

IUPUI Student Success and Retention

Council on Graduation and
Retention (CRG)

April 28, 2014
Update



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Student Data, Analysis, and
Evaluation (SDAE)

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<http://research.uc.iupui.edu/>



Data Sources

****IUPUI Indianapolis Only Fall Beginners ****

- Institutional Data
- Entering Student Survey (administered at the end of New Student Orientation)
- Admissions (Chris Foley)
- Student Affairs (housing GPA analysis from Rob Aaron)
- Credit Hour Retention Analysis (Gary Pike)

Theoretical Framework (Kurt Lewin)

❑ $B = f(P + E + PE)$

- ❑ Student Behavior or Success is a function of who students were before they entered college (Person) what happens to them after they enroll (Environment/Interventions) and the interaction of P and E.

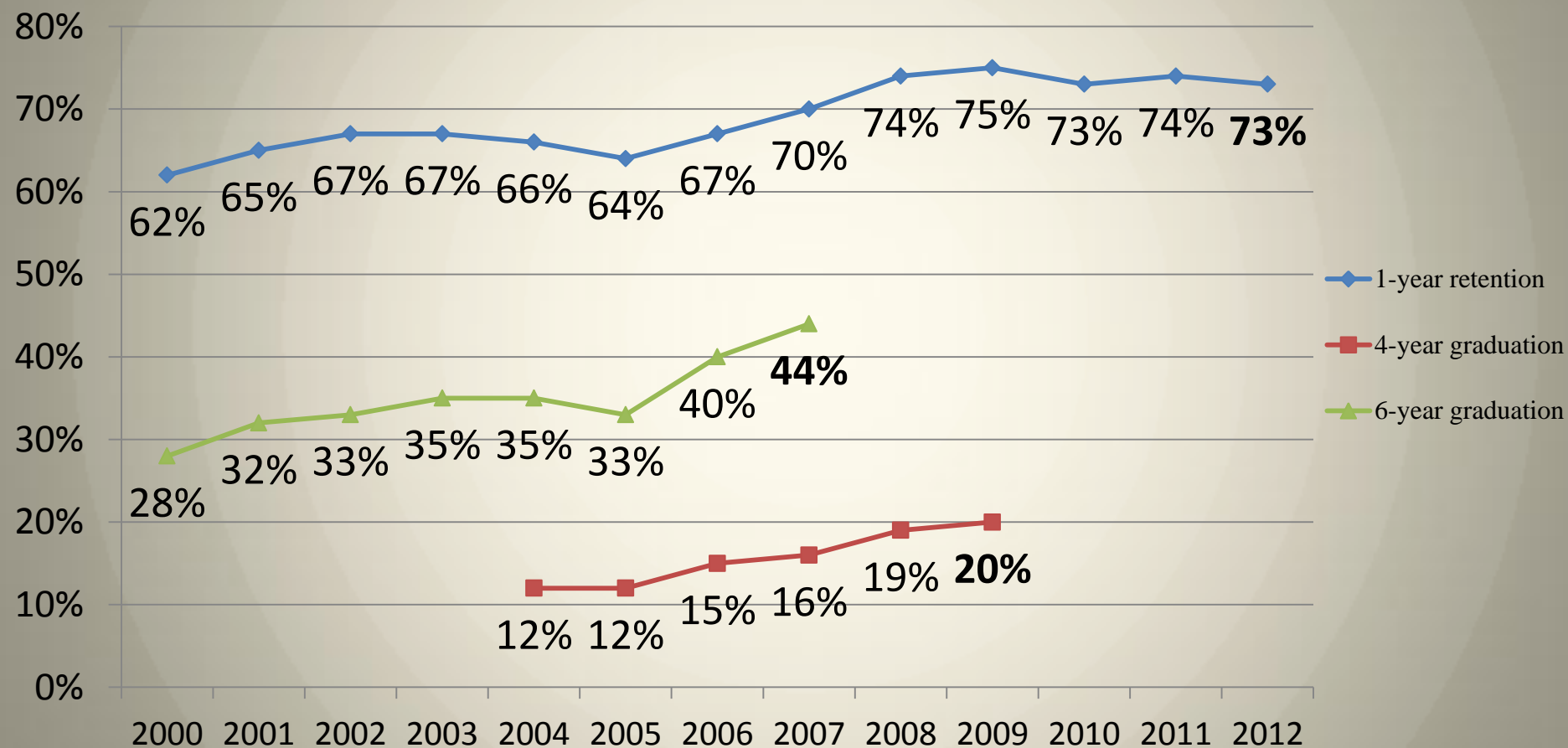
Student Characteristics, Dispositions, and Attitudes

- Academic Preparation
- Knowledge, Skills, and Abilities
- Student Demographics
- Socioeconomic Level and Financial Resources
- Cognitive Motivation (self-efficacy, hope, understanding and commitment to goals)
- Support Systems
- Institutional Commitment
- Intentions
- External Commitments (family, friends, work)

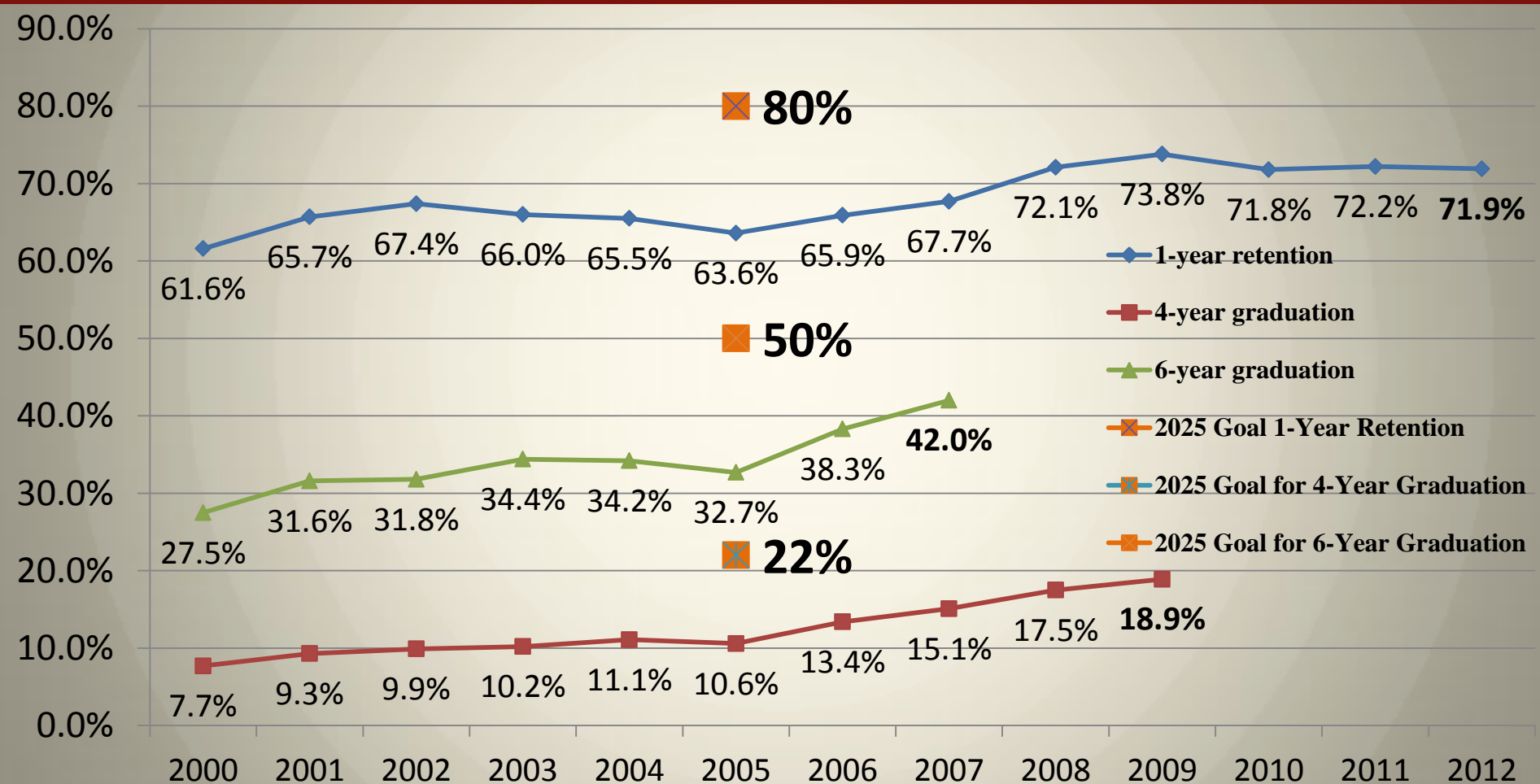
Institutional Factors

- Academic Support
- Personal and Social Support
- Academic and Social Integration
- Engaging and Challenging Instructional Strategies
- Early Interventions and Early Warning Systems
- Financial Support and Scholarships
- Opportunities for Involvement in Co-curricular Activities and Campus Engagement
- Helping Students Build Knowledge, Skills, and Abilities
- Enhancing Sense of Belongingness and Commitment to IUPUI
- Helping Students Feel Sense of Purpose, Self-Efficacy, Hope, and Commitment to Goals
- Fostering Diverse and Inclusive Environments
- Providing Major/Career Exploration and Development Opportunities

Indianapolis First-Time, Full-Time Cohort Retention and Graduation Rates (Bachelor's, Associate, and Certificate)



IUPUI First-Time, Full-Time Bachelor Degree Seeking



Peer Institutions

Peer Institutions	One-Year Retention	Four-Year Graduation	Six-Year Graduation
Univ. of Pittsburgh	92%	61%	79%
Temple University	89%	37%	68%
Univ. of Cincinnati	84%	22%	59%
Univ. of Illinois Chicago	82%	27%	55%
Virginia Commonwealth	85%	27%	53%
Univ. of Missouri-St. Louis	74%	25%	51%
Georgia State University	84%	18%	47%
Univ. of Houston	82%	15%	46%
Univ. of Toledo	65%	24%	46%
Univ. of Alabama-Birmingham	80%	23%	45%
Univ. of Missouri-Kansas City	75%	17%	41%
CUNY	83%	6%	40%
Univ. of Mass-Boston	75%	14%	40%
Univ. of Wisconsin-Milwaukee	73%	14%	40%
Portland State University	70%	14%	38%
Univ. of Memphis	78%	12%	38%
Univ. of New Orleans	64%	17%	38%
IUPUI	74%	11%	33%
Cleveland State University	64%	9%	30%
Wayne State University	77%	10%	26%

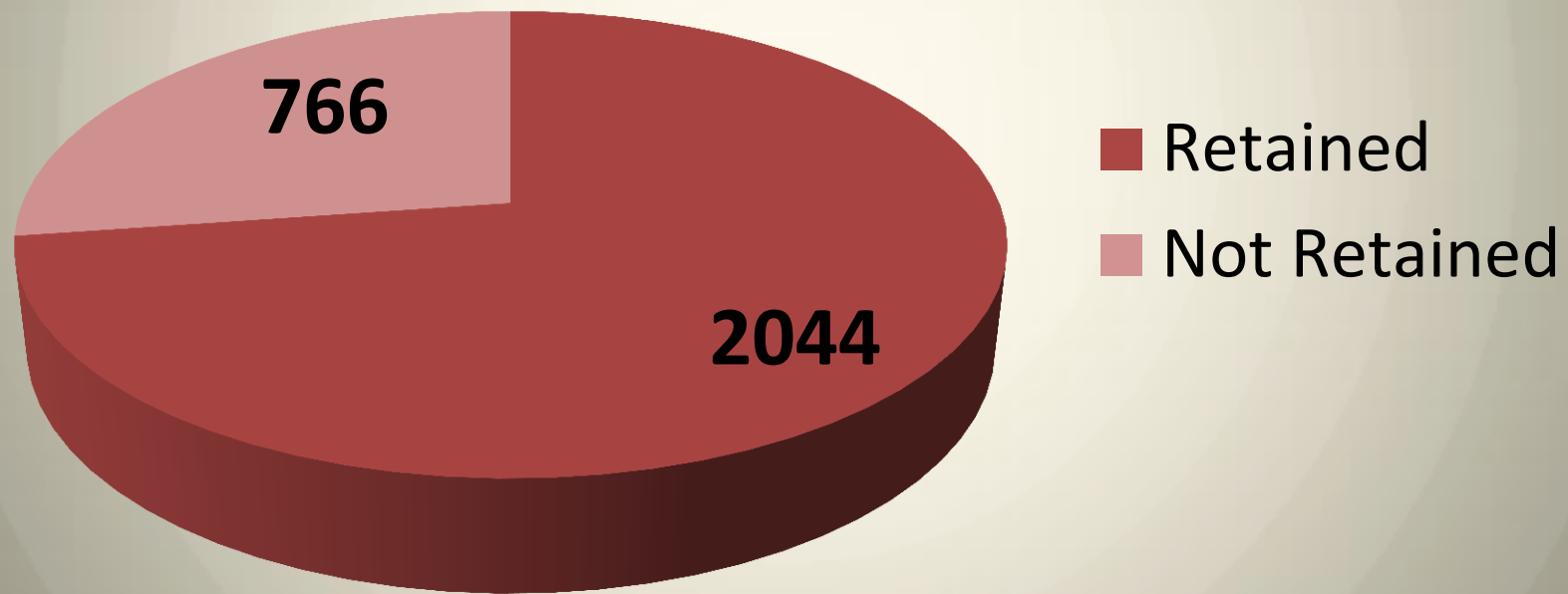
One-Year Retention Rates

One-Year Retention Rate by Type	2009-2010	2010-2011	2011-2012	2012-2013
IUPUI* (includes all degree seeking – Bachelors, Associates, Certificates)	73.4%	71.3%	72.3%	71.7%
IUPUI* (includes only Bachelor degree seeking)	73.8%	71.8%	72.2%	71.9%
IUPUI Indianapolis (includes all degree seeking – Bachelors, Associates, Certificates)	75%	72.9%	73.7%	72.7%
IUPUI Indianapolis (includes only Bachelor degree seeking)	75%	74%	73.6%	73.0%

* IUPUI official always includes Columbus

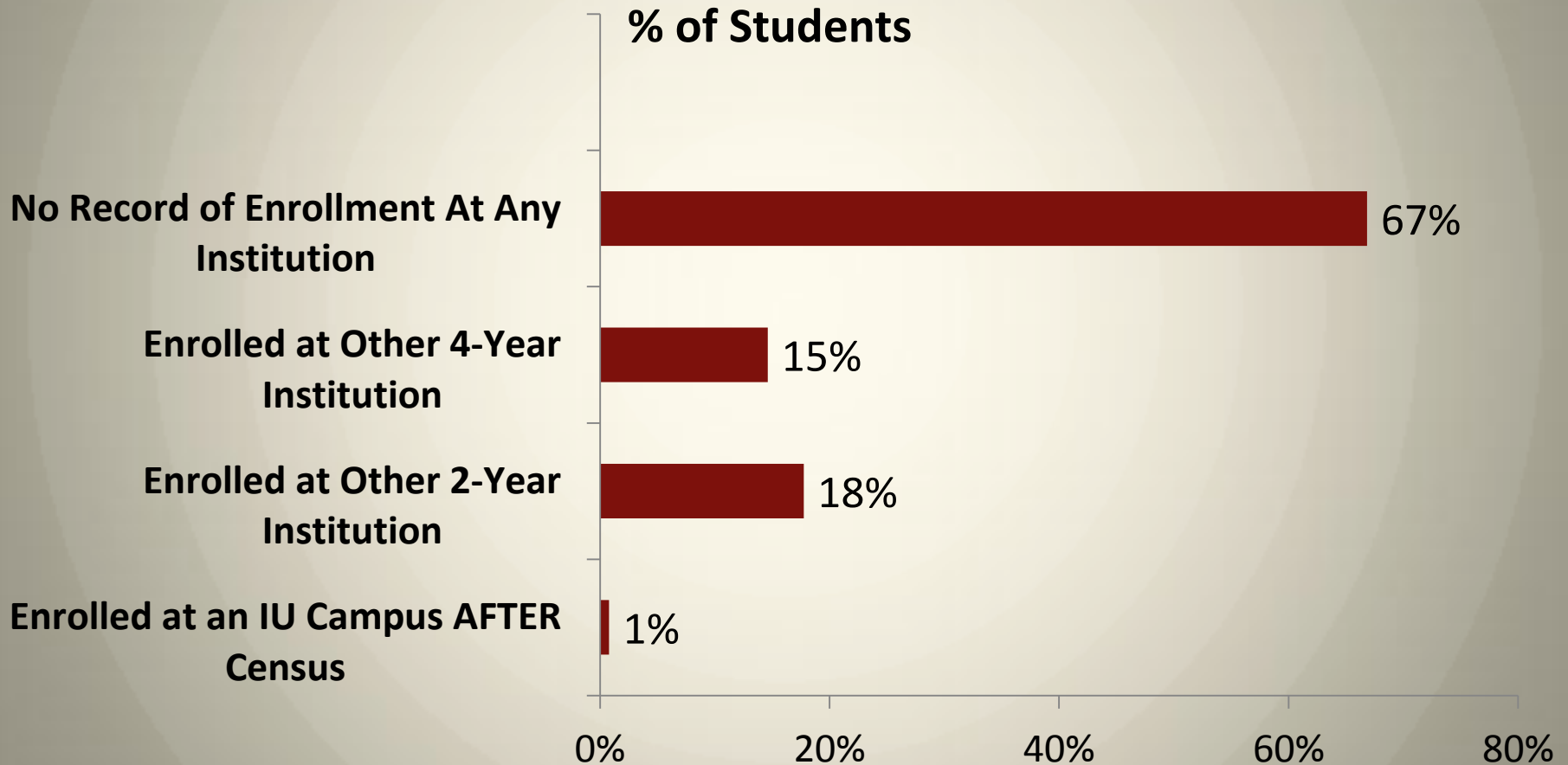
Fall 2012 IUPUI Indianapolis First-Time, Full-time Beginners N=2881

**Number Returned for Second Year of Classes
Any IU Campus (Fall to Fall Retention)**



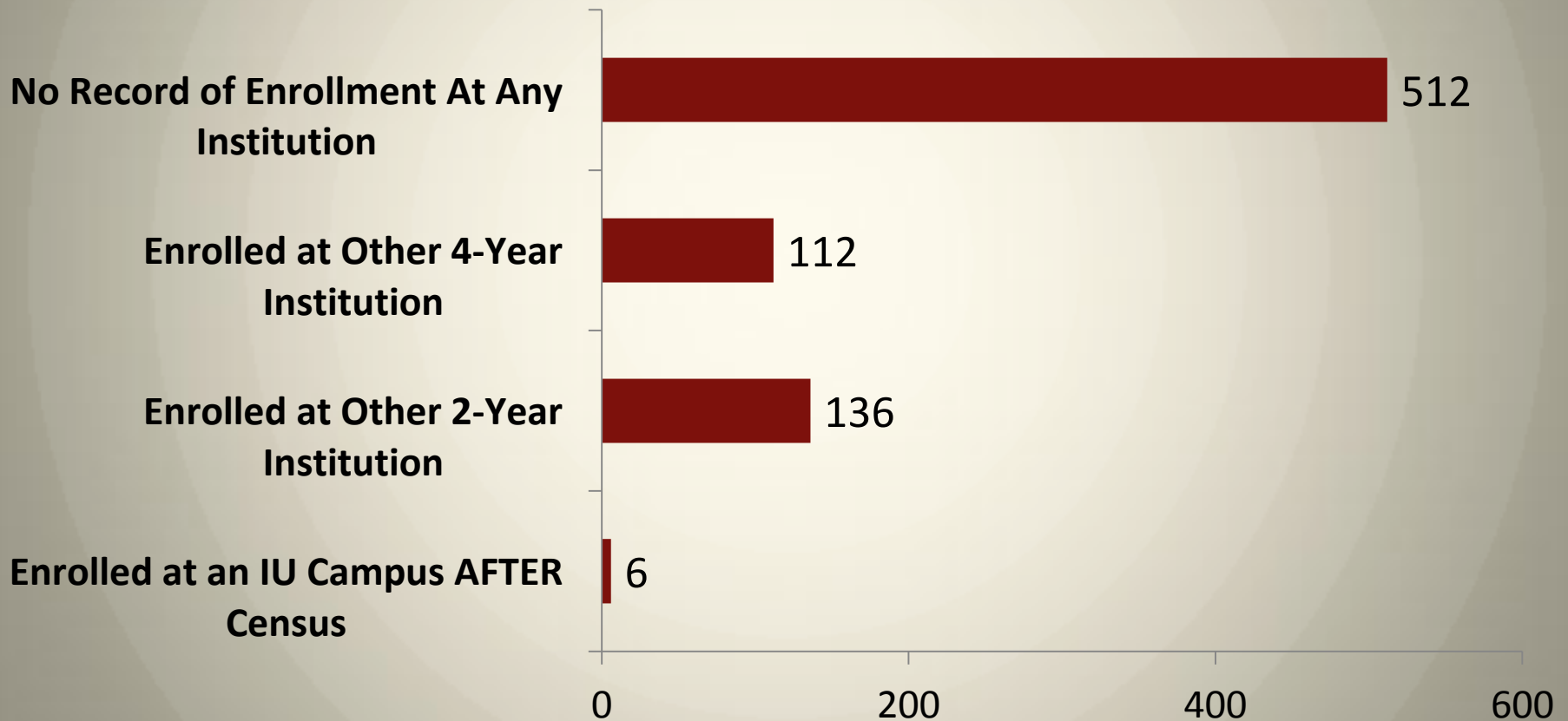
National Student Clearinghouse

Summary of Non-Returning Students N=766



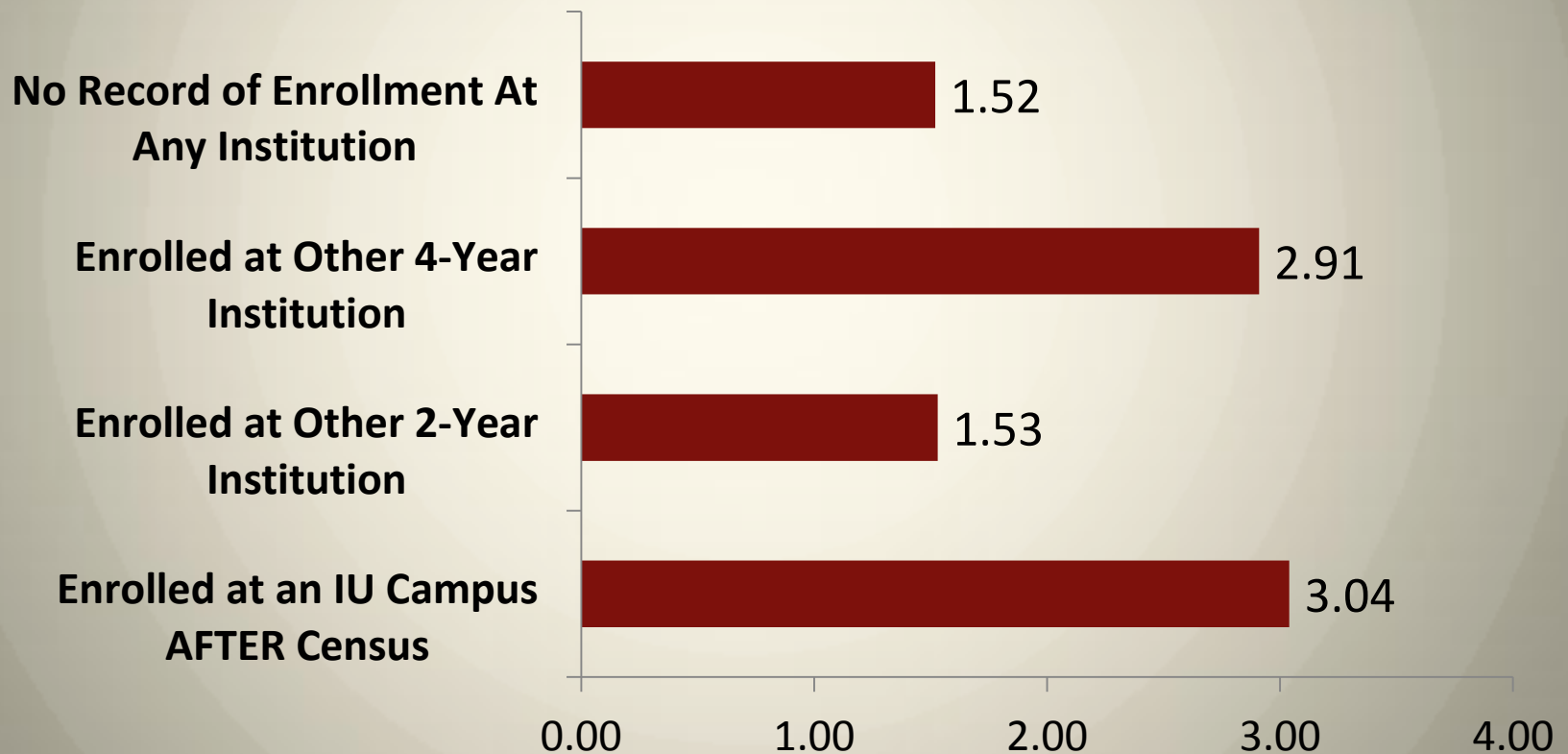
National Student Clearinghouse

Summary of Non-Returning Students N=766 Numbers of Students



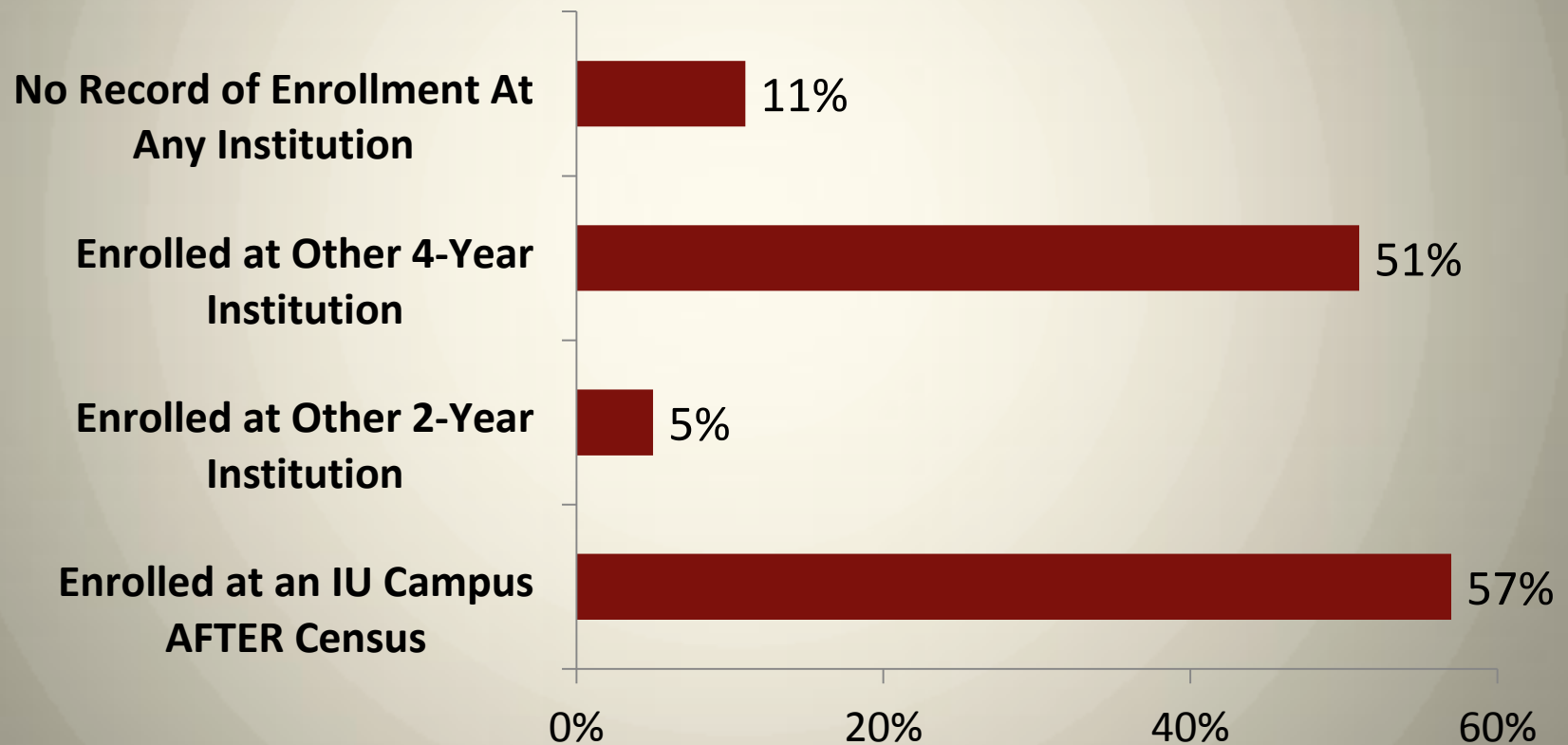
Academic Performance of Students Who Left

Average Cumulative First-Year GPA



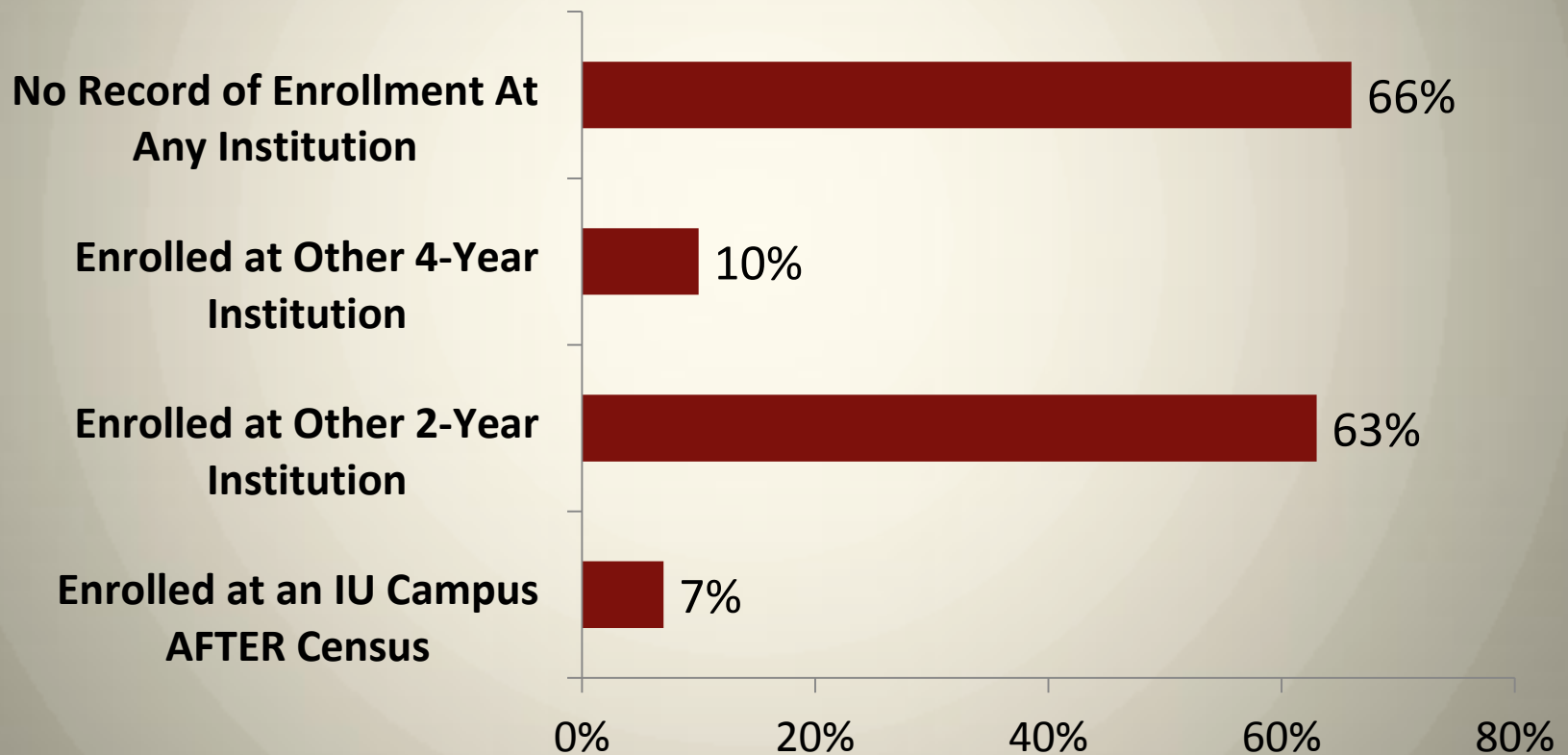
Academic Performance of Students Who Left

Average Cumulative First-Year GPA Above 3.00



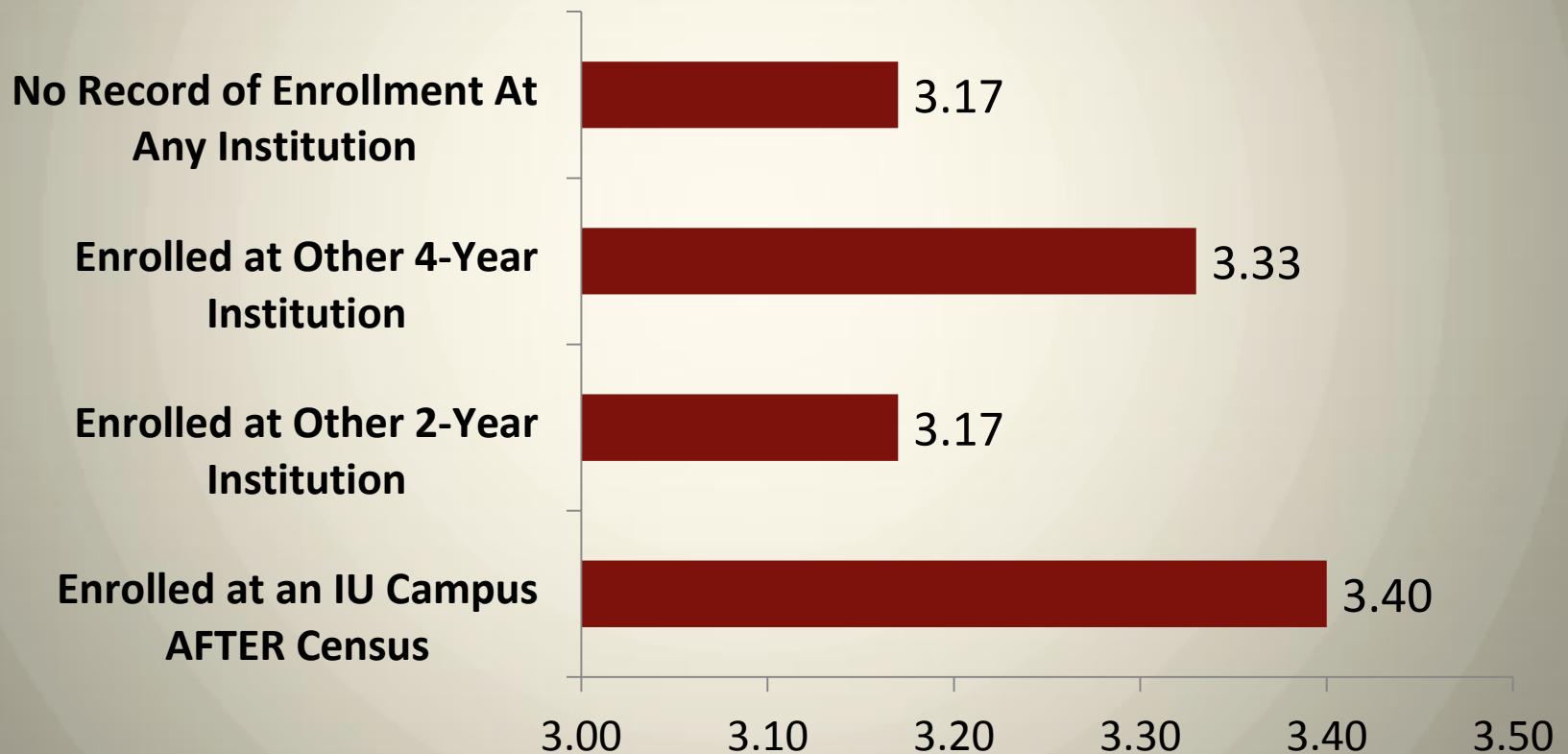
Academic Performance of Students Who Left

Average Cumulative First-Year GPA Below 2.00

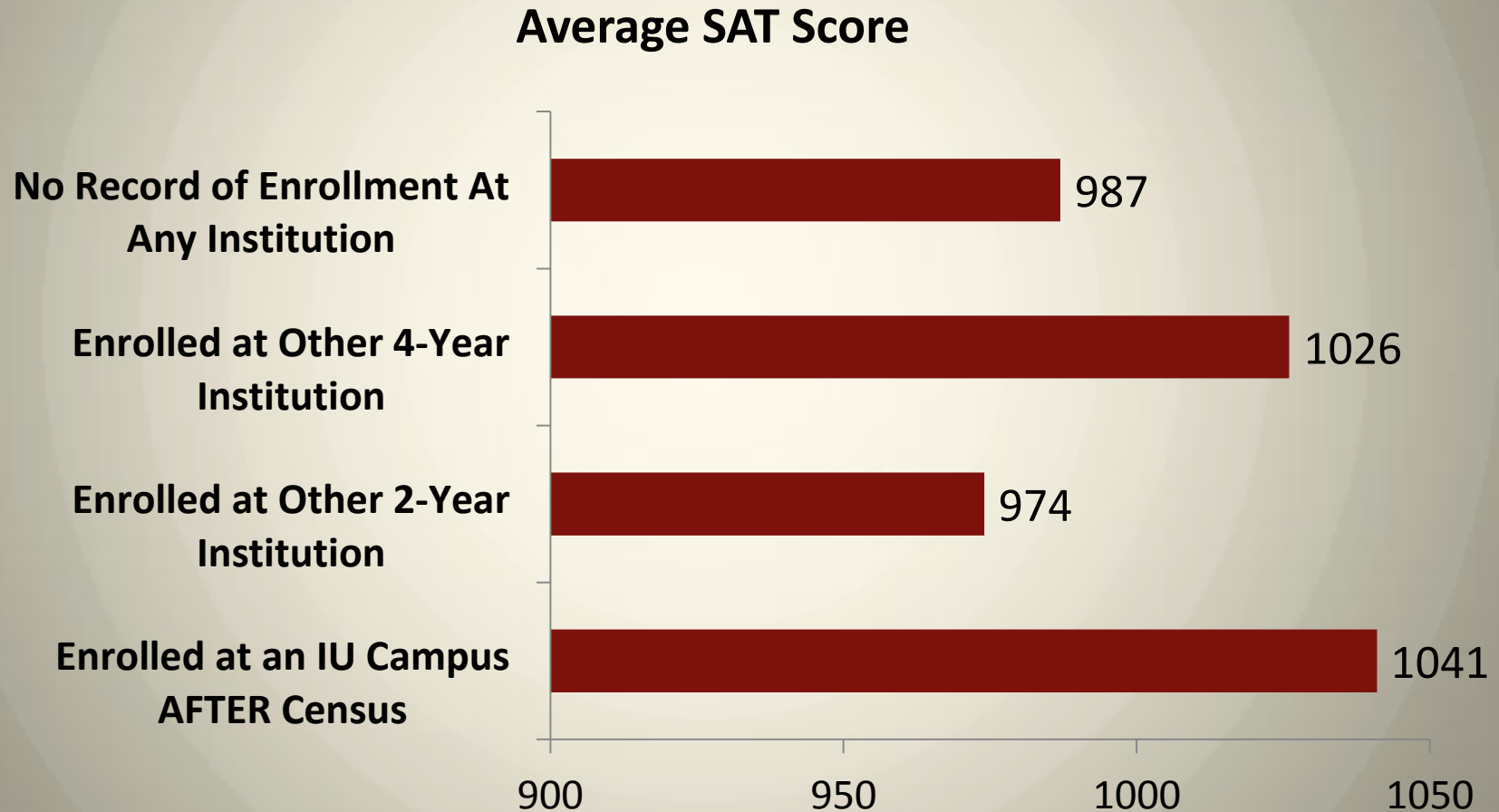


Academic Preparation of Students Who Left

Average High School GPA

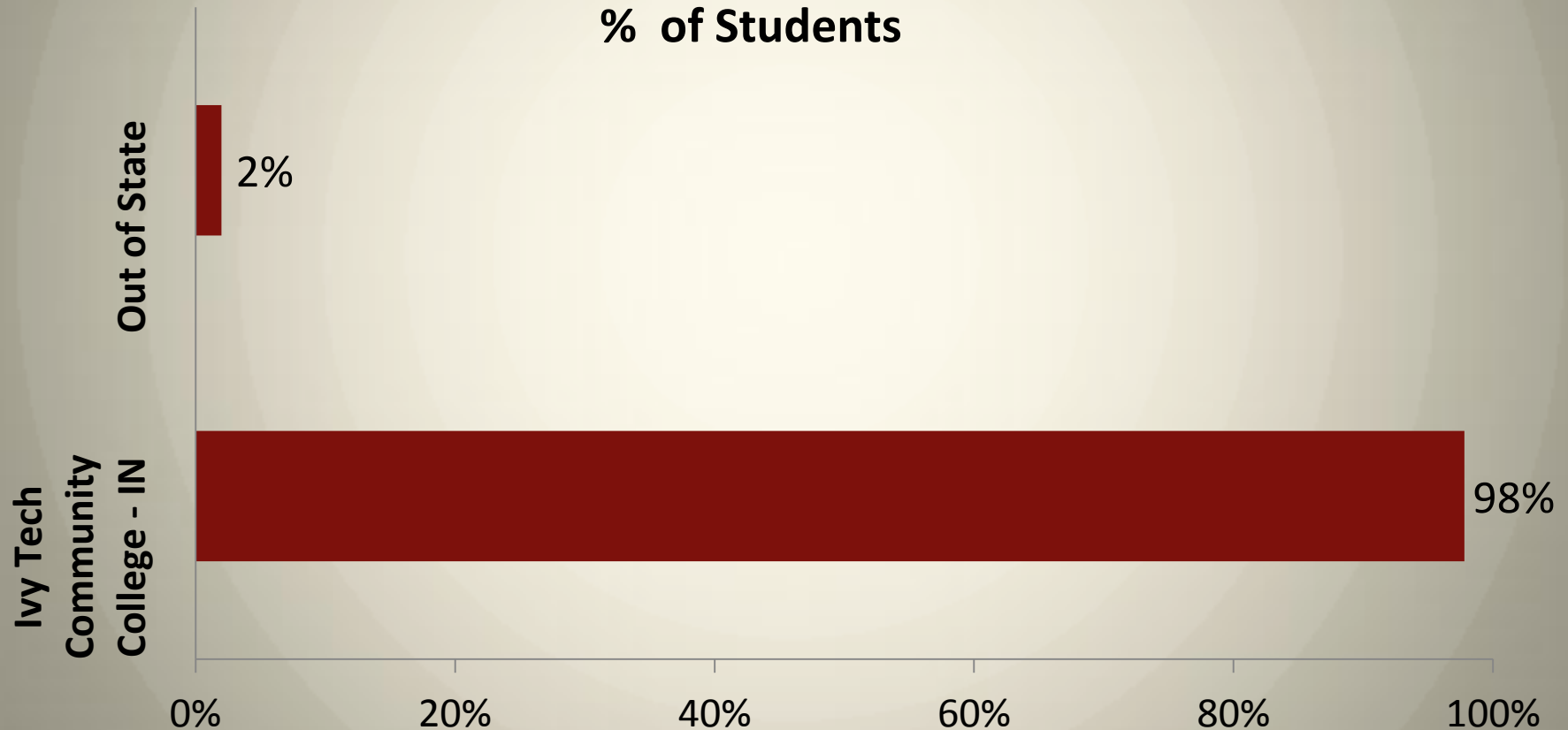


Academic Preparation of Students Who Left



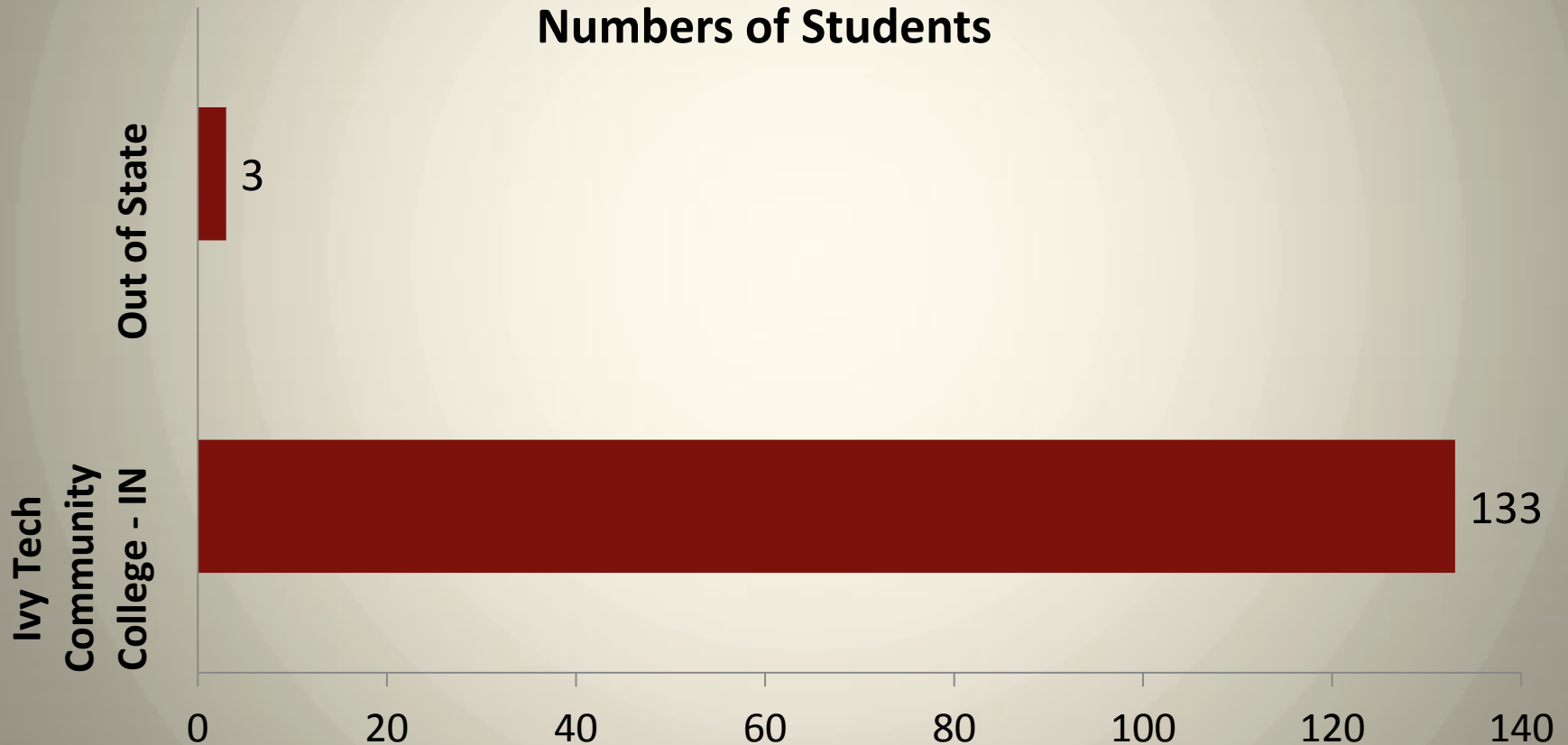
Most Common 2-Year Institutions

National Student Clearinghouse N=136
% of Students



Most Common 2-Year Institutions

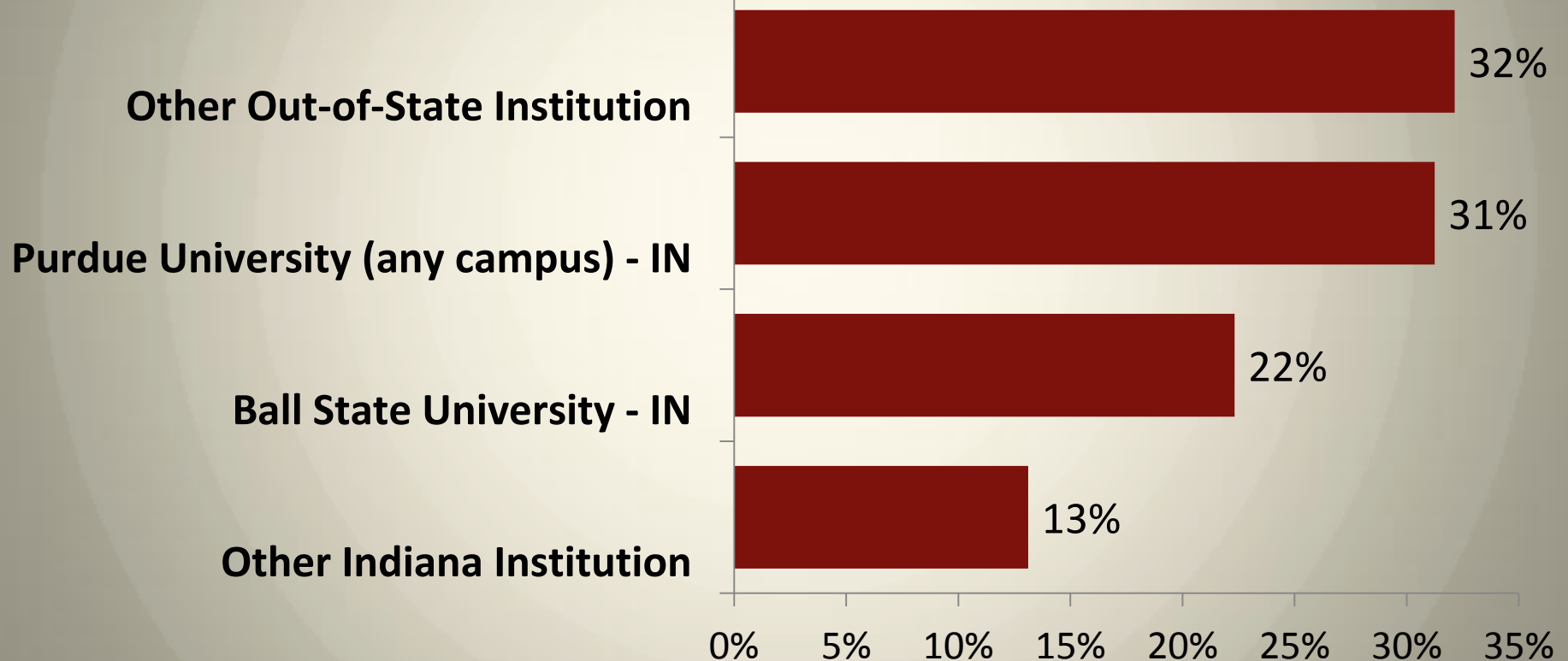
National Student Clearinghouse N=136
Numbers of Students



Most Common 4-Year Institutions

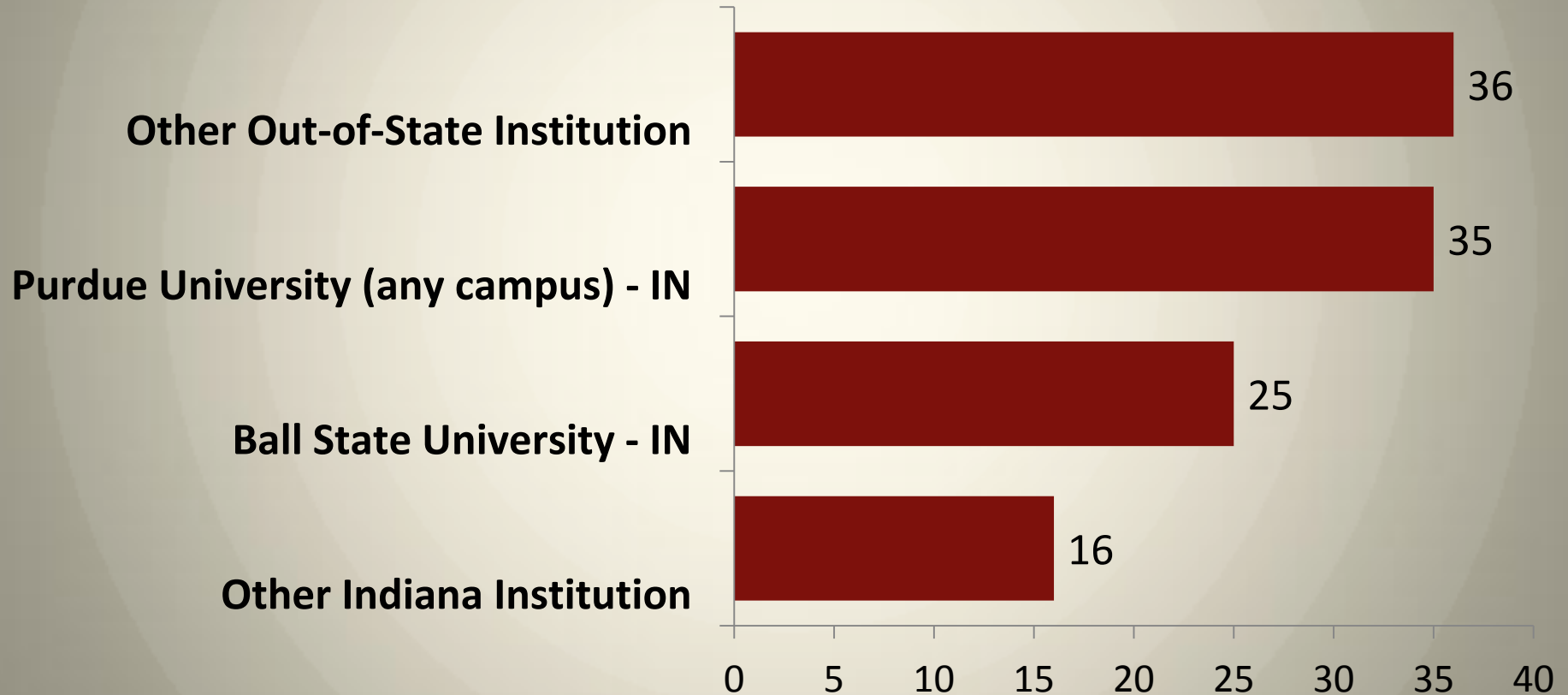
Summary of Non-Returning Students N=112

% of Students



Most Common 4-Year Institutions

Summary of Non-Returning Students N=112
Number of Students

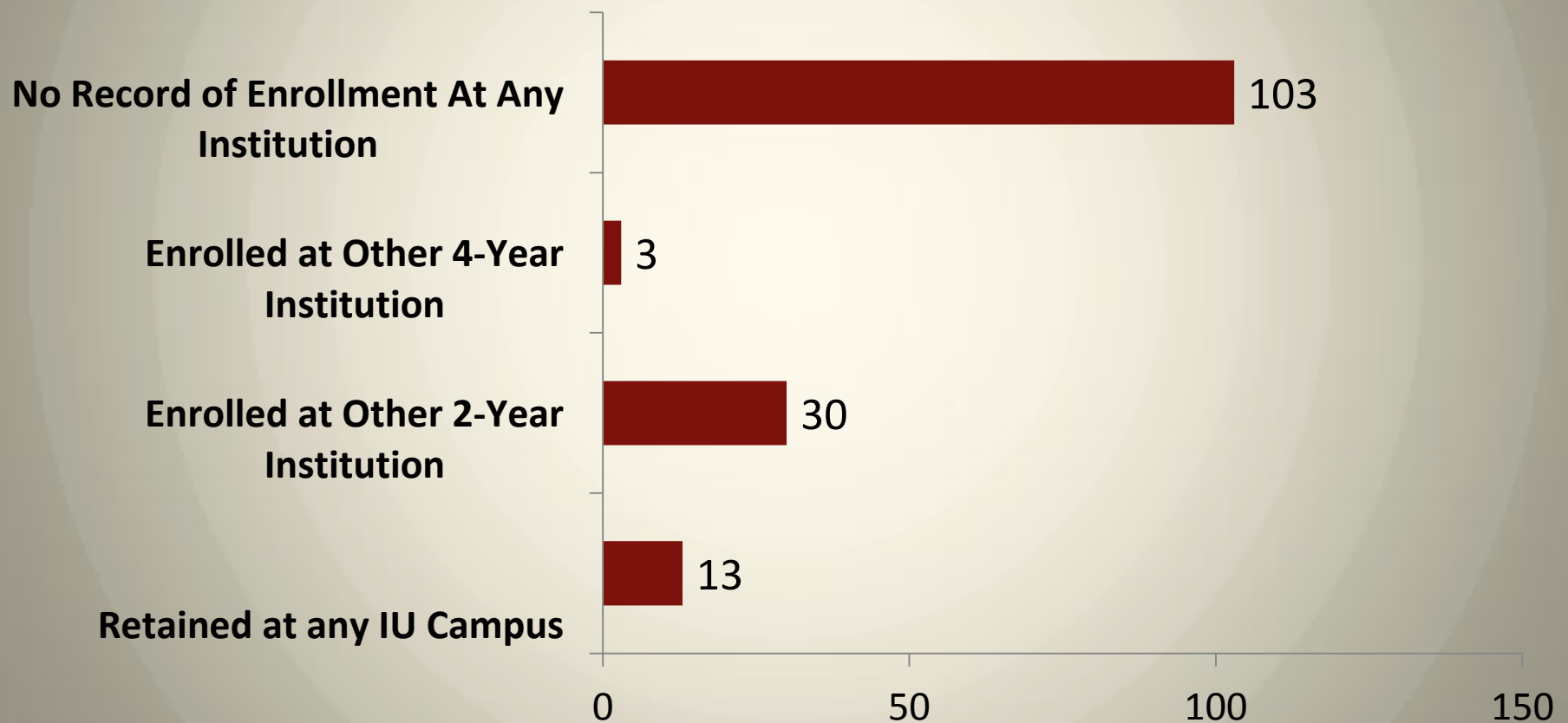


Academically Dismissed Fall 2012

National Student Clearinghouse

Summary of Dismissed Students N=149

Numbers of Students

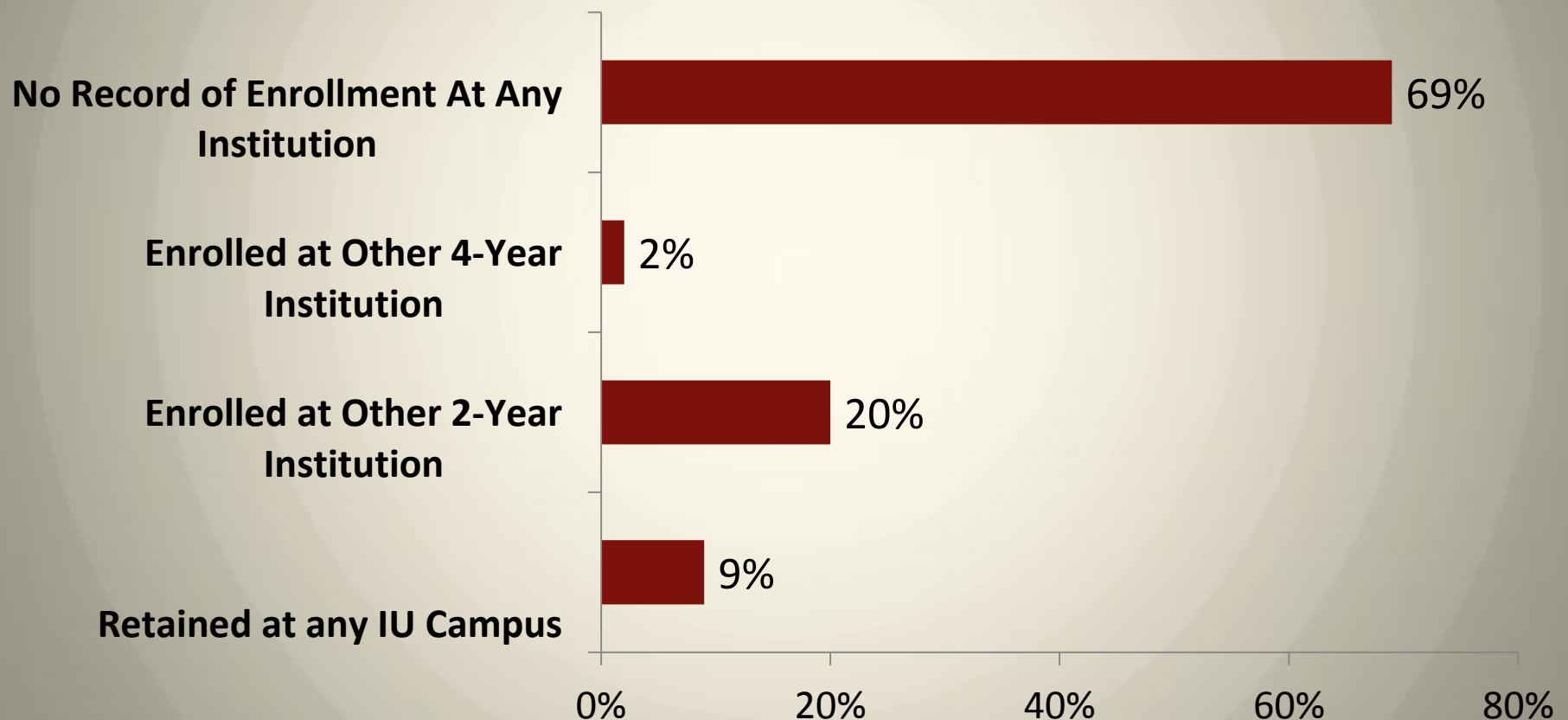


Academically Dismissed Fall 2012

National Student Clearinghouse

Summary of Dismissed Students N=149

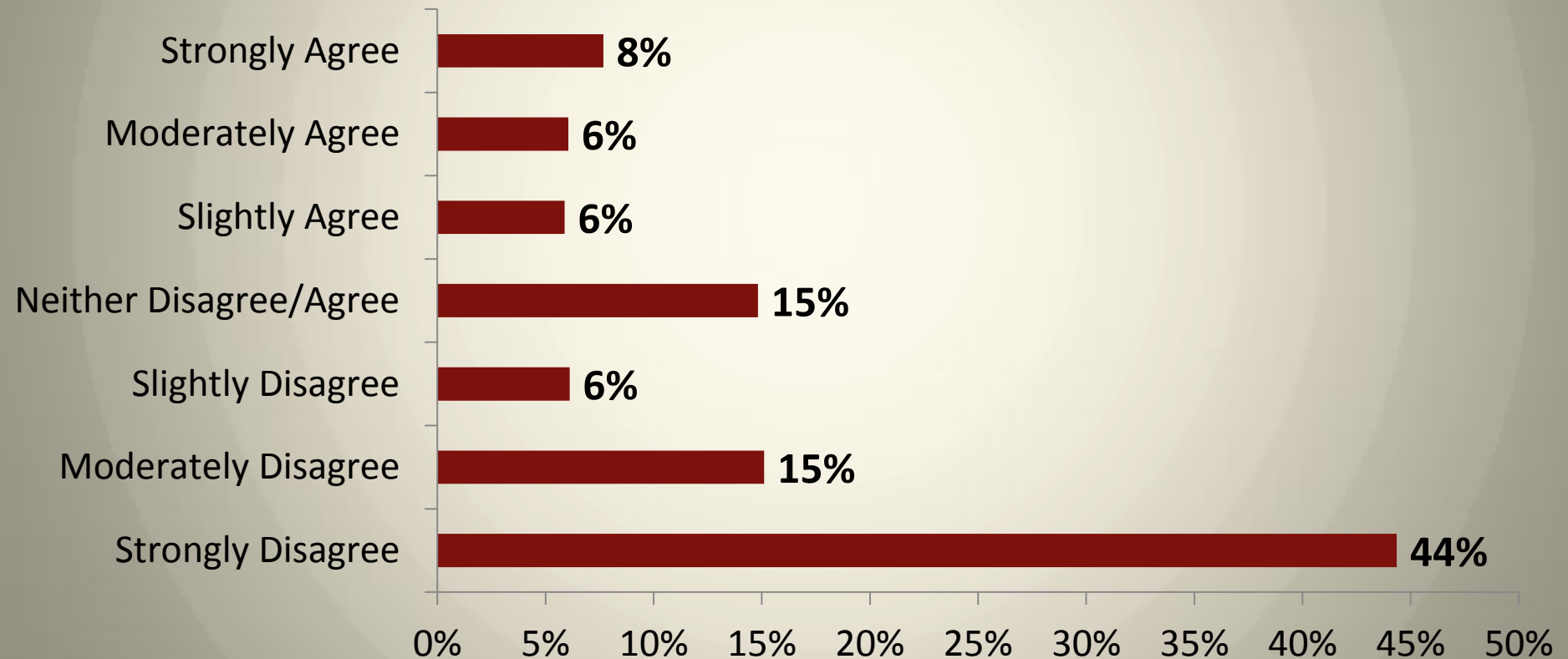
Numbers of Students



Fall Full-Time 2013 Intent to Transfer

“I intend to transfer to another institution”

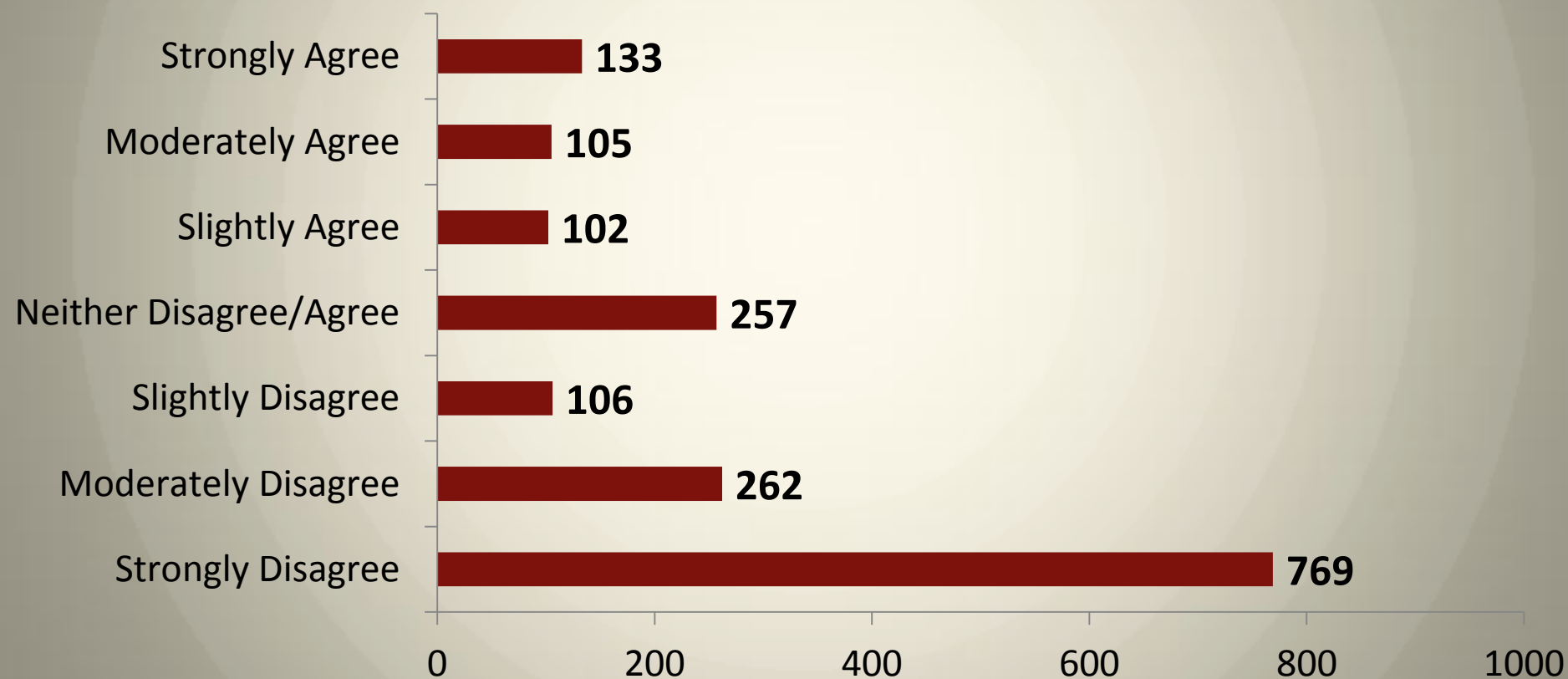
Entering Student Survey N=1734



Fall Full-Time 2013 Intent to Transfer

“I intend to transfer to another institution”

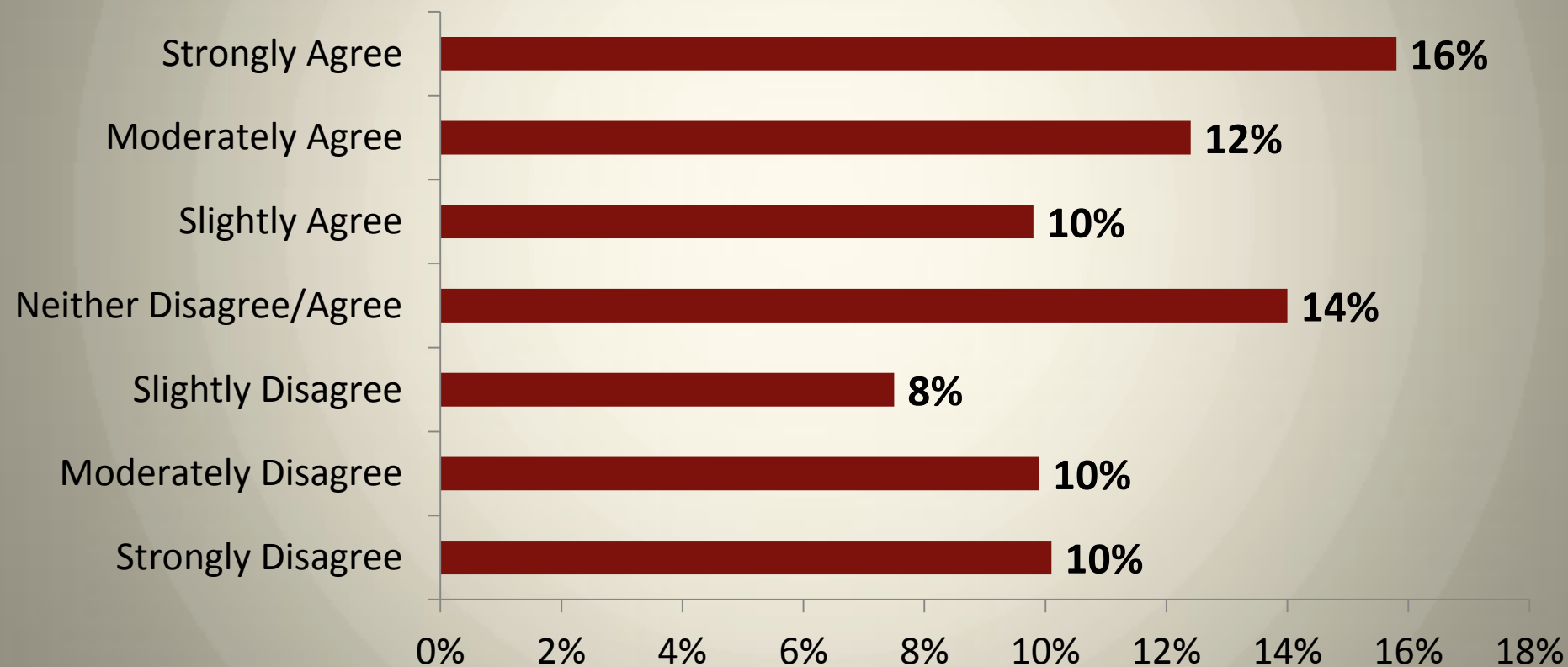
Entering Student Survey N=1734



Fall Intent to Transfer and % of Students Who Did Not Return in Spring

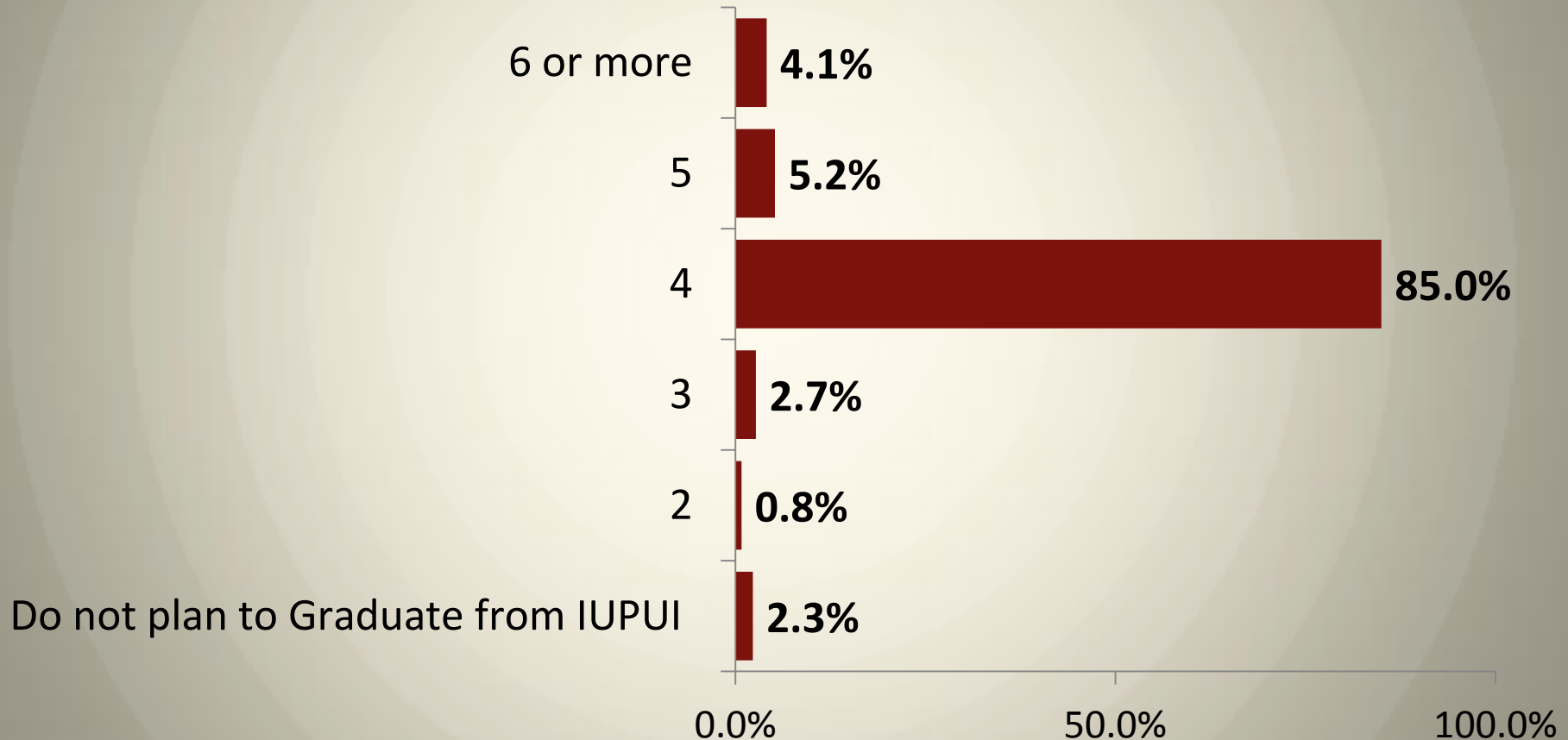
“I intend to transfer to another institution”

% Not Retained to Spring Semester

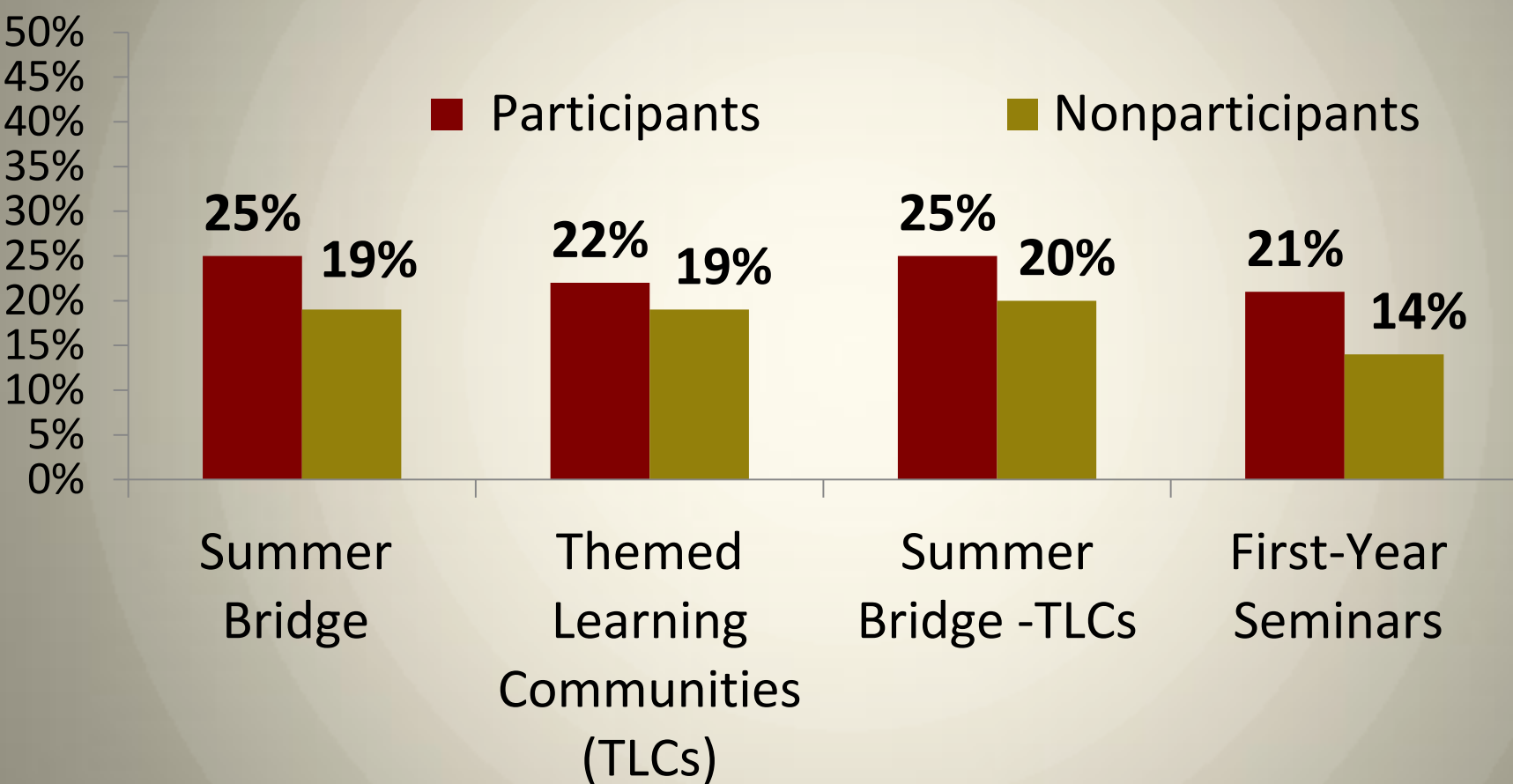


Years to Graduate

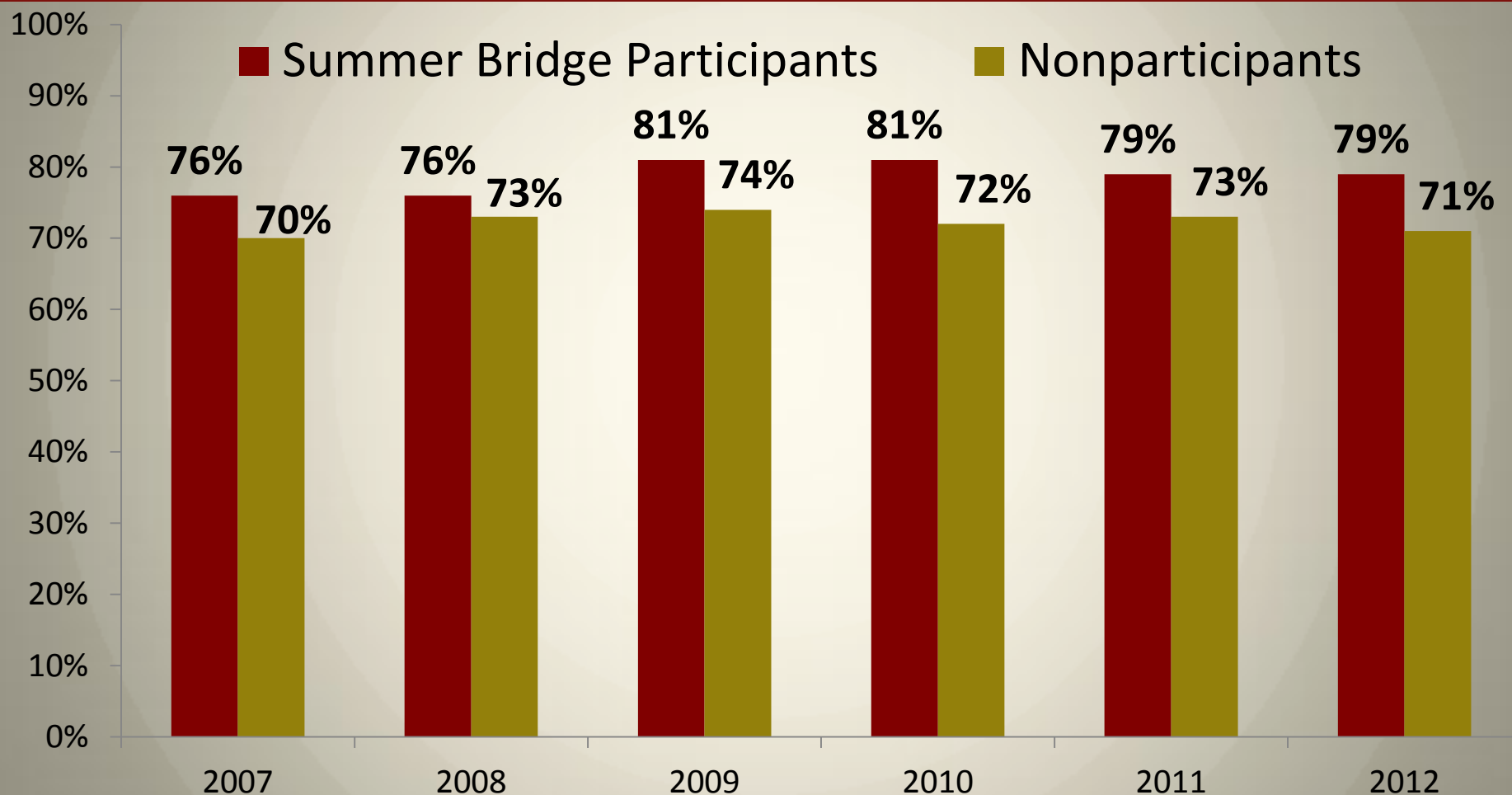
First-Time, Full-Time Beginners Years Expected to Take to Graduate



Indianapolis Only 2009 First-Time, Full-Time Cohort 4-Year Graduation Rates



Summer Bridge Students Have Higher One-Year Retention Rates Compared to Nonparticipants

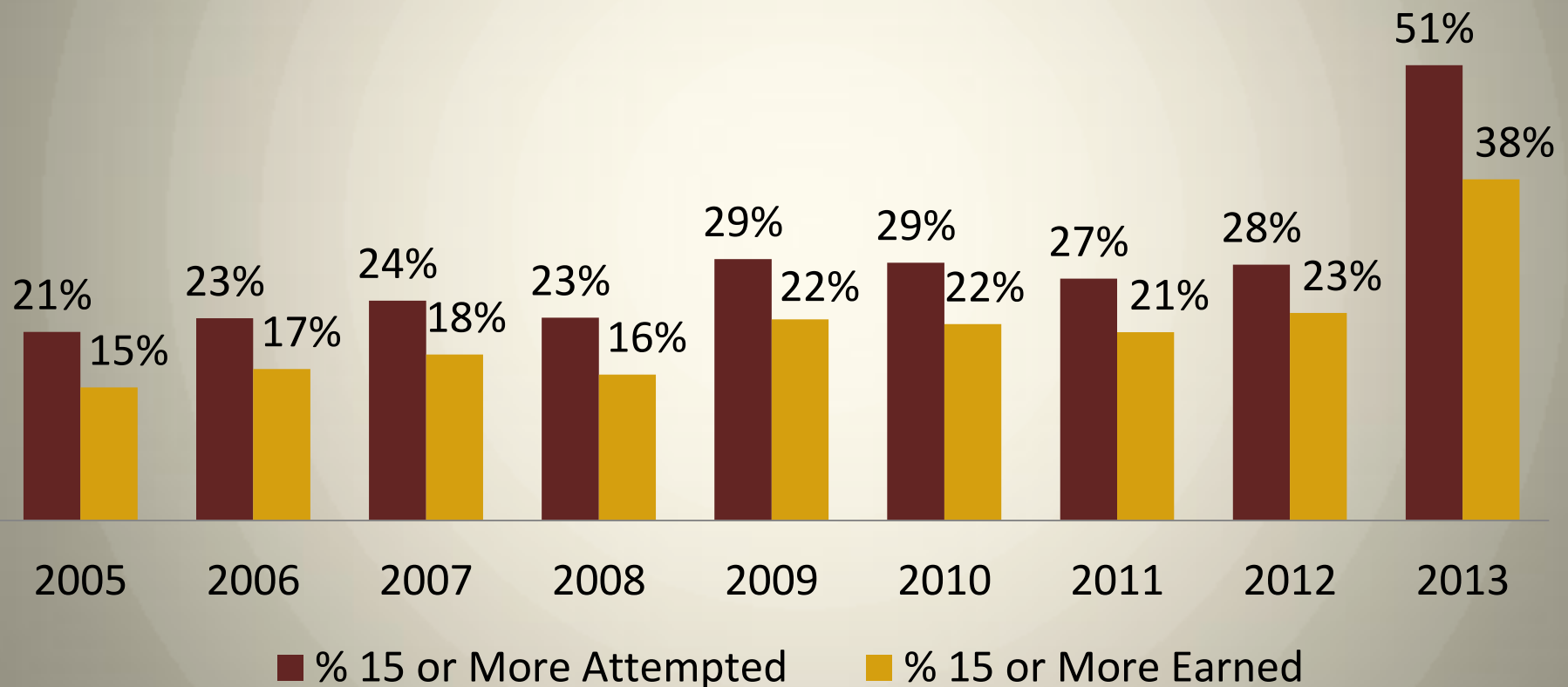


Growth Of Summer Bridge Program



15 or More Credit Hours Attempted and Completed Fall Semester

% 15 IU Credit Hours or More Attempted and Earned
First-time, Full-Time Beginners



Making Progress in Fall 2013!

- There were **1649** who attempted 15 or more credit hours during their first semester.
- Of the 1649 who attempted 15 or more IU credit hours, 1228 (74%) earned or completed 15 or more credit hours.
- There were 2043 (63%) students who earned 15 or more credits during their first semester (including IU, dual, ACP, and AP credit)

***First-Time, Full-Time 2013 IUPUI Indianapolis Only Beginners**

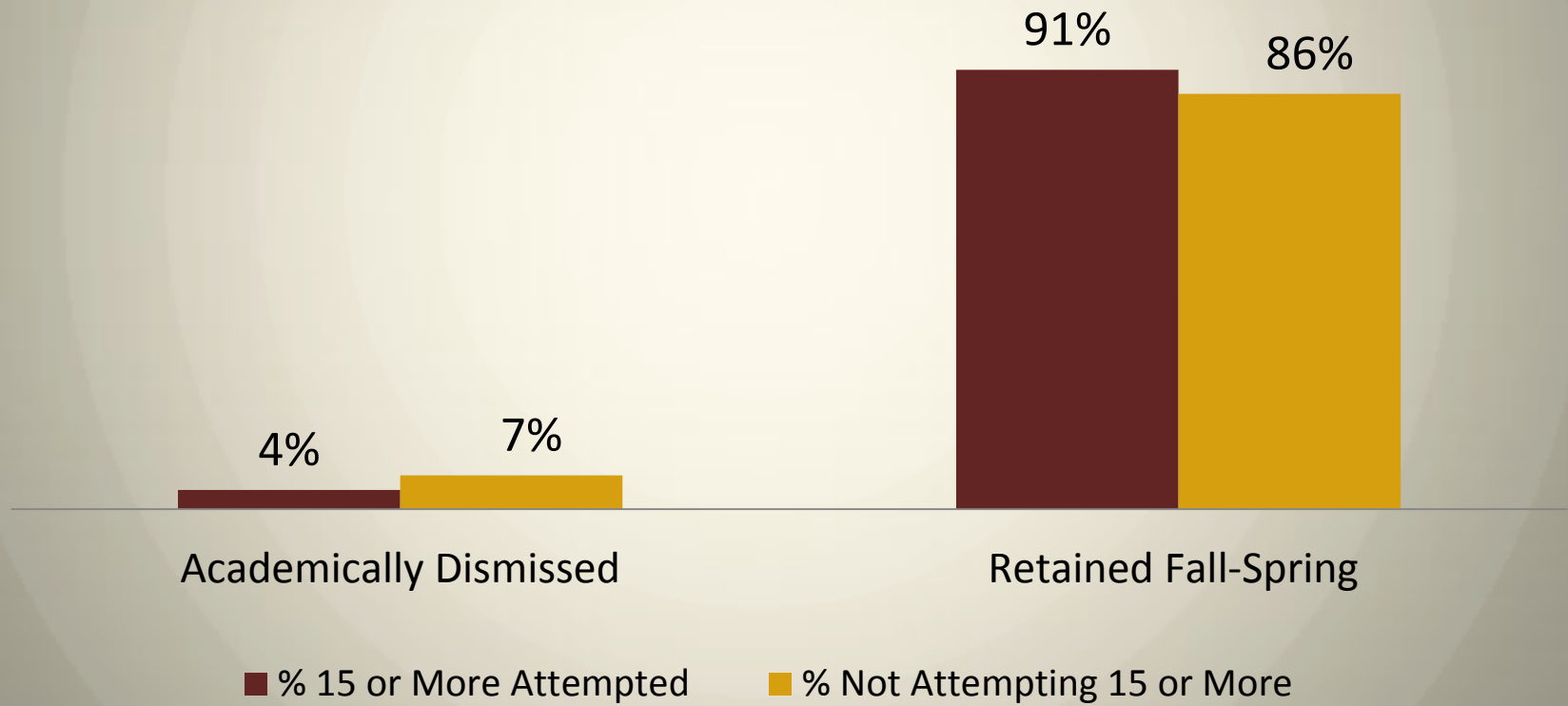
Students who Attempted 15 or More Hours But Did not Complete

- There were 421 (26%) who attempted 15 or more credit hours during their first semester, but did not complete.
- 14% were academically dismissed.
- Had significantly lower HS GPAs and SAT scores.
- More likely to receive Pell Grant and had higher levels of Unmet Financial Need.
- Planned to spend more hours working off-campus for pay.
- More likely to be male.
- Higher proportion of African American (12% compared to 6%)
- Lower levels of academic performance (1.87 Fall GPA compared to 3.27)

Compared to students who completed 15 or more IU credit hours during semester and **not** in High School such as dual, Advance College Project (ACP), or AP.

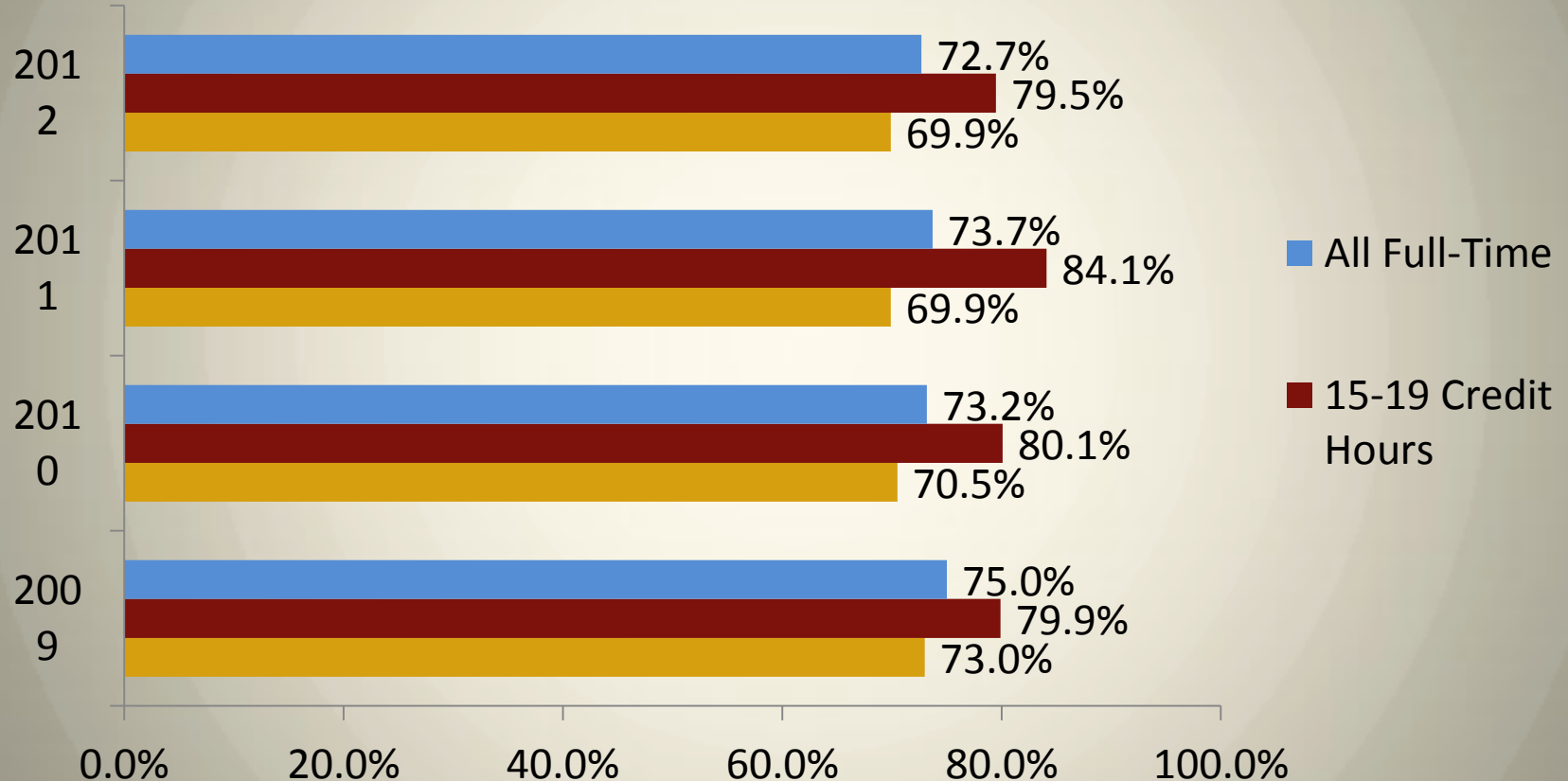
Attempting 15 Credit Hours

% Students First-time, Full-Time Beginners
Fall Semester



Retention Rates by Credit Hours Attempted

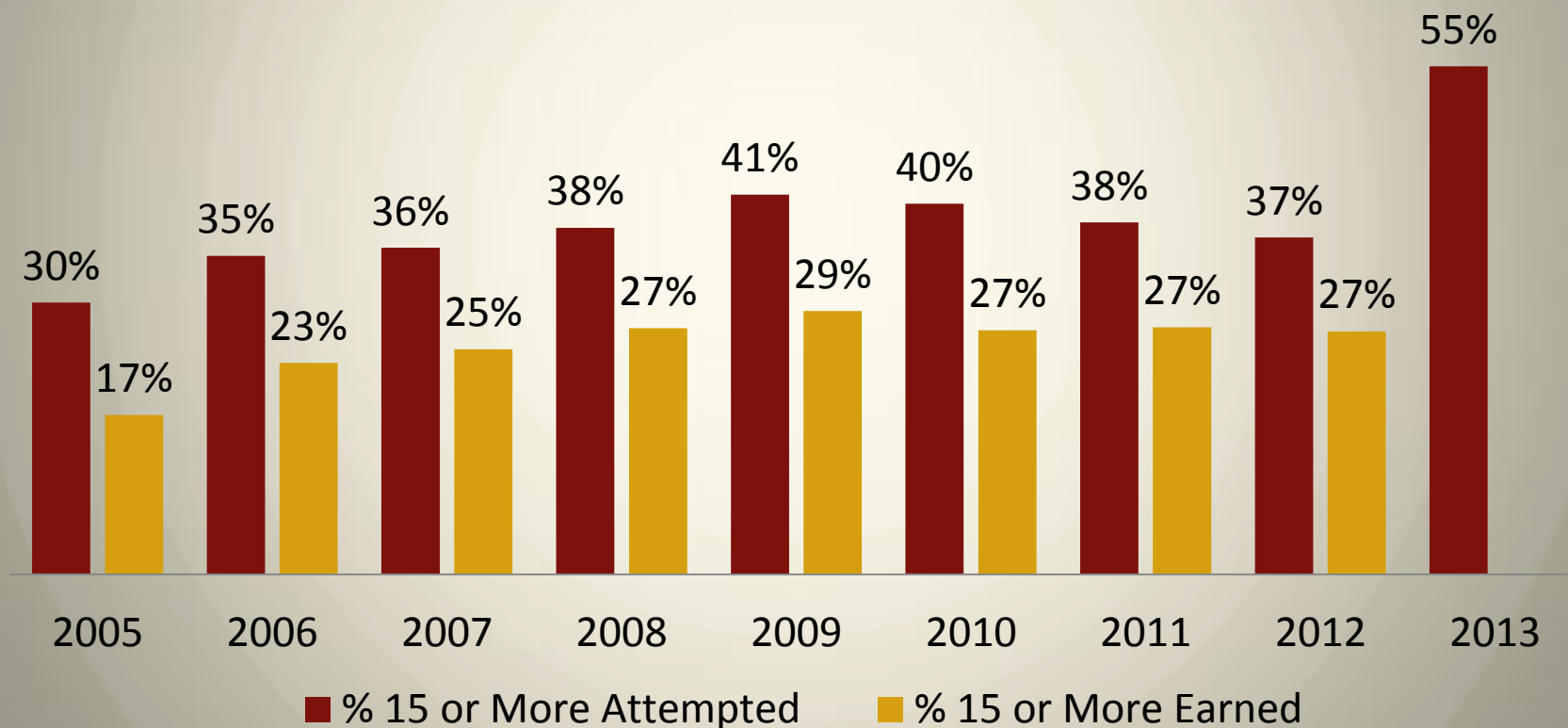
One-Year Retention Rates for First-Time, Full-Time Beginners by Credit Hours Attempted



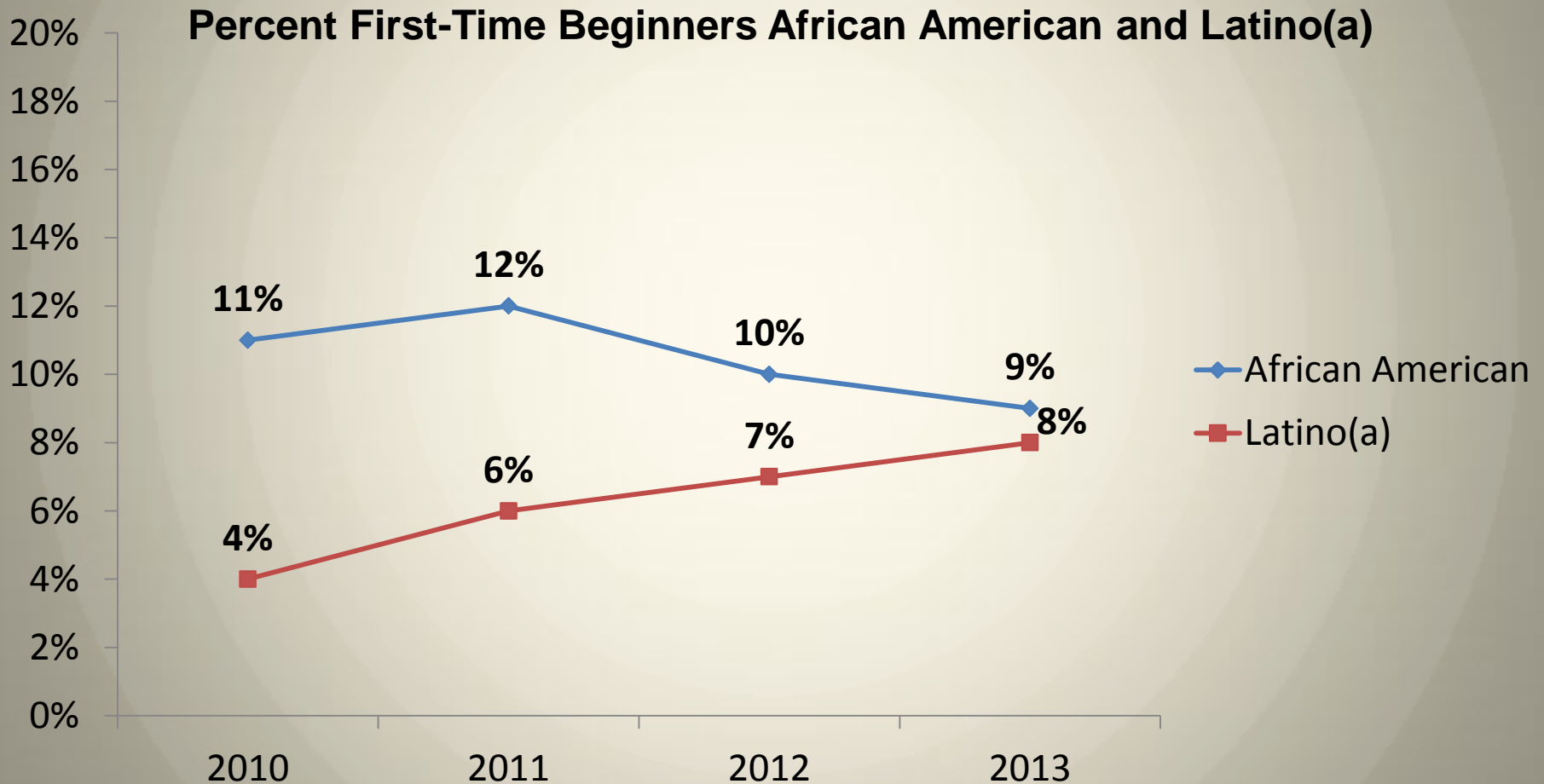
Source: Gary Pike, Retention Analyses Report , September, 2013

15 or More Credit Hours Attempted

% 15 Credit Hours or More Attempted and Earned in the Spring Semester, First-time, Full-time Beginners Enrolling in Spring



Underrepresented Students



African American Students

Number of First-Time Beginners African American Students



Latino(a) Students

Number of First-Time Beginners Latino(a) Students



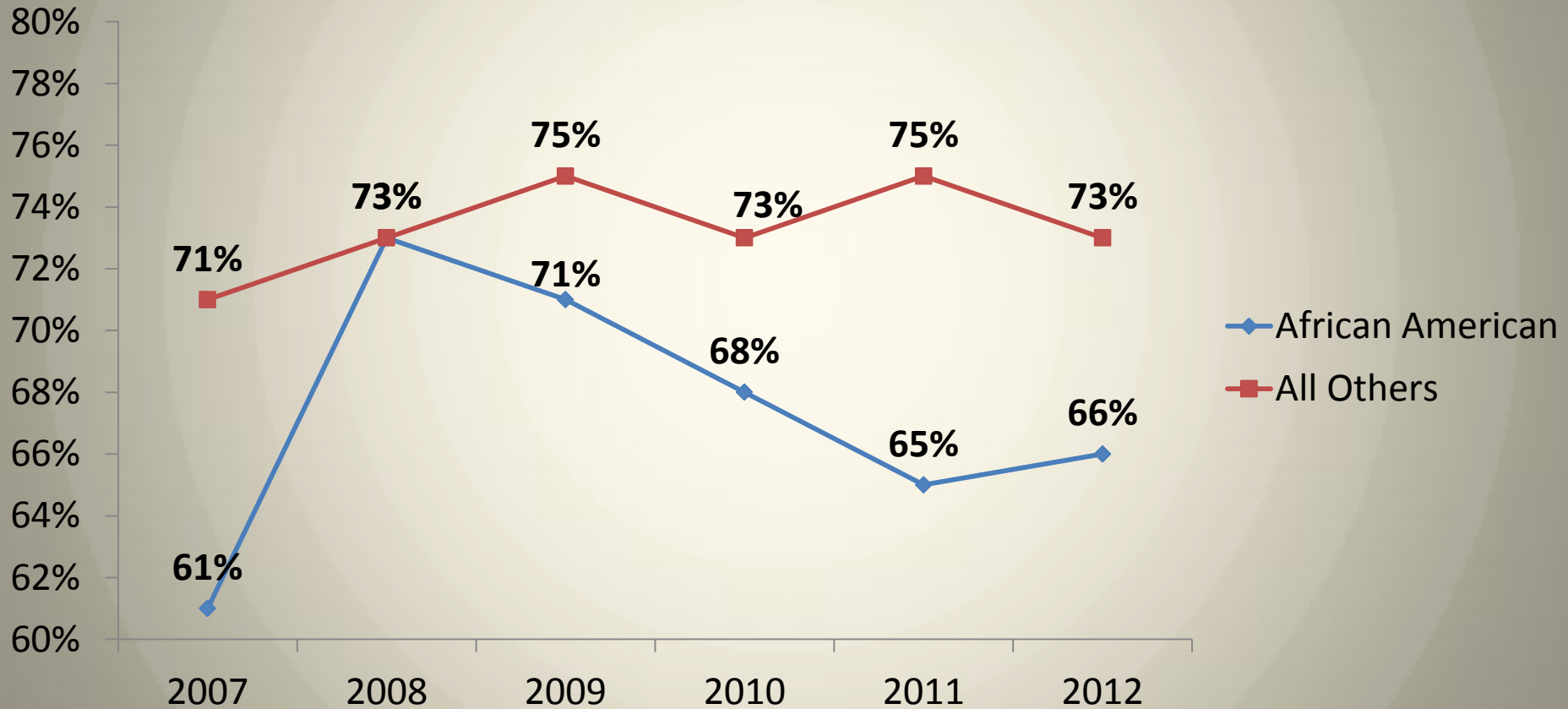
Students Reporting Two or More Races

Number of First-Time Beginners Two or More Races



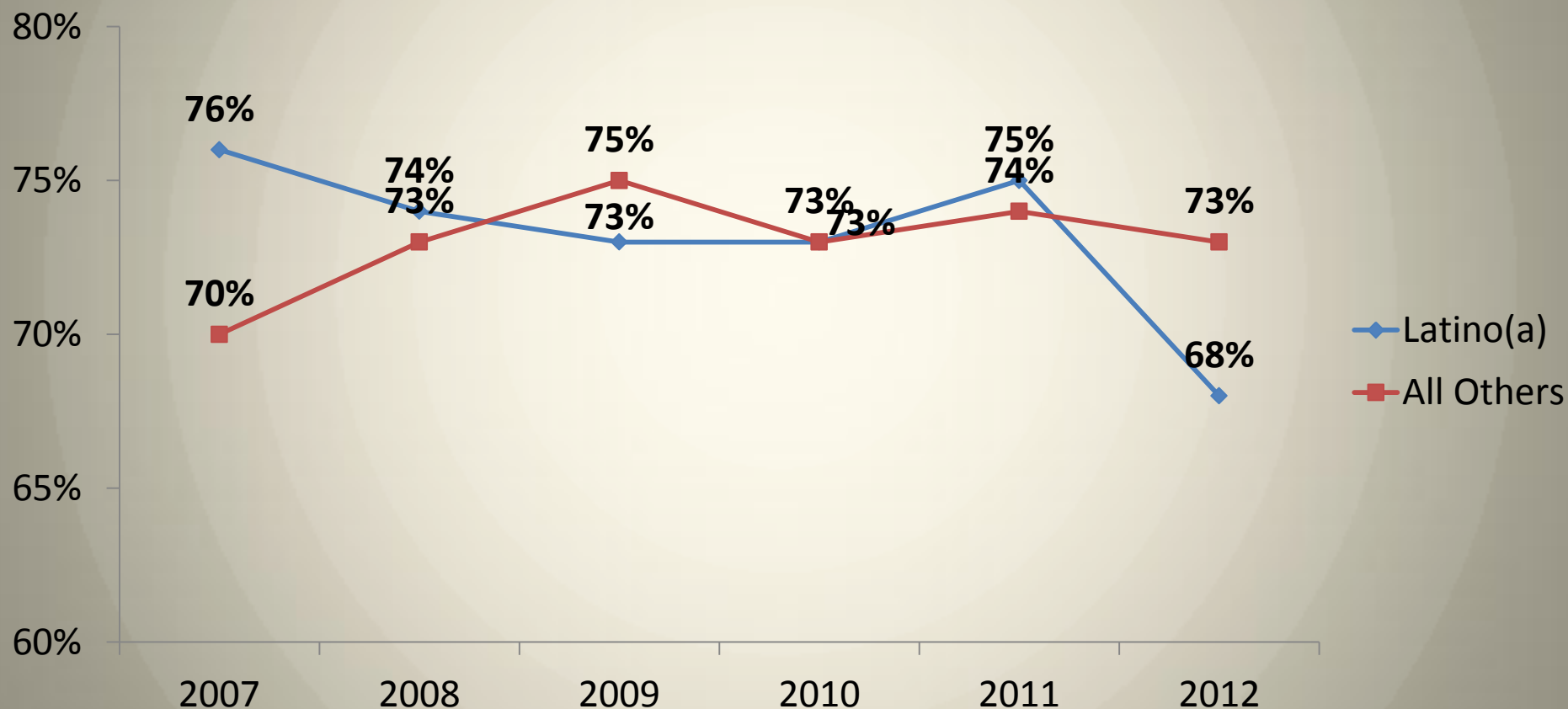
African American Retention Rates

First-Time, Full-Time Beginners One-Year Retention Rates



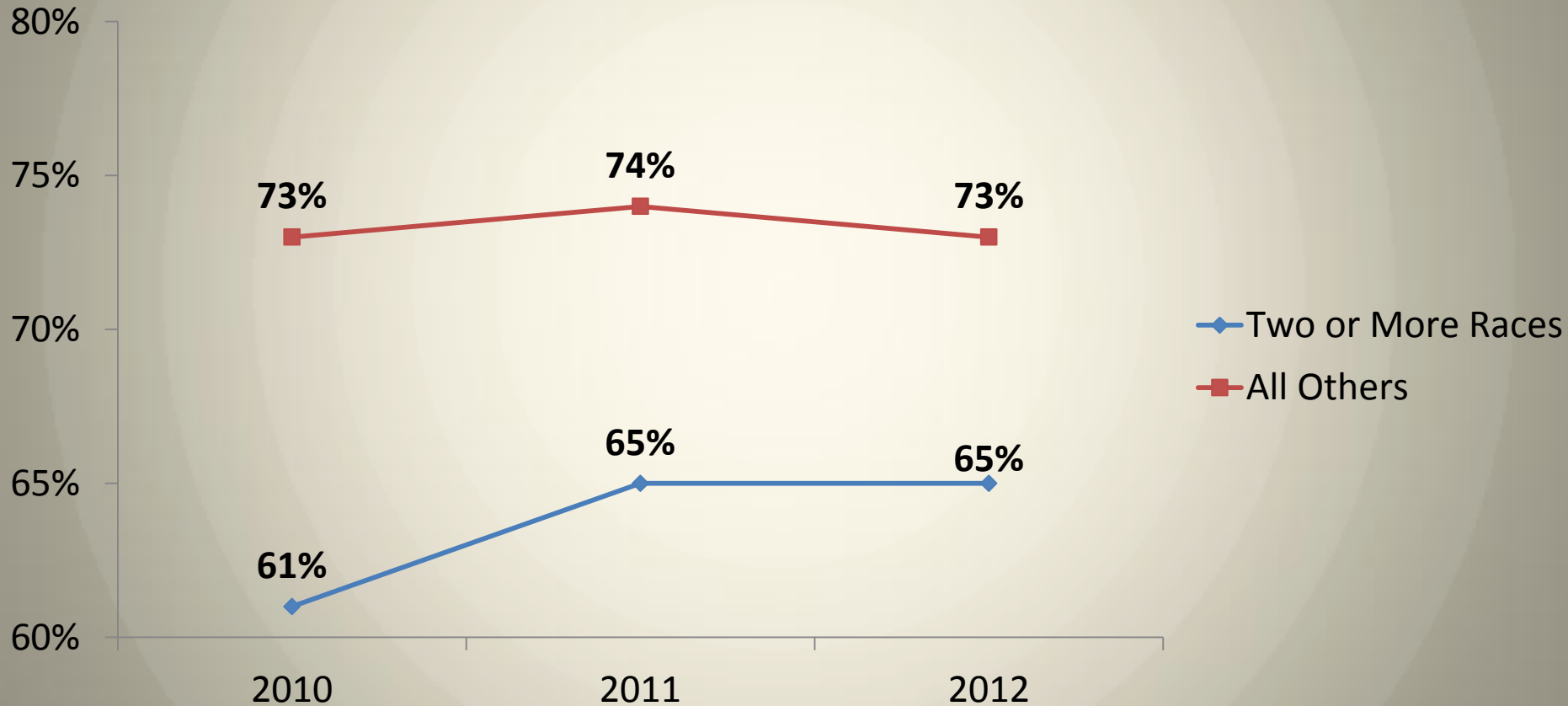
Latino(a) Retention Rates

First-Time, Full-Time Beginners One-Year Retention Rates

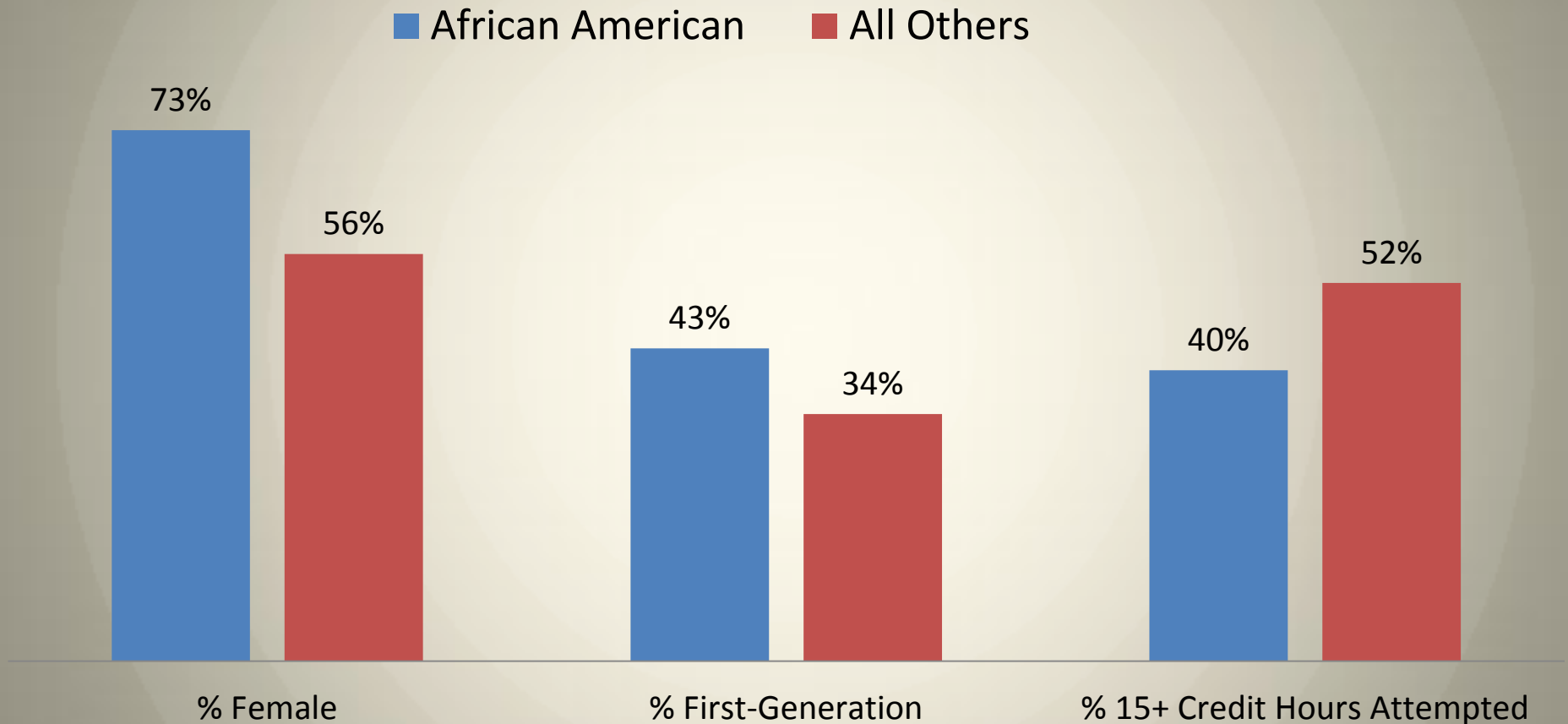


Two or More Races Retention Rates

First-Time, Full-Time Beginners One-Year Retention Rates



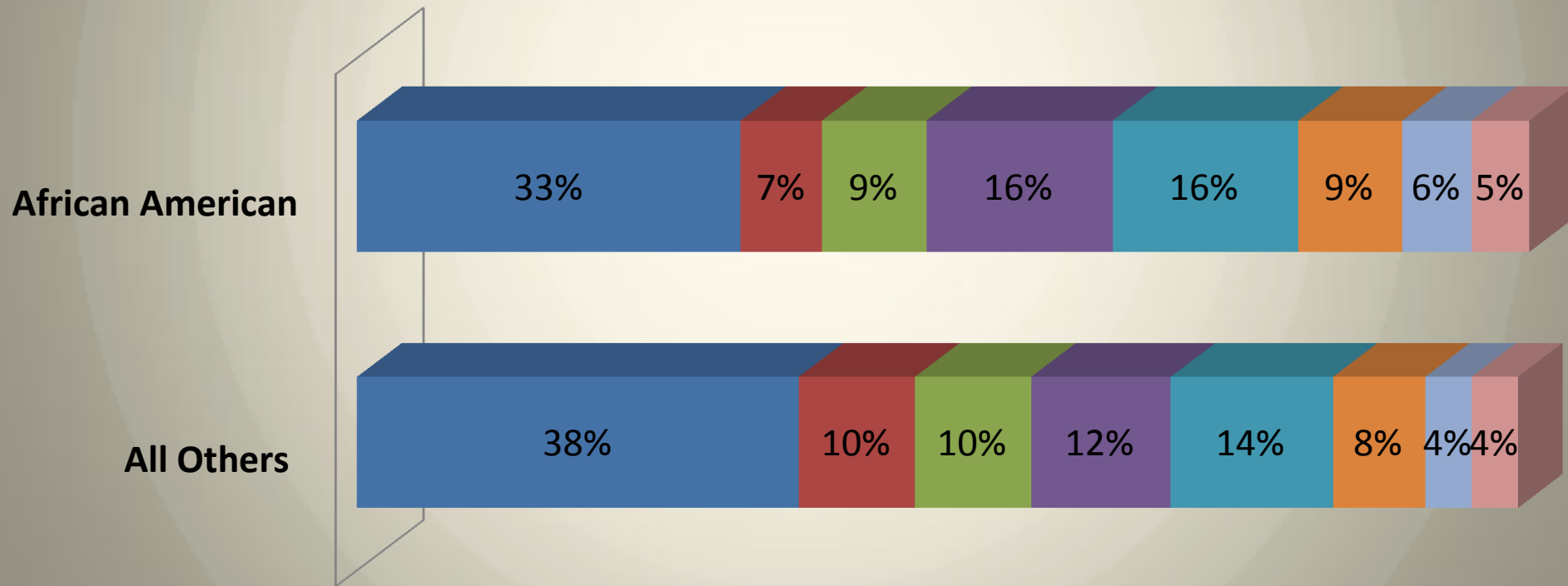
2013 African American FT, FT Beginners



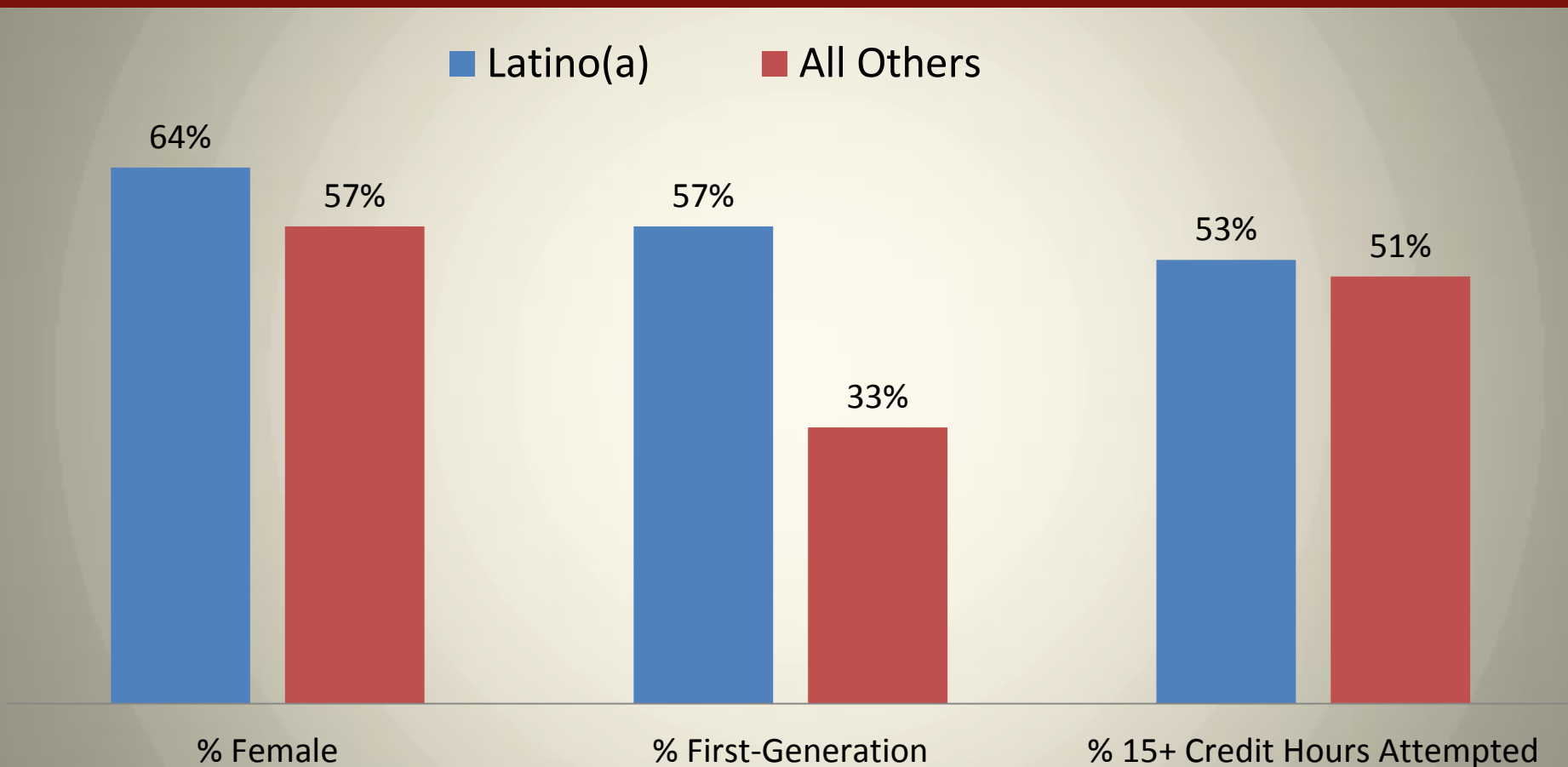
Working For Pay Off-Campus

Percent First-Time, Full-Time Beginners Planned Hours Per Week

■ 0 ■ 1-5 ■ 6-10 ■ 11-15 ■ 16-20 ■ 21-25 ■ 26-30 ■ More than 30



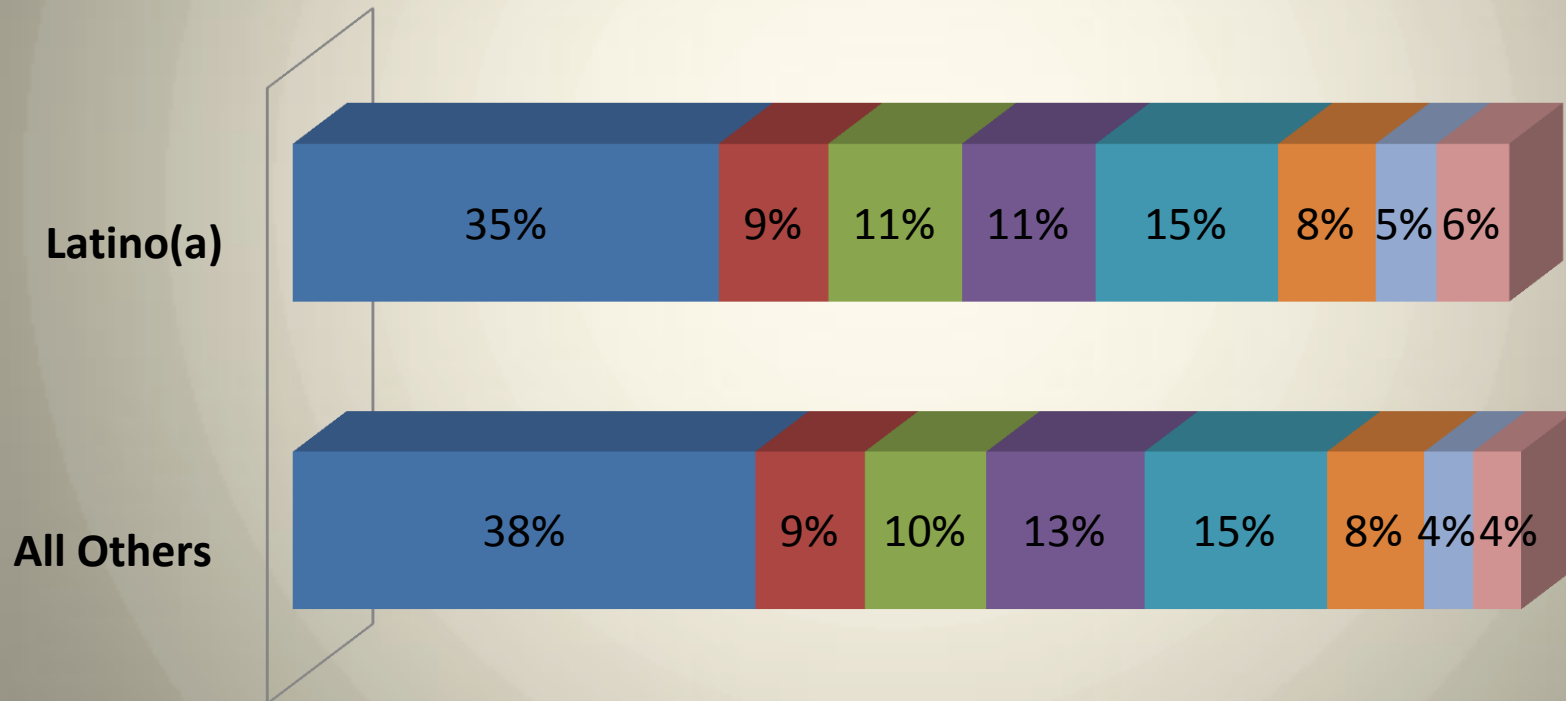
2013 Latino(a) FT, FT Beginners



Working For Pay Off-Campus

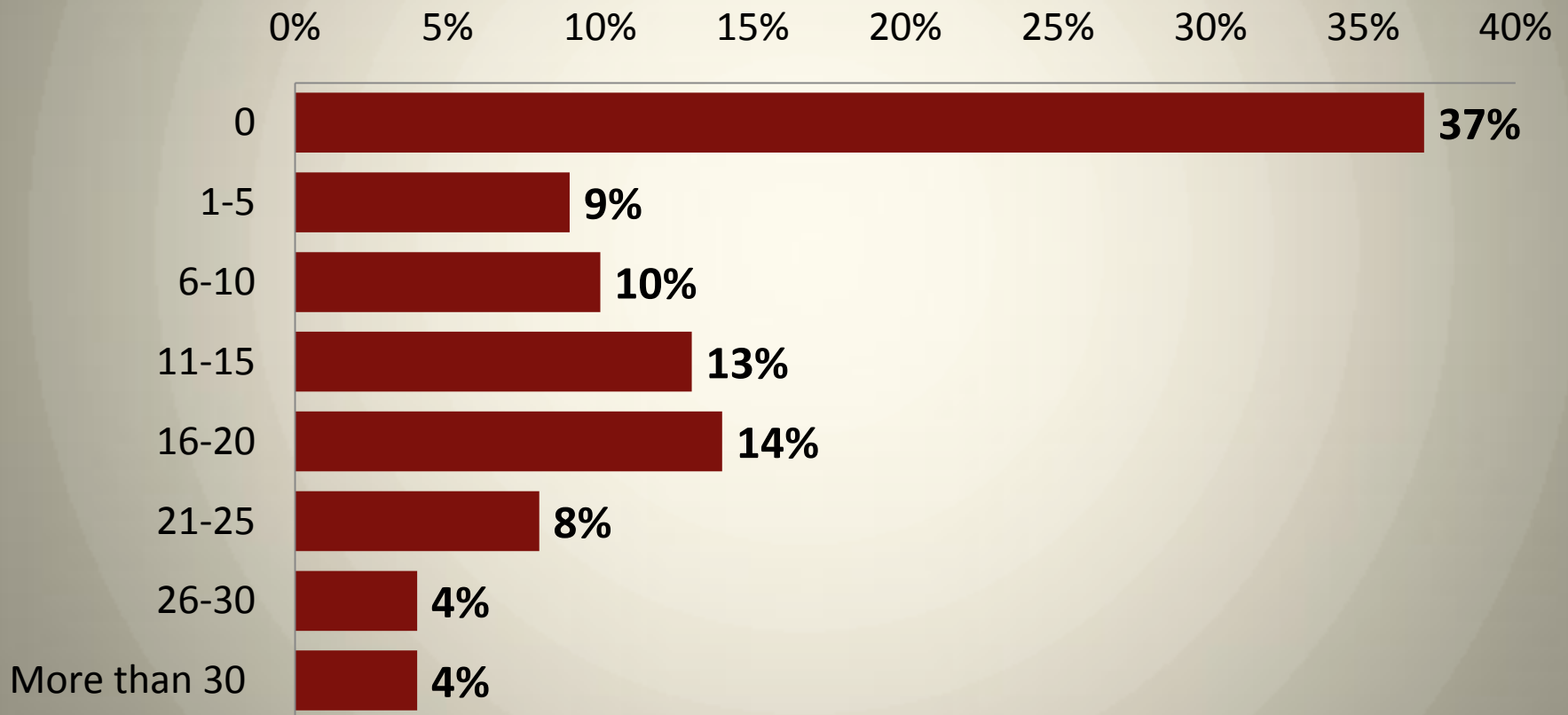
Percent First-Time, Full-Time Beginners Planned Hours Per Week

■ 0 ■ 1-5 ■ 6-10 ■ 11-15 ■ 16-20 ■ 21-25 ■ 26-30 ■ More than 30



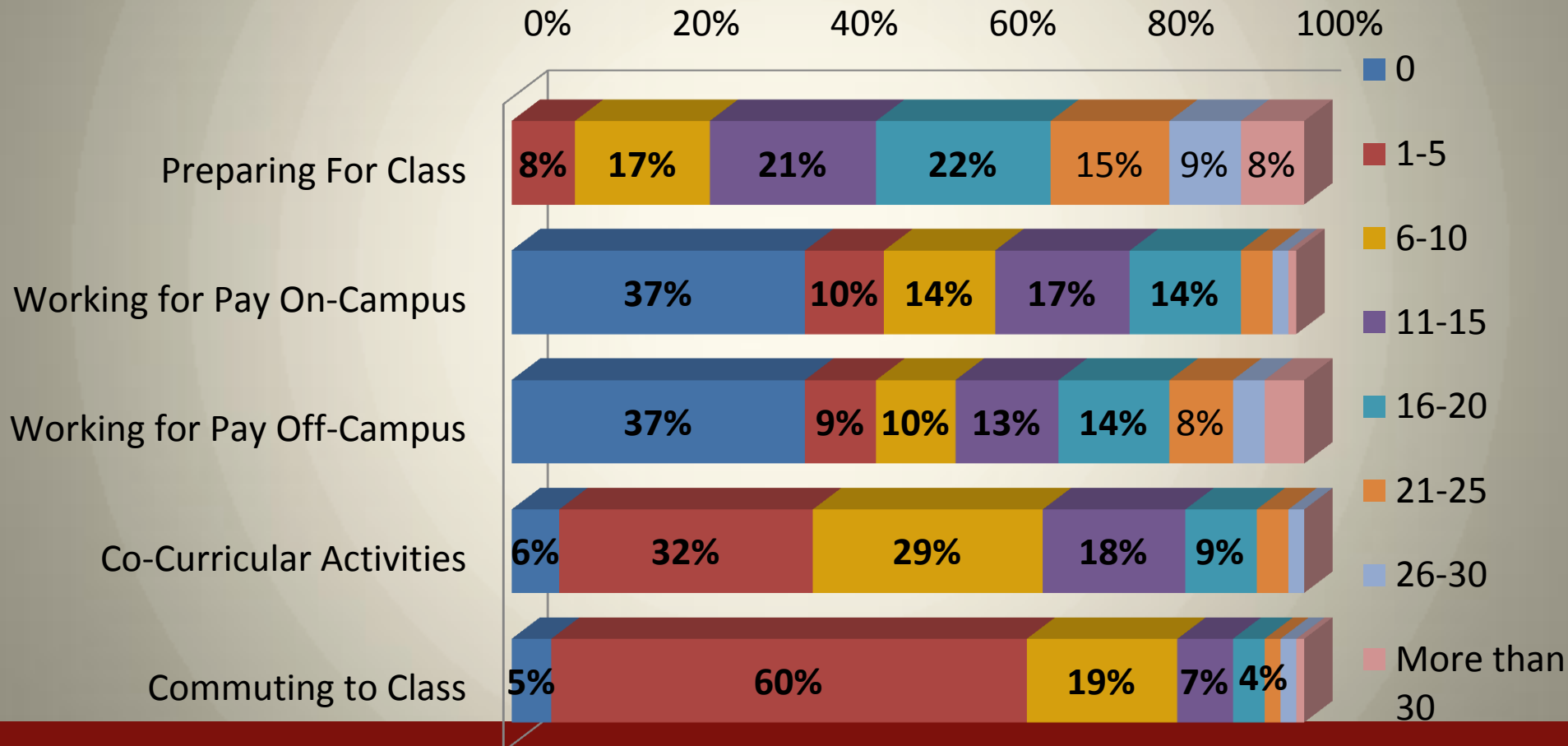
Working Off-Campus

First-Time, Full-Time Beginners Percent Hours Planned to Work Off-Campus Per Week for Pay



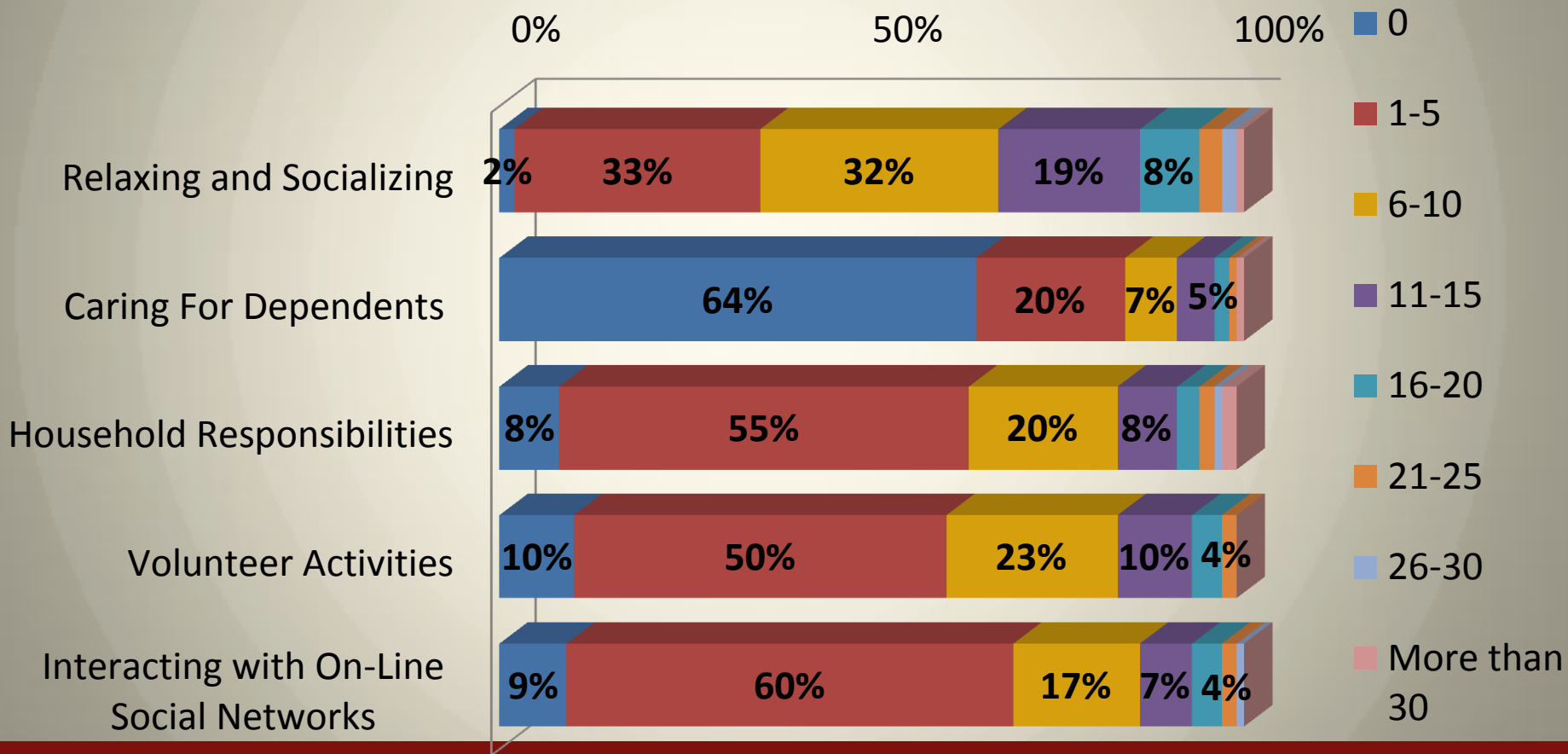
Time Commitments

First-Time, Full-Time Beginners Percent Hours Per Week Planned to Engage in Activities



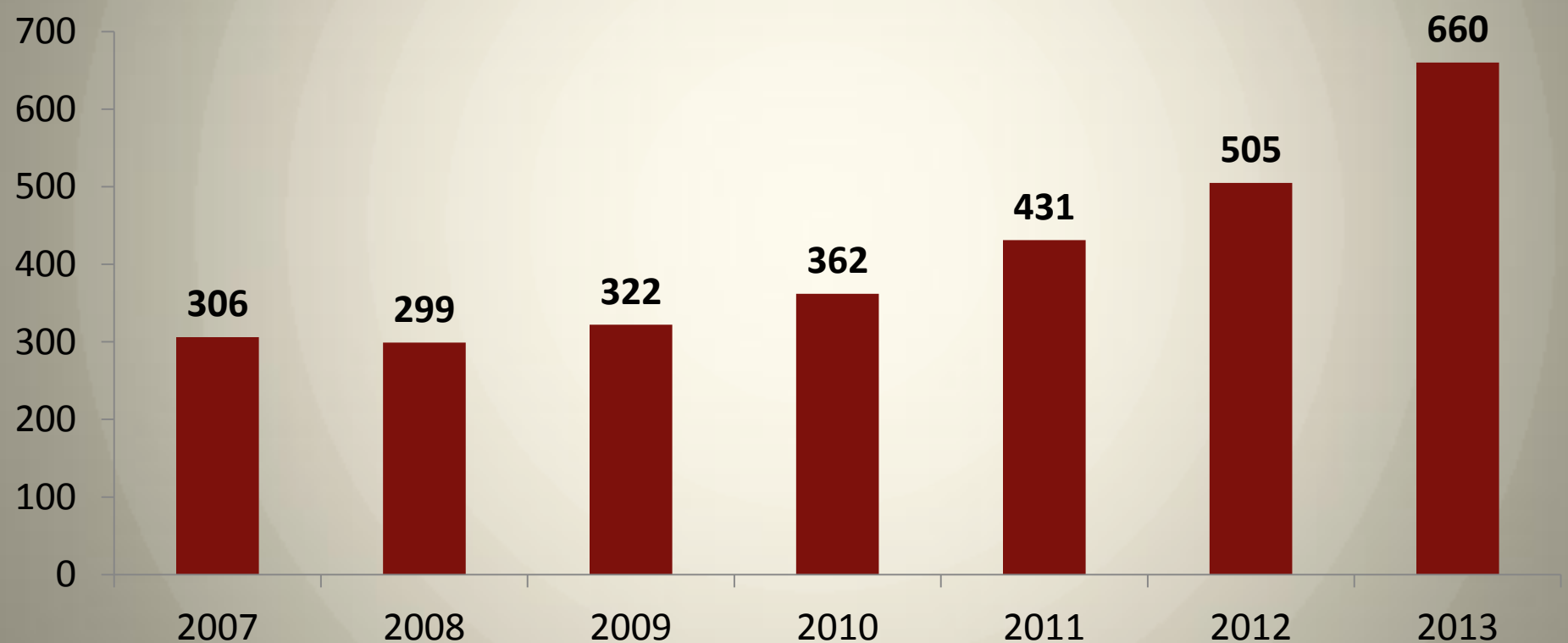
Time Commitments

First-Time, Full-Time Beginners Percent Hours Per Week Planned to Engage in Activities



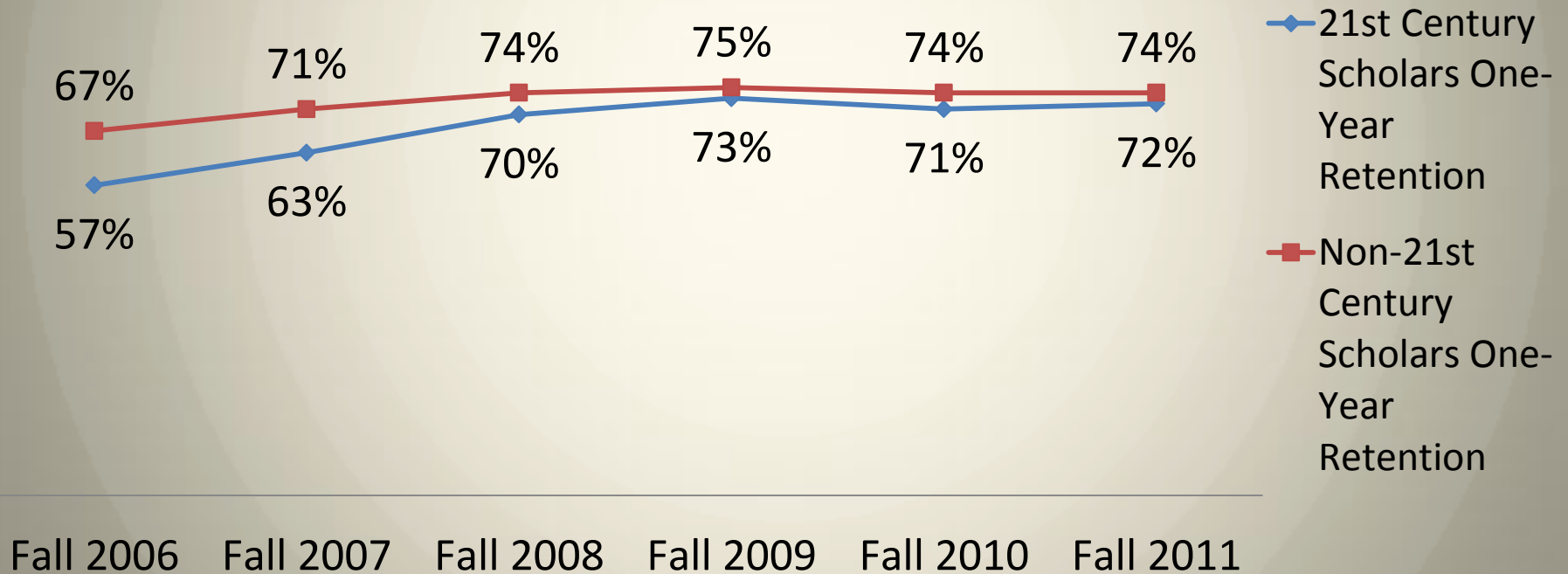
Twenty First Century Scholars

Number of First-Time Beginners Participating in Twenty First Century Scholars Program



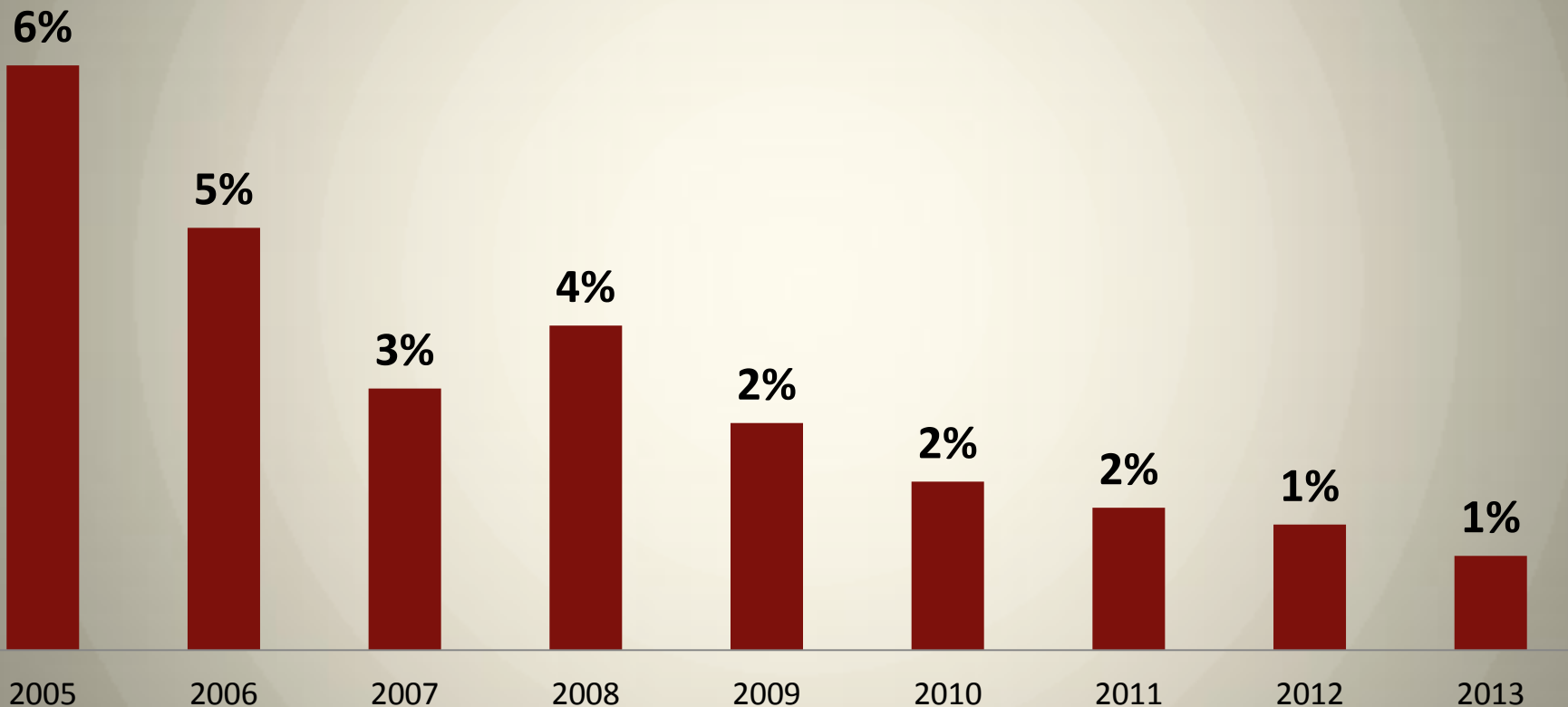
Closing the Gap

Closing the One-Year Retention Rate Gap Between Twenty-First Century Scholars and All Other Students, Fall 2006 - Fall 2011



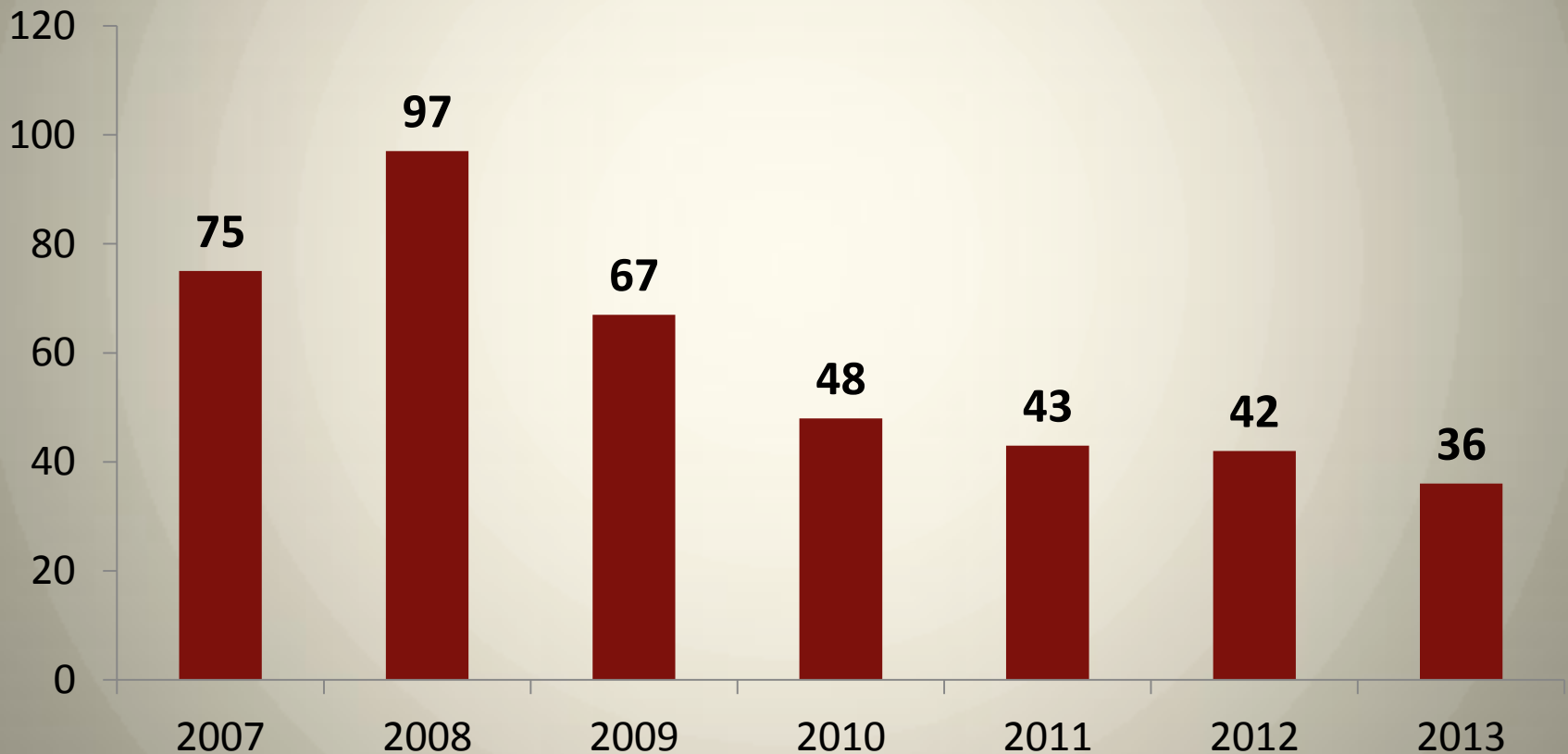
Age 25 or Older

Percent of First-Time Beginning Freshman Age 25 or Older , 2005 - 2013



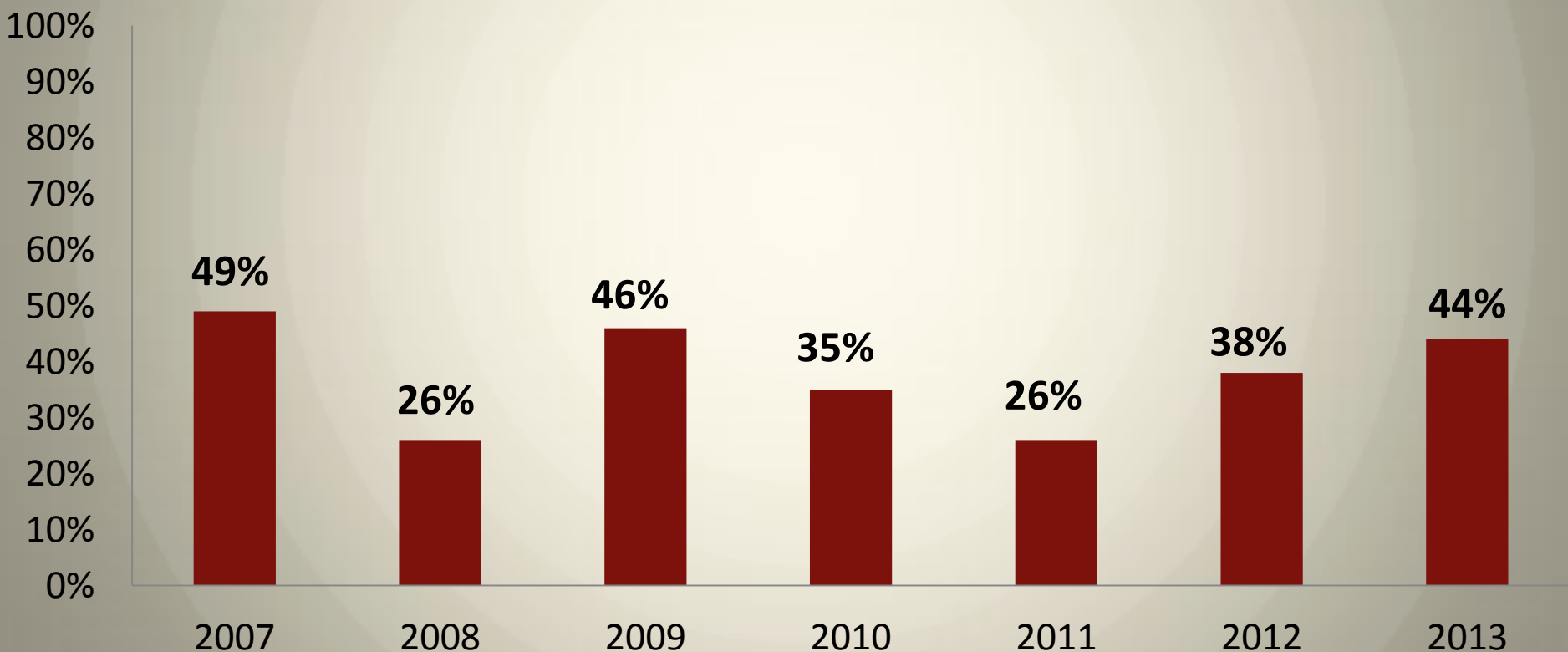
Age 25 or Older

Number First-Time Beginners Age 25 or Older

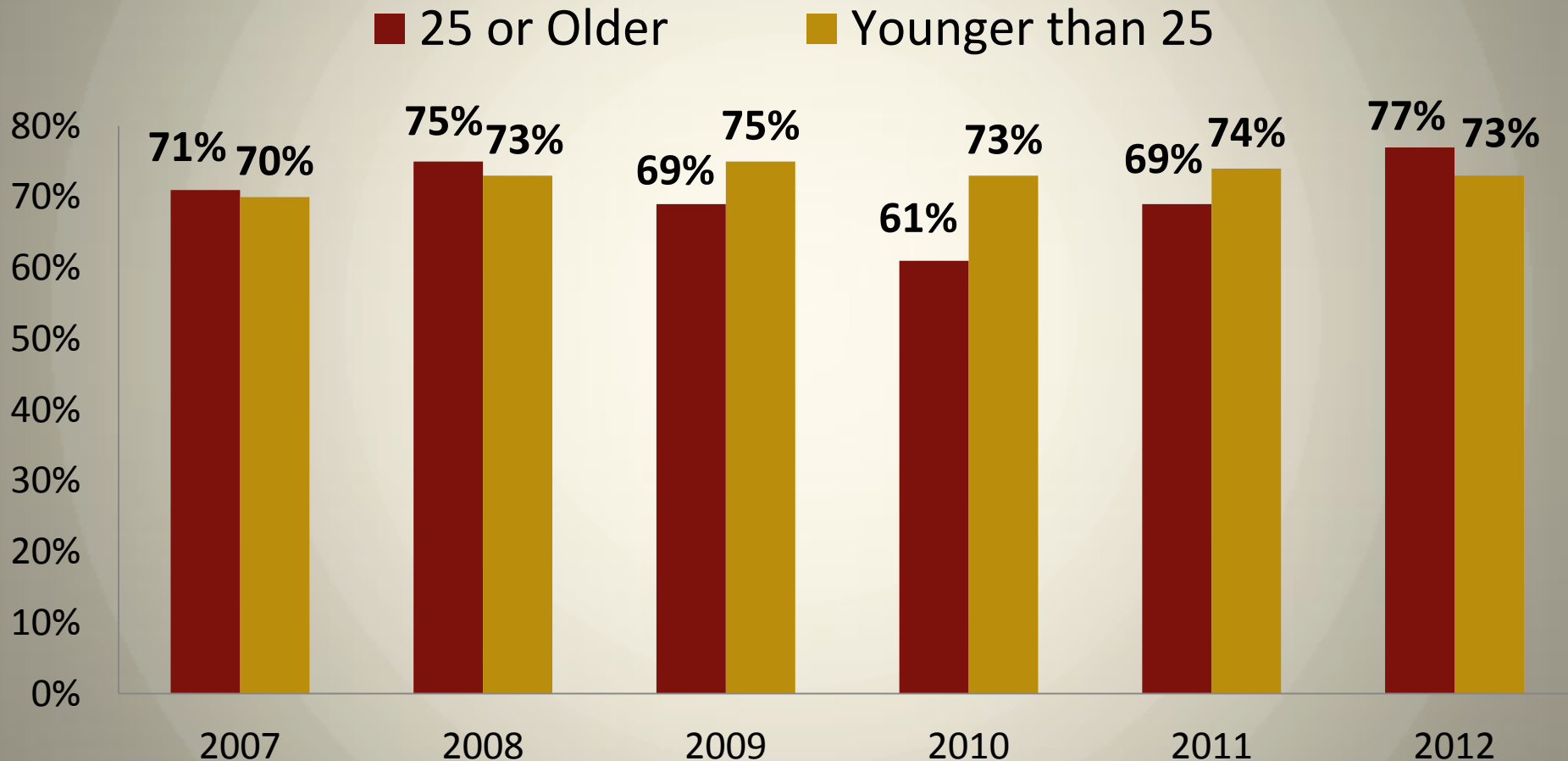


Age 25 or Older Part-Time

Percent of First-Time Beginning Freshman Age 25 or Older that Enrolled Part-Time in First Semester 2007 - 2013

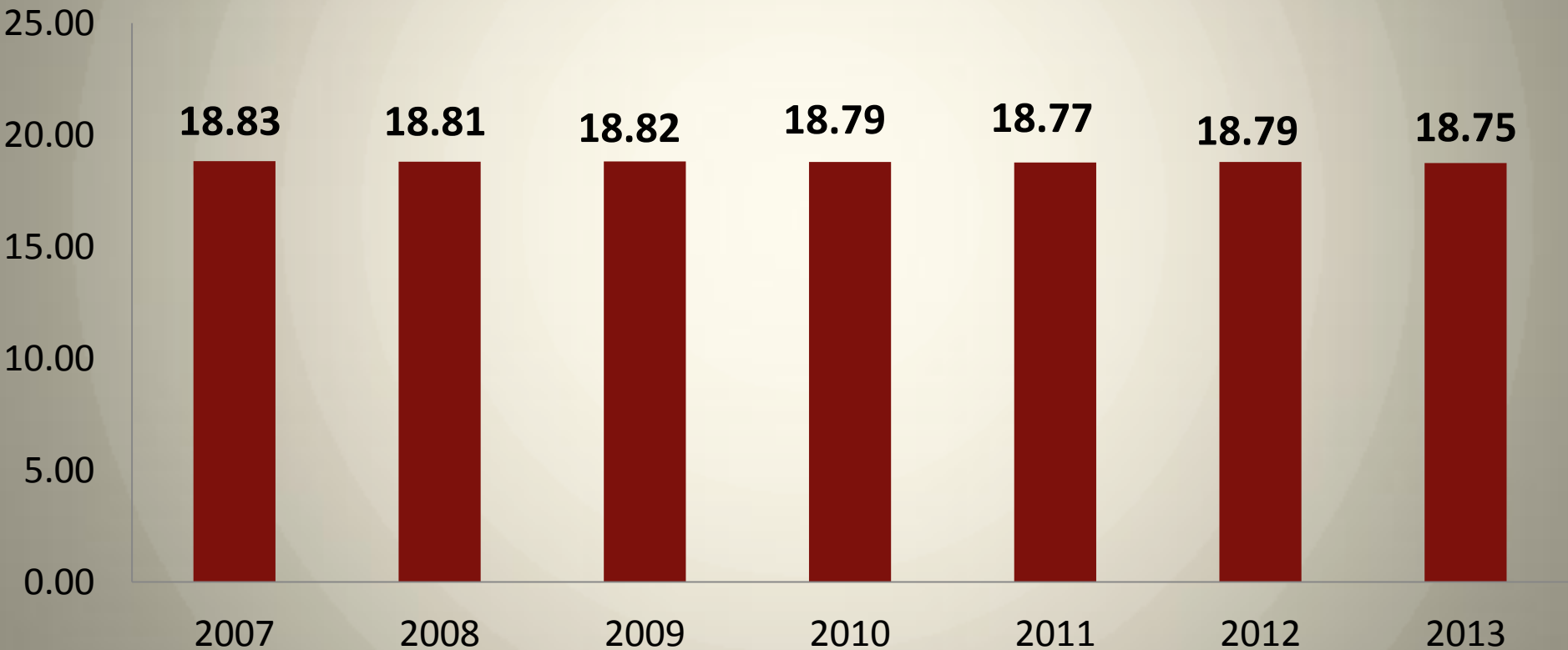


Age 25 or Older One-Year Retention (Full-Time Beginners)



Median Age

First-Time Beginners Median Age



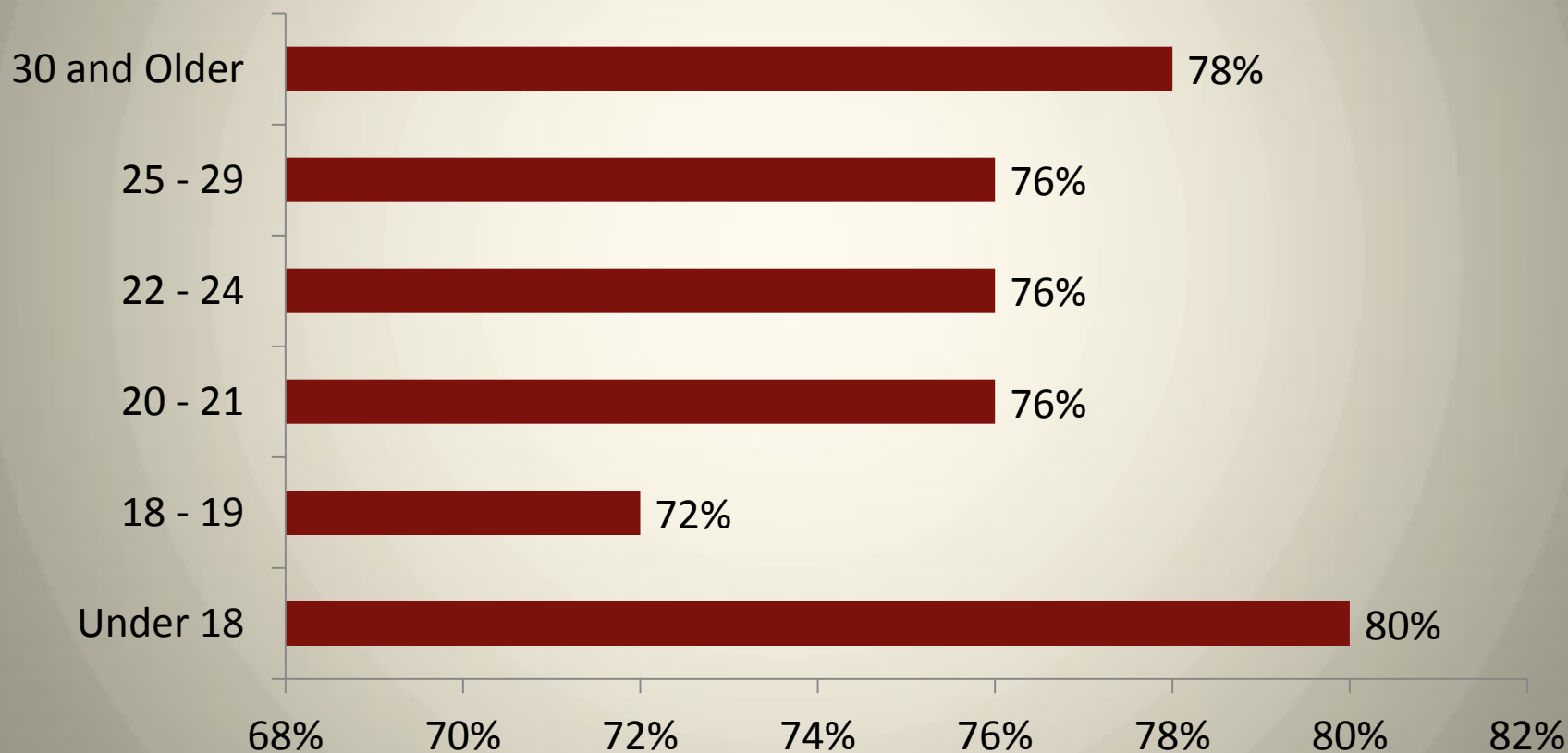
Fall 2012 Age Category by Number of Students

First-Time, Full-Time Indianapolis Only Beginners



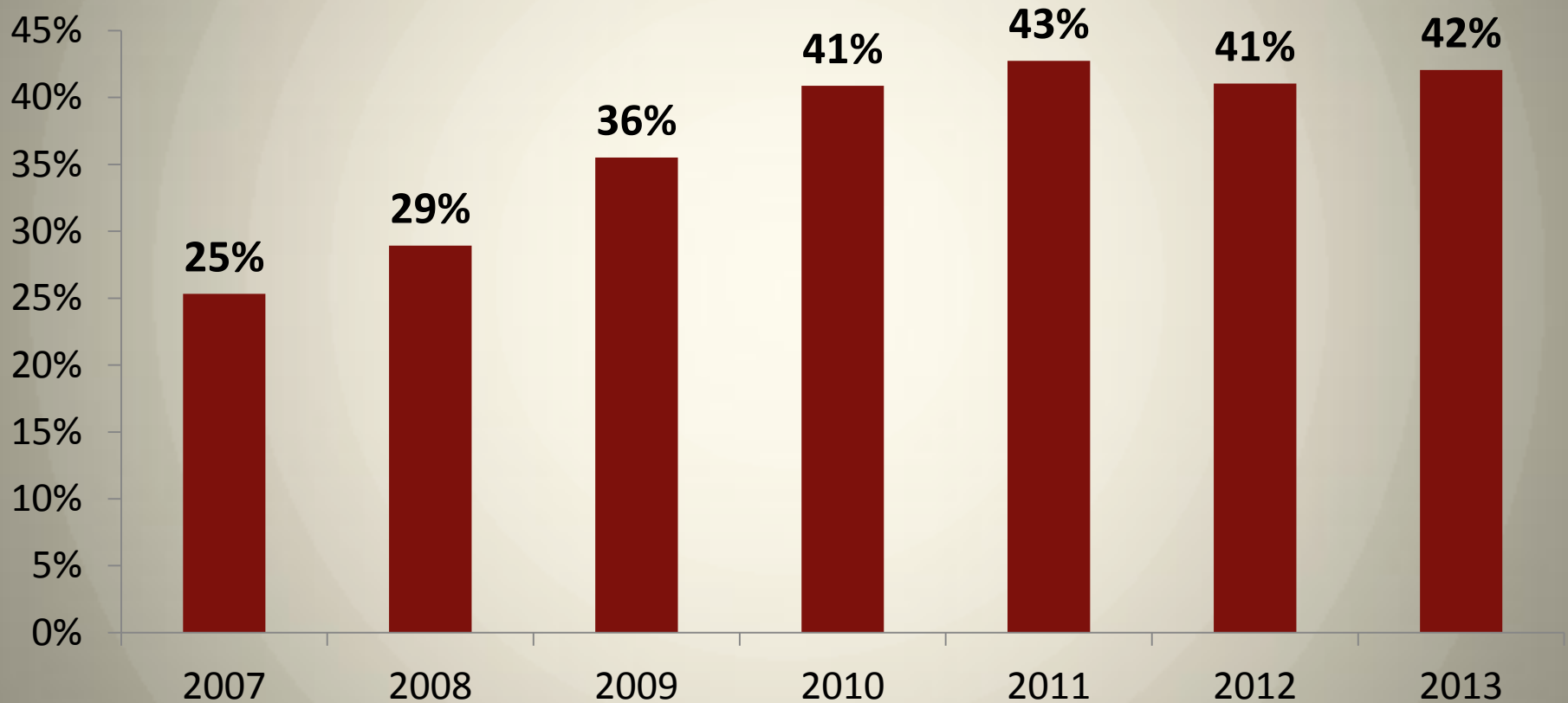
Fall 2012 Age Category by One-Year Retention Rate

First-Time, Full-Time Indianapolis Only Beginners



Pell Grant Recipients

Percent of First-Time Beginners Pell Grant Recipients

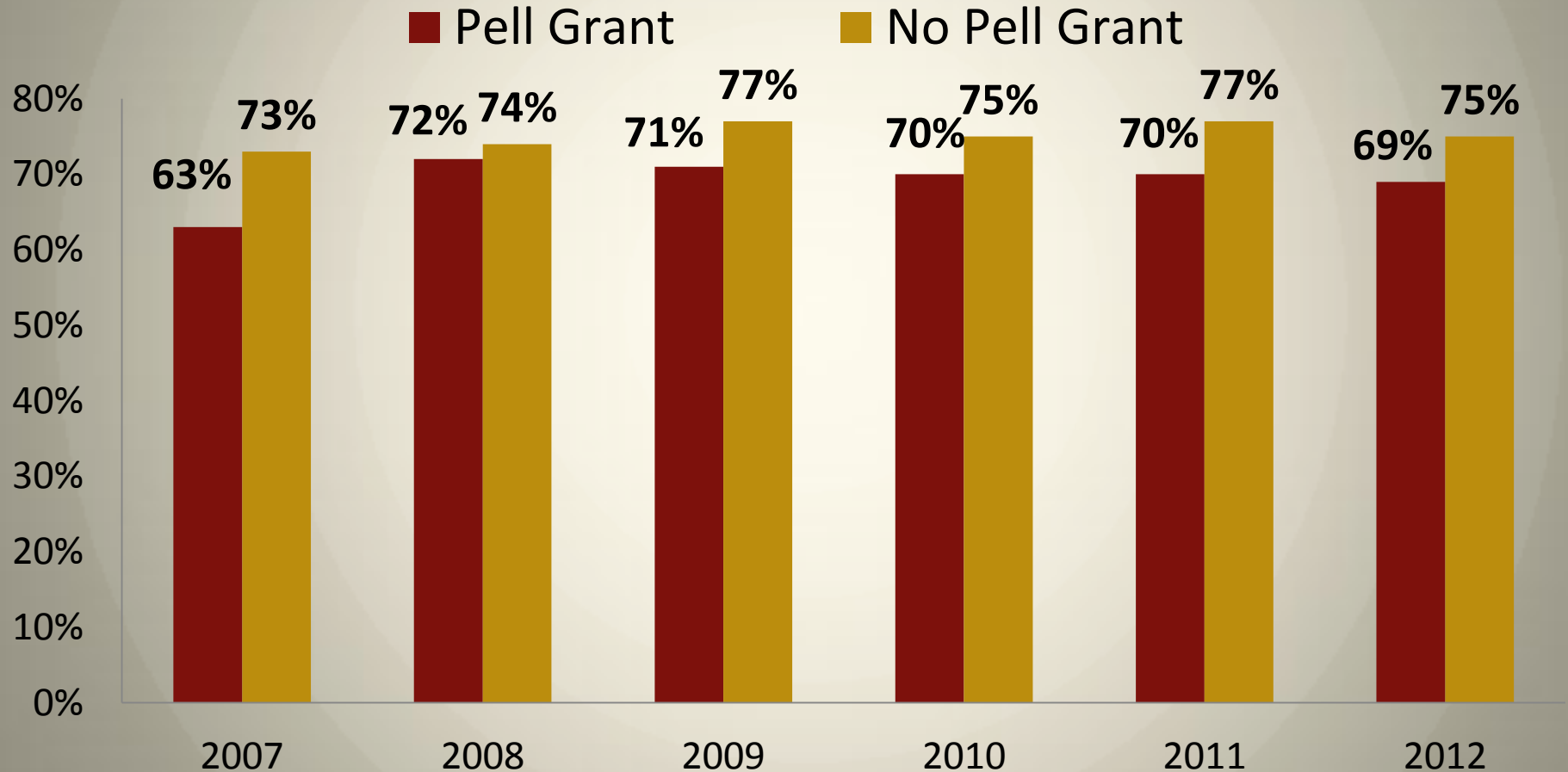


Pell Grant Recipients

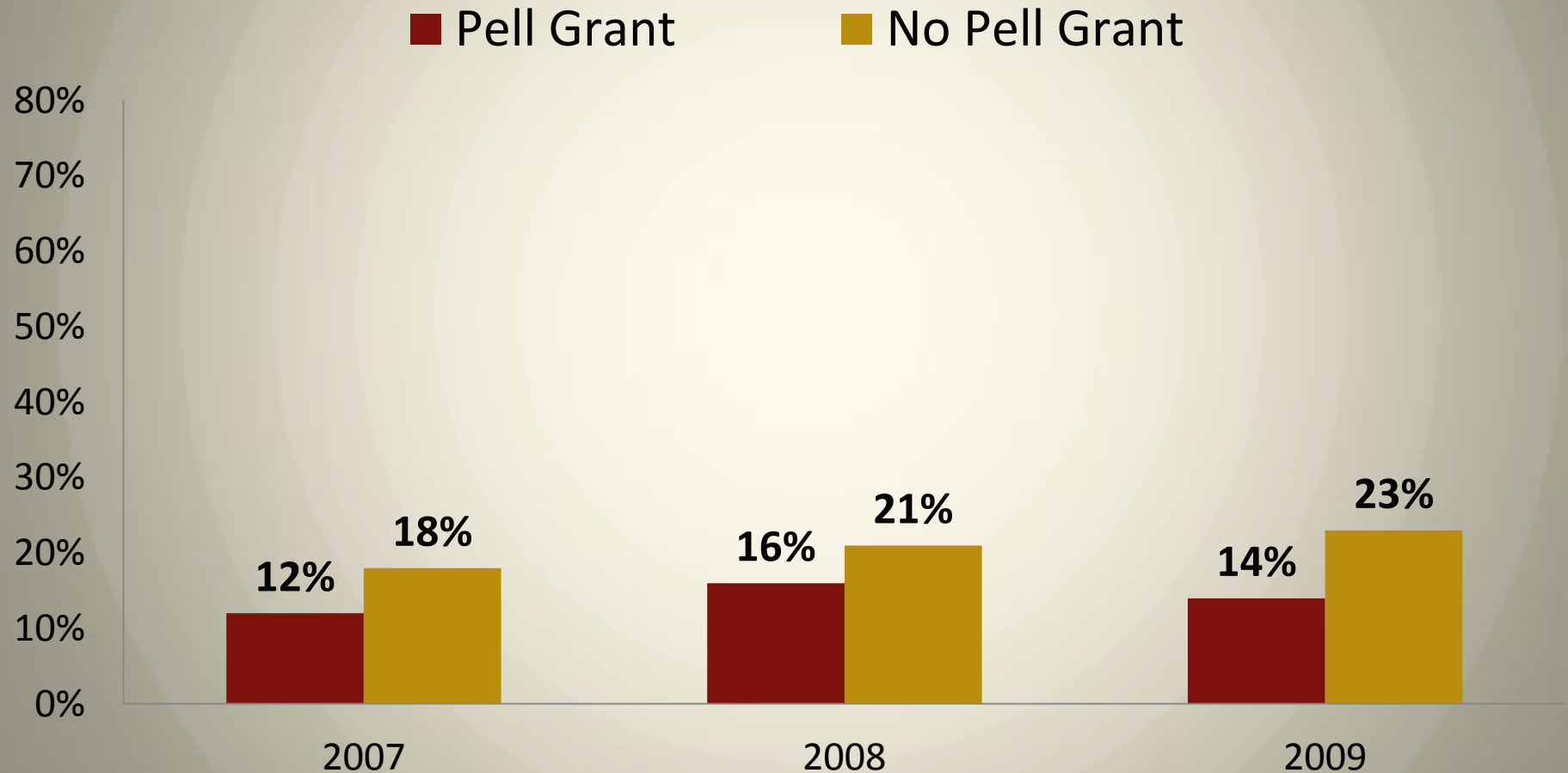
Number of First-Time Beginners Pell Grant Recipients



Pell Grant One-Year Retention



Pell Grant Four-Year Graduation Rate



Concerns About Finances

**% of Entering Student Survey Responders to Question:
Do you have any concerns about your ability to finance your
college education?**

■ Not Pell Recipient ■ Pell Recipient

Major (I am not sure that I will have
enough funds to complete college)



11%

15%

Some (but I will probably have enough
funds)

58%

68%

None (I am confident that I will have
sufficient funds)

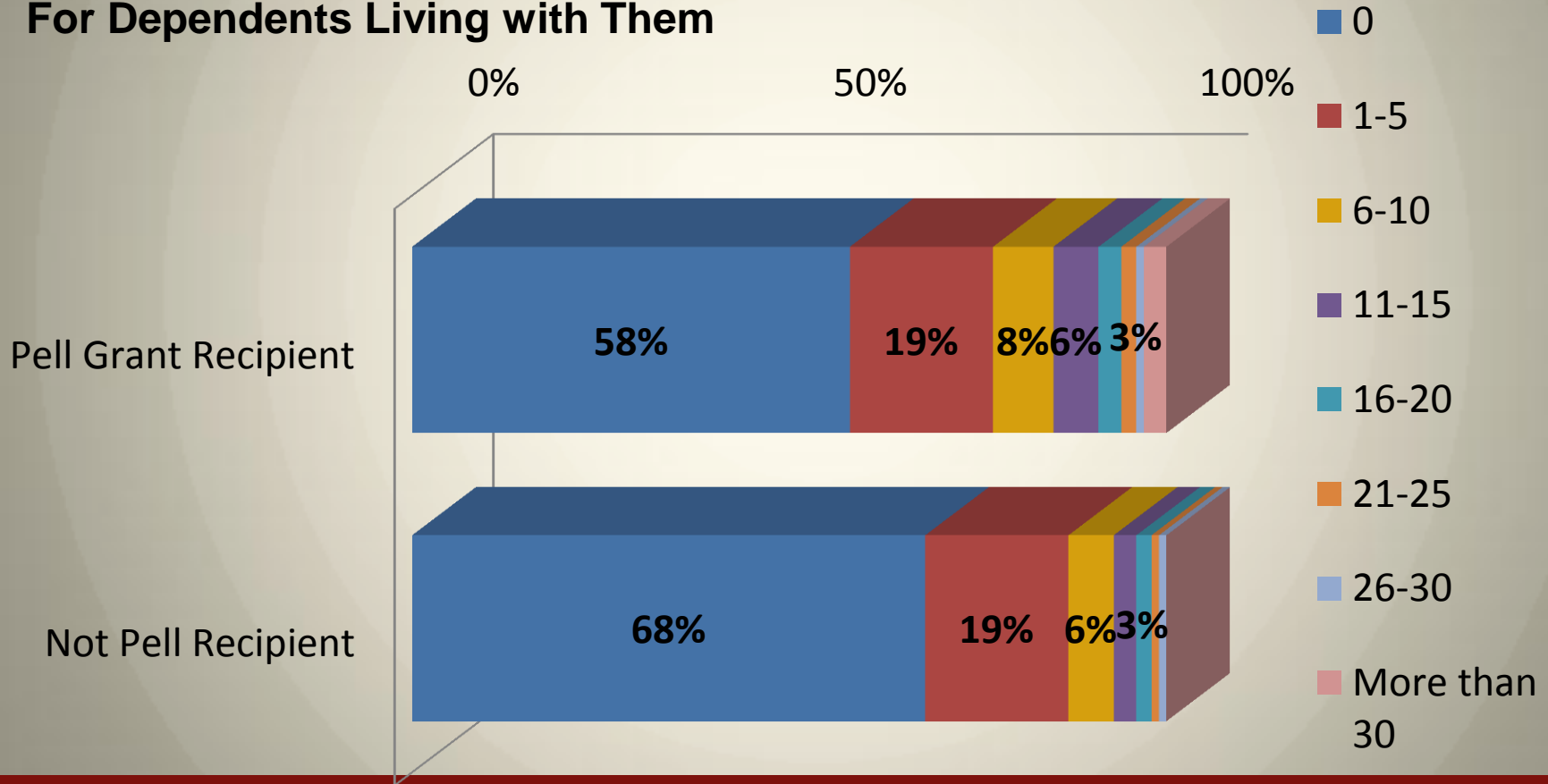
31%

17%



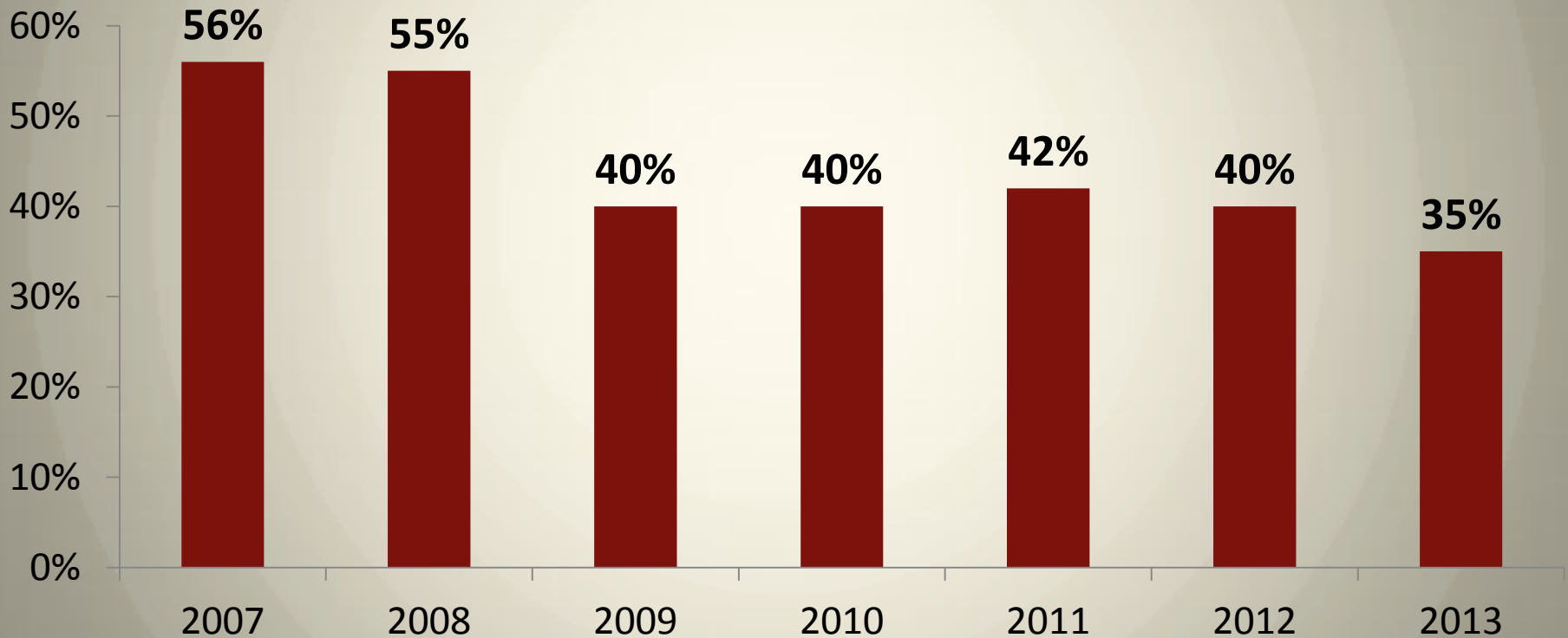
Pell Grant Recipients Plan to Spend Significantly More Time Caring For Dependents

First-Time, Full-Time Beginners Percent Hours Per Week Planned to Care For Dependents Living with Them



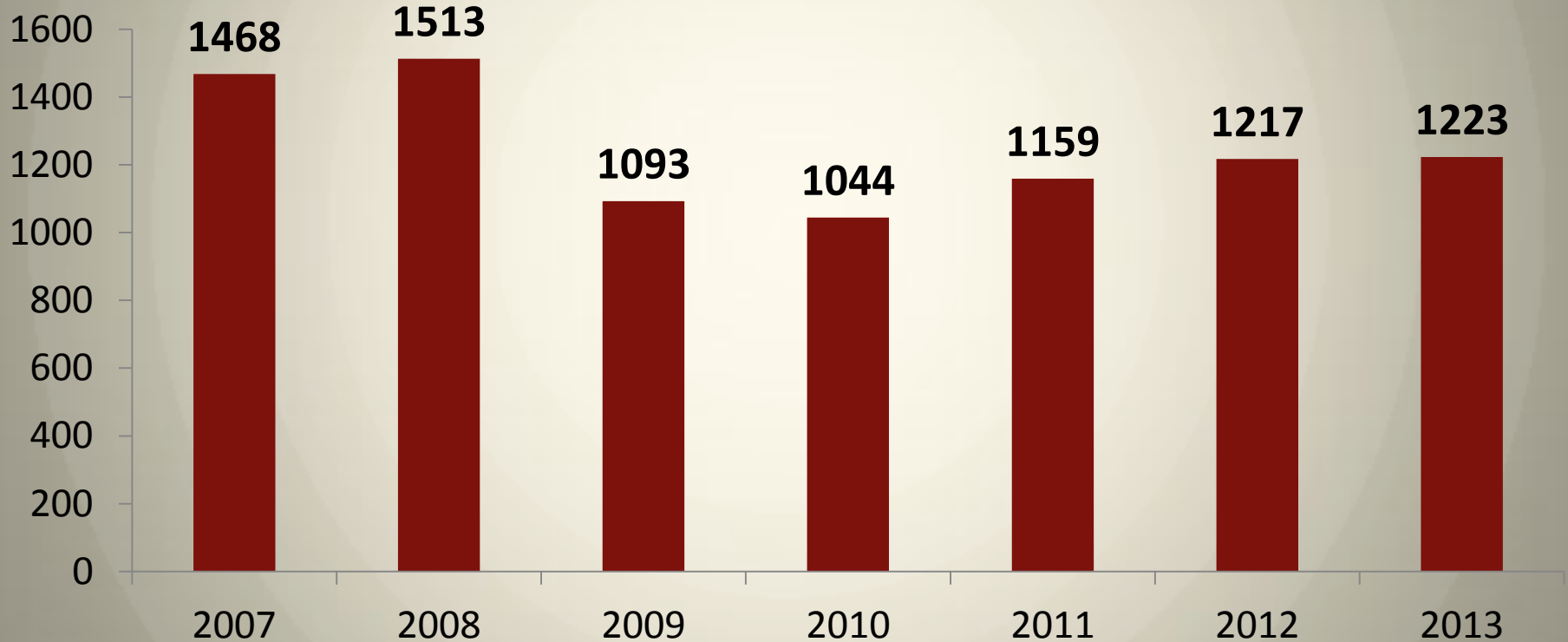
First Generation

Percent of First-Time Beginners First Generation (neither parent attended college)

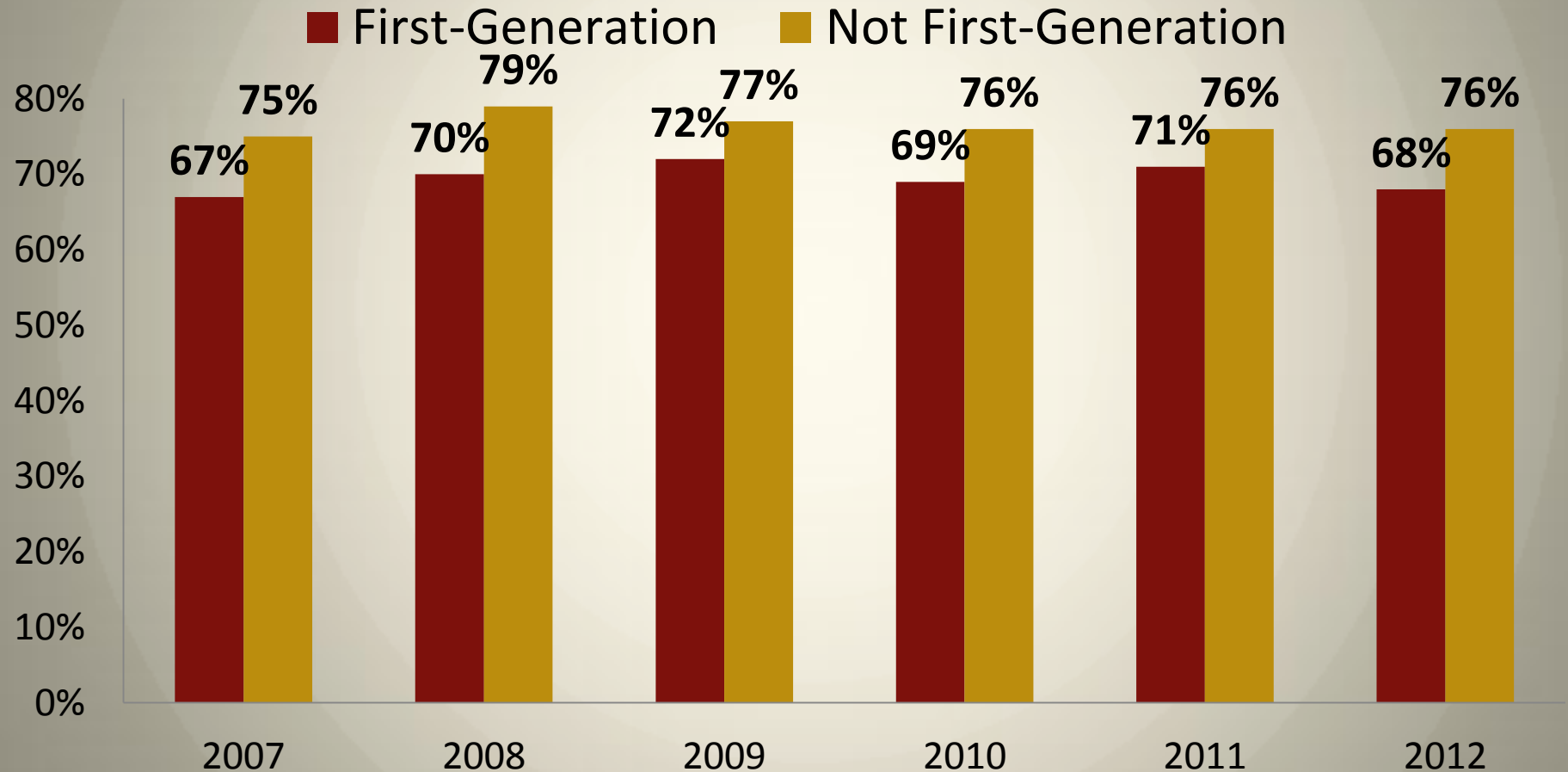


First Generation

Number of First-Time Beginners First Generation (neither parent attended college)

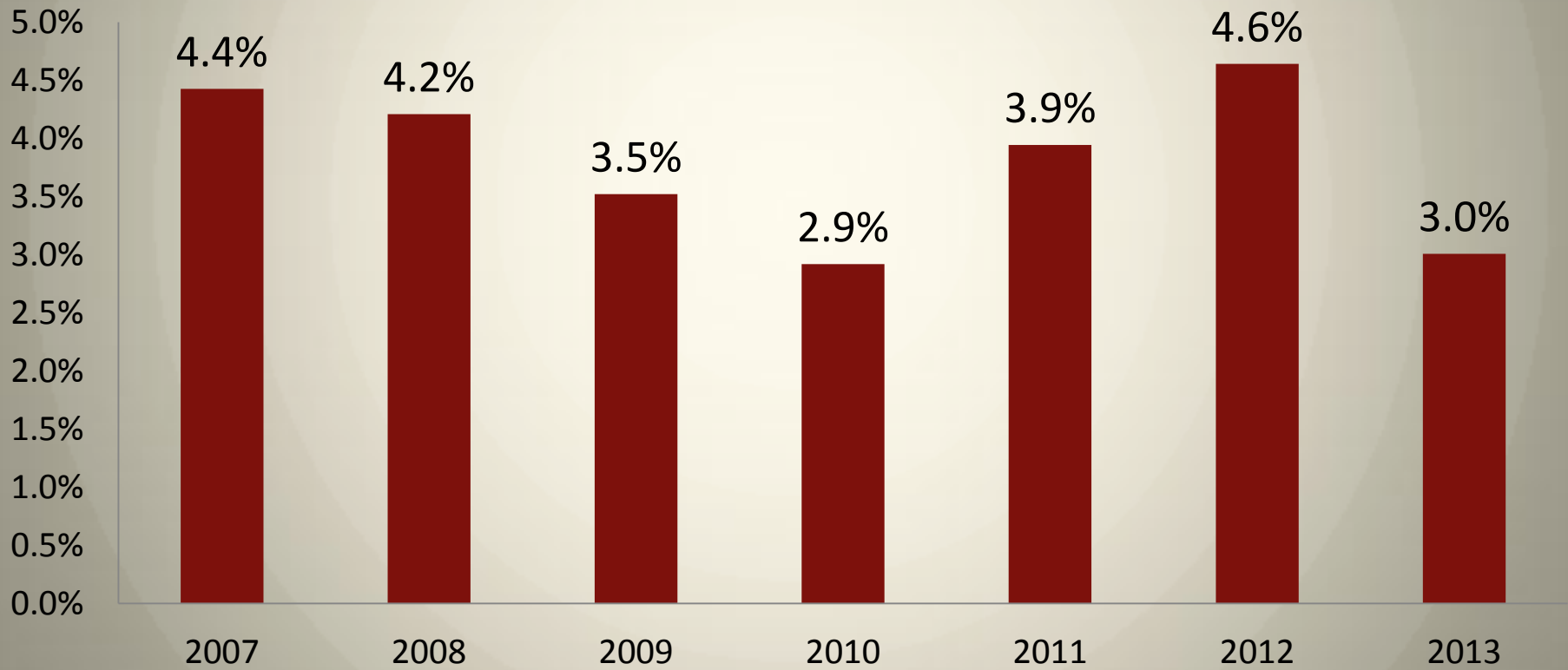


First Generation One-Year Retention



International Students

Percent of First-Time Beginners International Students

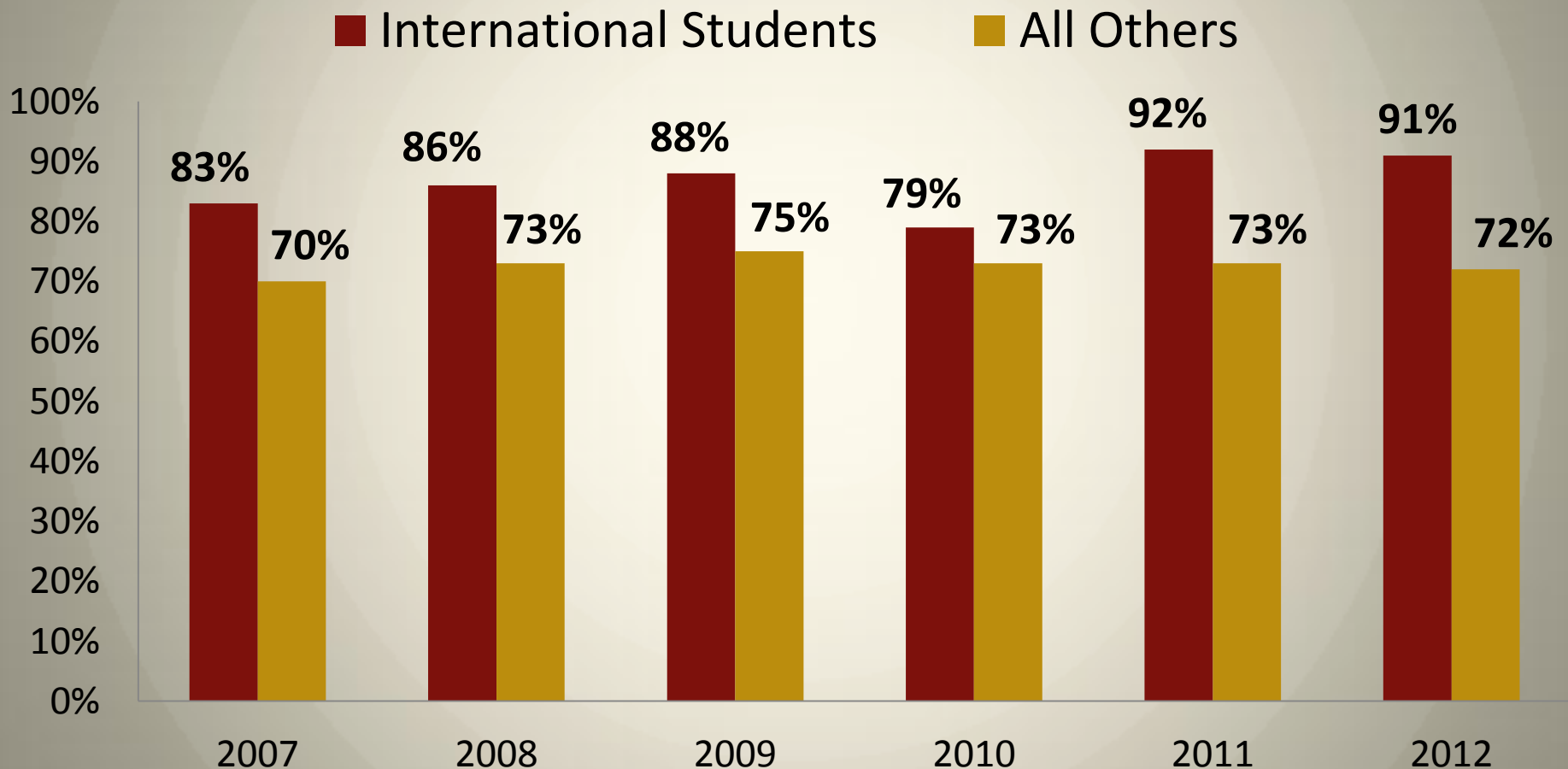


International Students

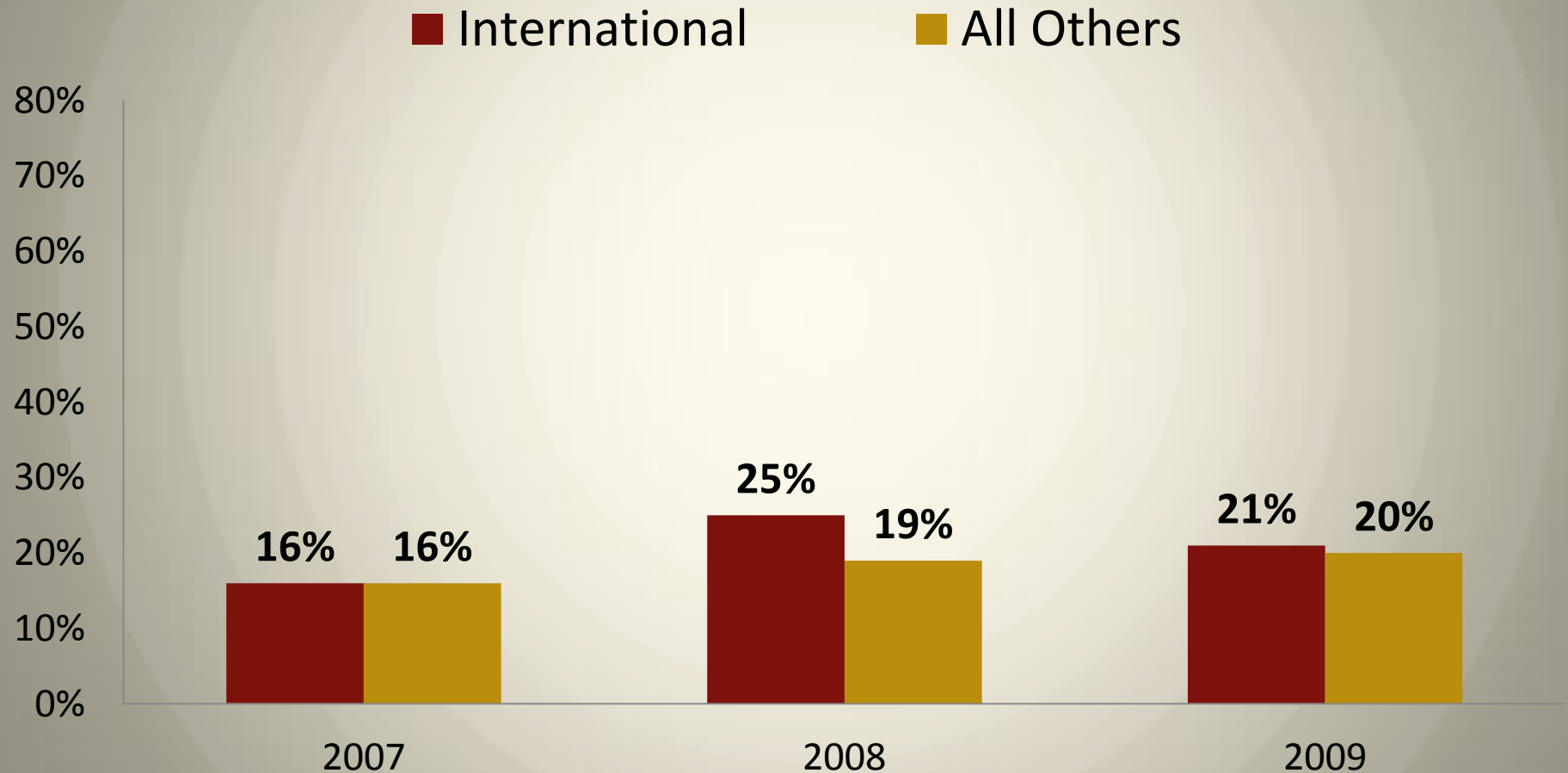
Number of First-Time Beginners International Students



International Students One-Year Retention

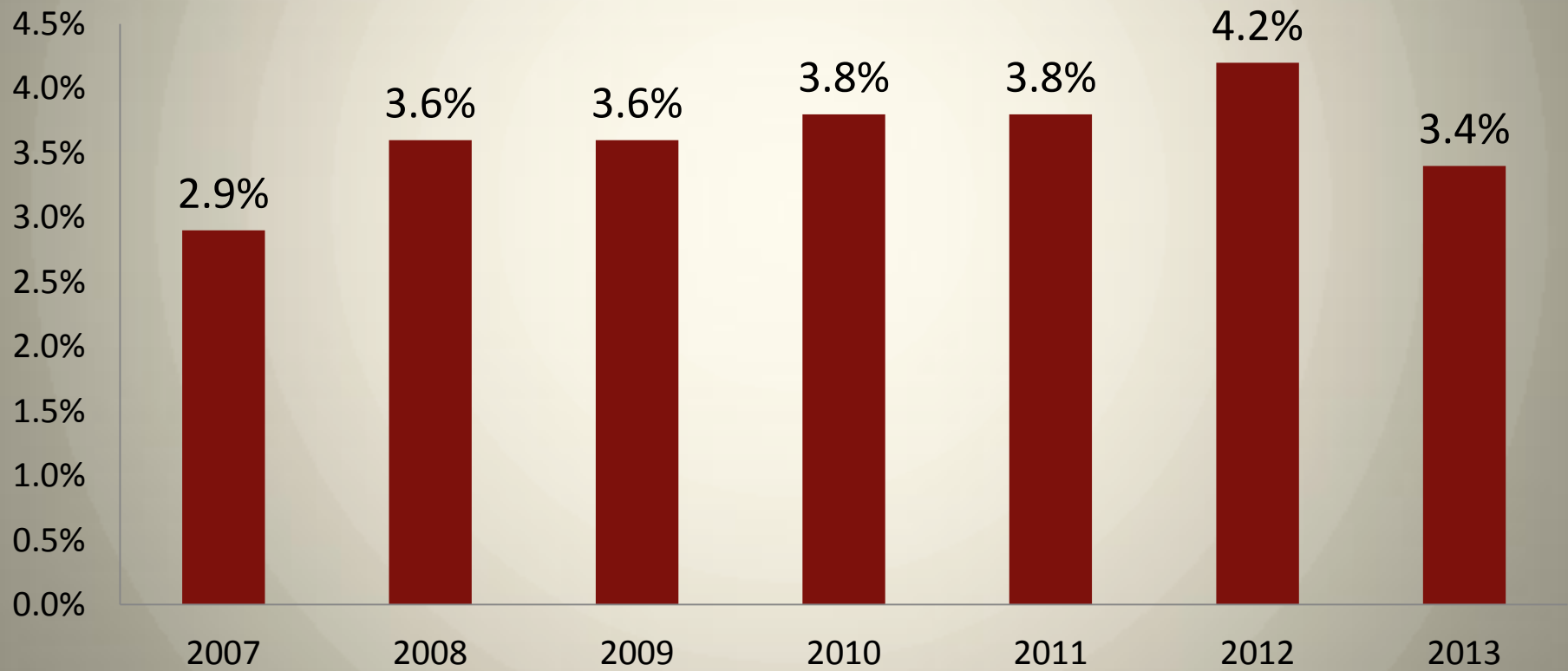


International Students Four Year Graduation Rate



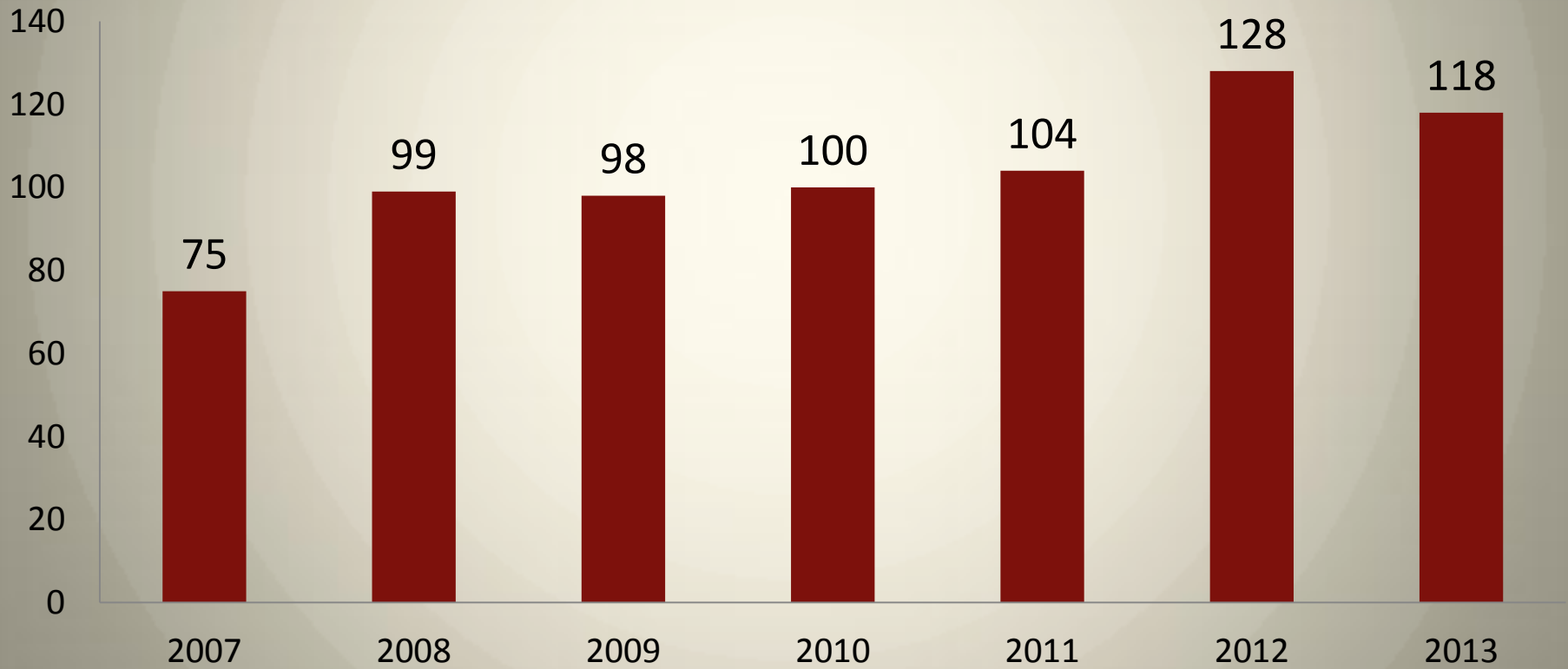
Domestic Out-of-State

Percent of First-Time Beginners Domestic Non-Indiana Resident

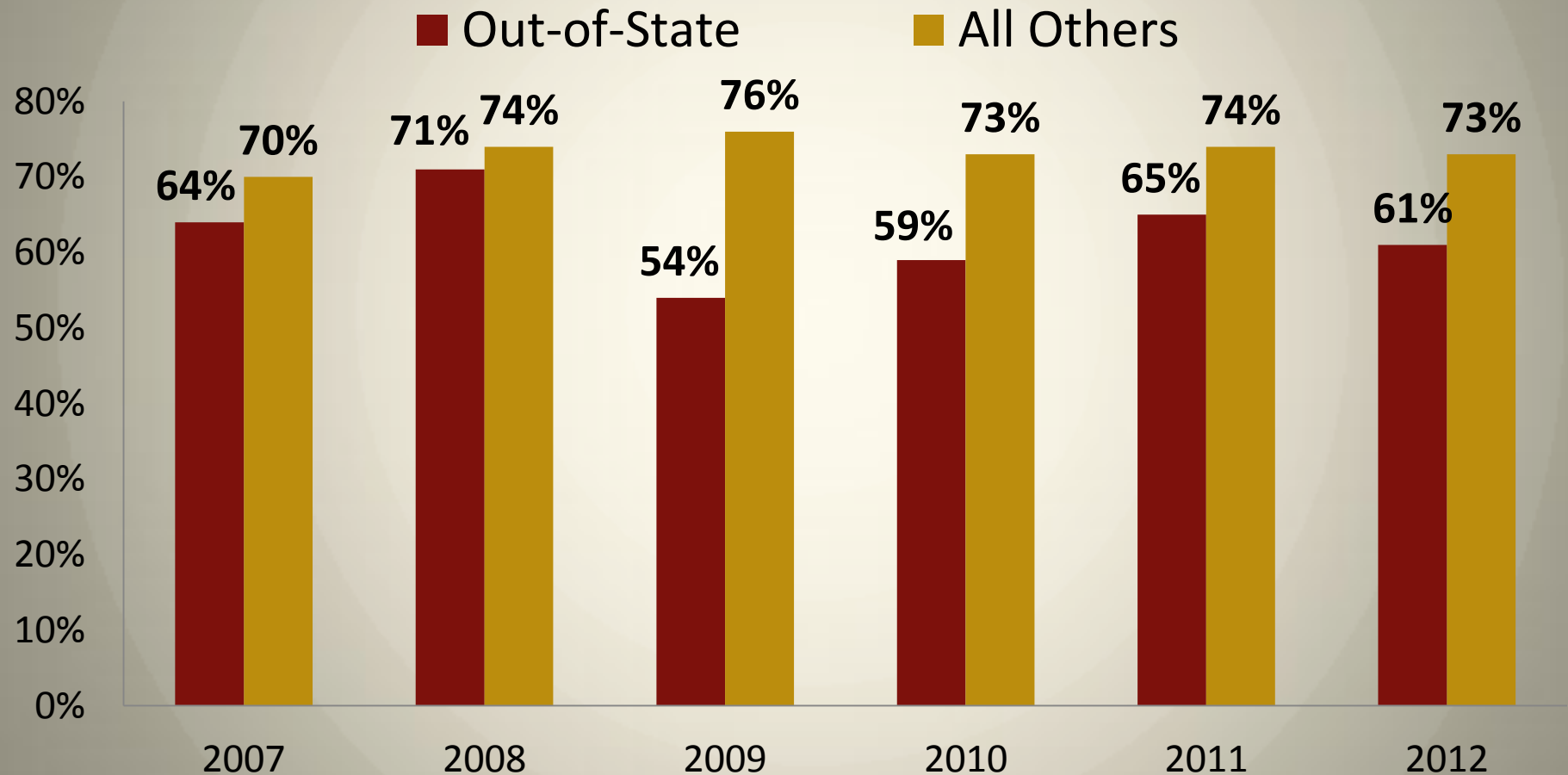


Domestic Out-of-State

Number of First-Time Beginners Domestic Non-Indiana Resident

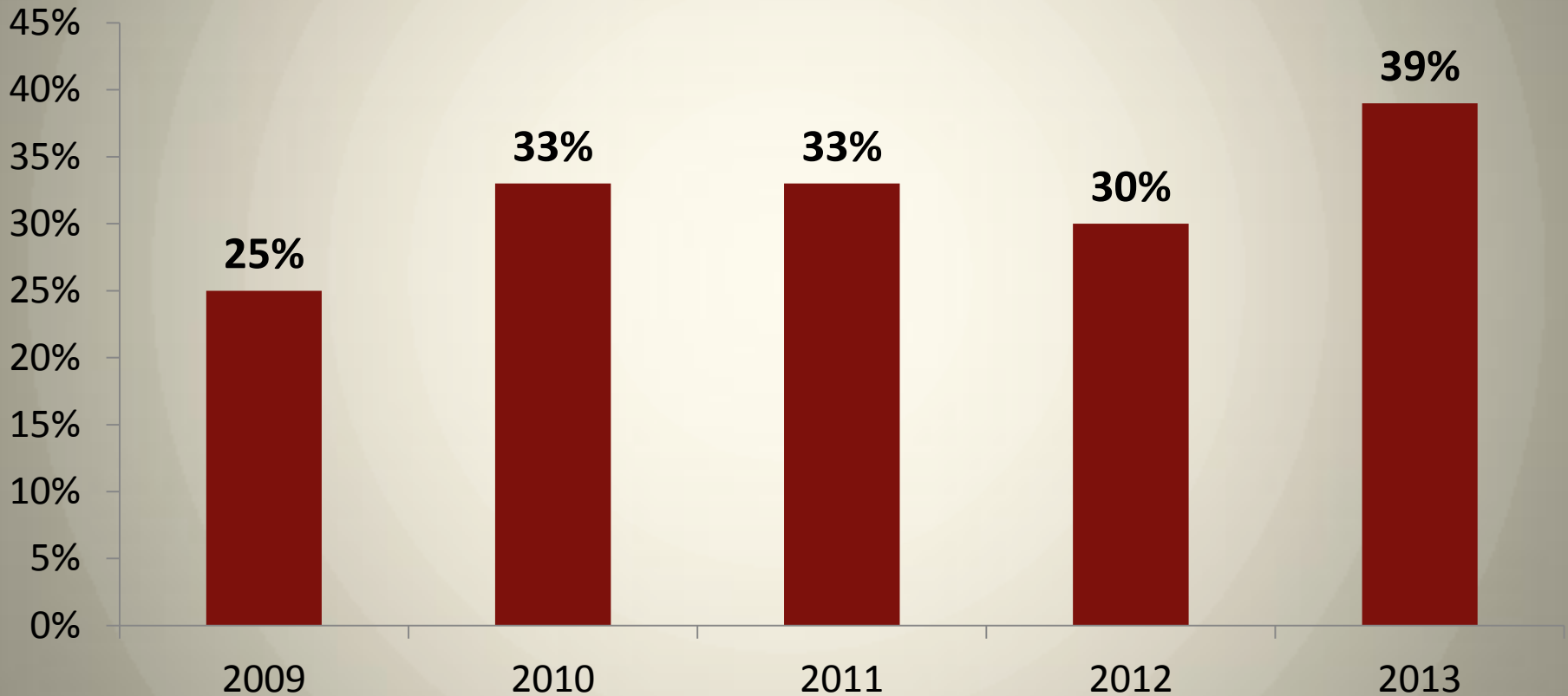


Out-of-State One-Year Retention



Living on Campus

Percent of First-Time Beginners Living in Campus Housing

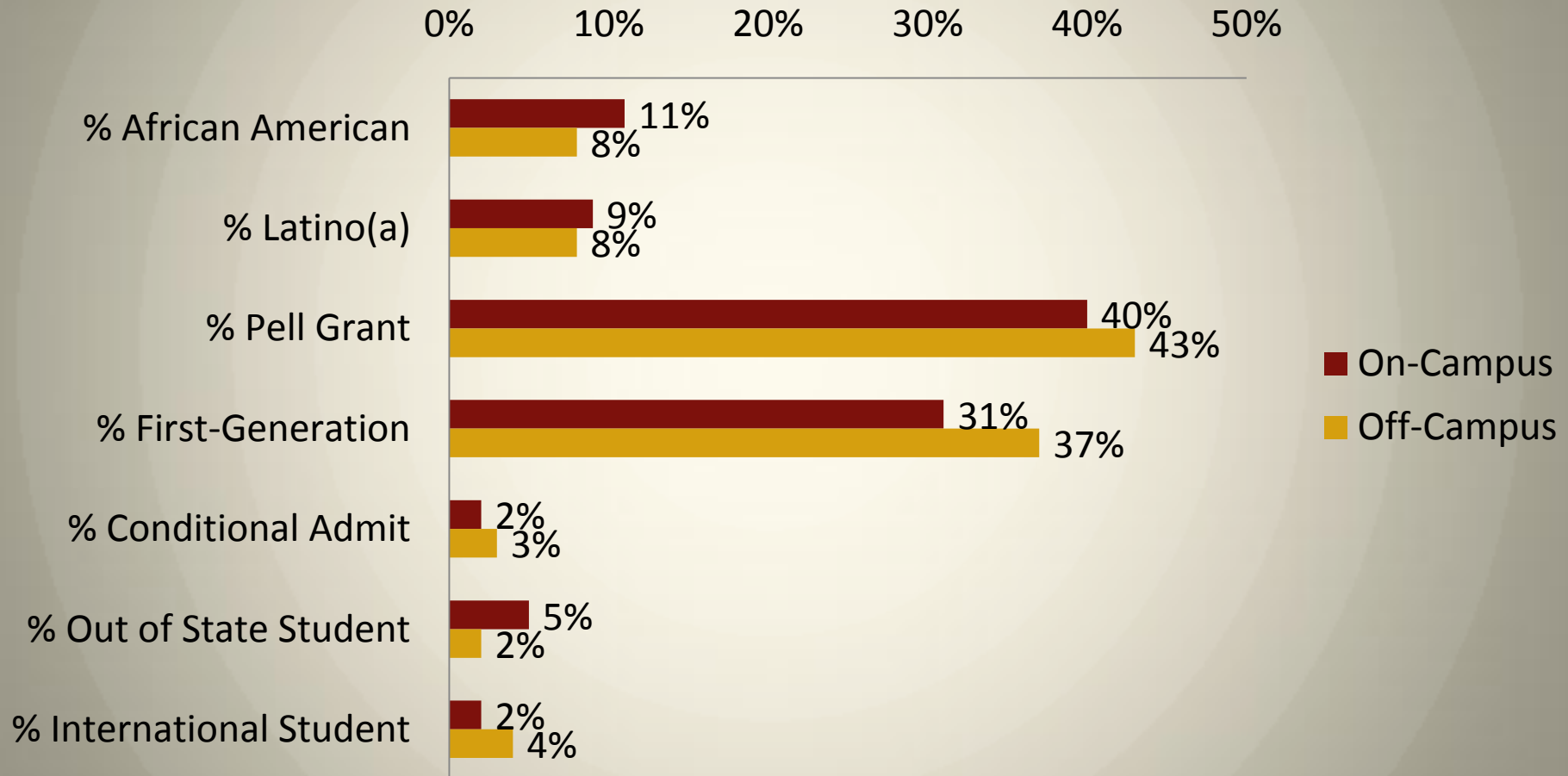


Living on Campus

Number of First-Time Beginners Living in Campus Housing



Characteristics Of Campus Housing Students 2013



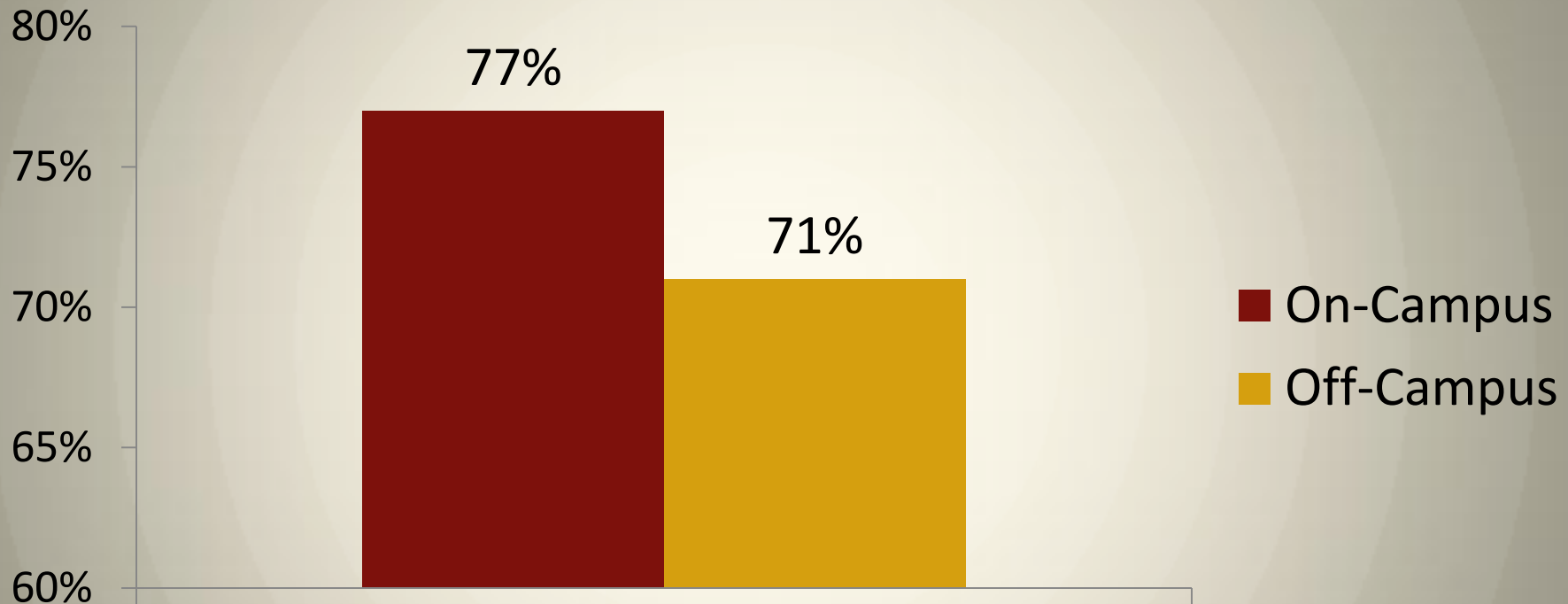
Living on Campus and Academic Performance

Semester	On-campus GPA	N	SD	Off-campus GPA	N	SD
Fall 2012	3.01	876	0.974	2.78	1892	1.132
Fall 2011	2.95	839	0.901	2.64	1673	1.081
Fall 2010	2.95	831	0.887	2.73	1535	1.039
Fall 2009	2.98	830	0.829	2.68	1726	1.035
Fall 2008	2.97	620	0.867	2.59	1894	1.056
Fall 2007	2.88	677	0.932	2.50	1784	1.095
Fall 2006	2.92	428	0.870	2.48	1988	1.160

All differences are statistically significant at the $p < 0.001$ level.

Source: Rob Aaron, Director of Assessment, Student Affairs

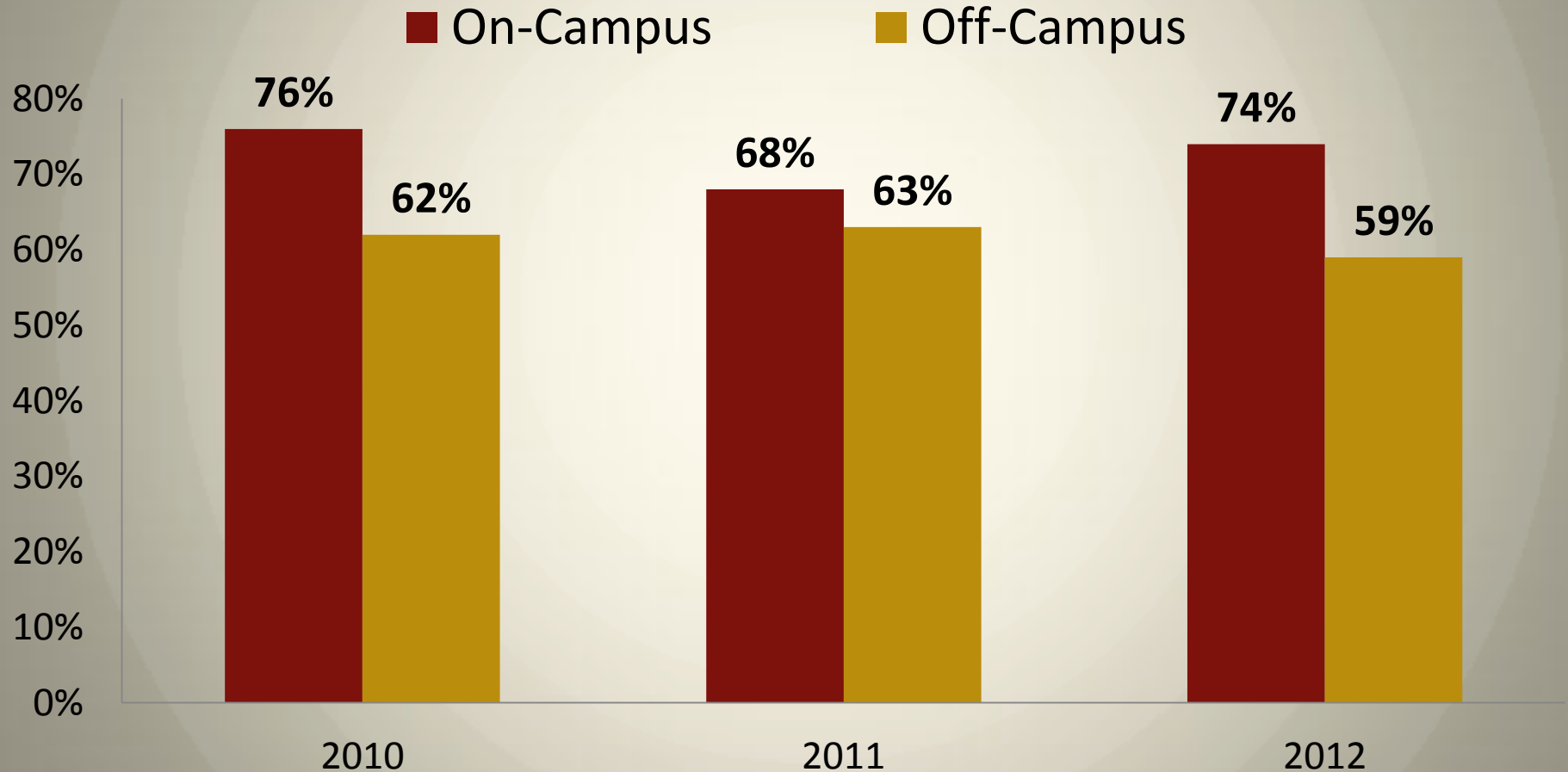
One-Year Retention Rate and Living On-Campus 2012



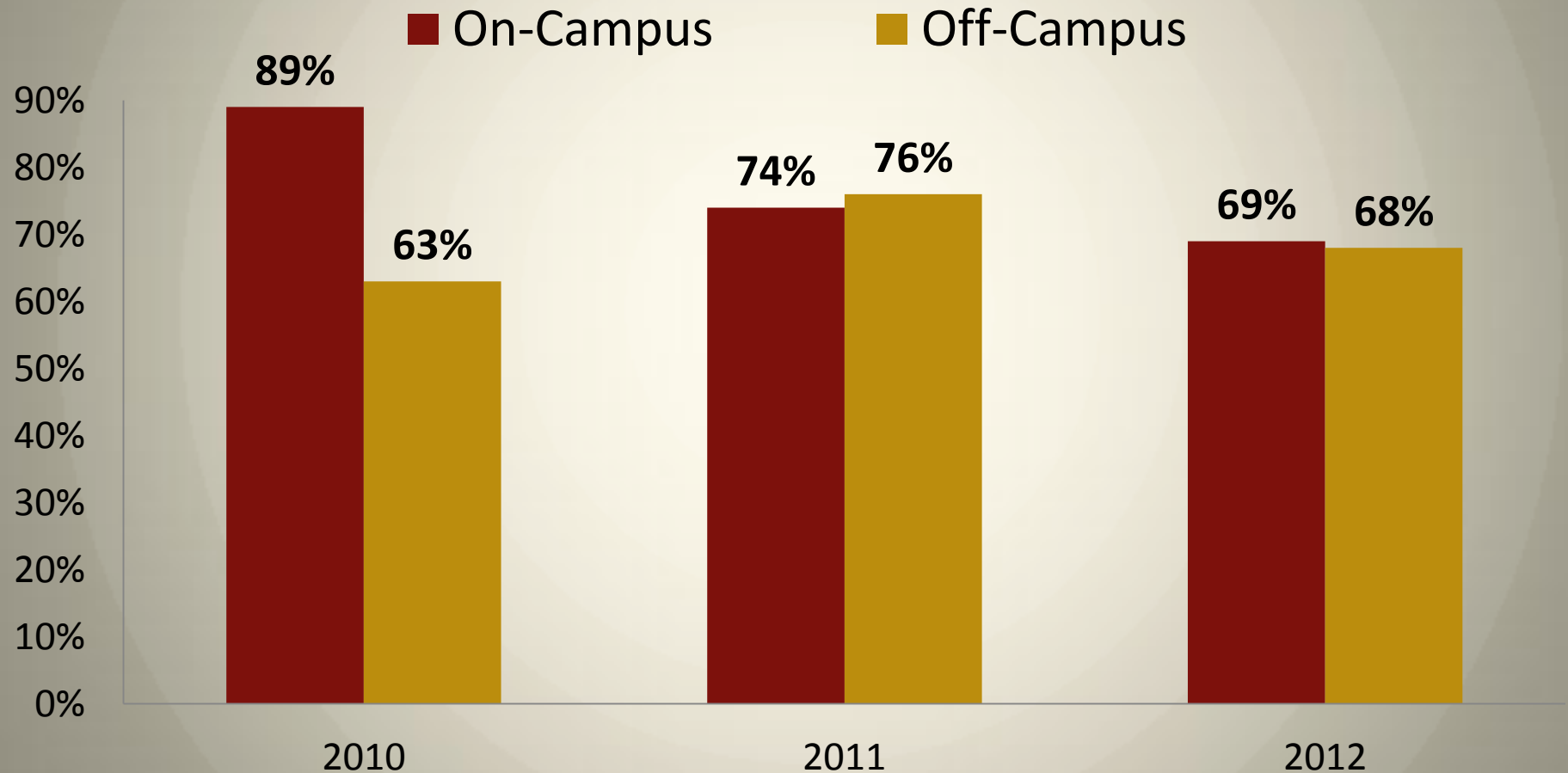
Fall 2012 Cohort One-Year Retention Rate

Difference significant based on logistic regression even when entering in HS GPA, SAT score, Gender, First-Generation Status, and Income (Pell Grant Recipient) in first step in model ($p < .05$)

African American Students On-Campus and Off-Campus Housing One-Year Retention

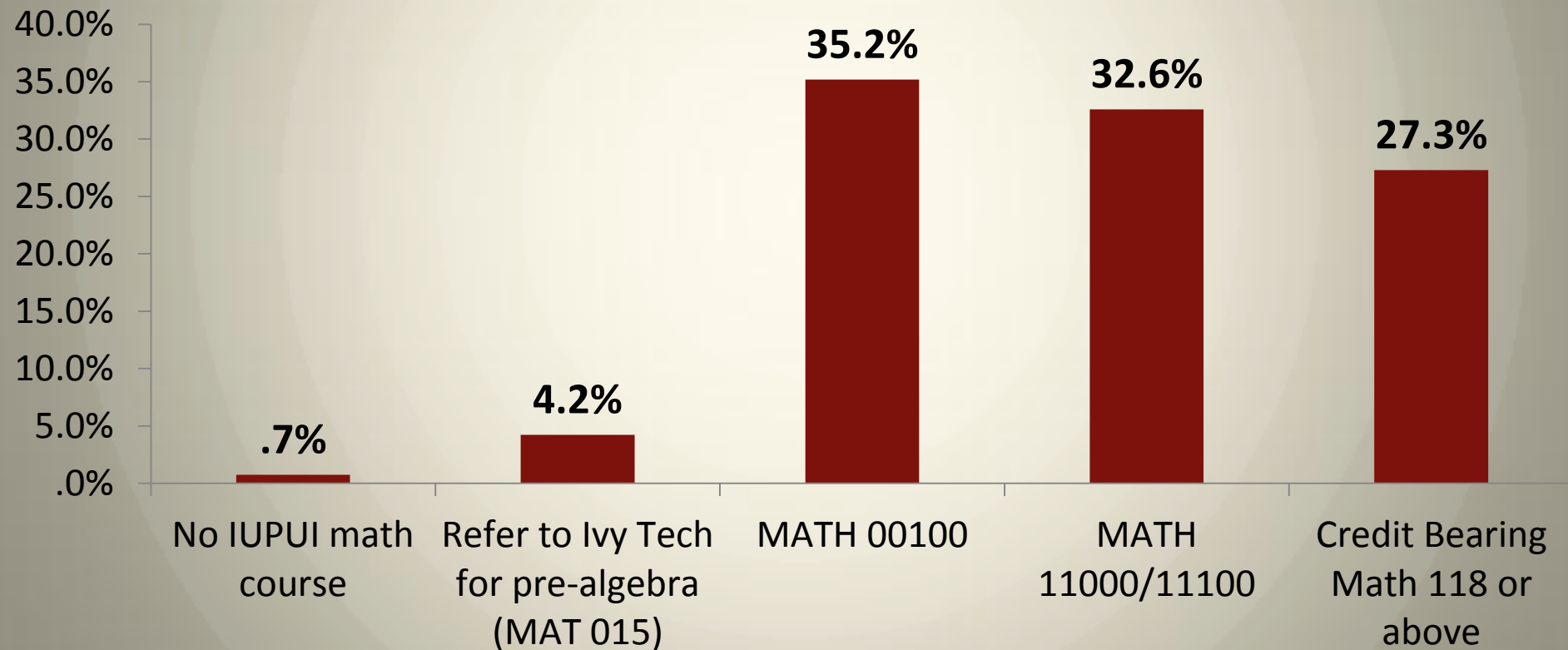


Latino(a) Students On-Campus and Off-Campus Housing One-Year Retention

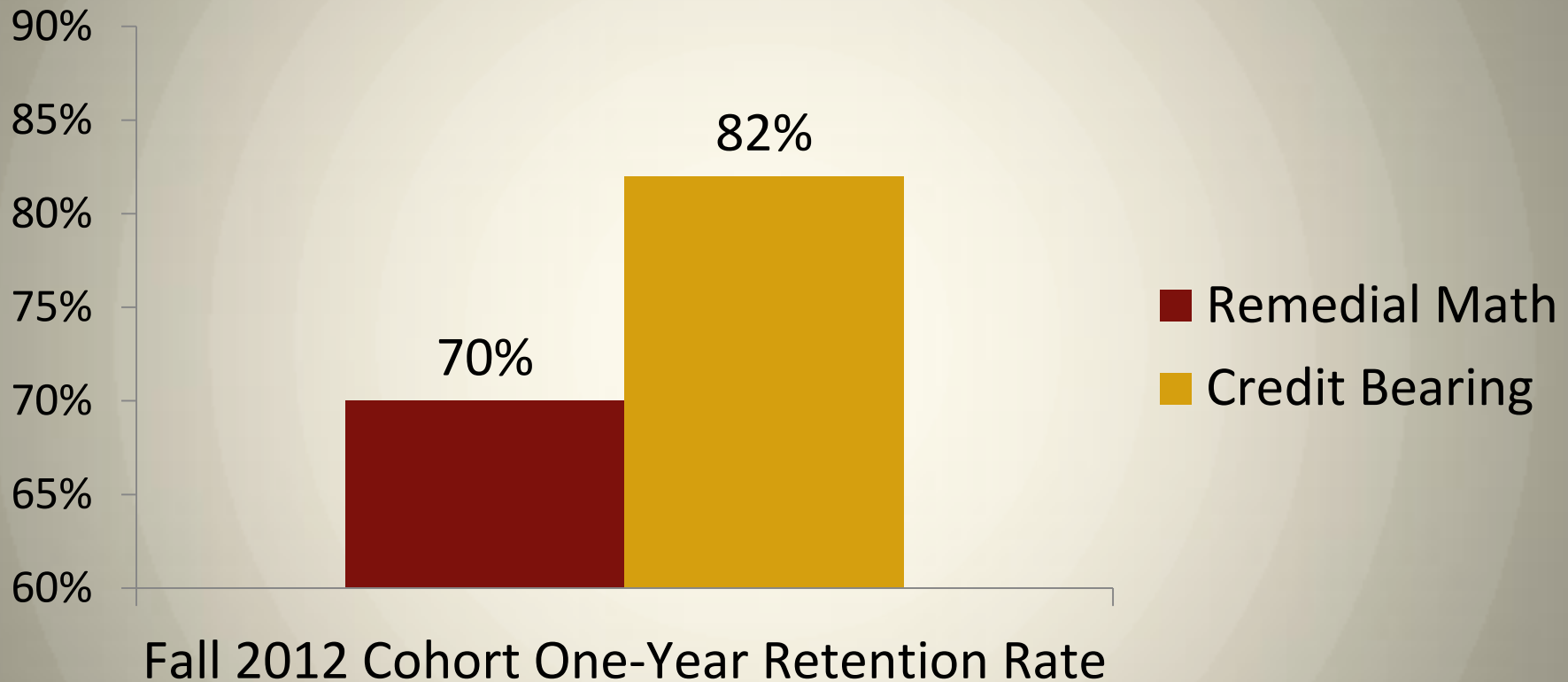


2013 Math Placement Results

First-Time Beginners Math Placement for 3215 Students who took Math Placement Test



One-Year Retention Rate and Placing into Remedial Math

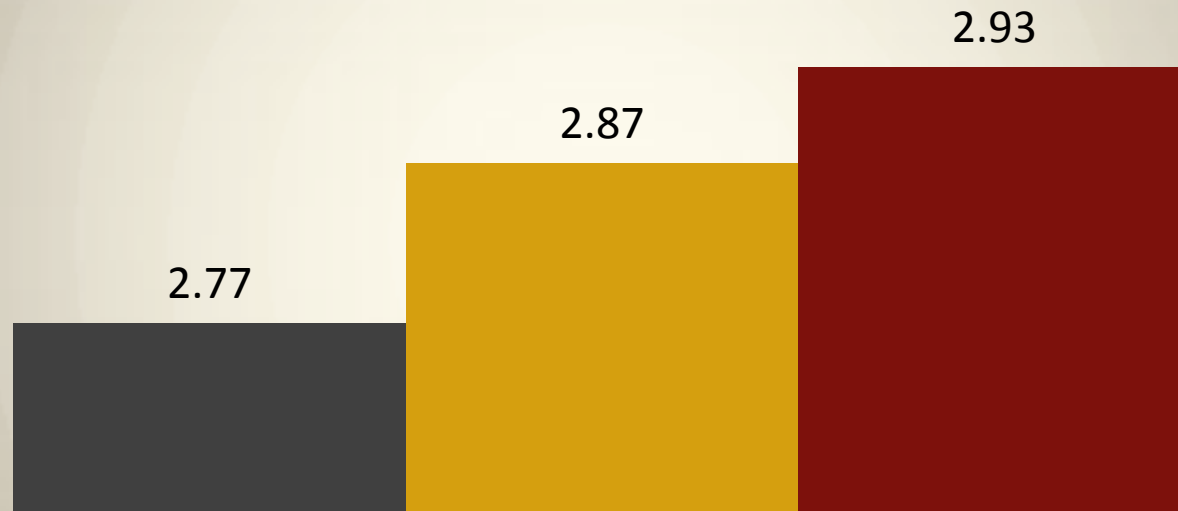


Difference NOT significant based on logistic regression even when entering in HS GPA, SAT score, Gender, First-Generation Status, and Income (Pell Grant Recipient) in first step in model ($p=.106$)

Academic Hope Levels Predict Fall GPAs

Entering Student Survey Results 2013

■ LOW ■ MEDIUM ■ HIGH



FALL GPA

Incoming levels of Academic Hope significantly predicted fall academic performance, even when taking HS GPA, SAT Score, and First-Generation status into account (based on hierarchal logistic regression results, $p < .001$)

Academic Hope Items

1. If I should find myself in a jam, I could think of many ways to get out of it
2. At the present time, I am energetically pursuing my academic goals
3. There are lots of ways around any school-related problems that I may face
4. Right now I see myself as being pretty successful
5. I can think of many ways to reach my current academic goals
6. I see myself meeting the goals I have set for myself

Alpha Reliability Coefficient = .88

Some Conclusions

- **Students participating in early academic support programs are more likely to persist at IUPUI.**
- **First-Generation and underrepresented students may need social and academic support.**
- **Students that are not academically successful are more likely to stop-out or transfer to a 2-year institution.**
- **Some academically successful students may transfer to other 4-year institutions such as Out-of-State, Purdue, or Ball State.**
- **Taking 15 credit hours per semester may help students get ahead and reach major milestones.**
- **Some students who attempt 15 or more credit hours during their first semester may not be successful (dual credit, ACP, AP may help students reach 30 credit hours in first year)**
- **Almost half of IUPUI new beginners are Pell Eligible. Although the Pell Grant offers a definite leg up for low income students, it can not cover their total education costs. These students often have to apply for other loans and work for pay to offset the cost of college. They face a unique set of challenges.**
- **Living on campus is a positive influence on academic success and retention.**
- **Placing into remedial math negatively affects one-year retention (this is a multifaceted issue).**

Person and Environment Interaction and Self-Selection

- **Students who choose to live on campus, take advantage of support programs, and enroll in 15 or more credit hours are different in some important ways compared to students who chose not to enroll or participate (e.g., more academically prepared and less likely to be first generation).**

Factors Positively Associated with High Levels of Academic Achievement and Persistence for IUPUI Students

- Gender (Being Female).
- Not being a First-Generation college student.
- Reducing amount of time spent working off-campus for pay (not working over 20 hours per week).
- High levels of academic preparation (High school GPA is a strong predictor).
- Living on-campus.
- Earning satisfactory academic performance in first-semester.
- Participating in early interventions or academic support programs (e.g., Summer Bridge, TLCs).
- Having low levels of unmet financial need and not having low family income (Pell Grant as a proxy).
- Applying and enrolling early (proxy for motivation).
- Placing into credit bearing math.
- Reporting high levels Institutional Commitment (Low Intent to Transfer) early in transition.
- Reporting high levels of Academic Hope early in transition.