Presented By Michele J. Hansen, Ph.D., Executive Director, Institutional
Taking Research and Decision Support (IRDS)
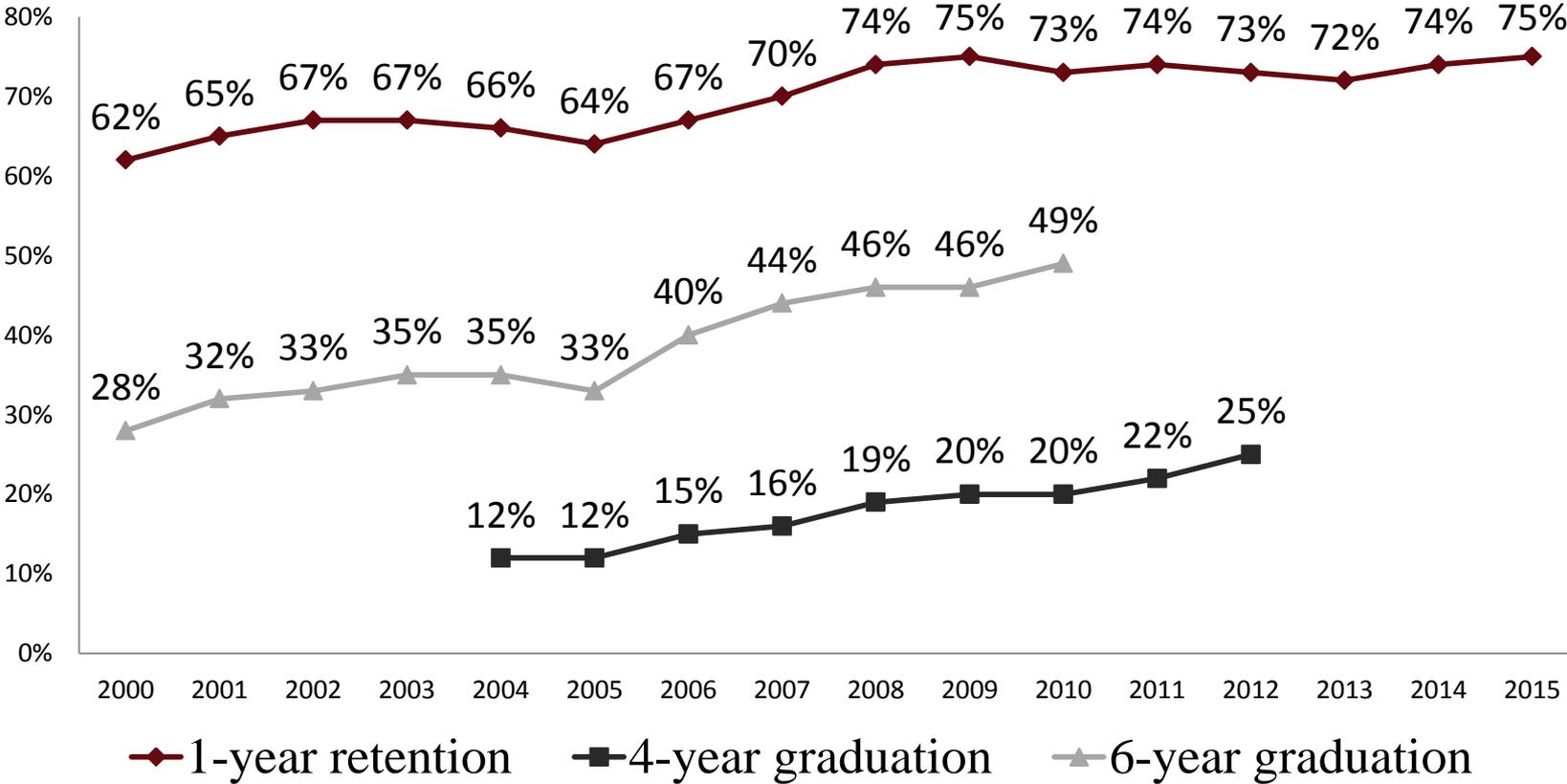
Taking a Deep Dive Into Student Success and Retention

Understanding IUPUI Student Success and Retention

- **Why they come?**
- **Why they stay?**
- **Why they leave and where they go?**
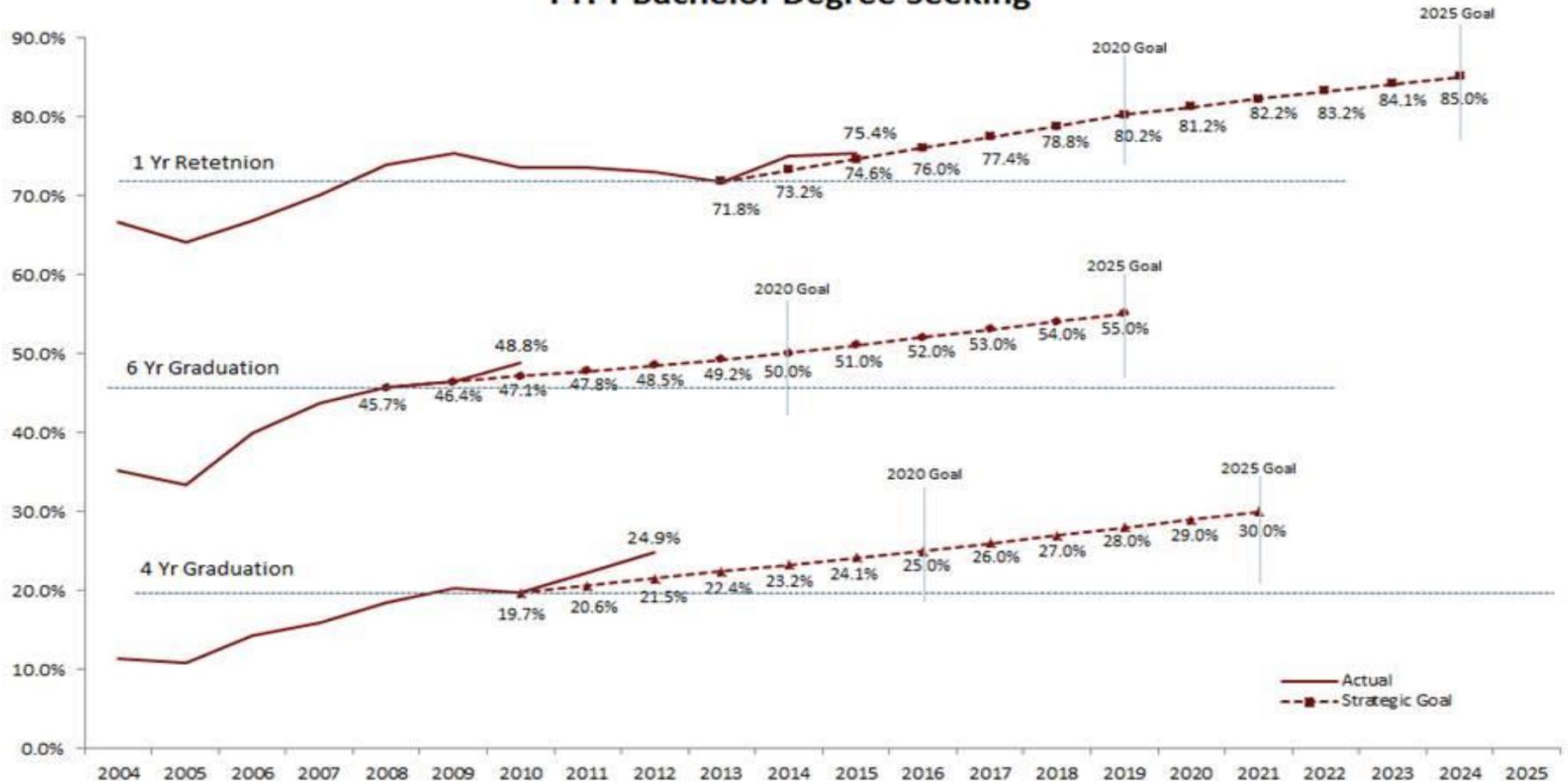- **What can we do to improve outcomes?**

Indianapolis Only FTFT Cohort Retention and Graduation Rate (Bachelor's, Associate, and Certificate)
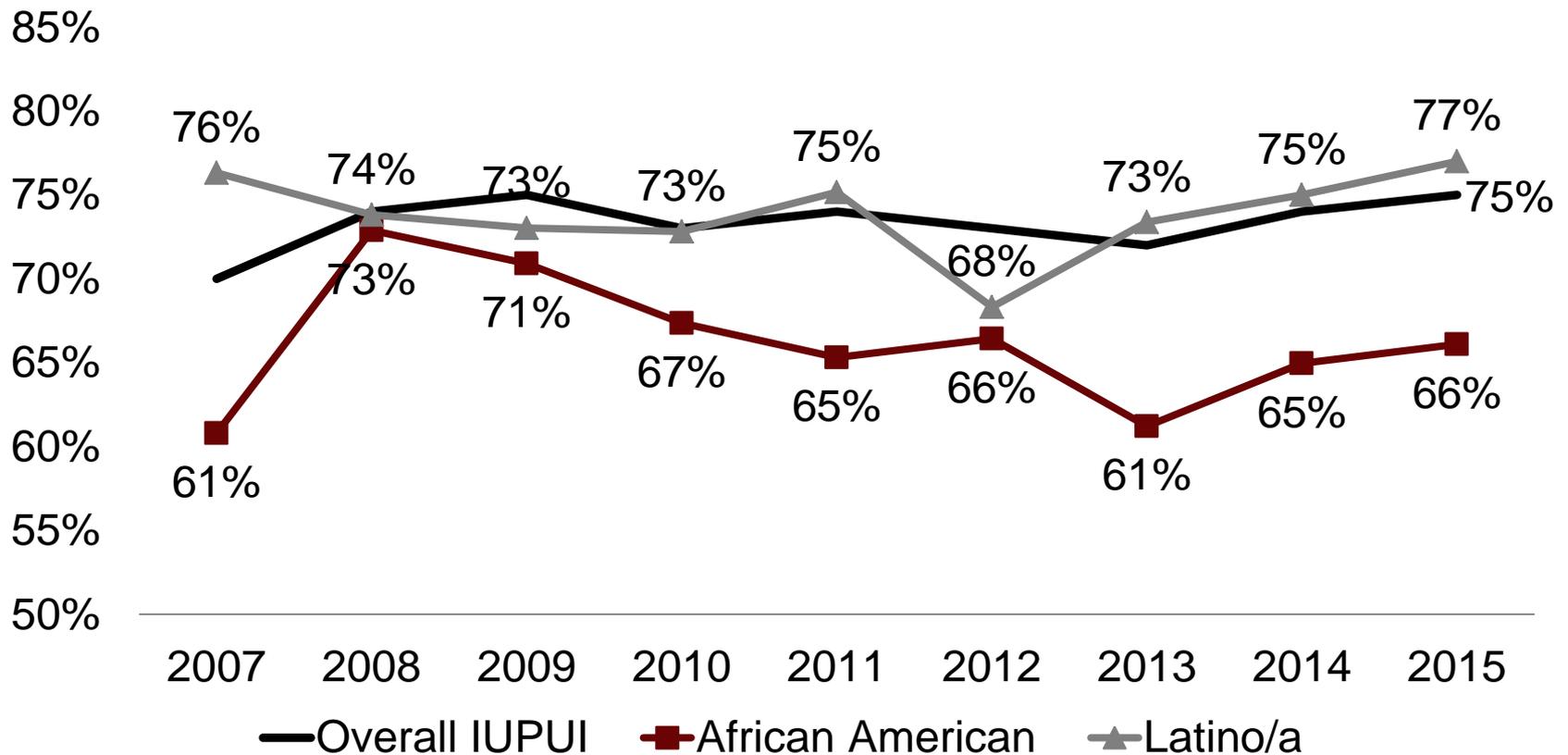
Retention/Graduation Rates
Student Performance Metrics
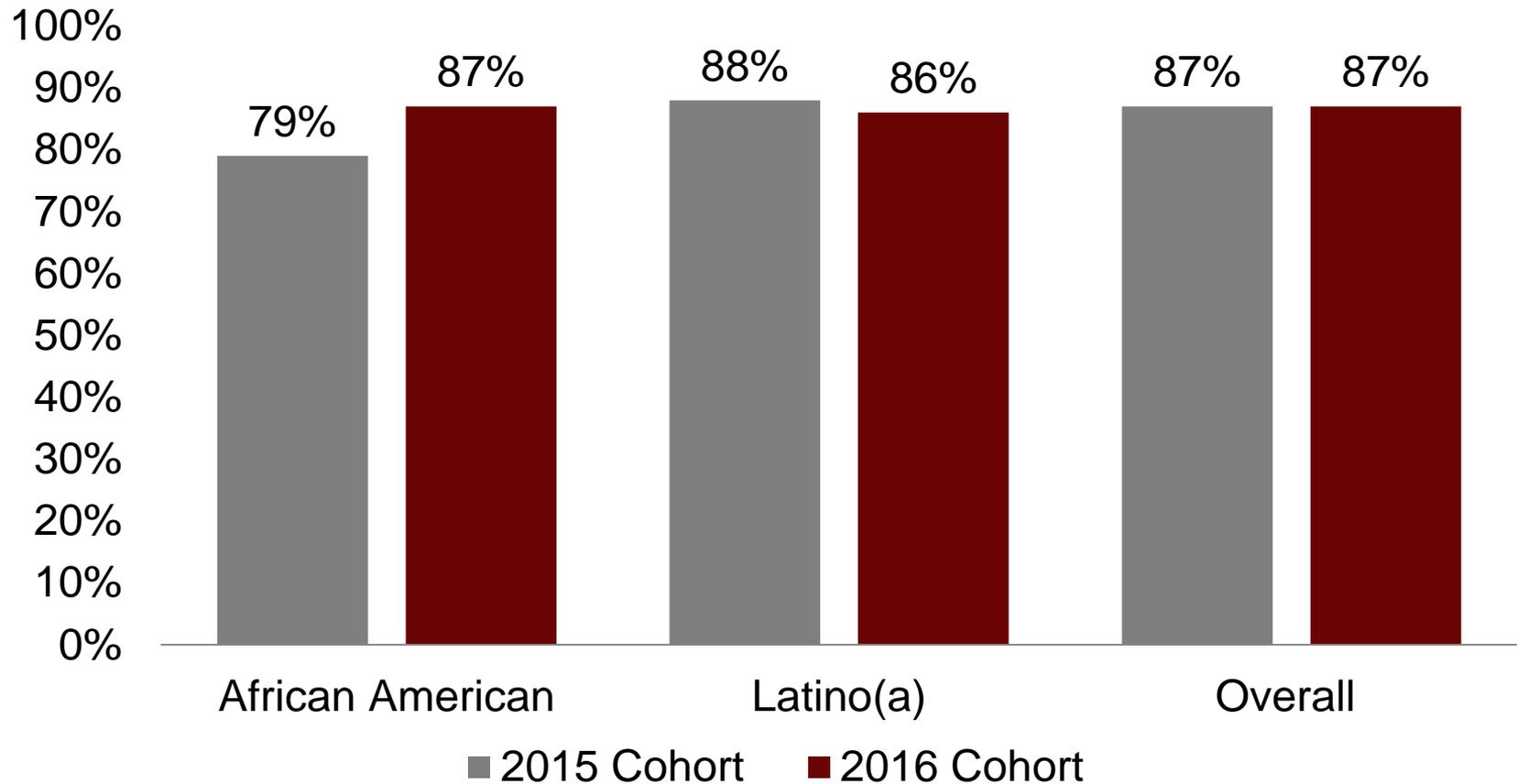

IUPUI - Indianapolis
FTFT Bachelor Degree Seeking

Indianapolis Only FTFT Cohort One-Year Retention (Bachelor's, Associate, and Certificate any IU) – Underrepresented Students
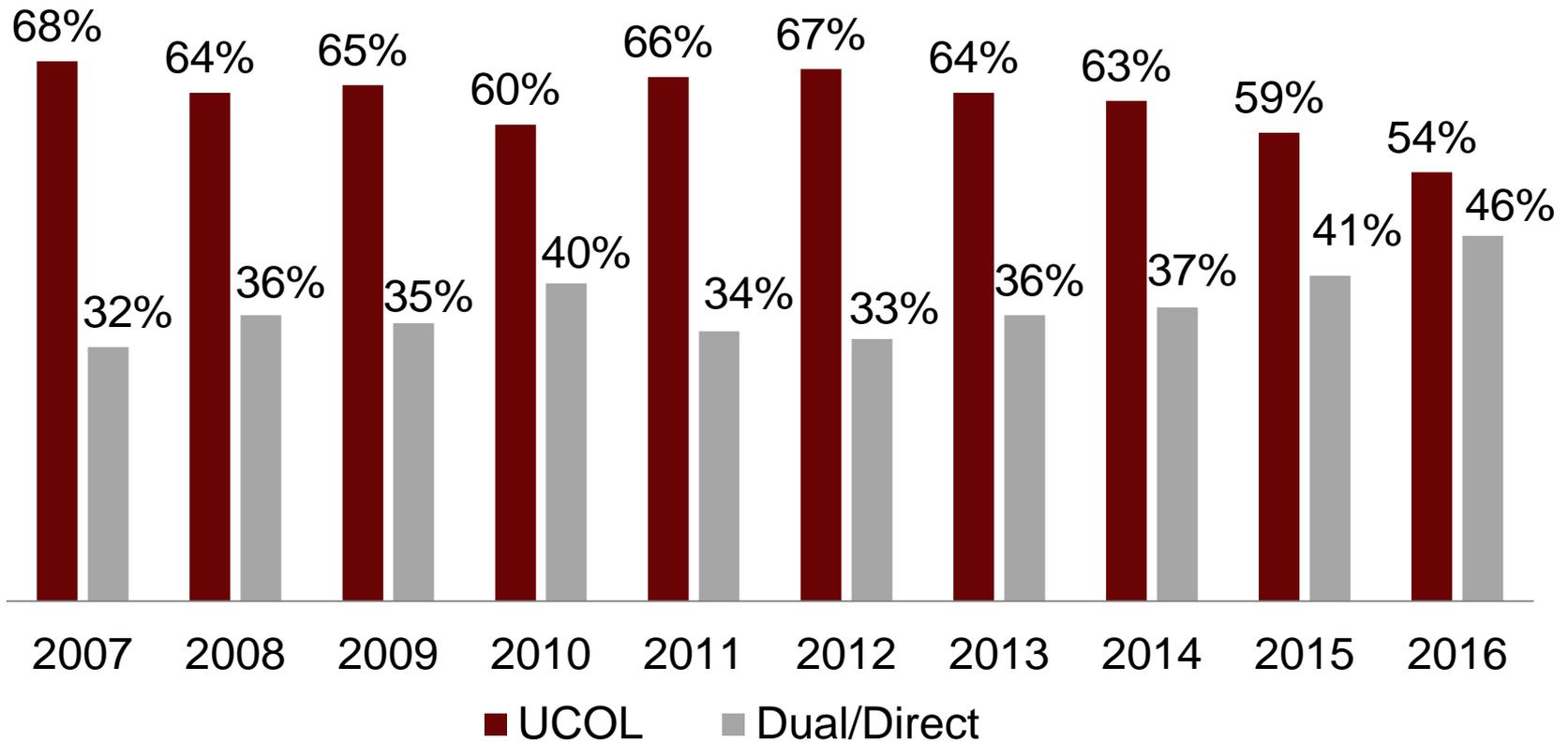
Making Progress!

Fall-Spring Retention – Retained IUPUI IN

New Beginners Direct/Dual and University College Admits

Chart showing UCOL and Dual/Direct percentages by year:

Year	UCOL	Dual/Direct
2007	68%	32%
2008	64%	36%
2009	65%	35%
2010	60%	40%
2011	66%	34%
2012	67%	33%
2013	64%	36%
2014	63%	37%
2015	59%	41%
2016	54%	46%

■ UCOL   ■ Dual/Direct

2015 University College One-Year Retention 65%, Direct/Dual Admit 78%,
Overall IUPUI Indianapolis Retention Rate FT, FT Retained IUPUI IN Campus 70%

7

ICHE Performance Funding

- Degree completion

  - At-risk degree completion (Pell Eligible)

- High impact degree completion (STEM Fields)

- Persistence

- Remediation success (only 2-year)

- On-time graduation (What is the change in a school's the two-year and four-year graduation rates for first-time, full-time students?)

- Institution selected measure

http://www.in.gov/che/2772.htm

How do we compare?

1 Year Retention Rates			
Peer Institutions	**Cohort Year**		
	2012	**2013**	**2014**
Temple U.	89%	89%	90%
U. of Utah	88%	89%	89%
U. at Buffalo	88%	88%	88%
U. of Cincinnati-Main Campus	85%	86%	88%
U. of South Florida-Main Campus	89%	89%	88%
Virginia Commonwealth U.	87%	86%	86%
U. of Illinois at Chicago	80%	80%	81%
U. of New Mexico-Main Campus	78%	79%	80%
U. of Alabama at Birmingham	80%	83%	79%
U. of Louisville	78%	81%	79%
Wayne State U.	77%	76%	77%
Indiana U.-Purdue U.-Indianapolis	72%	71%	74%
U. of Colorado Denver	75%	72%	68%
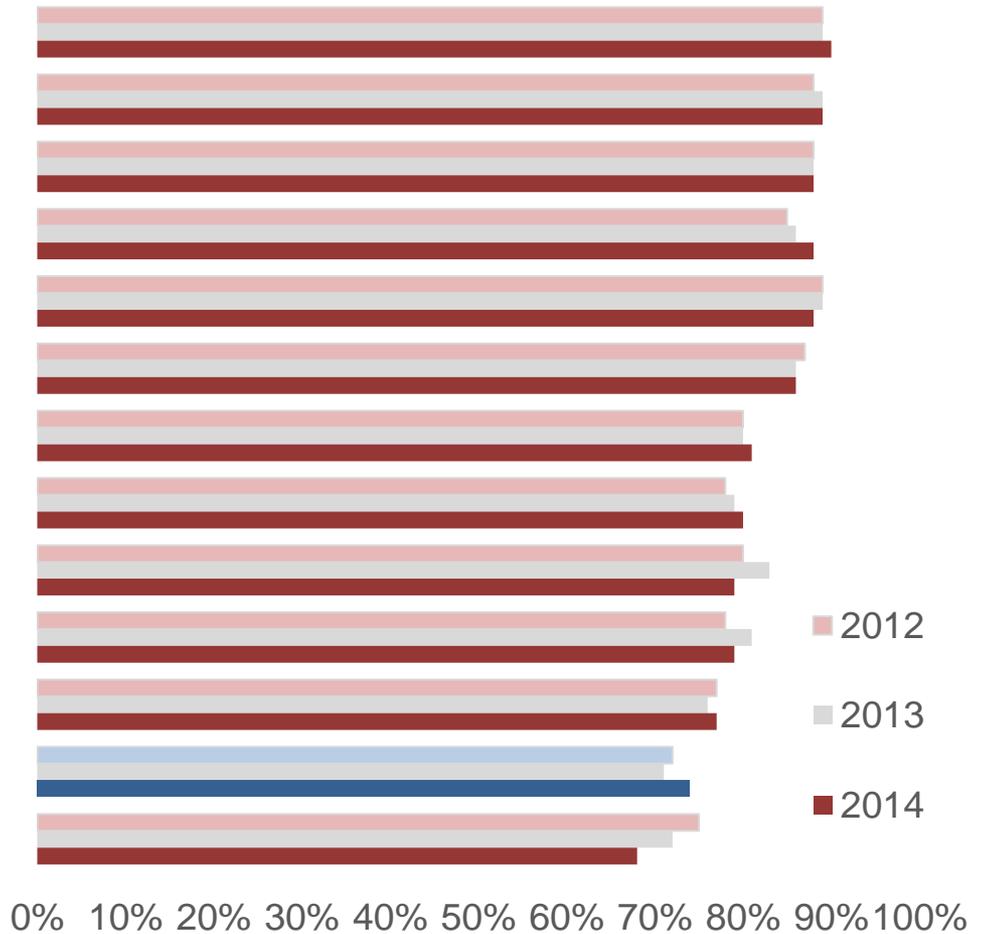
4 Year Graduation Rates

Peer Institutions	Cohort Year		
	2007	2008	2009
U. at Buffalo	52%	53%	55%
Temple U.	39%	41%	43%
U. of South Florida-Main Campus	36%	39%	43%
Virginia Commonwealth U.	30%	34%	37%
U. of Illinois at Chicago	30%	33%	34%
U. of Alabama at Birmingham	29%	33%	32%
U. of Utah	24%	24%	28%
U. of Cincinnati-Main Campus	25%	28%	28%
U. of Louisville	25%	36%	25%
Indiana U.-Purdue U.-Indianapolis	15%	18%	19%
U. of Colorado Denver	16%	15%	17%
U. of New Mexico-Main Campus	15%	15%	15%
Wayne State U.	11%	11%	11%

2007
2008
2009

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
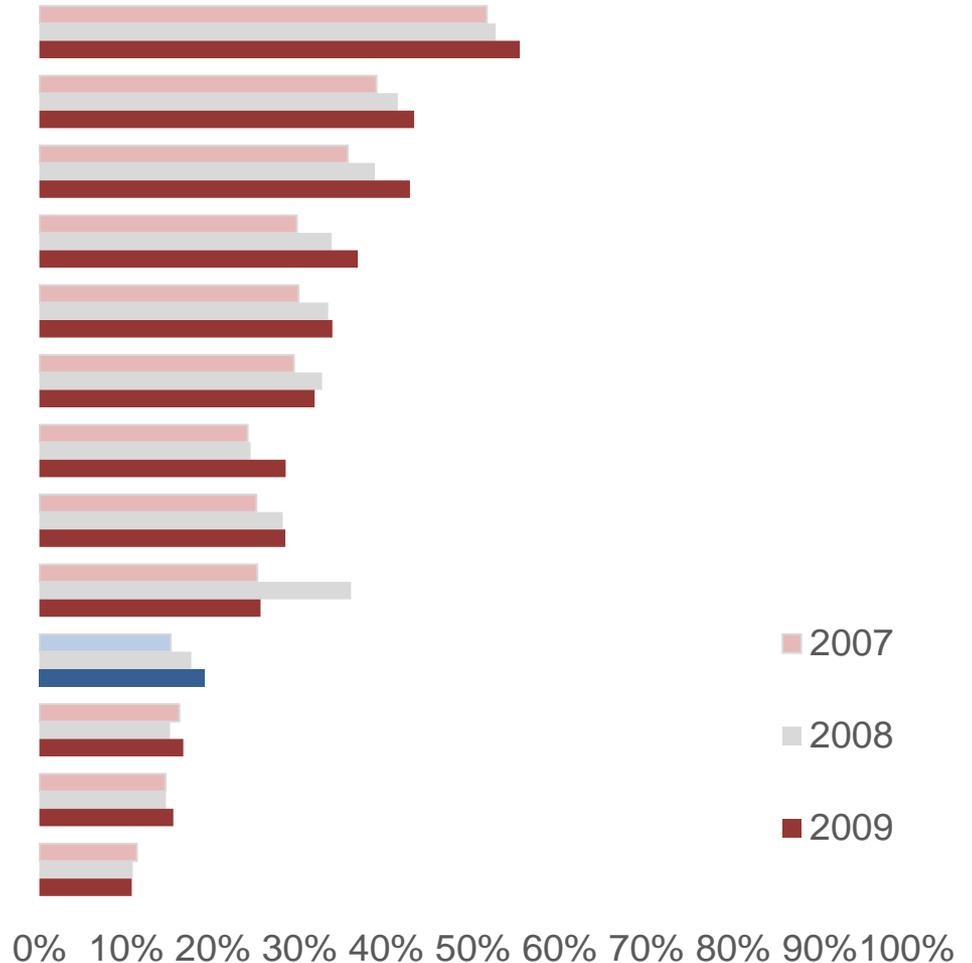
6 Year Graduation Rates

Peer Institutions	Cohort Year		
	2007	2008	2009
U. at Buffalo	72%	72%	74%
Temple U.	66%	69%	71%
U. of South Florida-Main Campus	63%	67%	68%
U. of Cincinnati-Main Campus	63%	65%	65%
U. of Utah	60%	62%	64%
Virginia Commonwealth U.	57%	59%	62%
U. of Illinois at Chicago	57%	60%	60%
U. of Alabama at Birmingham	53%	55%	55%
U. of Louisville	53%	54%	53%
U. of New Mexico-Main Campus	48%	47%	47%
U. of Colorado Denver	41%	40%	46%
Indiana U.-Purdue U.-Indianapolis	42%	44%	45%
Wayne State U.	32%	34%	35%

■ 2007

■ 2008

■ 2009

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
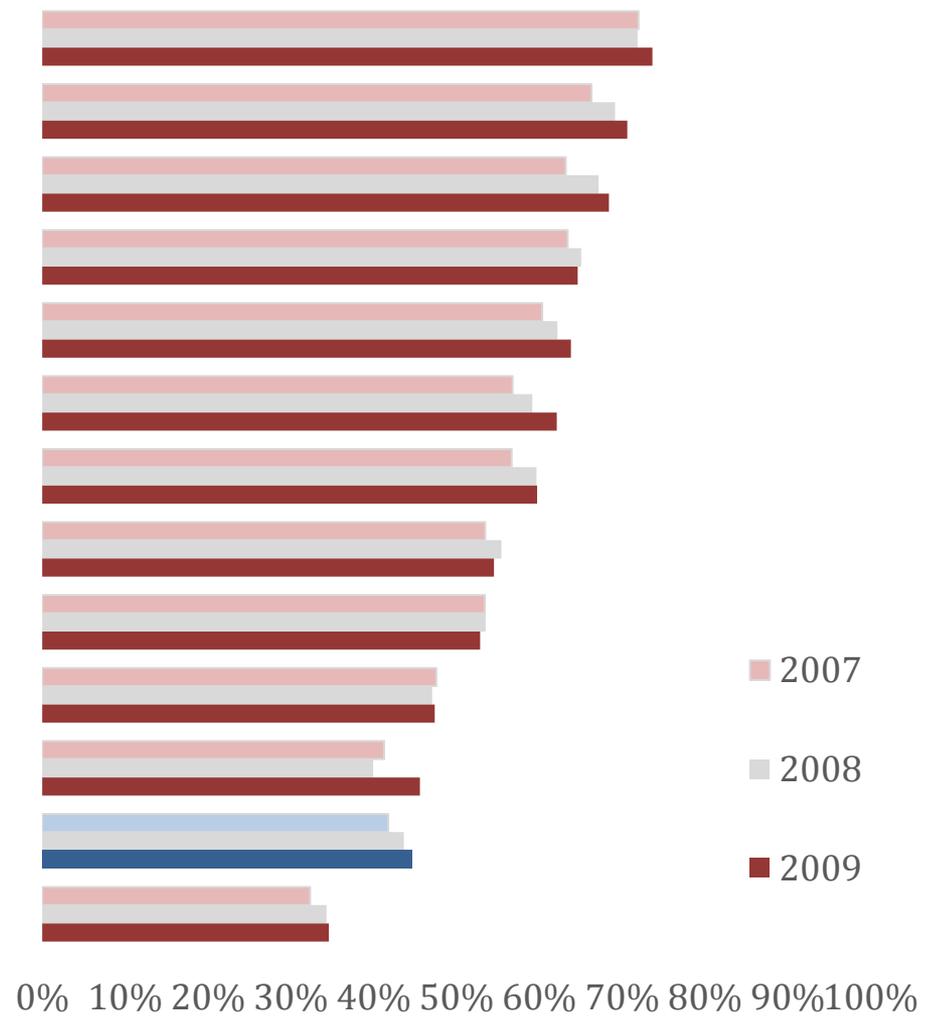
Difference Between IUPUI Peers Pell Grant Recipients

% First Year Students Receiving Federal Pell Grant 2014-2015
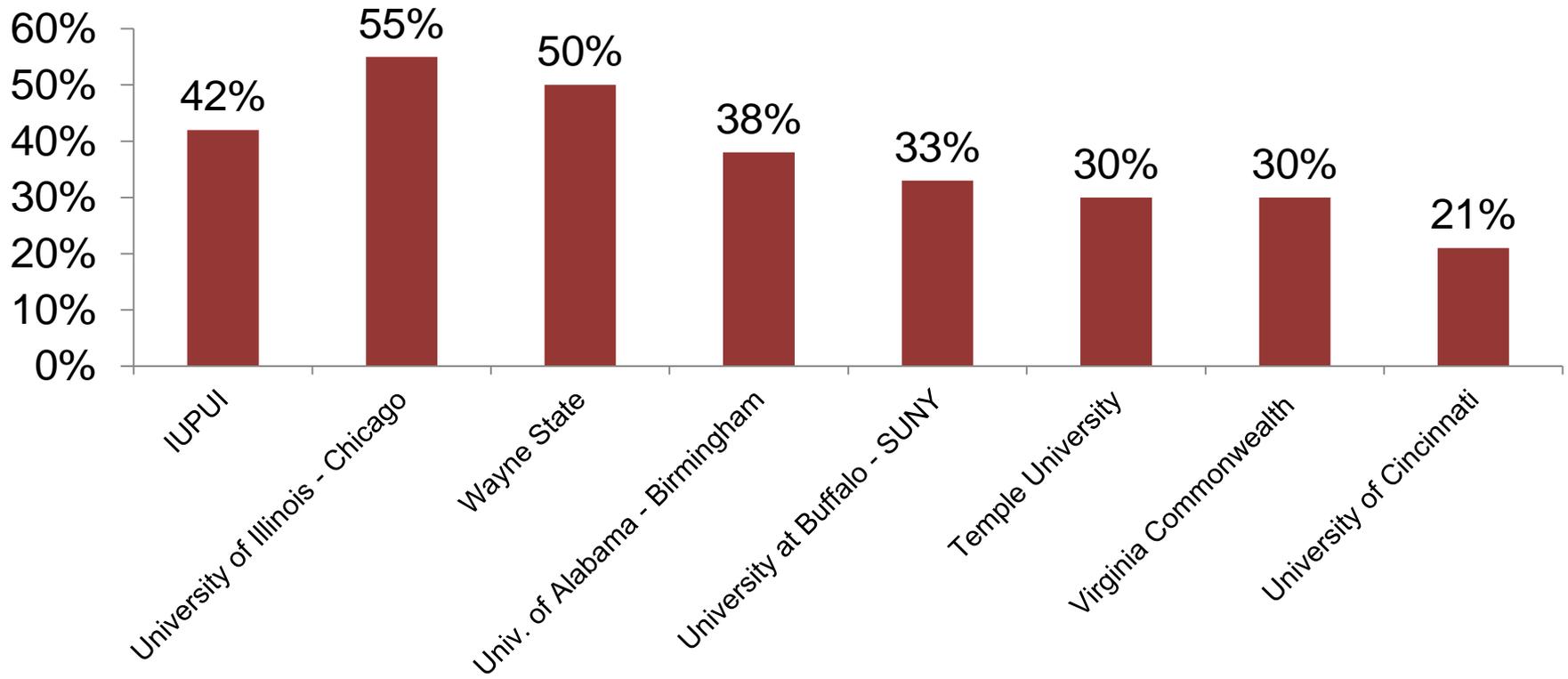
Institutional Aid and Scholarships

❖ In 2013-2014, we ranked last in percentage of first-time, full-time undergraduates receiving institutional aid or scholarships

❖ In 2014-2015, we ranked second to last (behind University of Colorado Denver/Anschutz Medical Campus and Virginia Commonwealth University).

Based on The Integrated Postsecondary Education Data System (IPEDS)

National Survey of Student Engagement

Administered Spring 2015 FY and Seniors
About 560 colleges and universities participate in NSSE each year.
Over 1,600 have participated since 2000.

Official Peers (N=8)
University at Buffalo, State University of New York (Buffalo, NY)
University of Alabama at Birmingham (Birmingham, AL)
University of Cincinnati (Cincinnati, OH)
University of Illinois at Chicago (Chicago, IL)
University of Louisville (Louisville, KY)
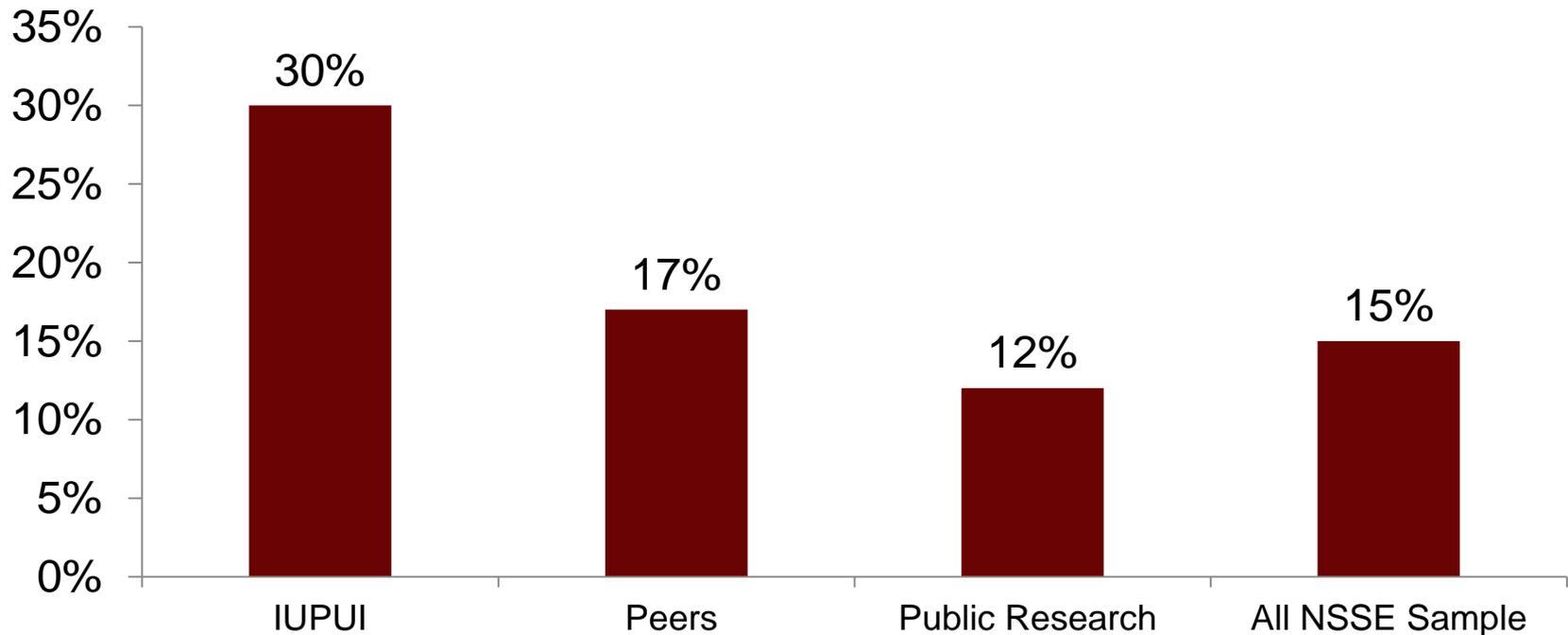University of South Florida (Tampa, FL)
Virginia Commonwealth University (Richmond, VA)
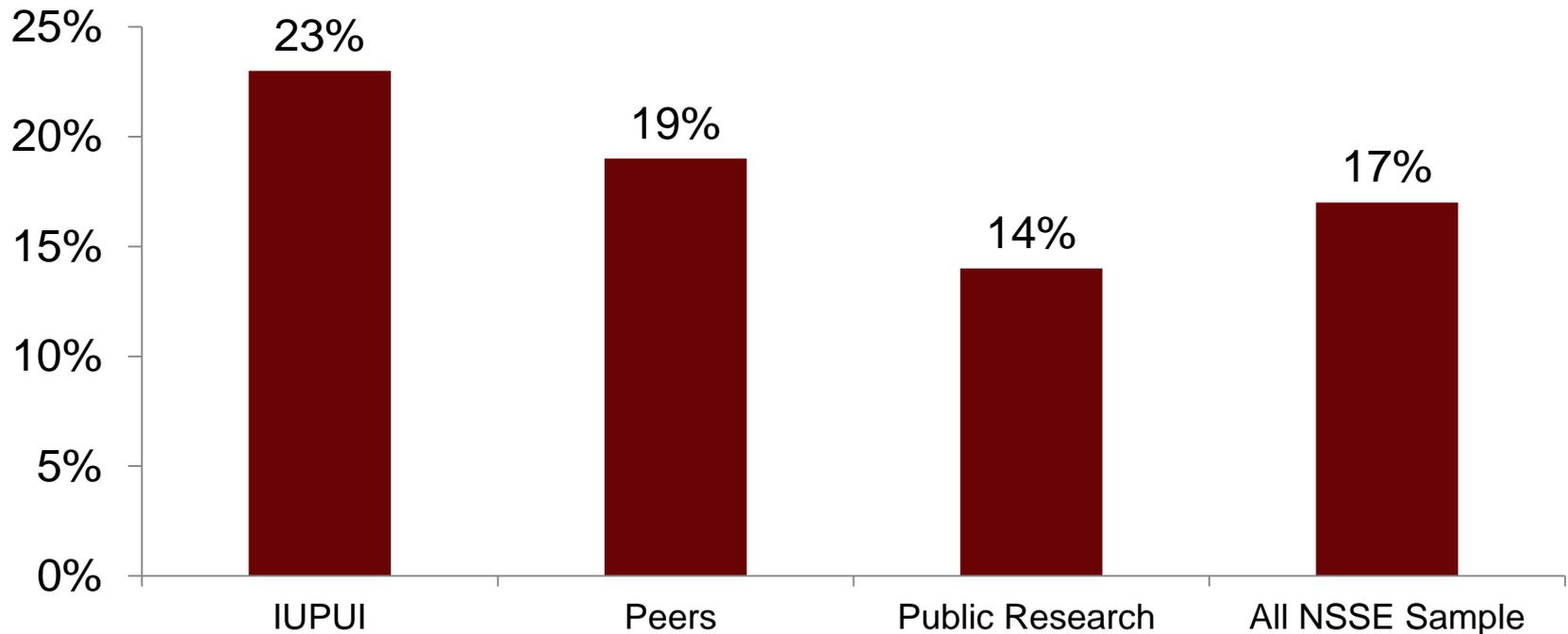Wayne State University (Detroit, MI)

Time Spent Working for Pay Off Campus

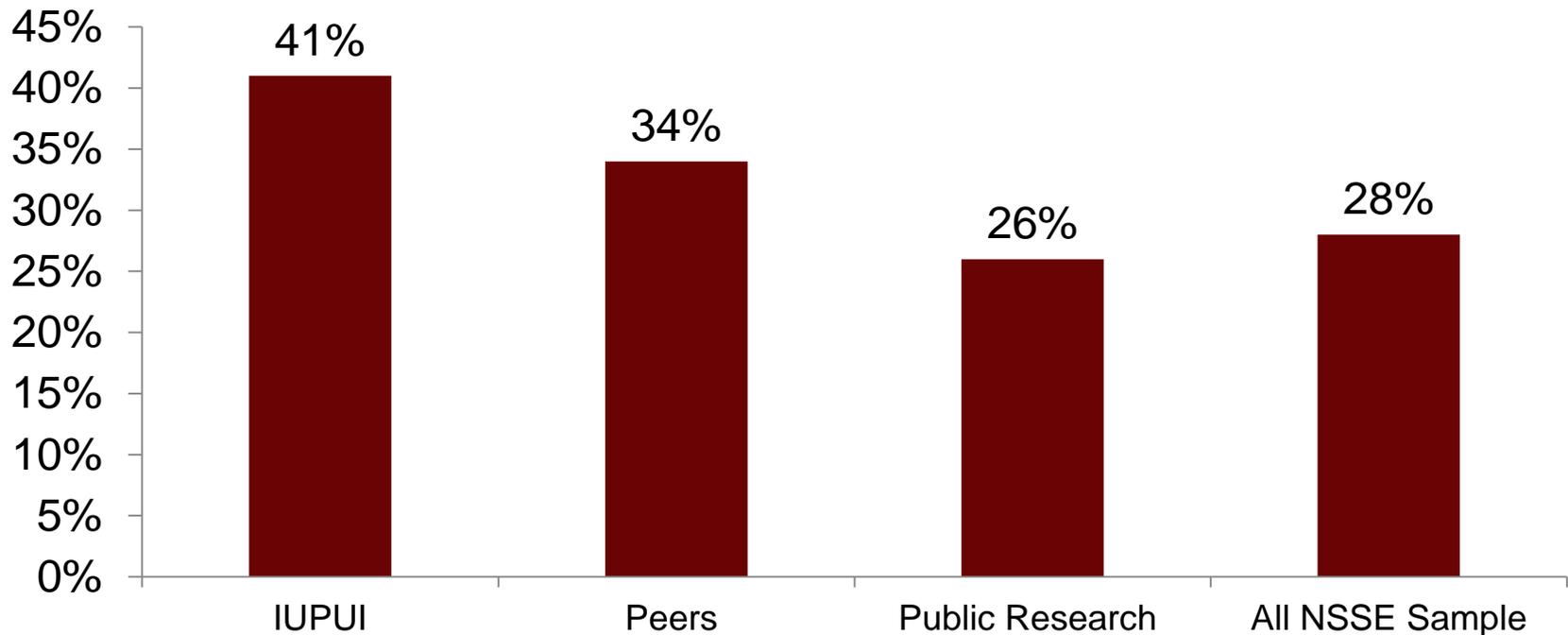**Working For Pay 16 or More Hours Per Week
First Year Students**

Time Spent Working for Pay Off Campus

Working For Pay More than 30 Hours Per Week Seniors

Time Spent Working for Pay Off Campus

Working For Pay More than 20 Hours Per Week Seniors

First Year Students

Strengths

- Quality Interactions with Faculty

- Talked about Career Plans with a faculty Member

- Instructors clearly explained course goals and requirements

- Writing and Speaking Clearly and Effectively

- Thinking Critically and Analytically

- Acquiring job- or work-related knowledge and skills

- Working effectively with others

- Developing or clarifying a personal code of values and ethics

- Institution emphasizes:

    - Spending significant amount of time

    - Providing support to help students succeed academically

    - Using learning support services (tutoring services, writing center, etc.)

Areas of Concern

- Work Fewer Hours On-Campus

- Less likely to feel institution emphasizes:

    - spending time attending campus events and activities

    - providing support for well-being (recreation, health care, counseling, etc..).

- Lower interactions with diverse peers (based on race/ethnicity, religion, economic backgrounds, political views)

Seniors

Strengths

- Quality Interactions with faculty, other students, advisors, student services staff, and administrative offices

- Writing and Speaking Clearly and Effectively

- Acquiring job- or work-related knowledge and skills

- Examining the strengths and weaknesses of your own views on a topic or issue

- Providing support to help students succeed academically

- Using learning support services (tutoring services, writing center, etc.)

Areas of Concern

- Work Fewer Hours On-Campus

- Spend more time providing care for dependents

- Less likely to feel institution emphasizes:

    - spending time attending campus events and activities

    - providing support for well-being (recreation, health care, counseling, etc..).

- Fewer Interactions with diverse peers (based on race/ethnicity, religion)

- Lower time spent on analysis of numerical information (evaluated and reached conclusion)
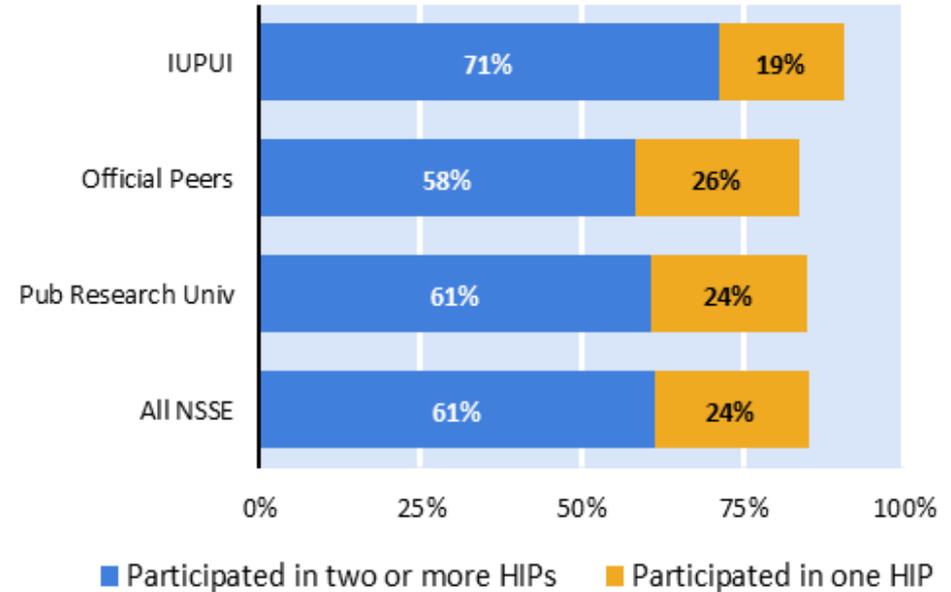
High Impact Practices

First-Year Students
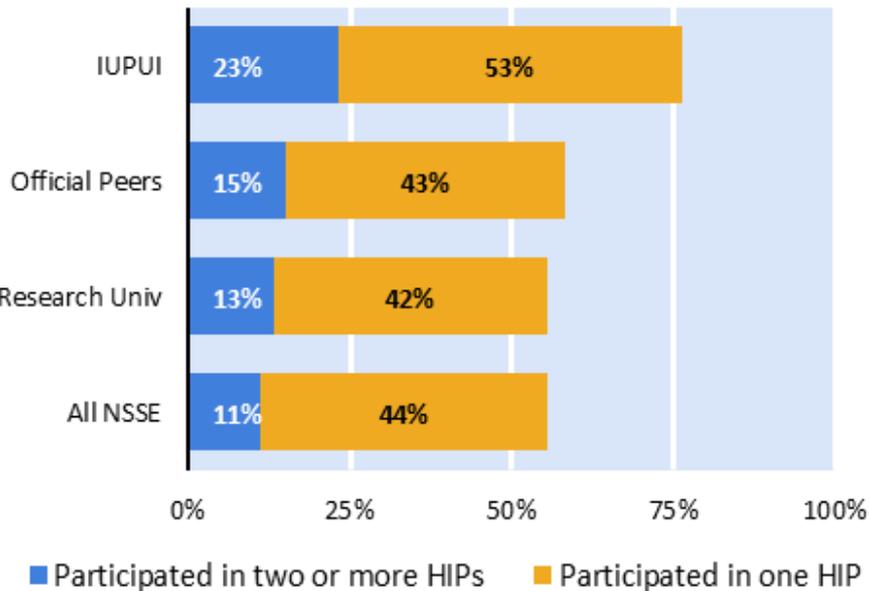
Seniors

- IUPUI students significantly more likely to participate in learning communities, service learning, internships or field experience, and capstones.
- IUPUI students less likely to participate in study abroad.
- Similar levels of participation in undergraduate research.

HIPs – Higher Order Learning FY Students

Means Higher-Order Learning Scores
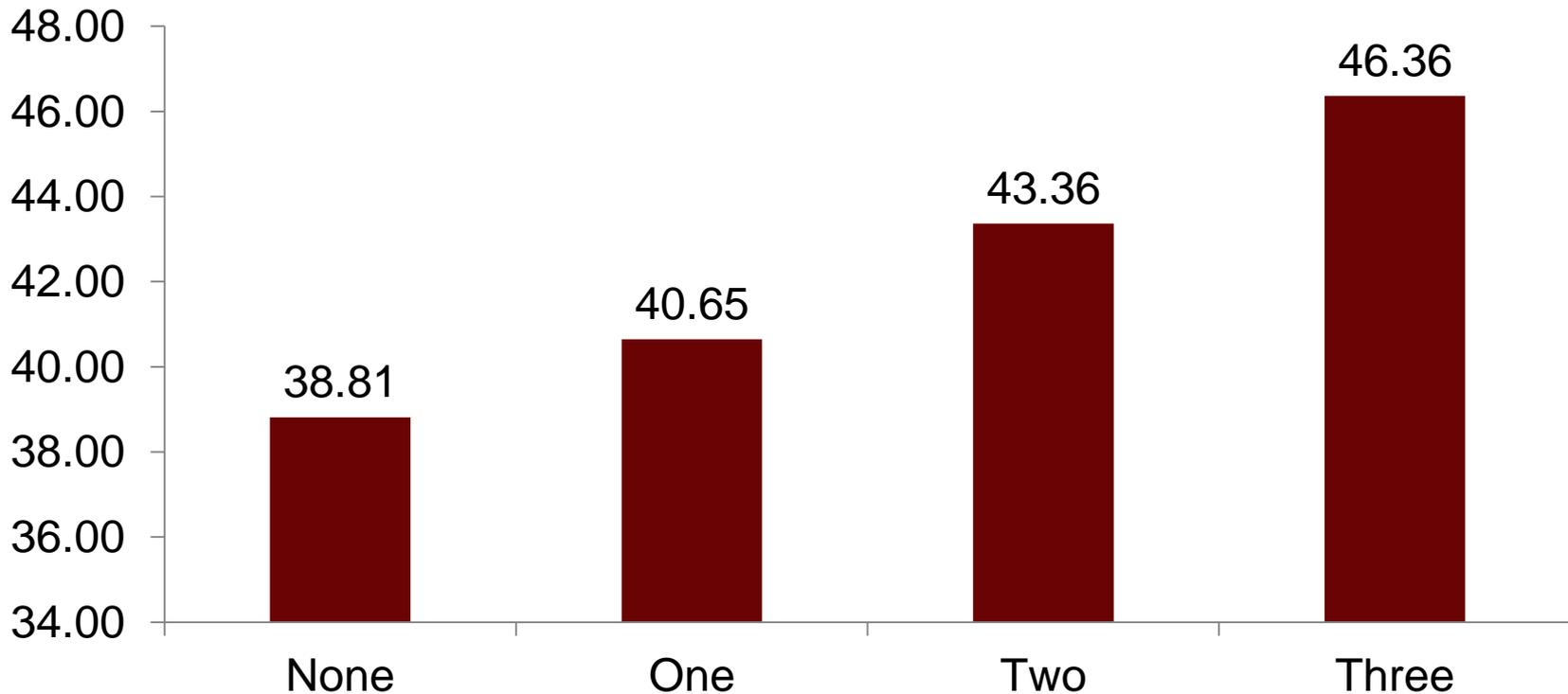
Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

HIPs – Discussions with Diverse Others FY Students

Means Discussions with Diverse Others

Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

HIPs – Higher Order Learning Senior Students

Means Higher-Order Learning Scores

Bar chart values:
- None: 37.32
- One: 37.76
- Two: 40.13
- Three: 43.38
- Four: 43.11
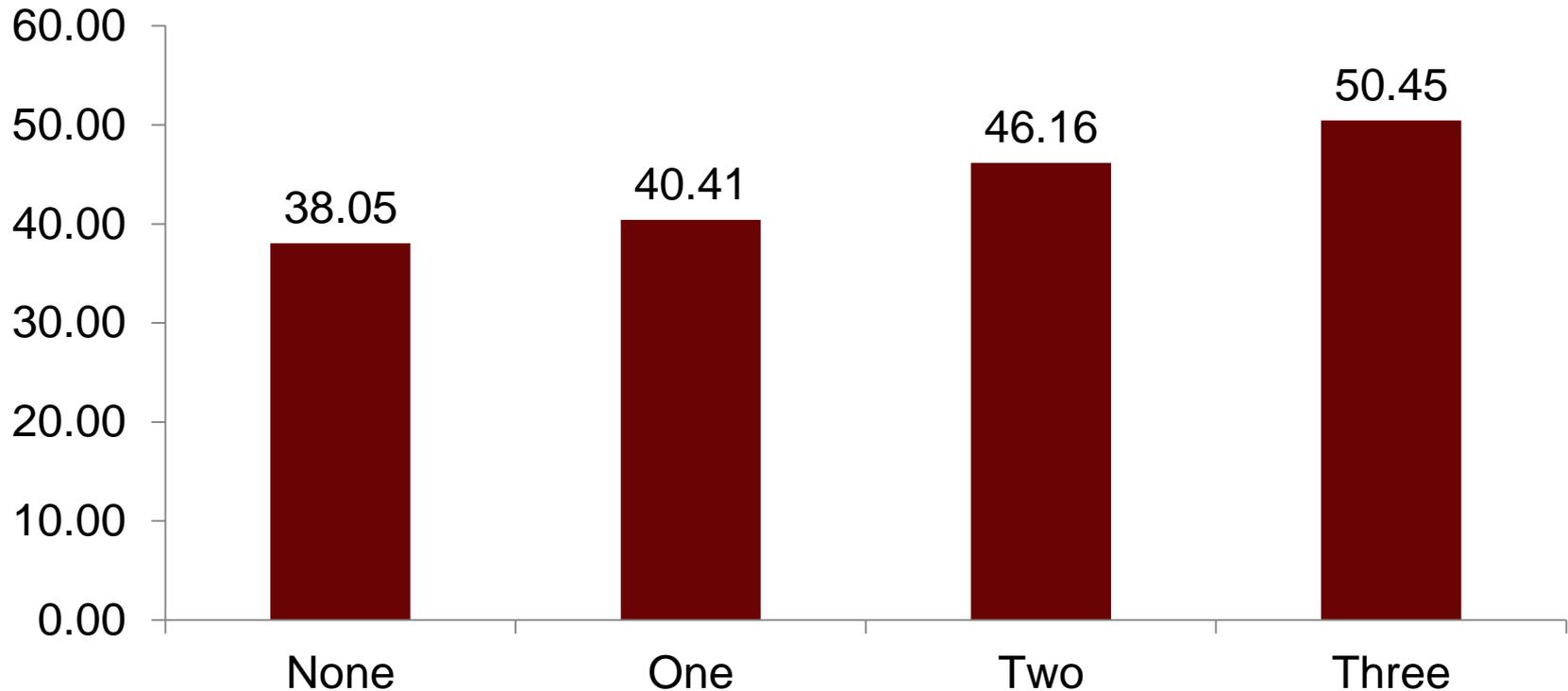- Five: 45.40
- Six: 44.00

Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

HIPs – Discussions with Diverse Others Senior Students
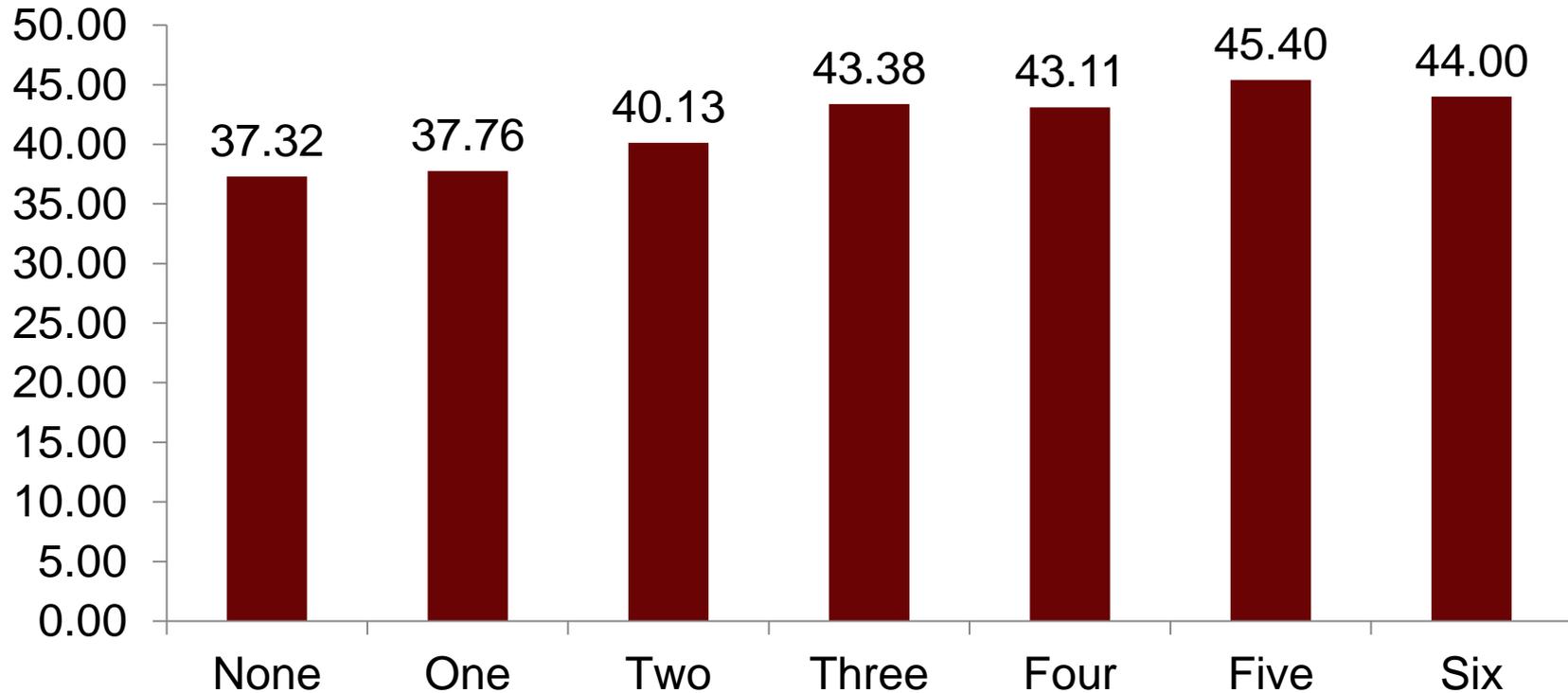
Means Discussions with Diverse Peers
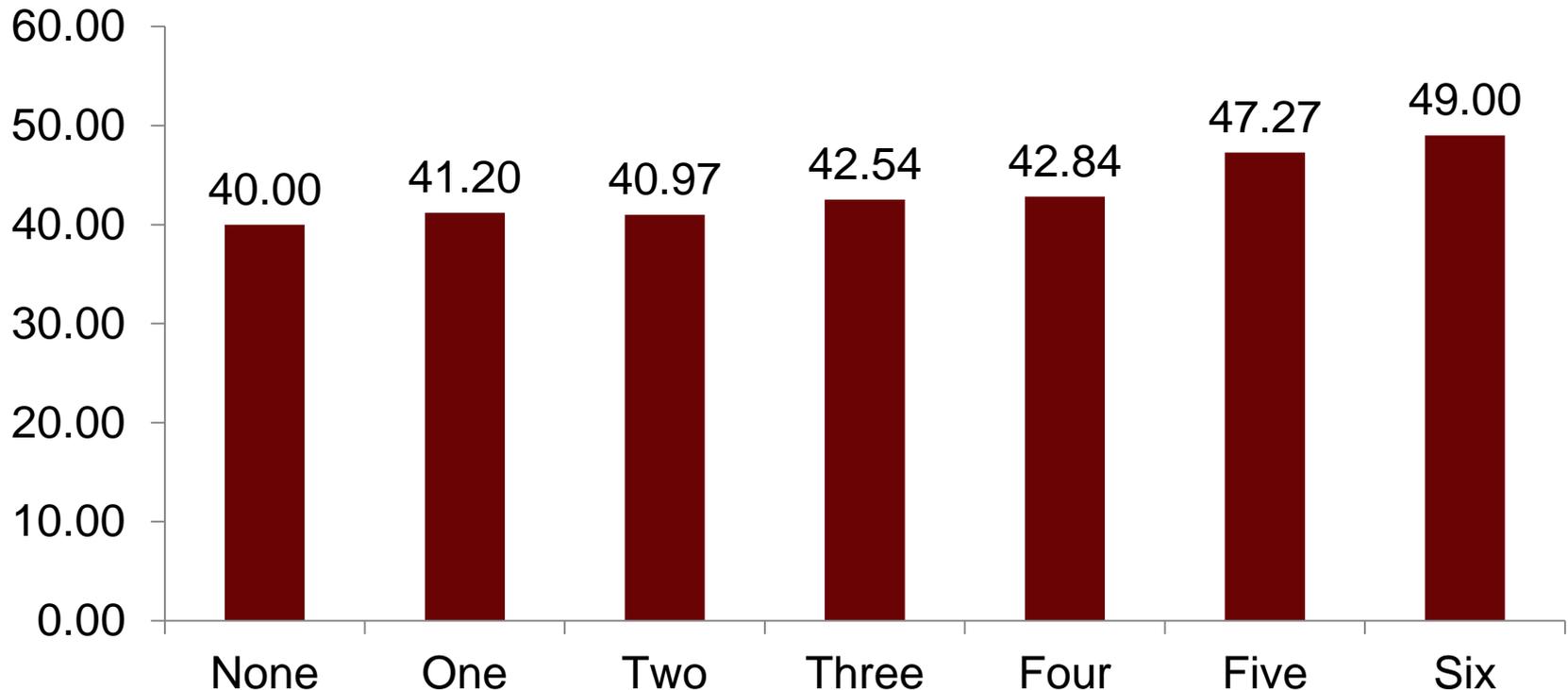
Each EI is scored on a 60-point scale. To produce an indicator score, the response set for each item is converted to a 60-point scale (e.g., Never = 0; Sometimes = 20; Often = 40; Very often = 60), and the rescaled items are averaged. Thus a score of zero means a student responded at the bottom of the scale for every item in the EI, while a score of 60 indicates responses at the top of the scale on every item.

Where do they go?

Understanding What Happens to Our Students

The National Student Clearinghouse is the nation's trusted source for education verification and student outcomes research.
http://www.studentclearinghouse.org

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

One-Year Retention Rate by Type	2011–2012	2012–2013	2013–2014	2014-2015	2015-2016
IUPUI* (includes all degree seeking—bachelor's, associate, certificates)	72.3%	71.7%	70.8%	73.4%	**73.8%**
IUPUI* (includes only bachelor's degree seeking)	72.2%	71.9%	70.9%	73.8%	**73.9%**
IUPUI Indianapolis (includes all degree seeking—bachelor's, associate, certificates)	73.8%	72.7%	71.7%	74.4%	**75.1%**
IUPUI Indianapolis (includes only bachelor's degree seeking)	73.6%	73.0%	71.8%	74.9%	**75.1%**
IUPUI Columbus - (includes all degree seeking—bachelor's, associate, certificates)	58.1%	60.1%	59.0%	62.2%	**57.7%**
IUPUI Columbus - (includes only bachelor's degree seeking)	58.4%	60.3%	59.4%	62.1%	**59.0%**
IUPUI Indianapolis (includes all degree seeking—bachelor's, associate, certificates) **retained at IUPUI Indianapolis**	**69.2%**	**68.0%**	**67.0%**	**68.7%**	**70.0%**

- *** IUPUI official always includes Columbus**

Fall 2015 IUPUI Indianapolis First-Time Beginners N=3,621

Number Returned for Second Year of Classes IUPUI IN Campus (Fall to Fall Retention)

1,126

2,495

■ Retained

■ Not Retained
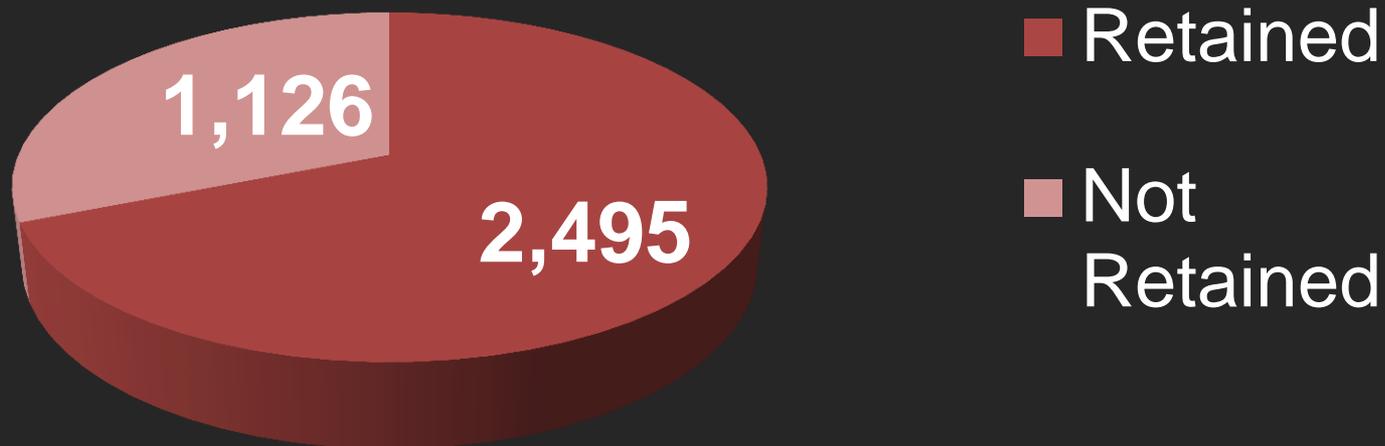
National Student Clearinghouse

Summary of Non-Returning Students N=1,126
Numbers of Students

Category	Number
No Record of Enrollment At Any Institution	540
Enrolled at Other 2-Year Institution	163
Enrolled at Other 4-Year Institution	186
Enrolled at another IU Campus	190
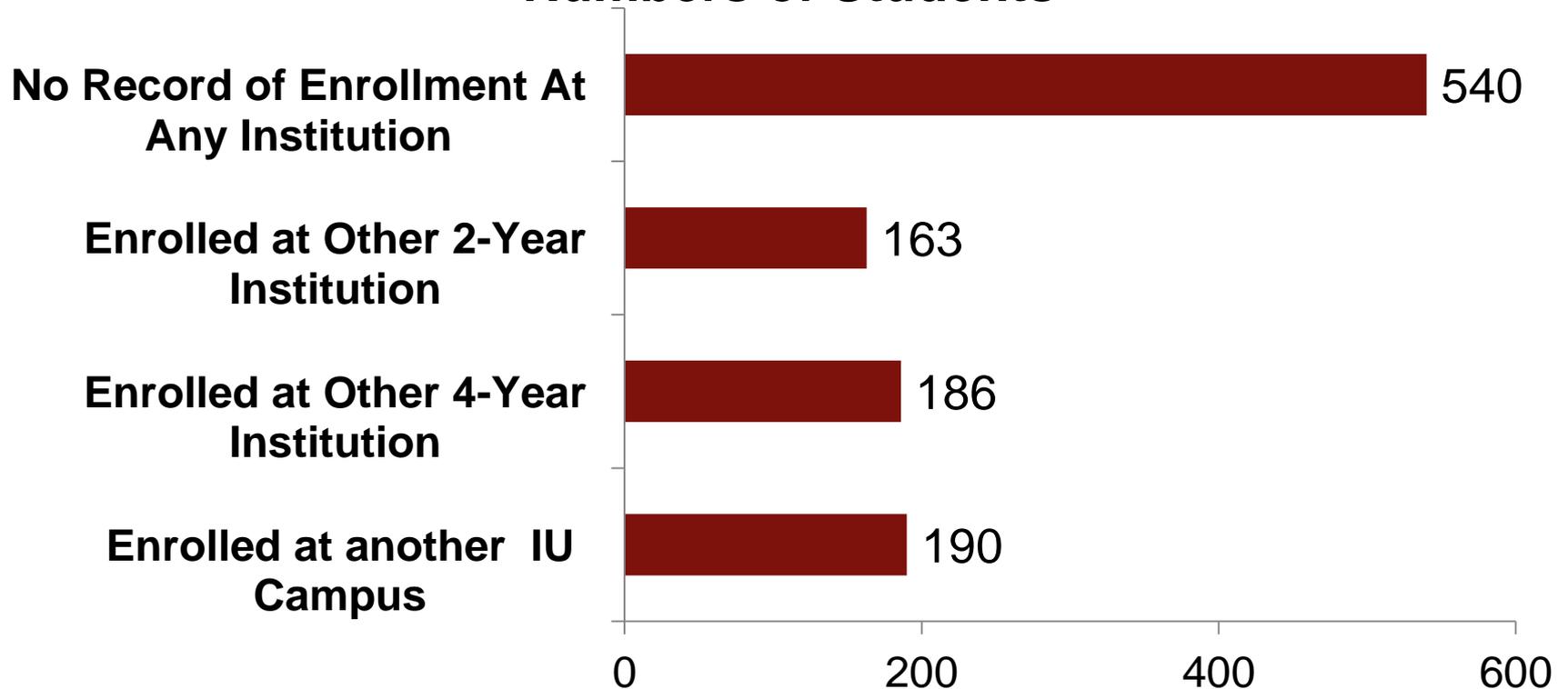
National Student Clearinghouse by Cohort Years

Summary of Non-Returning Students
% of Students

Indiana University–Purdue University Indianapolis
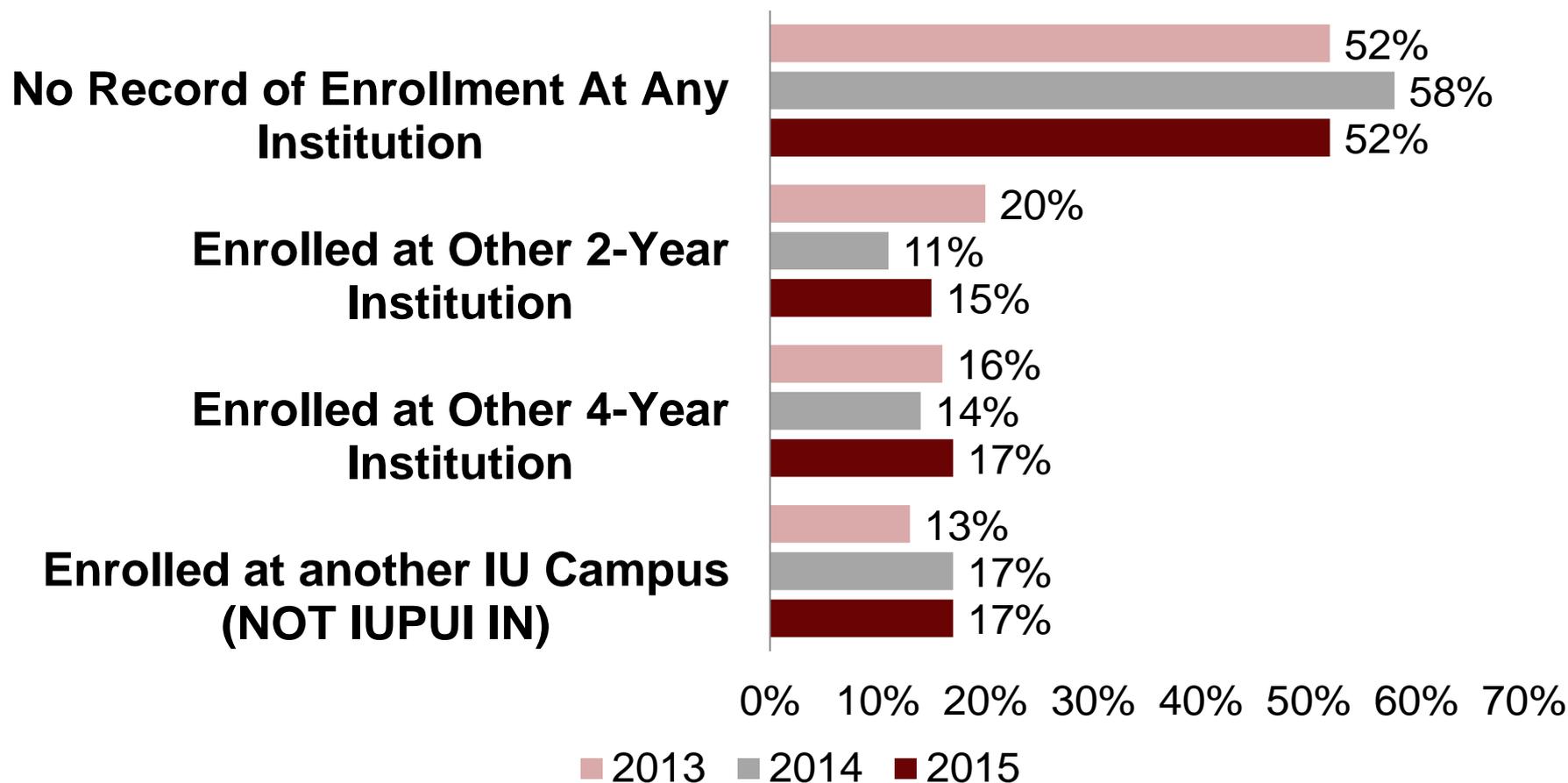
Where Do Students Enroll?
(Top 10 Institutions Out of the 64 Institutions Our Students Enrolled in Fall 2015 / % of 1,126)

Institution	N	%
Ivy Tech Community College	158	14%
Indiana University Bloomington	104	9%
Purdue University - West Lafayette	34	3%
Ball State University	32	3%
Indiana University Northwest	20	2%
Butler University	18	2%
Indiana University South Bend	16	1%
Indiana University Southeast	16	1%
Indiana University Kokomo	14	1%
Indiana State University	13	1%

Top 4-Year Institutions N=186

Institution	N	%
Purdue University - West Lafayette	34	18%
Ball State University	32	17%
Butler University	18	10%
Indiana State University	13	7%
University Of Southern Indiana	12	6%
Marian University	10	5%
Vincennes University	5	3%
Purdue University - North Central	4	2%
Purdue University Calumet	4	2%

Other IU Institutions N=190

Institution	N	%
Indiana University Bloomington	104	55%
Indiana University Northwest	20	11%
Indiana University South Bend	16	8%
Indiana University Southeast	16	8%
Indiana University Kokomo	14	7%
Indiana University- Purdue University Columbus	10	5%
Indiana University East	5	3%
Indiana University Purdue Univ - Fort Wayne	5	3%
Total	190	100%

Academic Performance of Students Who Left and Stayed

Average Cumulative IUPUI First-Year GPA

Category	GPA
No Record of Enrollment At Any Institution	1.55
Enrolled at Other 2-Year Institution	1.64
Enrolled at Other 4-Year Institution	2.80
Enrolled at another IU Campus	2.93
Retained at IUPUI	3.10
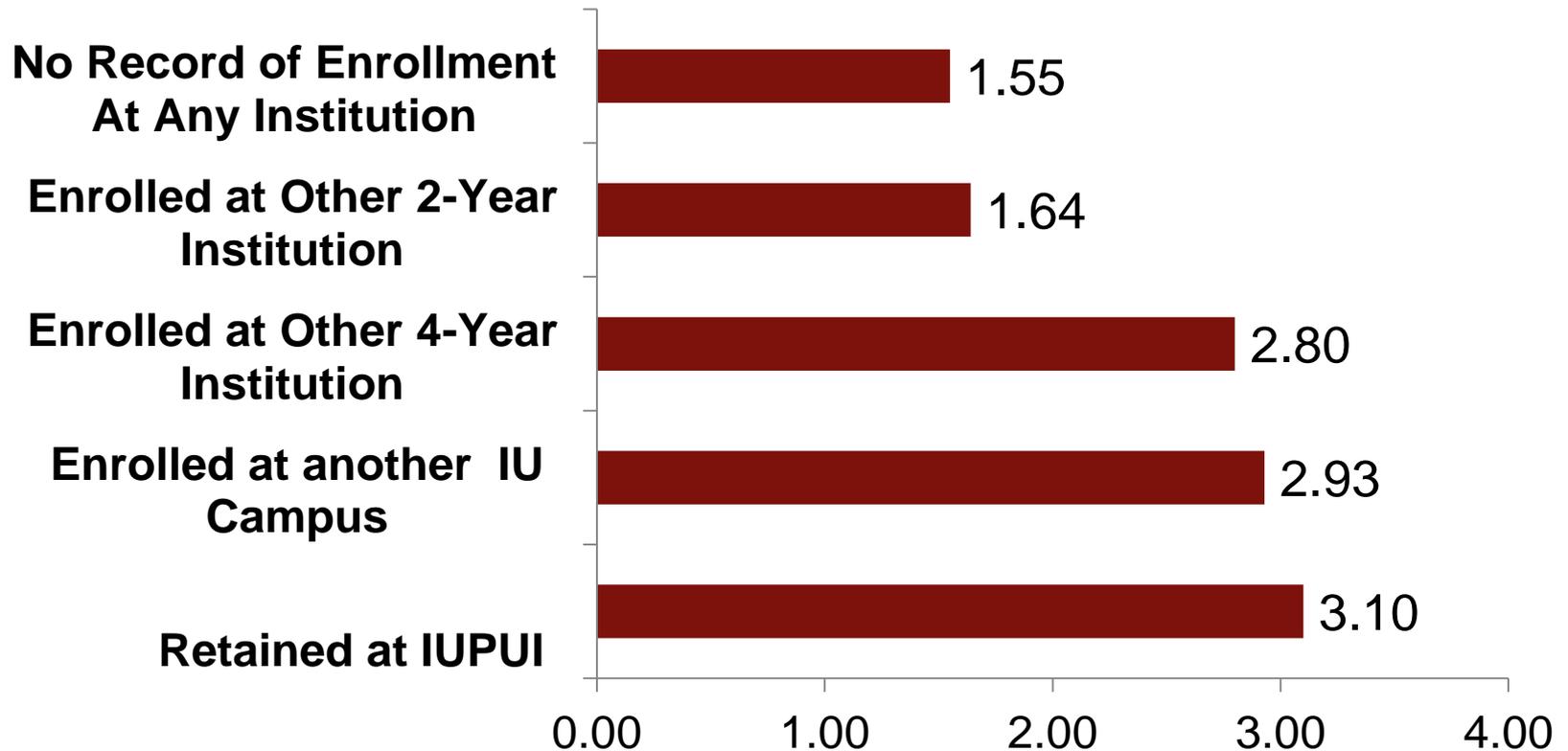
Academic Preparation of Students Who Left and Stayed

Average High School GPA

Category	GPA
Enrolled at another 2-Year Institution	3.21
No Record of Enrollment At Any Institution	3.24
Enrolled at another IU Campus	3.38
Enrolled at Other 4-Year Institution	3.42
Retained at IUPUI Indianapolis	3.50

3.00 3.10 3.20 3.30 3.40 3.50 3.60

Average SAT Score

Category	Score
Enrolled at Other 2-Year Institution	972
No Record of Enrollment At Any Institution	995
Enrolled at another IU Campus	1015
Enrolled at Other 4-Year Institution	1030
Retained at IUPUI Indianapolis	1060

900 950 1000 1050 1100

Why Students Leave?

Poor Academic Performance
- Having poor academic performance in first semester strong predictor of attrition

Do Not Get Into Program
- Students leave when feel concerned about or do not get into preferred major school.
- "My return to IUPUI all depends on if I get into the nursing school or not."

Location
- "Live too far from home."
- "Dislike large city of Indianapolis."

Lack of Campus Life
- "Campus is boring and no campus life."
- "Everyone leaves on the weekends so it can be boring."
- "I will be going to IU next year to get more of a college experience."

Not a Good Fit
- "Having hard time adjusting to campus ."
- "Just not right fit for me and not welcoming."

Major Not Offered
- "I do not plan on returning because IUPUI does not have my major I want to pursue"
- "There is no theatre or acting major."

Cost and Financial Concerns
- It is too much money and couldn't support it without loans"
- "Financially my family can't do."

Personal Reasons
- "I am leaving for personal issues."
- "I am leaving but not b/c of the school. It's for my own mental health."

IU IUPUI
FULFILLING *the* PROMISE

Why Do Students Come to IUPUI?

Top 10 Reasons For Choosing IUPUI
New Beginners Fall 2016

1) Availability of specific academic programs (majors)

2) Career and job opportunities available in Indianapolis after I complete my degree.

3) Job, career, and internship opportunities available in Indianapolis while attending school

4) Graduates get good jobs

5) Availability of financial aid/scholarship

6) Opportunity for an IU or Purdue Degree

7) Cost

8) IUPUI's reputation

9) Social climate/activities at the college

10) Social opportunities associated with IUPUI located in the city of Indianapolis

Rank ordered by mean ratings out of 21 items

Top 10 Reasons For Choosing IUPUI
New External Transfers Fall 2016

1) Graduates get good jobs

2) Availability of specific academic programs (majors)

3) Opportunity for an IU or Purdue Degree

4) Career and job opportunities available in Indianapolis after I complete my degree.

5) IUPUI's reputation

6) Availability of financial aid/scholarship

7) Job, career, and internship opportunities available in Indianapolis while attending school

8) Cost

9) Social climate/activities at the college

10) Wanted to live near home

Rank ordered by mean ratings out of 21 items

40

Retained Students More Likely to Select IUPUI for These Reasons!

- Social opportunities associated with IUPUI located in the city of Indianapolis

- IUPUI's Reputation

- Graduates get good jobs

- My parents wanted me to come

- Job, career, and internship opportunities available in Indianapolis while attending school

- Social climate activities on campus

- Institution's academic offerings such as courses, certification, and degrees

- Wanted to Live Near Home

- Career and job opportunities available in Indianapolis after I complete my degree

Bringing it all together and moving forward!

Student Factors Related to Retention and Academic Success

- High levels of academic preparation (high school GPA is strong predictor)
- High Socioeconomic Status (SES) (not Pell Eligible and having low levels of unmet financial need)
- Registration date (the earlier a student registers for classes, the higher their retention rate)
- Placing into credit-bearing math at entry
- High rigor and intensity of high school curriculum
- Achieving satisfactory academic performance in first semester
- Participating in early interventions (peer mentoring, Summer Bridge, Diversity Equity and Achievement Program -DEAP)
- Participating in High Impact Practices (Service Learning, Themed Learning Communities, Internships)
- Enrolling in 15 or more credit hours first semester
- Living on campus
- Gender (female)
- Not being First Generation
- Transferring in with 30 or more credit hours

Predictors of Success

Belonging and Commitment to IUPUI

+ Sense of Belonging (e.g., I feel like I fit right in on campus)
+ Organizational Commitment (e.g., It is important for me to graduate from IUPUI (e.g., rather than from another college)

- External Commitments (working off-campus, care for dependents, commuting, taking care of household responsibilities)

Motivation and Commitment

+ Commitment to educational goals
+Drive to succeed (confidence)
+ Motivation for College Work (confidence)
- Come to class late (past behavior)
- Wait until last minute to get assignments done (past behavior)

Confidence Levels- Self-Efficacy

+ Ability to seek out appropriate academic help
+Ability to manage finances
+ Study skills
+ Emotional health
+ Physical health (not for 2015 cohort))
+ Intellectual or Academic Activities

Expectations

+ Plan to enroll in summer courses
+ Plan to participate in service learning
+ Plan to participate in student clubs/groups
+ Plan to participate in events or activities on campus
+ Plan to change major (marginally significant .063)

Concerns

- Ability to finance college education

* Criterion: One-Year Retention IUPUI IN
2013, 2014, 2015 Entering Student Survey Results (n=8,889)
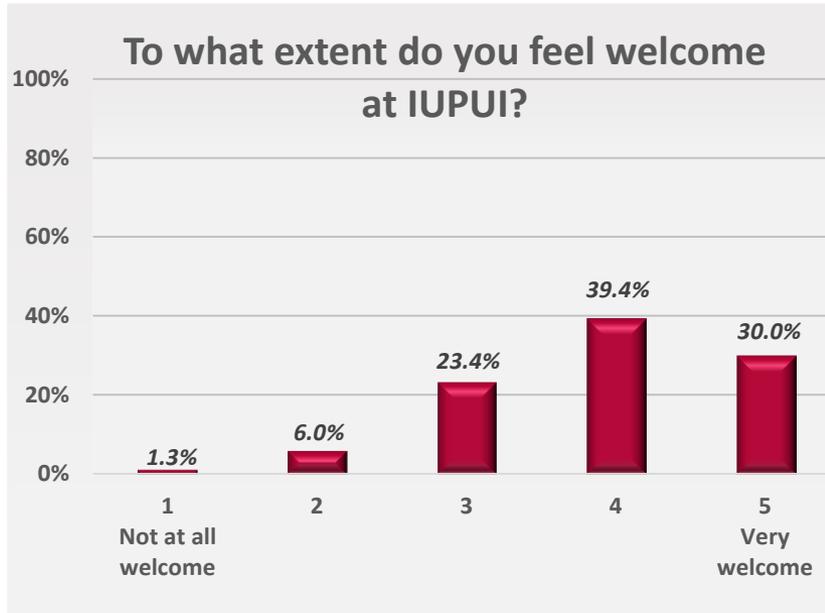 Covariates: HS GPA, SAT Score, Pell Grant

44

Institutional Factors Related to Student Success

1. Clear pathways to degree completion and addressing barriers (administrative, academic, financial, and social)

2. Providing quality High Impact Practices

3. Intrusive and high quality career and academic advising

4. Comprehensive, intentional, and integrated support for first-year and transfer students

5. Effective early interventions for high risk students

6. Fostering academic and social integration (student affairs and academic affairs collaboration)

7. Residential on-campus experiences that foster campus engagement, interaction with peers, and enrich academic pursuits

8. Strategic use of institutional aid and scholarships (for strategic enrollment management recruitment and retention)

9. Welcoming campus that fosters sense of belonging and community

10. Using data to develop and improve programs, policies, services, and instructional practices

11. Being strategic about ensuring the right students have the right support (students that will benefit most) - world of predictive analytics coupled with good analysis, evaluation, model refinements

Welcoming Campus Initiative Survey

To what extent do you feel welcome at IUPUI?

- 1 Not at all welcome: 1.3%
- 2: 6.0%
- 3: 23.4%
- 4: 39.4%
- 5 Very welcome: 30.0%

- Undergraduate students (3.98) rate their feeling of welcome significantly higher compared to graduate students (3.79).

- Undergraduate transfer students (3.84) feel significantly less welcome compared to undergraduates who begin at IUPUI (4.05).

- No significant differences were found on gender, race, LGBTQ status, disability status, veteran status, or if the respondent identifies as an international student for undergraduate or graduate respondents.

What does a welcoming campus mean to IUPUI students?

Faculty/staff/students who are friendly and helpful - 35% of comments

"Where people smile, say hi…will listen to what your needs/opinions are."

"Staff and faculty that are approachable and convey interest in facilitating student success."

A sense of belonging/community - 25% of comments

"To feel accepted and a valuable part of the academic and social environment."

"Where each individual feels as though they are part of a team."

A campus that is welcome to all persons/ideas/beliefs - 17% of comments

"Where a person feels free to respectfully express their thoughts and ideas in a way to create discussion and dialogue."

What can IUPUI do to make campus more welcoming?

Events (More options & advertisement) - 18% of comments

"Have more group activities during all times of the day."

"We need something to add more liveliness to campus, especially on the weekends."

Diversity education and appreciation – 7% of comments

"Cultural competency is really important. I don't want faculty and staff to say offensive things because they aren't taught."

"Hire more faculty and staff of color and make sure they are in visible positions where students can find them."

Physical improvements - 7% of comments

"Have more comfortable study places in the various buildings."

"I think we could use better building signage and signs that indicate the direction you go to get to key places."

Reach out more to non-traditional students - 6% of comments

"Events are not family-friendly or convenient for non-traditional students."

"As a commuter student I have not had many chances to get involved in activities."

46

Undergraduates N= 1128, Graduate students N= 719

Internal and External Changes Expected to Positively Affect Retention and Graduation Rates

IUPUI

- Changes in Admissions Criteria

- More Academically Prepared Students

- More Need-Based Institutional aid provided

- More Students Enrolled Full-Time and Taking 15 Hour Credit Load Per Semester

- Increases in Campus Housing

- Degree Maps

- High Impact Practices

- Strategic Enrollment Management

- Division of Undergraduate Education/ University College

External

- Changes in High School Math Curriculum

- Increased Access to Dual Credit and AP courses

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.

What Well Working – Leverage and Sustain

1. Summer Bridge

2. High Impact Practices

3. Diversity Enrichment and Achievement Mentoring (DEAP) Program

4. Success Coaching

5. Institutional Aid and Programming - Success of Twenty First Century Scholars

6. More Commitment to Need-Based Aid

7. More Students Enrolling in 15 or More Credit Hours

8. Campus Housing

9. Attracting more Underrepresented Students and Making Progress on Improving Success Outcomes

10. Graduates are getting jobs and staying in Indiana

11. Faculty Teaching and Learning Excellence - Engaged in High Impact Practices

12. Culture of data-supported planning, decision making, and improvement.

High Impact Practices

Through the LEAP initiative, AAC&U has published research on a set of widely tested teaching and learning strategies and programs that—<u>when done well</u>—have substantial educational benefits, especially for traditionally underserved students. The elements of good teaching and learning embedded in these practices can be applied in many settings, including in traditional classrooms as well as special programs, and in co-curricular settings.

★ First-Year Seminars and Experiences

★ Common Intellectual Experiences

★ Learning Communities

★ Writing-Intensive Courses

★ Collaborative Assignments and Projects

★ Undergraduate Research

★ Diversity/Global Learning

★ Service Learning, Community-Based Learning

★ Internships

★ Capstone Courses and Projects

What Faculty and Instructional Teams Can Do to Ensure HIPs Done Well

- Set expectations set at appropriately high levels

- Ensure students invest significant investment of time and effort

- Design experiences to promote quality interactions with faculty and peers

- Ensure students have experiences with diversity

- Provide frequent and constructive feedback

- Provide periodic and structured opportunities for reflection

- Develop experiences that have relevance through real-world applications

- Require a public demonstration of competence

(Kuh, 2008; Kuh & O'Donnell, 2013)

Consider and Continue to Explore

1. Scaffolding High Impact Practices throughout all 4-5 Years and Ensuring all Students Participate

2. Reduce barriers to awarding credits for internships, research (opportunity with banded tuition)

3. Making sure that HIPs are done well and with fidelity.

4. Use of e-portfolios and the electronic personal development plans to engage students in reflective practices (folio thinking) , understanding self and aligning interests to majors.

5. Ensuring that interventions are reaching students that may benefit the most – more strategic targeting

6. Continue Ways to Couple Institutional Aid With Programming

7. Provide supports to help low-income students overcome practical barriers – Beyond Financial Aid.

8. Move Beyond the First Year – More Collaboration with Schools and Inspiring Pre Majors

9. Use of Summer

10. Math Academic Support in Credit Bearing Courses

11. Leveraging Campus Welcoming with Enhancing Students' Sense of Belonging

12. Ensuring High Quality Degrees - Capstone Experiences and Working With Employers

13. Accelerated Degree Programs

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