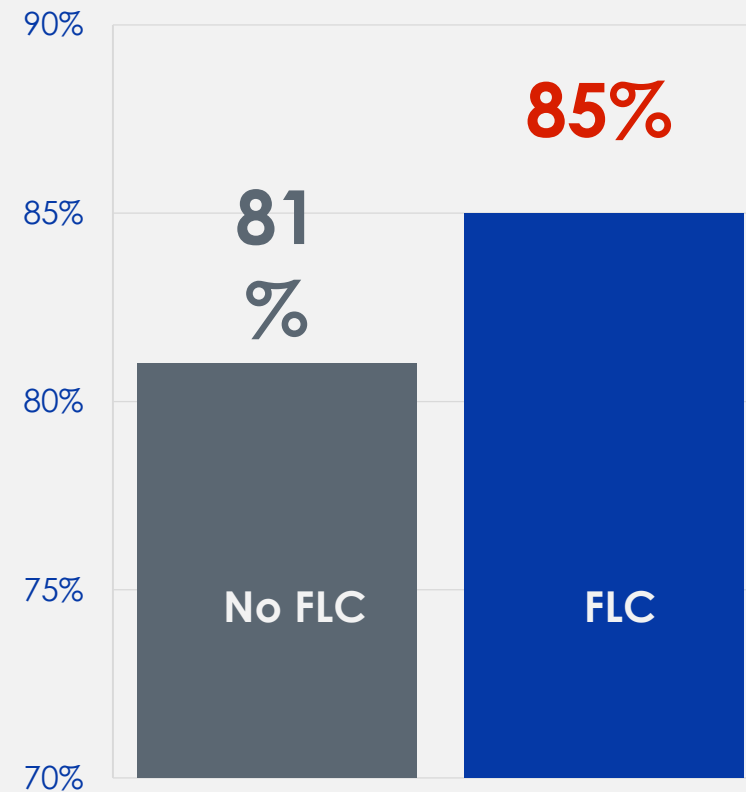


Freshman Learning Communities with block schedules of 5 to 6 courses:
95% of non-Honors freshmen (Opt-out model)

1st Year GPA



Retention





Business
Education
Exploratory
STEM
Humanities & Arts
Health Professions
Policy/Social Science





MAJOR
CHANGES
IN 2013

2,718

MAJOR
CHANGES
IN 2015

1,853

2-YEAR
CHANGE

-32%



Pre-Calculus, College Algebra, Intro to Statistics

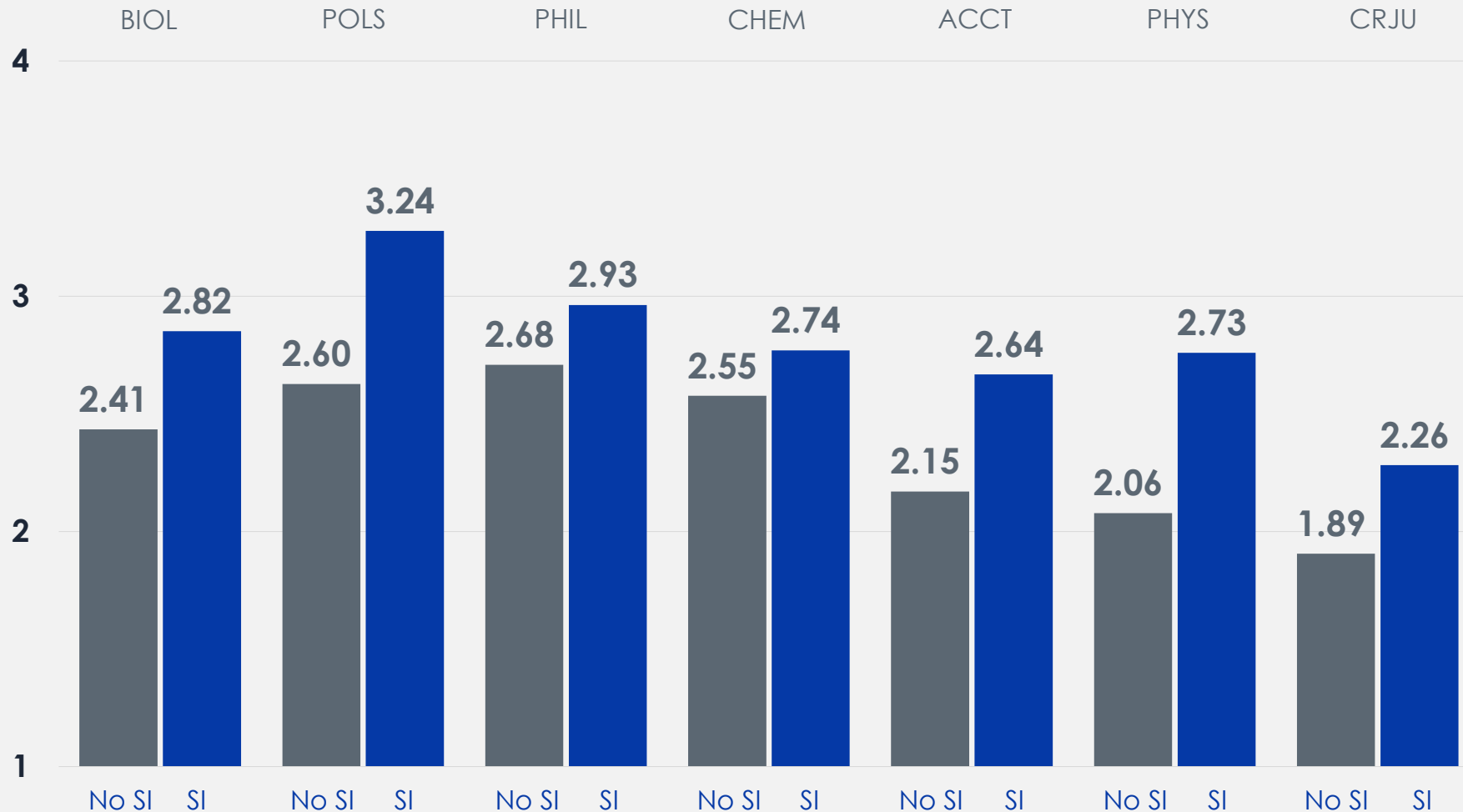
- Prior to Change: DFW rates were **43%**. Today: DFW rates are **28%** (**35% drop**)
- Number of Students enrolled in courses taught through the MILE, 2014-15: **7,500**



Eliminating Bottlenecks: Peer Tutors



Supplemental Instruction (SI)



Course GPA

No SI: **2.41**

SI: **2.91**

One-Year
Retention

No SI: **83.5%**

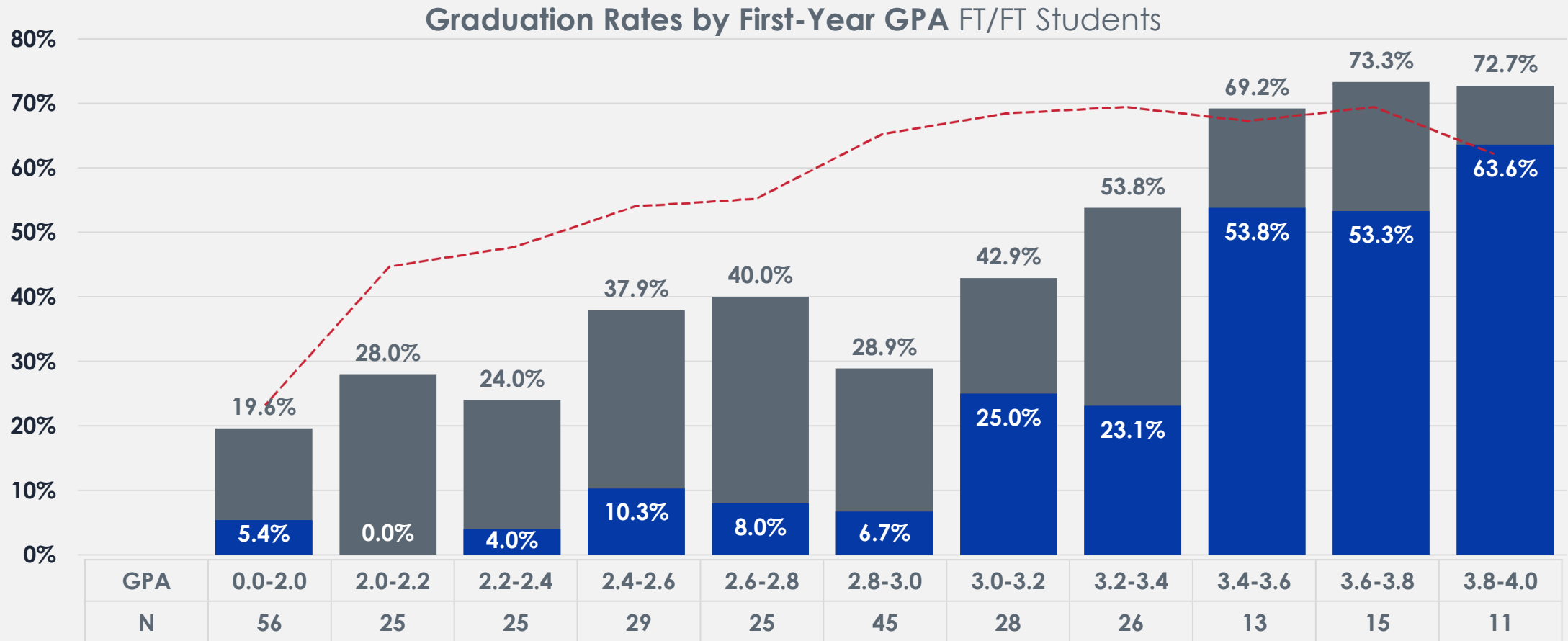
SI: **91.2%**

Students: **9,700**

Academic Program Redesign



How Well Does First-Year GPA Predict Graduation in Nursing and Health Professions – Nursing and Overall? What opportunities do we see to inflect change?



Panther Retention Grants



Grants Since 2012: **8,000+**

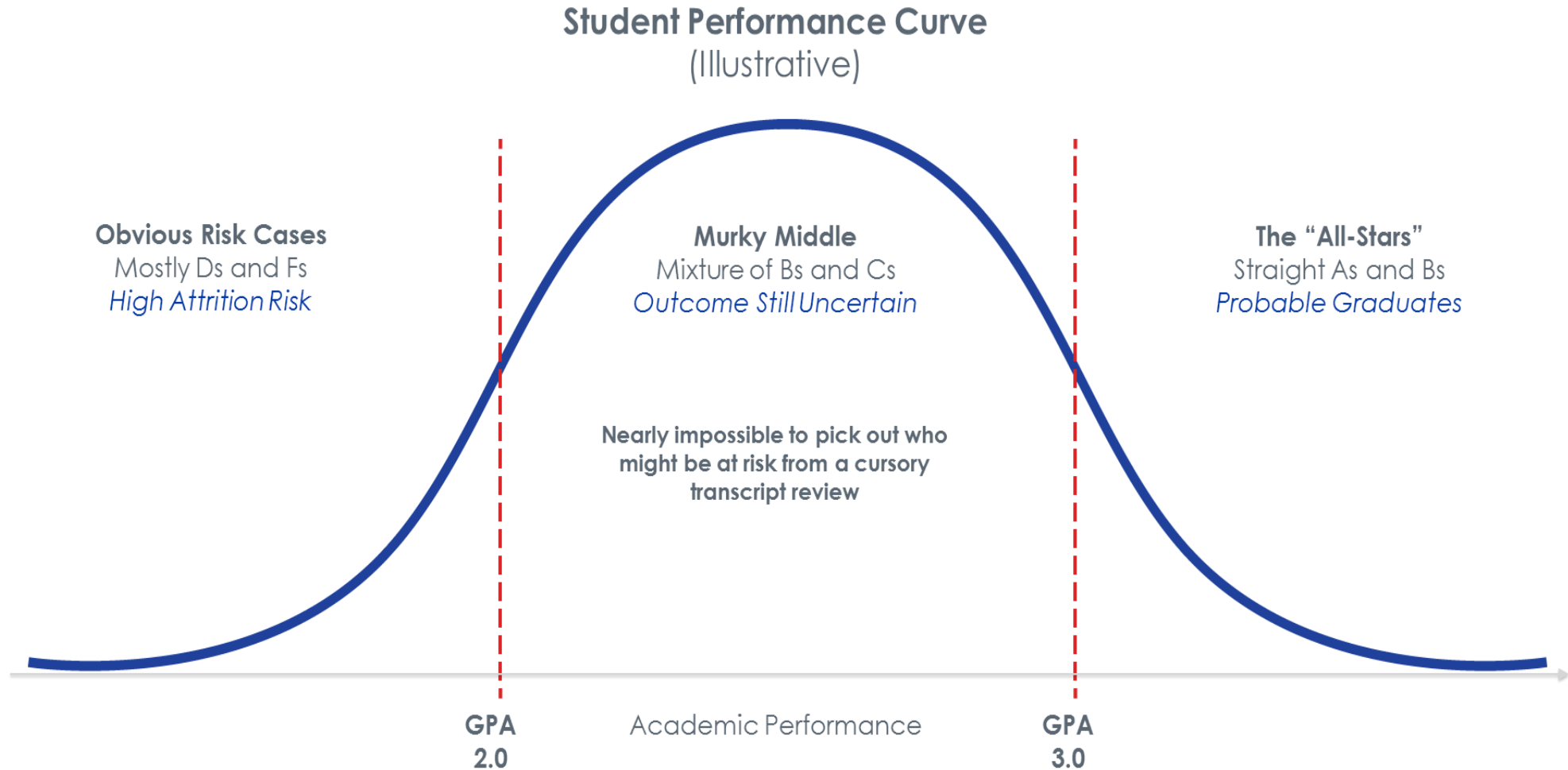
**AVERAGE
GRANT** **\$900**

Seniors Graduated: **70%**

Grant Recipients
Graduated 2015-16: **1,257**



The Advisement Challenge: The Murky Middle



Source: Education Advisory Board

Advisement: GPS Advising



Predictive Analytics Project with EAB

10 YEARS
OF DATA

2.5 MILLION
GRADES

144,000
STUDENT RECORDS

800+
ANALYTICS-BASED
ALERTS

30,000 STUDENTS
TRACKED **DAILY**

Academic Program Maps: B.S. in Chemistry

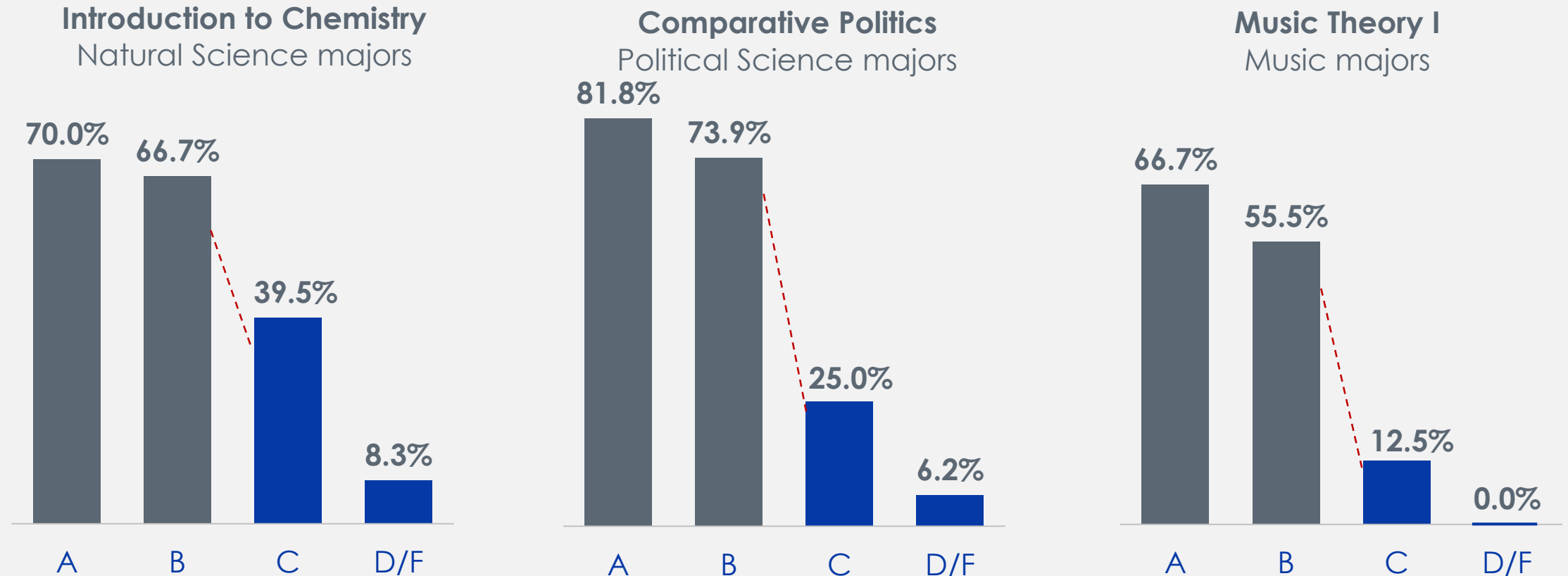


SEMESTER 1	SEMESTER 2
<ul style="list-style-type: none">• Complete 1 of ENGL 1101, ENGL 1102 or ENGL 1103 (C or Better)• Complete MATH 1113 or Higher (B- or Better)• Complete CHEM 1211K (B- or Better)	<ul style="list-style-type: none">• Complete ENGL 1102 or 1103 (C or Better)• Complete MATH 2211 or Higher (B- or Better)• Complete CHEM 1212K (B- or Better)• Maintain a cumulative GPA of 2.25 or Better
SEMESTER 3	SEMESTER 4
<ul style="list-style-type: none">• Complete CHEM 2400 (B- or Better)• Complete MATH 2212 (C or better)• Complete PHY 2211k (C or better)	<ul style="list-style-type: none">• Complete CHEM 3410 (C or better)• PHY 2212k (B- or Better) (C or better)• Maintain a cumulative GPA of 2.25 or Better
SEMESTER 5	SEMESTER 6
<ul style="list-style-type: none">• Complete CHEM 4000 with a C or Better• Complete CHEM 4110 with a C or Better	<ul style="list-style-type: none">• Complete CHEM 4010 with a C or Better• Complete CHEM 4120 with a C or Better
SEMESTER 7	SEMESTER 8
<ul style="list-style-type: none">• Complete CHEM 4160 with a B- or better	<ul style="list-style-type: none">• Complete CHEM 4190 with a C or Better

Alerts Based on Historical RPG Data



Graduation Rate in Major by Introductory Course Grade



Linking Academics to Career Pathways



Georgia State University Welcome Timothy Log Out

Students Institutional Analytics

Students > Joe Student Previous student Next student

Joe Student
ID: 00000000
Age: 20
DOB: 06/03/1994

Overview
Success Progress
Term Details
History

Major Explorer

KEY INFO
Email: joe1@student.gsu.edu
Phone: (404) 555-1212
Address: 1234 Avenue St.
Atlanta, GA 30303

MAJOR EXPLORER

ACADEMIC SUMMARY **RISK**

COURSE GRADE of D/F: 0 REPEATED COURSES: 0 COURSE WITHDRAWALS: 0 Current risk: **LOW**

CURRENT MAJOR

Major Name	Risk Level	Related Careers
Biological Science College of Arts & Sciences	Low Risk	Biochemist Biological Technician Biologist Biomedical Engineer Biostatistician 12 more...

MAJOR OPTIONS

College: All colleges

Major Name	Risk Level	Related Careers
Real Estate Robinson College of Business	Low Risk	Apartment Manager Appraiser / Assessor Community Manager Leasing Manager Property Manager Real Estate Agent / Broker

STUDENT ADV: In Person

I want to...

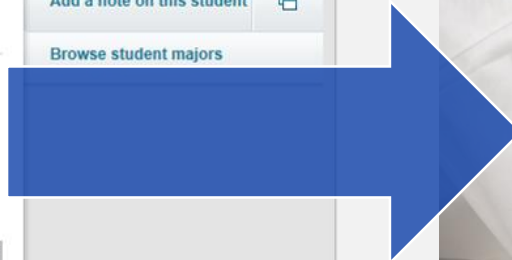
Change student status

Email student

Remind me to follow-up

Add a note on this student

Browse student majors



Drill-Down, Live Data on Individual Careers



MAJOR EXPLORER



ACADEMIC SUMMARY

COURSE GRADE of D/F **0** REPEATED COURSES **0** COURSE WITHDRAWALS **0** Notifications **0**

Expand ▼

[< Back to Major Options](#)

Biochemist

Studies the chemical composition of cells and organisms and conducts research using advanced technologies. Studies the chemical interactions involved in biologic processes such as metabolism, reproduction, and growth, or the effect of drugs or hormo... [View more](#)

Related titles: Research Manager, Wildlife Biologist, Chemist, Food and Agricultural Scientist / Technologist, Soil / Plant Scientist

National Hiring Statistics Provided by Burning Glass ?

Statistics for this career, and its related titles, are derived from nationwide, online job postings from the last 12 months.

Salary

\$55K - \$112K *

* From U.S. Bureau of Labor Statistics

Hiring Demand

Low

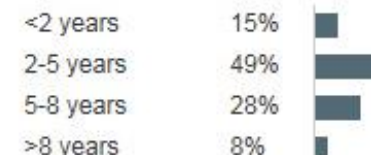
Education & Experience Requirements

Minimum education and experience levels typically required by employers.

Education



Experience



Foundation Skills, Most Requested by Employers

1. Research
2. Communication Skills
3. Writing
4. Organizational Skills
5. Problem Solving
6. Creativity
7. Leadership
8. Detail-Oriented
9. Quality Assurance and Control
10. Planning
11. Multi-Tasking
12. Presentation Skills

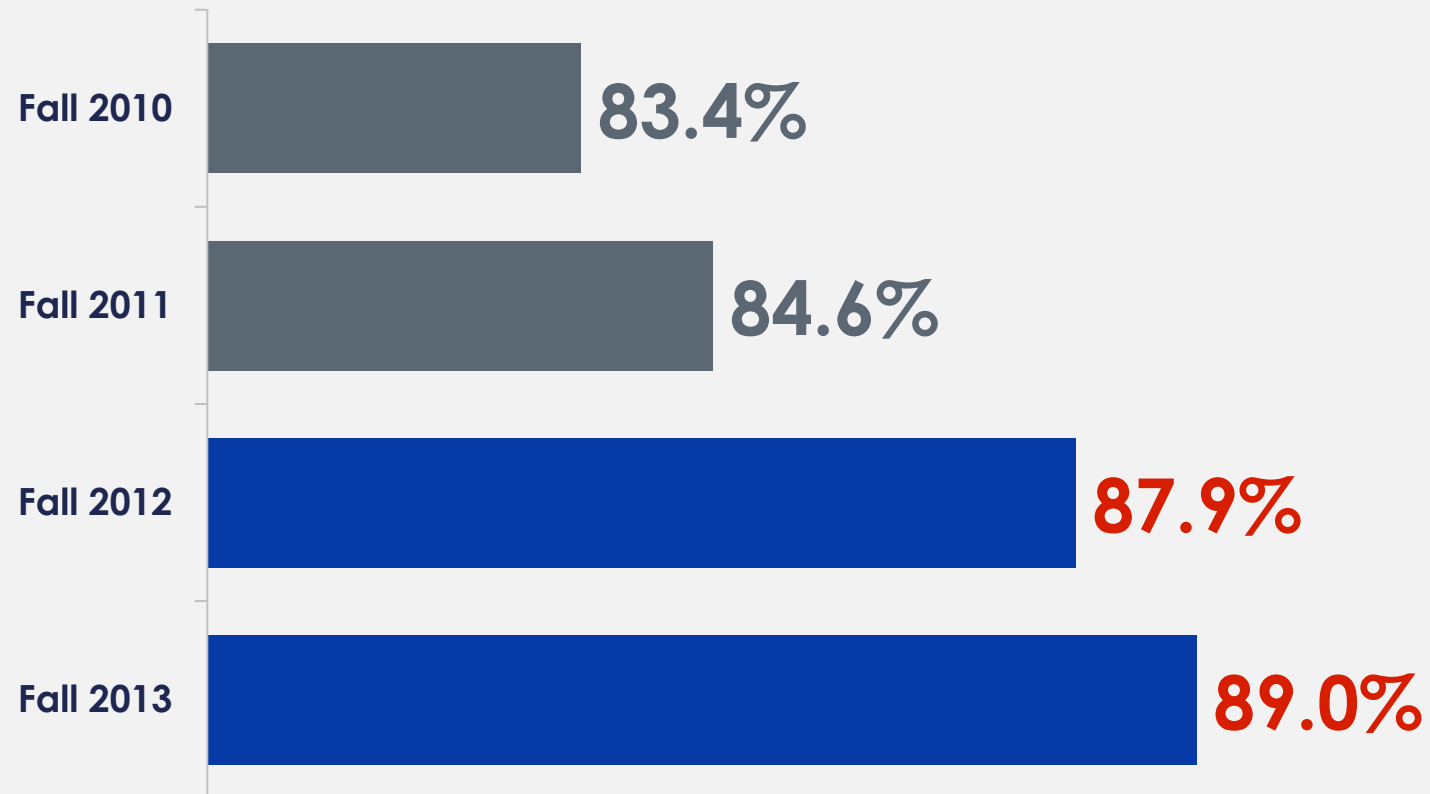


52,150

Results: Increased Retention



Increased Average First Term Retention
Fall to Spring Retention



Rapidly Improving Progression Rates

Freshmen with 30-hours of
Passing Credit After 12
Months

2012-13 **47%**

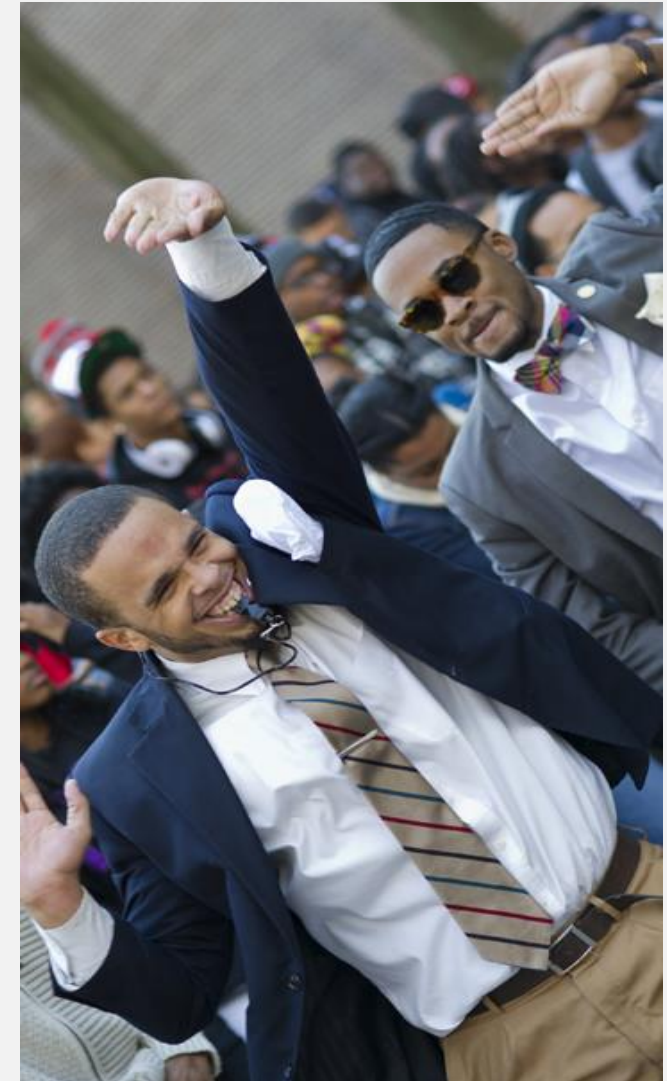
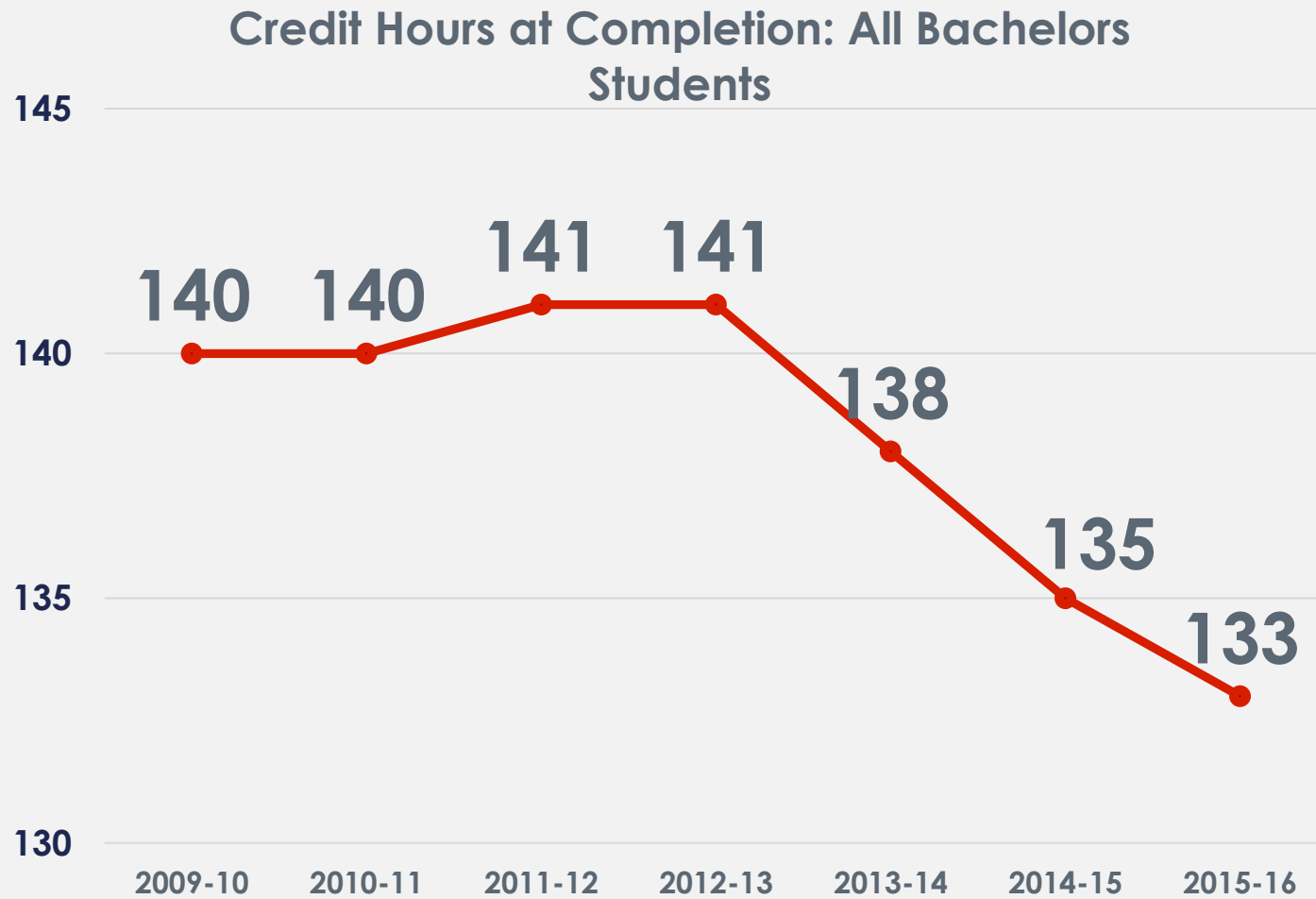
2013-14 **53%**

2014-15 **56%**

2015-16 **63%**



Results: Decline in Time to Degree





\$15 million

Savings to the Class of 2016 in tuition and fees when compared to the Class of 2013



STEM Degrees Conferred Since 2011

Black **+69%**

Black Male **+111%**

Hispanic **+226%**

The Cost of Inaction



The Calculus of Student Success: ROI

y

1-point increase in retention =
325 students

Average student tuition
& fees annually/student = **\$9,800**

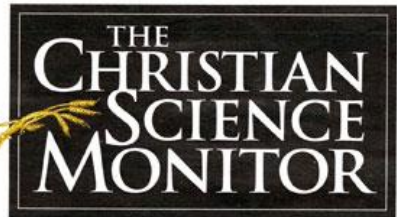
ROI for each 1-point increase =
\$3.18 million/year



x



Why This Work Matters



The Washington Post



TIME

The New York Times

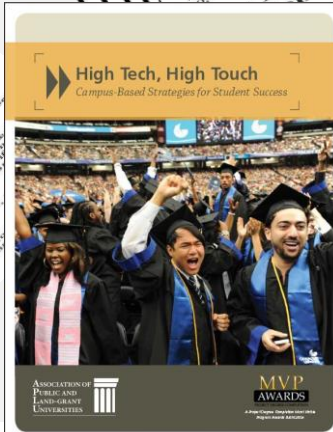
Diversity ISSUES IN HIGHER EDUCATION
University Presidents & Future
by Jamail Abdul-Alim
larger portions of
economic
eliteness

THE WALL STREET JOURNAL
Dow Jones Company, Inc.
WSJ.com

The Economist



COMPLETE COLLEGE AMERICA



Little Data Can Solve
n's Biggest Problems

Becker said that if we do our job right, they themselves on leading jobs. The goal here is to keep asking faculty members to do practical, that universities should obtain their degrees.



The Atlantic
Go back to school: Can you afford it?
ATLANTA, which has long been a college town, is now a city of students. The Atlanta-Fulton County Stadium has been converted into a dormitory. The Atlanta-Fulton County Stadium has been converted into a dormitory. The Atlanta-Fulton County Stadium has been converted into a dormitory.

National Journal



PBS NEWSHOUR

Growing Recognition



Georgia State Degree Conferrals



2008-09: | 2014-15:
5,857 | **7,601**

INCREASE:
1,744 (+30%)

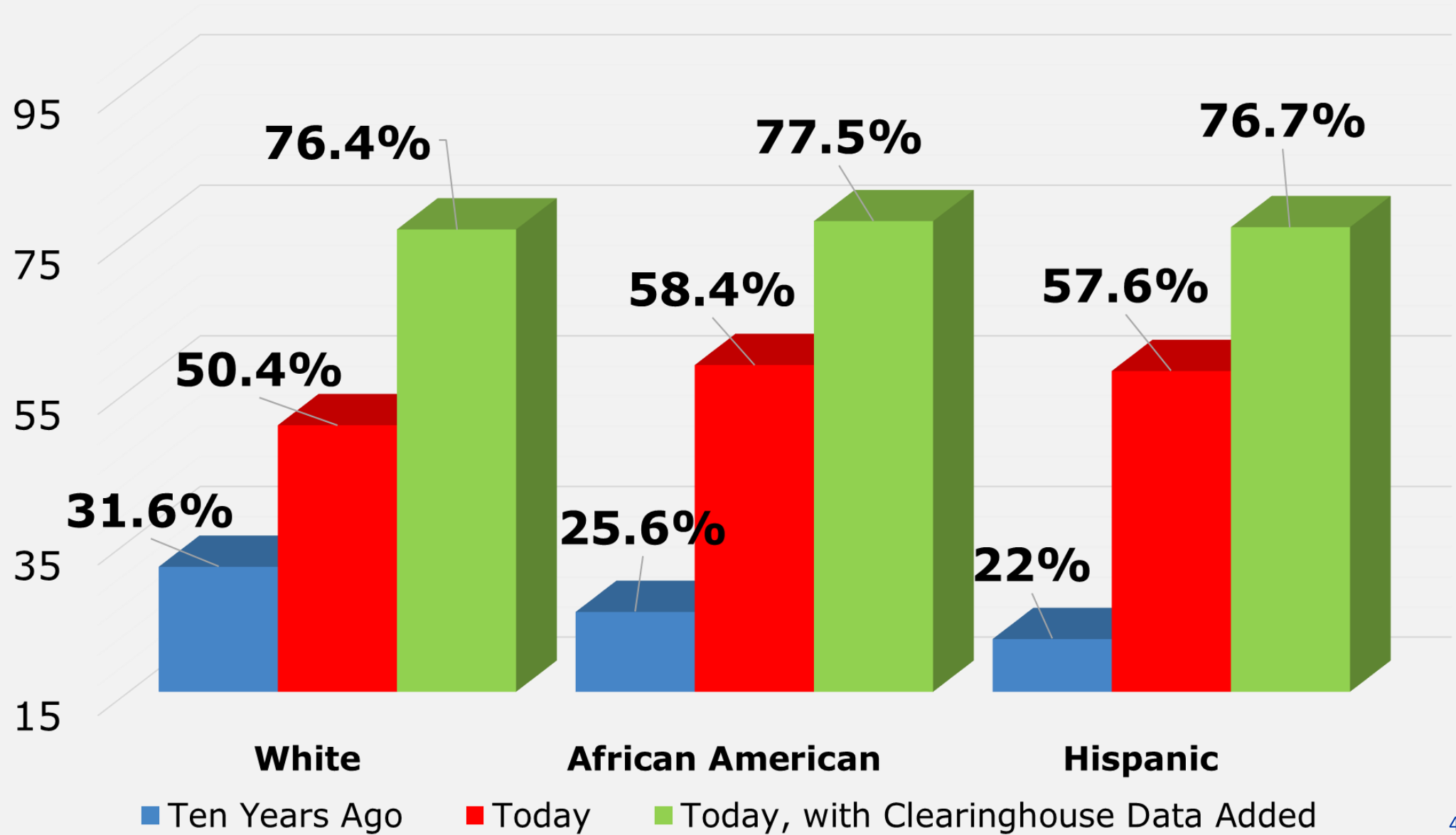
Bachelor's Degrees Awarded



	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Change
African American	1,001	1,322	1,440	1,550	1,692	1,825	82%
Pell	1,298	1,648	1,835	2,007	2,052	2,501	93%
Hispanic	196	300	328	372	414	435	123%



GRADUATION RATES BY RACE & ETHNICITY (CLEARINGHOUSE DATA ADDED)



#1 in Degrees Conferred to African Americans



Top 100 Degree Producers: Non-Profit Universities

2014 African-American Bachelor's - All Disciplines Combined

	Institutions	State	Total	%Grads	%Chg
1	Georgia State University	GA	1645	35%	8%
2	FAMU	FL	1475	95%	6%
3	North Carolina A & T State University	NC	1214	87%	7%
4	University of Central Florida	FL	1195	10%	2%
5	University of Maryland-University College	MD	1073	26%	5%
6	University of Memphis	TN	1016	34%	9%
7	Jackson State University	MS	987	90%	11%
8	Howard University	D.C.	966	94%	-15%
9	The University of Texas at Arlington	TX	951	14%	10%
10	Florida Atlantic University	FL	905	18%	-2%

Graduation Rates by Pell Status

