



An Examination of Factors Affecting Retention Rates Among First-Time, Full-Time Beginners

This report focuses on IUPUI (Indianapolis only) first-time, full-time beginners, including all degrees (e.g., bachelor's, associate, and certificates). The purpose of this report is to develop a better understanding of the factors influencing one-year retention rates.

HIGHLIGHTS

Retention and Graduation Rate Trends

- The one-year retention rate in 2019 was 76.0%, which represented almost a 4% increase compared to the 2017 rate of 72.4%.
- The retention for African American beginners increased by 6.5% for the Fall 2019 cohort compared to the 2018 cohort (72.9% vs. 66.4%). It is noteworthy that the gap between overall beginners and African American beginners is currently at 3.1% and it has previously ranged from 6% -10%.
- We have witnessed continuous improvements in the four-year and six-year graduation rates among IUPUI Indianapolis first-time full-time beginners over the last decade. The 2010 cohort four-year graduation rate was 19.8% compared to the 2016 cohort rate of 39.5%. The 6-Year graduation rate 2010 cohort was 49.1% compared to the 2014 cohort rate of 53.5%.

Peer Comparisons

- Despite improvements in and retention and graduation rates, IUPUI rates are far below the majority of our urban public peers. It is notable that while Wayne State University and University of Illinois-Chicago have higher one-year retention rates than IUPUI, they both serve more historically marginalized students, have more students receiving Federal Pell Grants, and lower proportion of first-time beginners living in campus housing compared to IUPUI.
- In order to ensure a more appropriate comparison while retaining aspirational peers, a new peer group has been developed using the following criteria: percent first-time, full-time (FTFT) on campus, percent FTT Pell, SAT 75th percentile (ACT converted), percent African American, percent Latinx, total headcount, percent undergrad, Carnegie classification, number of degrees conferred, and degrees offered.
- The Average Amount of Institutional Grant Aid awarded to IUPUI first-time full-time beginners was lower (\$5, 231) compared to Wayne State University (\$6, 426) and University of Illinois at Chicago (\$5,446) based on the 2018-19 Student Financial Aid year. It is noteworthy that IUPUI has the lowest net price (\$9,807) compared to all our new peer institutions.

National Student Clearinghouse Results: What Happened To Non-Returning Students?

- An examination of data provided by the National Student Clearinghouse indicated that the majority (61.5%) of 2019 cohort non-returning students stopped out or did not have a record in the Clearinghouse. Of the students who did not return to IUPUI and enrolled at another institution, the top four institutions they enrolled were 1) Ivy Tech Community College (132/13%), 2) Indiana University Bloomington (72/7.1%), 3) Ball State 22/2.2% and 4) Purdue University - West Lafayette (29/2%). A higher percentage of 2019 cohort students transferred to Bloomington compared to 2018 (7.1% compared to 4.8% of non-returners).
- Non-returning students who had no clearinghouse record/were not enrolled at another institution or enrolled at a 2-Year Institution one year later, tended to perform poorly academically at IUPUI. A total of 53% (147) of students who enrolled at another 2-Year Institution earned a fall GPA less than 2.00. However, students who enrolled at another IU Campus, enrolled at another 4-Year Institution, or reenrolled at IUPUI IN tended to have high levels of academic performance.

Understanding the nearly 2% Increase in One-Year Retention Fall 2018 (74.7%) and Fall 2019 (76.2%) Among All Beginners

- Compared to the IUPUI 2018 beginner cohort, the 2019 cohort students were more likely to participate in Summer Bridge, receive institutional aid in the form of Pledge Grants, perform better in their math fall IUPUI math courses, register earlier for classes, and earn dual credit prior to enrollment.
- There were a number of new programs and initiatives implemented during the 2019-2020 academic year including the following: The Jaguar Leadership Network, Indy Achieves program for Marion County residents who are Twenty-First Century Scholars or O'Bannon scholars, and students were not academically dismissed for poor academic performance. These initiatives could have contributed to the improved retention rates.

Understanding Factors Affecting Retention Rates

- Understanding the factors that significantly predict one-year retention requires an examination of student pre-college factors, IUPUI programs and experiences, and students' perceptions and psychosocial factors.
- High School GPA, levels of unmet financial need, being first generation, placing into developmental math, and registering late are the primary pre-college factors affecting retention rates.
- Students who have unmet financial needs over \$5,500 tend to have lower one-year retention rates compared to students who have less unmet financial need. Also, students who have concerns about financing college have lower retention rates.
- Earning satisfactory academic performance in the first semester (earning above a 2.00 Fall GPA) is associated with higher retention rates. Not earning any F grades is also a good predictor---even among students who earn low GPAs.
- DFW rates in math courses is a strong predictor of one-year retention rates.
- The most significant IUPUI programs that positively affect one-year retention are the following: 1) living in on-campus housing, 2) Summer Bridge, 3) working for pay on-campus, and 4) Themed Learning Communities.
- The following students' perceptions and psychosocial factors significantly predict one-year retention even when considering HS GPA, income level, and registration date: sense of belonging, growth mindset, academic self-efficacy, grit and resilience, and commitment to IUPUI.
- Students reported the following reasons for leaving IUPUI: Don't feel like I belong at IUPUI, lack of campus life and activities, lack of friends and connections, difficulty paying for college (finances), personal emotional/mental health, and major not offered.
- There was a lot of variation among degree granting academic schools in terms of one-year retention rates. One year retention rates ranged from 75% to almost 90%. The one-year retention rates of pre-majors or University College are lower than students directly admitted into a degree-granting school.

Implications for Practice: What IUPUI Can Do to Ensure Success (based on National and IUPUI Evidence)

- Academic performance in the first semester is one of the primary predictors of persistence. In order to enhance student success, it is critical to ensure that students have all the social and academic support they need to feel a sense of belonging and self-efficacy that they can succeed early in the first semester (e.g., welcoming campus, advising/peer mentor support, instructors who care about students' learning).
- Provide academic support in first year math courses and expedite enrollment in credit-bearing math courses.
- Continue to leverage need-based aid strategies so that students do not face financial struggles and hardships that affect academic performance and degree completion. Focus on closing the unmet financial need gap and explore awarding larger amounts to fewer students (while not increasing financial aid expenditures).
- Continue to expand Summer Bridge, provide opportunities for students to participate in Themed Learning Communities continue, encourage and support on-campus employment, and explore the feasibility of offering more on-campus and/or near campus housing.
- Ensure all degree granting schools adopt best practice strategies such as proactive advising and use of the Student Engagement Roster (SER) as an early alert system to improve one-year retention and ensure the success of all students, particularly pre-majors.
- Offer early graded assignments and monitor students' early performance. Students who earn Fs are at a high risk of not returning. Earning an F may have negative effects on students' self-efficacy expectations and create feelings of alienation.
- Many students get their sense of belonging from their experiences in the classroom. Therefore, it is important for instructors to provide opportunities for students to interact with other students so they can form friendships and supportive peer networks.

- Ensure we are creating inclusive learning environments. Along with this, create opportunities so that all faculty/instructors engage in professional development to enhance multicultural competence and inclusive teaching practices. Additionally, take steps to ensure that all instructors are educated on how factors such as stereotypes, stereotype threat, implicit bias and more can have negative impacts on student success.
- Conduct an audit review of all websites, physical spaces, communications, messages, policies, and photos that may make students feel isolated, not affirmed, and not valued.
- Create physical and social spaces in which all students feel affirmed and valued, and have an opportunity to connect with one another.
- Continue to encourage engagement in programs and activities designed to foster a sense of belonging, particularly activities early in the fall semester or programs that develop over several weeks. Students can benefit from the connections they develop in ways beyond retention.
- Expectations surrounding the social environment on campus should be communicated early during the admissions process. This will provide appropriate level setting for the social environment and improve the likelihood that students will develop a sense of belonging and form friendships more quickly.
- Communications professionals should also find ways to streamline communications about events and other possibilities for engagement on campus so that students can find opportunities that match their interests.
- Continue initiatives to hire a more diverse faculty, especially in terms of race/ethnicity. Students of color were quick to mention (in IUPUI focus groups and surveys) that having faculty from similar backgrounds is important for making them feel as if they belonged on campus.
- Provide support for programs that encourage engagement from family and provide ways for students to become engaged beyond the campus community. Feelings of belonging that facilitates retention can come from a variety of sources beyond IUPUI.
- Instructors, advisors and staff implement strategies to foster growth mindset and resilience such as the following: 1) normalizing and encouraging students to persist despite setbacks, 2) enhancing sense of belonging and networks of support, 3) offering opportunities for self-reflection and opportunities to grow, 4) engaging students in problem-solving by breaking the problem down into smaller, more manageable parts 5) providing useful timely, detailed feedback on learning, and 6) providing opportunities for students to repeatedly practicing the skill the student wants to improve (e.g., time on task to build math skills).
- Be strategic about using data and information at the individual student level and intervening with students early on to address needs and eliminate barriers to success.

Interventions to Sustain Post-Pandemic

The Fall 2019 cohort of beginners experienced the rapid shift to online learning during the spring 2020 semester due to the COVID 19 worldwide pandemic. IUPUI implemented a number of strategies and evidence-based initiatives to mitigate any potential negative effects the COVID 19 pandemic on student success. The following strategies could be maintained in order to sustain benefits to students:

- Calling Campaign - Jags Check in. Called 19,000 students in spring 2020 to establish connections and conduct needs assessment. This was a novel campaign that involved faculty and staff in student success and engagement efforts.
- Amplified professional development and consultations with instructors to improve teaching/learning environments and student engagement. This included sessions on improving student engagement via Canvas LMS and Zoom.
- Leveraged financial aid to disburse aid in the form of cash grants to Federal Pell Grant students and emergency aid for students encountering financial challenges due to COVID 19.
- Collected real-time data using student surveys to understand and address students' needs and challenges. Results were used in campus planning decisions.
- Improved communications with students and held a series of Town hall meetings to foster engagement and connections.
- Students reported that they benefitted from instructors who were understanding, accommodating, and flexible during the rapid shifts to online formats. Students may continue to benefit if instructors are flexible and accommodating in face-to-face formats.
- Initiated a proactive advising program that monitored student engagement with the Canvas LMS. Students with low engagement with Canvas LMS received nudging messages from advisors. This was part of a research project which employed an experimental design with random assignment. Students who received the messages from advisors had significantly better academic performance compared to those who did not.

Summary of Factors Significantly Associated with One-Year Retention

Pre-College Factors (associated with lower retention rates)

- Low levels of academic preparation (High school GPA is a strong predictor.)
- Lack of rigor and intensity of high school curriculum (not attaining an Academic Honors Diploma as an indicator)
- Not placing into a credit-bearing math class (placing into developmental math)
- Not earning pre-college credit (dual or test credit)
- Registering for classes late during summer registration (proxy for motivation, commitment, and enrolling in desired programs and courses)
- Being a first-generation college student
- Received a Pell Grant (proxy for low socioeconomic status or SES) or having high levels of unmet financial need.
- Students' estimates of the hours they expected to devote to nonacademic activities (e.g., high number of hours working for pay off campus, commuting, caring for dependents, taking care of household responsibilities).
- Indicating they plan to work more than 20 hours off campus for pay
- Indicating they plan to transfer before starting at IUPUI

IUPUI Experiences and Programs (positively associated)

- Earning satisfactory academic performance in first semester (earning above a 2.00 Fall GPA)
- Not earning any Fs in first year
- Performing well in fall and spring math courses
- Having institutional financial aid and scholarships that serves to lower levels of unmet financial need
- On-Campus Housing
- Summer Bridge
- Themed Learning Communities
- Diversity Enrichment and Achievement Program (among historically marginalized students)
- Working for Pay On-Campus – student employment
- Having opportunities to form friendships and form supportive peer networks
- Opportunities to join clubs/organizations

Perceptions and Psychosocial Factors (positively associated)

- Sense of belonging (I feel a sense of belonging to IUPUI; I feel that I fit right in on campus)
- Growth Mindset (I believe that I can improve my academic ability if I work hard enough)
- Self-efficacy in math, writing, and academic ability
- Low level of concern about financing college.
- Feeling that experience with IUPUI is aligned with my expectations in terms of what the college experience should be
- Institutional Commitment (e.g., is important for me to graduate from IUPUI (e.g., rather than from another university)
- Satisfaction with overall academic experience at IUPUI
- Satisfaction with overall social experiences at IUPUI
- Satisfaction with overall quality of instructor/faculty members at IUPUI
- Satisfaction with academic advising in major department/school or University College
- Satisfaction with tutoring, coaching, and other academic support services
- Satisfaction with campus activities and events

Top Self-Reported Reasons for Not Re-Enrolling

- Don't feel like I belong at IUPUI
- Lack of sense of community
- Lack of campus life and activities
- Lack of friends
- Difficulty paying for college (finances)
- Personal emotional/mental health reasons
- Major not offered

Note: Factors identified based on a series of analyses conducted for this report along with other investigations and student surveys found on our website <https://irds.iupui.edu/>

One-Year Retention Rates (Fall-To-Fall) First-Time, Full-Time Beginners By Cohort

Table 1. Explanation of different rates by cohort reported in other campus reports:

One-Year Retention Rate by Type	2015	2016	2017	2018	2019
IUPUI * (includes all degree seeking—bachelor’s, associate, certificates)	74.1%	74.9%	71.4%	72.8%	74.4%
IUPUI (includes only bachelor’s degree seeking)	74.2%	75.2%	71.5%	72.9%	74.6%
IUPUI Indianapolis (includes all degree seeking—bachelor’s, associate, certificates)	75.4%	75.7%	72.4%	74.5%	76.0%
IUPUI Indianapolis (includes only bachelor’s degree seeking)	75.4%	76.0%	72.4%	74.7%	76.2%
IUPUI Indianapolis (includes all degree seeking—retained at IUPUI Indianapolis)	70.0%	70.8%	68.0%	70.9%	72.4%
IUPUI Columbus (includes all degree seeking—bachelor’s, associate, certificates)	57.7%	62.0%	57.4%	63.6%	63.7%
IUPUI Columbus (includes only bachelor’s degree seeking)	59.0%	62.3%	58.0%	63.4%	63.5%
IU Fort Wayne (includes all degree seeking—bachelor’s, associate, certificates)	---	---	---	54.5%	63.1%
IU Fort Wayne (includes only bachelor’s degree seeking)	---	---	---	54.5%	63.2%

*IUPUI official always includes Columbus. Retained means re-enrolled next fall semester at any IU campus unless otherwise specified.

Figure 1. Indianapolis Only FTFT Cohort Retention and Graduation Rates (Bachelor’s, Associate, and Certificate). Retained or Graduated Any IU Campus

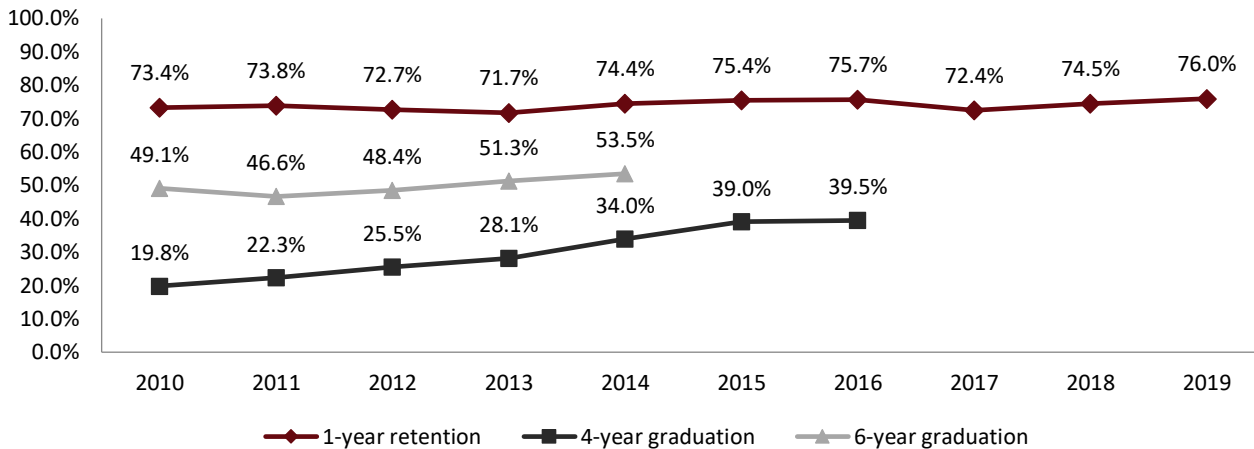
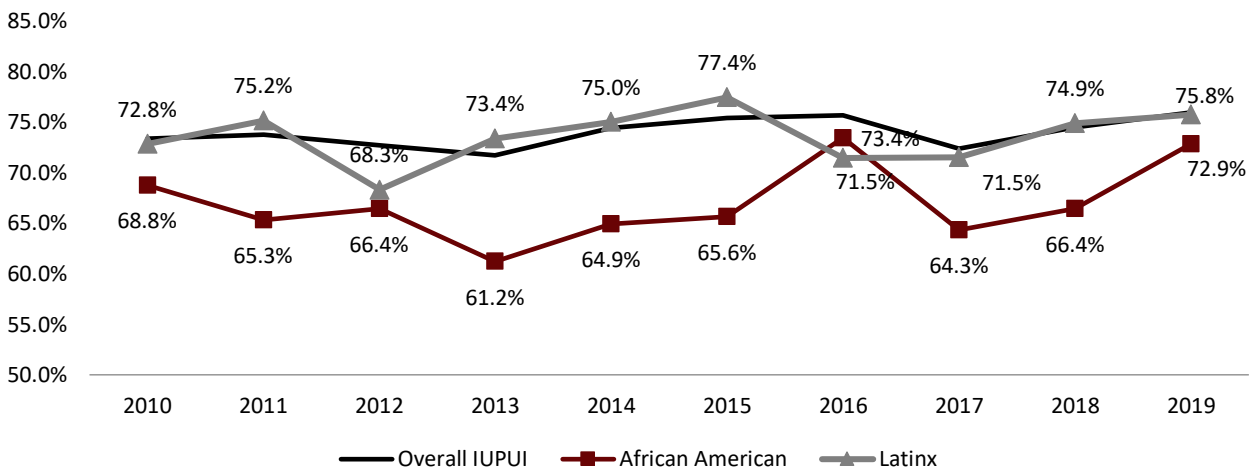


Figure 2. Indianapolis Only FTFT Cohort One-Year Retention Any IU Campus (Bachelor’s, Associate, and Certificate) – African American and Latinx



PEER COMPARISONS

Table 2. Official Peer Institutions: First-Time Full-Time Beginners

Peer Institutions	Six-Year Graduation	Four-Year Graduation	One-Year Retention
University at Buffalo	75%	59%	86%
University of South Florida-Main Campus	75%	60%	91%
Temple University	74%	52%	89%
University of Cincinnati-Main Campus	71%	35%	88%
University of Utah	70%	33%	89%
Virginia Commonwealth University	67%	45%	83%
University of Alabama at Birmingham	63%	40%	83%
University of Illinois at Chicago	61%	34%	79%
University of Louisville	59%	37%	80%
University of New Mexico-Main Campus	53%	29%	77%
University of Colorado Denver/Anschutz Medical Campus	52%	24%	70%
IUPUI	51%	28%	73%
Wayne State University	48%	20%	79%

Note: Retention cohort 2018, Four-Year Graduation and Six-Year Graduation Rates 2013. Retention rates measure the percentage of first-time students who are seeking bachelor's degrees who return to the institution to continue their studies the following fall. Source IPEDS

Table 3. New Peer Institutions: First-Time Full-Time Beginners

Peer Institutions	Six-Year Graduation	Four-Year Graduation	One-Year Retention
University of Cincinnati-Main Campus	71%	35%	88%
University of Utah	70%	33%	89%
Virginia Commonwealth University	67%	45%	85%
University of Illinois at Chicago	61%	34%	79%
Georgia State University	55%	28%	82%
University of Colorado Denver/Anschutz Medical Campus	52%	24%	70%
Boise State University	50%	26%	79%
IUPUI	51%	28%	73%
Portland State University	48%	22%	74%
Wayne State University	48%	20%	79%
University of Nevada-Las Vegas	45%	17%	79%
University of Wisconsin-Milwaukee	44%	19%	76%

Note: Retention cohort 2018, Four-Year Graduation and Six-Year Graduation Rates 2013. Retention rates measure the percentage of first-time students who are seeking bachelor's degrees who return to the institution to continue their studies the following fall. Source IPEDS

Table 4. New Peer Institutions: First-Time Full-Time Beginners

Institution Name	Average Net Price	Percent Awarded Any Financial Aid	Percent Awarded Pell Grant	Average Amount Pell Grant Aid Awarded	Percent Awarded Institutional Grant Aid	Average Amount of Institutional Grant Aid	Total Amount of Institutional Grant Aid	Percent State/Local Grant Aid	Average Amount of State/Local Grant Aid
Boise State University	\$13,237	84%	25%	\$4,600	53%	\$9,813	\$14,395,010	13%	\$3,546
Wayne State University	\$15,012	98%	48%	\$5,212	94%	\$6,426	\$17,903,466	8%	\$1,033
University of Utah	\$13,739	85%	20%	\$4,901	70%	\$6,343	\$17,740,249	22%	\$3,785
Georgia State University	\$14,136	93%	53%	\$5,073	22%	\$6,271	\$6,615,385	75%	\$6,990
Virginia Commonwealth University	\$20,968	81%	33%	\$4,620	60%	\$5,731	\$15,455,363	38%	\$6,523
University of Illinois at Chicago	\$12,322	78%	55%	\$4,906	62%	\$5,449	\$13,878,281	60%	\$4,675
University of Cincinnati	\$19,219	75%	19%	\$4,507	56%	\$5,340	\$15,954,538	12%	\$1,472
IUPUI	\$9,807	89%	42%	\$4,927	65%	\$5,231	\$13,458,866	42%	\$6,827
University of Nevada-Las Vegas	\$12,403	92%	41%	\$4,913	26%	\$3,782	\$3,888,180	73%	\$2,186
Portland State University	\$12,710	82%	51%	\$4,545	53%	\$3,478	\$3,238,348	36%	\$2,989
University of Colorado Denver/Anschutz Medical Campus	\$15,865	82%	41%	\$4,560	66%	\$2,779	\$2,954,553	35%	\$2,388
University of Wisconsin-Milwaukee	\$14,822	78%	32%	\$4,581	23%	\$2,078	\$1,849,195	34%	\$2,338

Note 1. First-time, full-time students awarded grant or scholarship aid 2018-19 (SFA1819). Source: IPEDS

National Student Clearinghouse Results: What Happened To Non-Returning Students?

Table 5. Fall 2019 Cohort Compared to 2018 Cohort: Not Retained at IUPUI IN Clearinghouse Results

Enrollment Outcome	N	Percent 2019	Percent 2018
No Clearing House Record/Not Enrolled	625	61.5%	57.4%
Ivy Tech Community College	132	13.0%	19.5%
Indiana University Bloomington	72	7.1%	4.8%
Ball State University	22	2.2%	0.9%
Purdue University - West Lafayette	22	2.2%	1.6%
Indiana University Kokomo	11	1.1%	1.0%
Indiana University South Bend	11	1.1%	1.7%
Indiana University Northwest	10	1.0%	2.3%
Indiana University Southeast	9	0.9%	0.9%

Legend
Green: Increase from 2018
Red: Decrease from 2018

Note 1. Results based on the National Student Clearinghouse. N= 1,013 students Fall 2019 cohort and 1022 for Fall 2018 cohort not retained at IUPUI IN after one year. Only top institutions shown. Full-time students only.

Table 6. Outcomes by Institution Type

Clearinghouse Enrollment Outcome	N	One-Year IUPUI GPA	One-Year IUPUI GPA Below 2.00
No Clearinghouse Record/Not Enrolled	625	1.52	69%
Enrolled at a 2-Year Institution	147	1.73	53%
Enrolled at Another IU Campus	125	3.07	7%
Enrolled at Another 4-Year Institution	118	2.68	19%
Retained at IUPUI IN	2,659	3.09	8%
Total	3,674		

Understanding the Increase In One-Year Retention

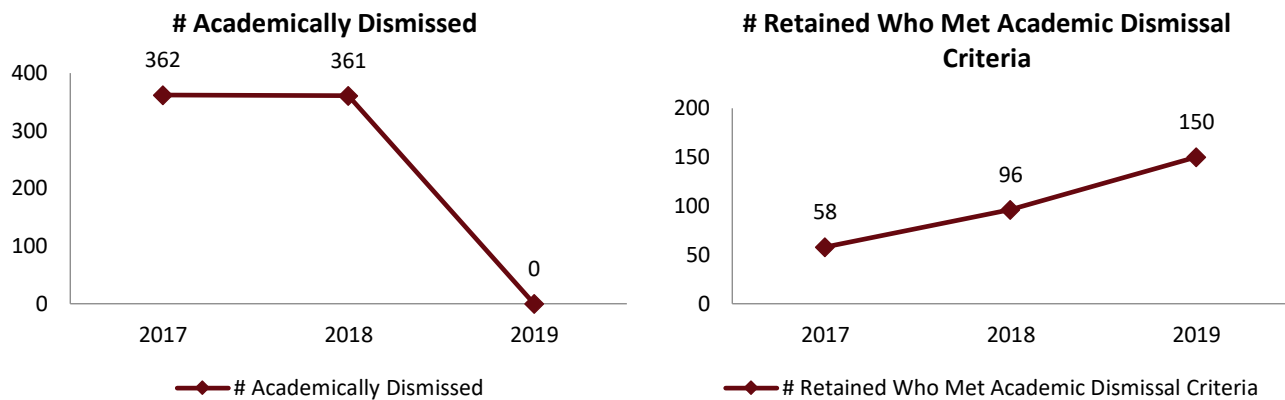
Table 7. Understanding the nearly 2% Increase in One-Year Retention Fall 2018 (74.7%) and Fall 2019 (76.2%) Among All Beginners

Independent Sample T-test of Significance between 2018 and 2019 Cohorts	2019 Mean or %	2018 Mean or %
Historically Marginalized Students (African American, Latinx, Two or More Races)	28%	25%
Pre-College Credit Hours	9.49	8.82
Late Registration (measured by number of days registered before start of classes)	58.55	54.11
Percent that Registered 2 weeks or less before Fall Census	.06%	2.1%
Participated in Summer Bridge	34%	26%
Pledge Grant Received (need-based institutional aid)	50%	33%
Spring Math DWF Rate	20.32%	28.84%
Spring Hours Earned with C or Better	10.69	10.31
Cumulative one-year GPA	2.77	2.70
New Programs and Initiatives		
Academically Dismissed after First Year	0%	10%
Indy Achieves Participant	10%	0%
Jaguar Leadership Network Participant	3%	0%

Note 1: All items are statistically different based on independent samples t-test or chi-square difference test results ($p < .05$).

Note 2: There were 3,674 First-time, Full Time Beginners in Fall 2019 and 3,515 in Fall 2018.

Figure 3. Number of Students Academically Dismissed Over Time and Number of Students Retained Who Met Academic Dismissal Criteria



Note 1: Academic dismissal criteria used due to variations in the policy of dismissal across schools. Fall and Spring IU GPA below 2.00 and cumulative Fall and spring IU GPA below 2.00. Number who were actually academically dismissed does not always equal those students who meet the criteria.

IUPUI Student Characteristics and Programs Affecting One-Year Retention Rates

Table 8. Fall 2019 First-Time, Full-Time Indianapolis Only Beginners Retained (*N* = 2,659) Compared to Not Retained (*N* = 1,013) Retained at IUPUI Indianapolis (72.4% Overall)

	Retained (<i>n</i> = 2,659)	Not Retained (<i>n</i> = 1,013)
Group or Variable	Mean	Mean
SAT Score Average	1132	1083
HS GPA average	3.56	3.34
Fall Course Load	15.11	15.02
Age	18.18	18.29
Level of Unmet Financial Need	\$3,534	\$5,262
Fall DFW Rate	12%	46%
Fall Cumulative GPA	3.03	1.76
Cumulative GPA (fall, spring, summer)	3.09	1.88
Math Fall Grade	2.70	1.61
Math Fall DFW Rate	20%	55%
English Fall Grade	3.15	2.10
English DFW	10%	41%

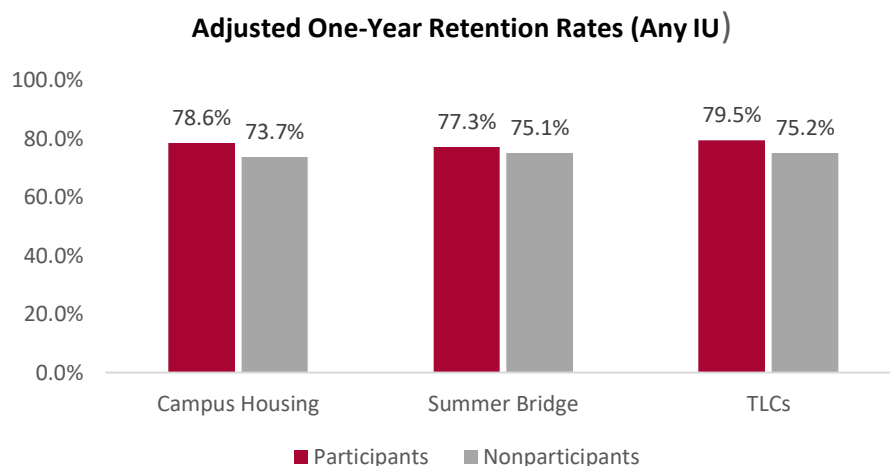
Note 1: Bolded items are statistically significant based on independent samples t-test results ($p < .01$).

Table 9. Fall 2019 Characteristics and Programs Affecting One-Year Retention Rates

Student Group	N in Participant Group	Participants One-Year Retn IUPUI	NonParticipants One-Year Retn IUPUI
Attained an Academic Honors Diploma	2,419	75%	67%
Earned below a 3.00 HS GPA	383	54%	74%
Placed into Developmental Math	1,350	65%	73%
Honors Student	167	96%	71%
Direct Admit	1,653	79%	67%
Earned Pre-College Credit	2,160	78%	64%
Earned Pre-College Test Credit (AP, IB,	602	86%	70%
African American	328	71%	73%
Latinx	499	73%	72%
International Student	61	82%	72%
First-Generation	1,036	68%	74%
Veteran	63	59%	73%
Athlete	72	93%	72%
MSEP State Award	167	78%	72%
Female	2,112	73%	71%
Twenty-First Century Scholar	683	71%	73%
Y'Bannon Scholar	567	71%	73%
Federal Pell Grant	1,464	70%	74%
Unmet Financial Need AY	2,105	68%	80%
Unmet Financial Need AY > 5,000	1,362	62%	79%
Twenty-First Century Scholar State Grant	683	73%	71%
MSEP State Reward	167	78%	72%
Campus Housing	1,574	77%	69%
Summer Bridge	1,252	76%	71%
First Year Seminar	3,497	73%	67%
TLC	216	72%	69%
Summer Bridge- TLC Linked	41	78%	69%
Registered Late for Classes	24	54%	73%
Earned at Least one F First Year	1197	51%	83%
Earned at Least one W First Year	1063	60%	77%
Earned below 2.00 Fall Math	904	54%	83%
Earned below 2.00 Fall English	196	39%	78%

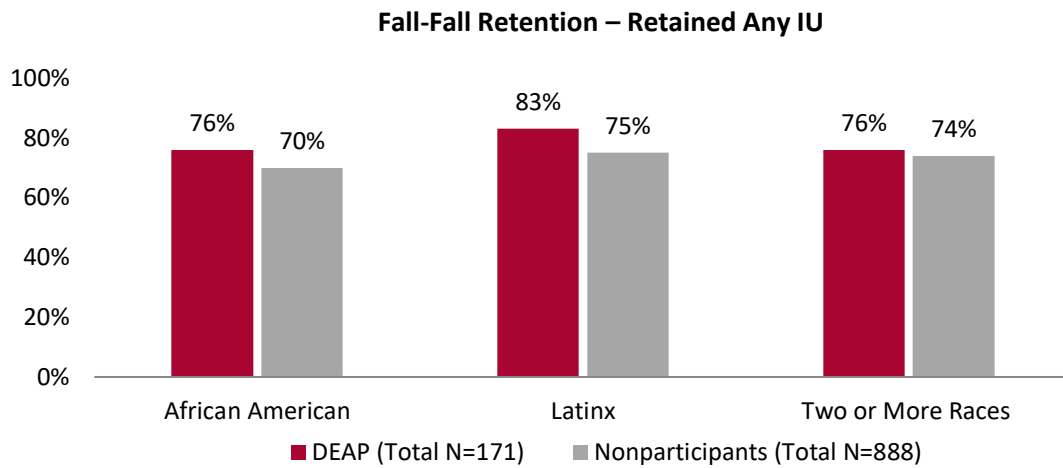
Note 1: Bolded items are statistically significant based on independent samples t-test results ($p < .001$).

Figure 4. IUPUI Programs Significantly Positively Associated with One-Year Retention While Taking Into Account Academic Preparation, Income, Registration Date, and First Generation Status



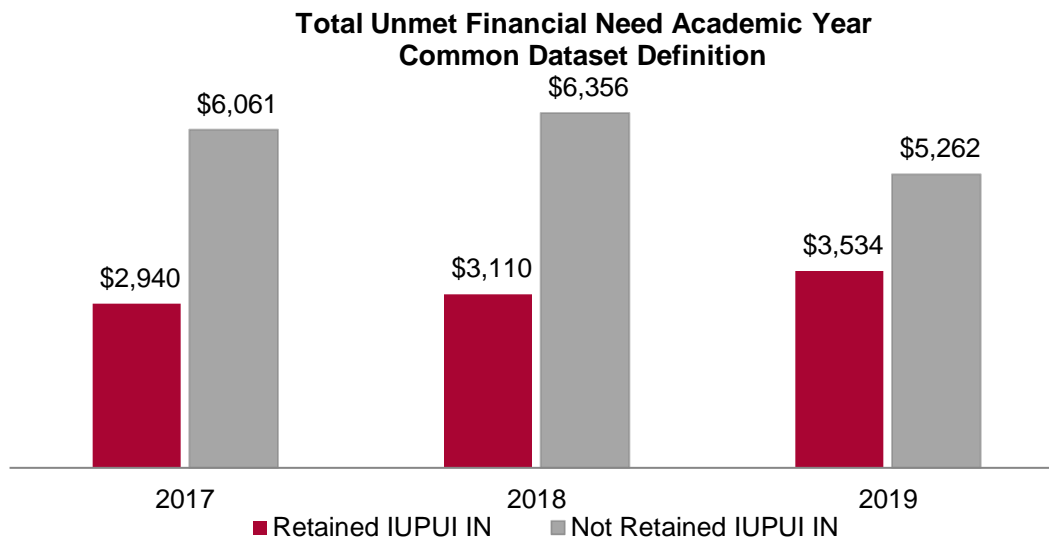
Note 1: * Adjusted one-year retention rate taking into account significant student factors predictors of one year retention: HS GPA, Received a Federal Pell Grant, Registration Date (proxy for motivation and commitment), and First-Generation Status

Figure 5. Participation in Diversity Enrichment and Achievement Program (DEAP) Positively Affects One-Year Retention Rates



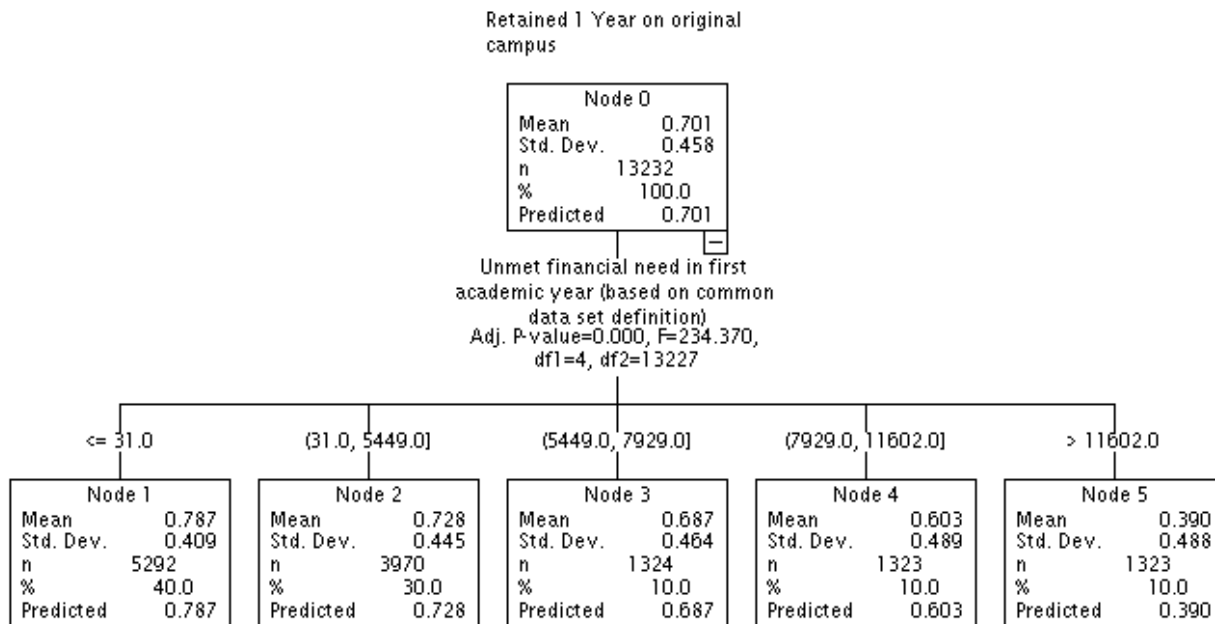
Note 1: DEAP students also participate in living-learning communities and Summer Bridge.

Figure 6. Annual Unmet Financial Need and One-Year Retention First-Time, Full-Time Beginners



Note 1: 920 Fall 2019 beginners who filed a FAFSA did not return to the IUPUI IN campus in Fall 2020

Figure 7: Decision Tree Analysis Results – One-Year Retention Rates by Unmet Need Classifications



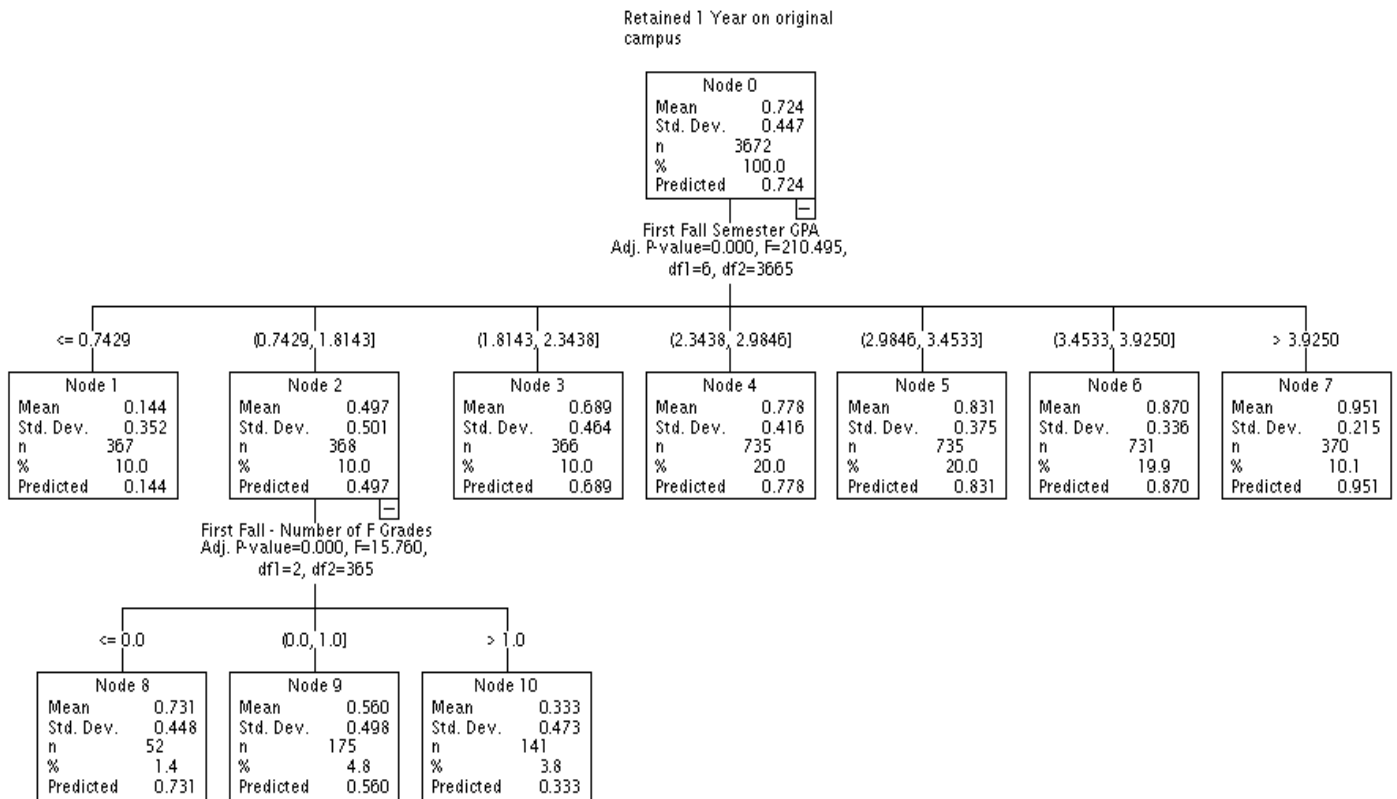
Unmet Financial Need Academic Year Classification	N	% of Students	Fall-Fall Retention IUPUI IN
Node 1 ≤ \$31	5,292	40%	78%
Node 2 \$31 - \$5,449	3,970	30%	73%
Node 3 \$5,449--\$7,929	1,324	10%	69%
Node 4 \$7,929-\$11,602	1,324	10%	60%
Node 5 >\$11,602	1,329	10%	39%

Note 1: Mean indicates in above figure indicates One-Year Retention Rate

Note 2: Analyses performed using Decision Tree Classification in SPSS for the Fall 2016-2019 First-time Full-Time Indianapolis Only Beginners. The technique performs best using large sample sizes.

Note 3: CHAID (Chi-square Automatic Interaction Detector) analysis is an algorithm used for discovering relationships between a categorical response variable and other categorical predictor variables. It is useful when looking for patterns in datasets with lots of categorical variables and is a convenient way of summarizing the data as the relationships can be easily visualized.

Figure 8: Decision Tree Analysis Results – One-Year Retention Rates by Fall GPAs and Number of Fs Classification



Fall GPA and Number of Fs Classification	N	% of Students	Fall-Fall Retention IUPUI IN	
Node 7	>3.93	370	10%	95%
Node 6	3.93 - 3.45	731	20%	87%
Node 5	3.45 – 2.98	735	20%	83%
Node 4	2.98 – 2.43	735	20%	78%
Node 8	1.81 – 0.74 and no F Grades	52	1%	73%
Node 3	2.43 – 1.81	366	10%	69%
Node 9	1.81 – 0.74 and 1 F Grade	175	5%	56%
Node 10	1.81 – 0.74 and >1 F Grades	141	4%	33%
Node 1	>= 0.74	367	10%	14%

Note 1: Mean indicates in above figure indicates One-Year Retention Rate

Note 2: Analyses performed using Decision Tree Classification in SPSS for the 2019 First-time Full-Time Indianapolis Only Beginners. The technique performs best using large sample sizes.

Note 3: CHAID (Chi-square Automatic Interaction Detector) analysis is an algorithm used for discovering relationships between a categorical response variable and other categorical predictor variables. It is useful when looking for patterns in datasets with lots of categorical variables and is a convenient way of summarising the data as the relationships can be easily visualised.

One-Year Retention Rate by Fall DFW Rate

Figure 9. Fall DFW Rate and Math Fall DFW Rate Trend Lines

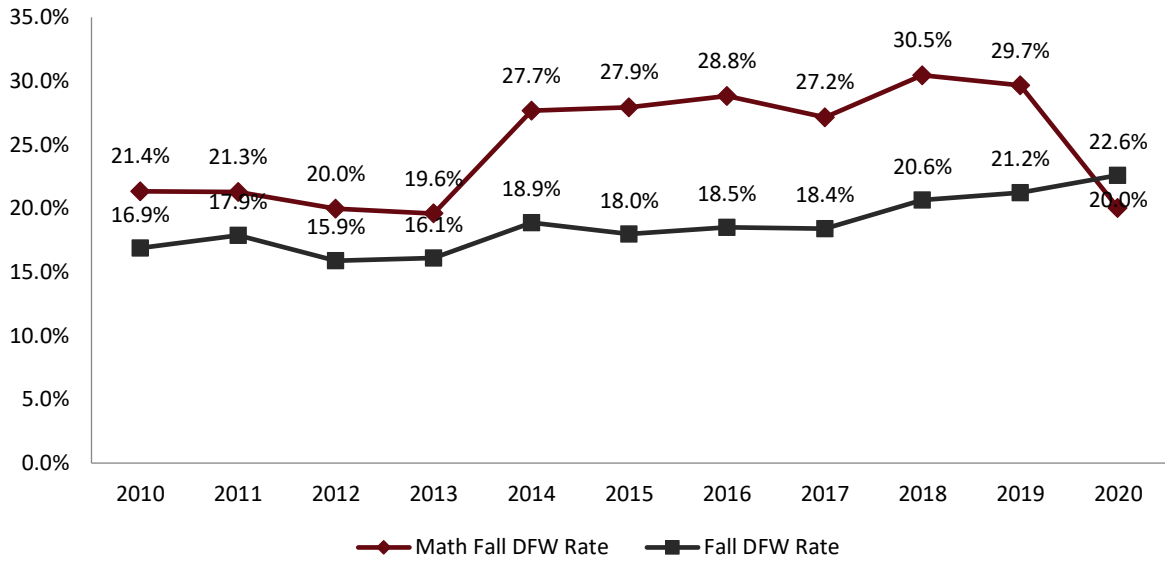
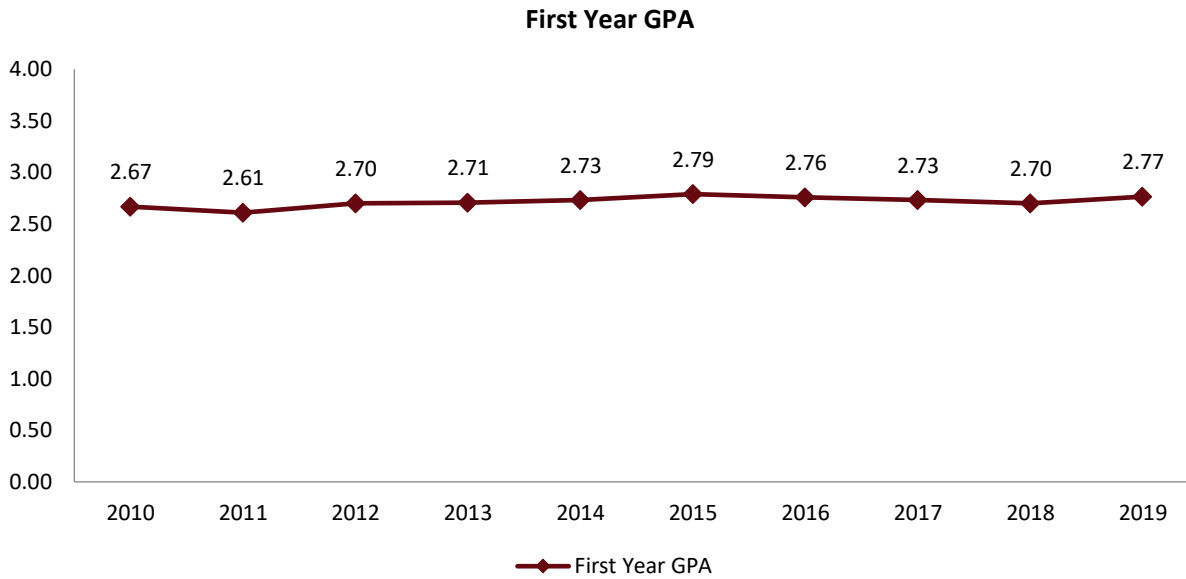


Figure 10. First Year GPA Overtime Suggests that the Pandemic Did not have a Significant Negative Effect on Average One-Year GPA Among Fall 2019 Beginners



One-Year Retention Rates by School and Pre-Major

Table 10. Fall 2019 Cohort School One-Year Retention Rates

School	N	% Retained IUPUI IN	% Retained Any IU 2019	% Retained Any IU 2018
Fairbanks Sch of Public Health	21	71.4%	76.2%	72.7%
Herron School of Art and Design	120	73.3%	75.0%	84.5%
Kelley School of Business	177	87.6%	88.7%	86.2%
Lilly Fam Sch of Philanthropy	11	81.8%	81.8%	77.8%
O'Neill Public & Environmental Affairs	55	74.5%	78.2%	85.2%
Sch of Informatics & Computing	99	76.8%	79.8%	88.0%
School of Dentistry	4	50.0%	50.0%	50.0%
School of Education	50	78.0%	80.0%	84.2%
School of Engr & Tech	354	77.1%	78.5%	75.7%
School of Health and Human Sciences	130	85.4%	89.2%	80.7%
School of Liberal Arts	187	71.7%	77.5%	80.2%
School of Science	445	83.1%	85.4%	83.1%
Total Direct Admits	1653	79.4%	82.0%	81.9%

Legend

Green: Increase from 2018

Red: Decrease from 2018

Table 11. Fall 2019 Cohort Pre-Majors One-Year Retention Rates

Pre-Major	N	% Retained IUPUI IN	% Retained Any IU 2019	% Retained Any IU 2018
Exploratory	243	67.9%	74.5%	68.3%
Fairbanks Sch of Public Health	2	50.0%	50.0%	75.0%
Herron School of Art and Design	5	60.0%	80.0%	75.0%
Kelley School of Business	338	64.5%	68.3%	72.7%
O'Neill Public & Environmental Affairs	40	55.0%	57.5%	72.4%
Sch of Informatics & Computing	24	62.5%	66.7%	62.5%
School of Dentistry	85	77.6%	83.5%	71.6%
School of Education	37	56.8%	67.6%	68.4%
School of Engr & Tech	180	71.7%	72.2%	66.1%
School of Health and Human Sciences	99	69.7%	70.7%	55.4%
School of Liberal Arts	6	33.3%	33.3%	68.1%
School of Medicine	106	63.2%	67.0%	64.7%
School of Nursing	397	64.2%	70.8%	71.9%
School of Science	399	68.7%	71.7%	63.1%
School of Social Work	57	66.7%	71.9%	72.9%
Total University College	2019	66.7%	71.0%	68.3%

Legend

Green: Increase from 2018

Red: Decrease from 2018

ENTERING STUDENT SURVEY PREDICTORS OF STUDENT SUCCESS

A series of logistic regression analyses (retention) and linear regression (Fall GPA) were conducted to examine the entering factors that significantly predicted one-year retention rates (retained at IUPUI) and first-term or Fall GPA. The table below displays the findings. Results are based on 2019 Beginner Cohort Entering Student Survey Results (n=2,864). The covariates used in analyses were: HS GPA, SAT Score, and Received a Federal Pell Grant. All items are significant at the $p < .05$ level.

Key Highlights

- A number of factors significantly predicted student success (One-Year Retention and/or First-Term GPA) including the following: the IUPUI campus community has made me feel welcomed (+); time planned to spend engaging in external commitments (working off-campus (-), taking care of household responsibilities (-)); motivation for college work (+), study skills (+) and more.
- The following were among the factors affecting students' decisions to attend IUPUI that significantly predicted student success (these may be indicators of fit or the IUPUI environment being aligned with expectations): social climate/activities at the college; type of housing available on campus; job, career, internship opportunities available in Indianapolis while attending classes, and my parents/relatives wanted me to attend.
- Students who had concerns about their ability to finance their college education significantly predicted one-year retention rates. Students who reported major concerns had lower retention rates than students who reported none or some concerns about financing their college education.

Sense of Belonging

- + I feel a sense of belonging to IUPUI ^R
- + I feel that I am a member of the IUPUI community ^R
- + I feel that I fit right in on campus ^R
- + I see myself as part of the IUPUI community ^R
- + It is important for me to graduate from IUPUI (e.g., rather than from another college) ^R
- + I am proud to tell others I am going to school here ^R
- + I feel a sense of IUPUI Jaguar pride ^R
- + The IUPUI campus community has made me feel welcomed ^{R/GPA}
- + I am extremely glad that I chose IUPUI over other colleges ^R
- + IUPUI was my first choice of colleges that I was accepted to or considered applying to ^R

Sense of Grit and Resilience

- + I finish whatever I begin ^{R/GPA}
- I focus on a certain idea or project for a short time but lose interest later ^{GPA}

Self-Efficacy Ratings

- + Motivation of college work ^{R/GPA}
- + Self-confidence (related to intellectual or academic activities) ^R
- + Emotional health ^{R/GPA}
- + Study skills ^{R/GPA}
- + Physical health ^{GPA}
- + Ability to seek out appropriate academic help ^{GPA}

Financing College

- Concerns about financing college (the more concerns student have, the lower their retention rates and GPAs) ^R
- + Satisfaction with the amount of financial support ^R

Time Commitments

- Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities) ^R
- Working for pay off campus ^{R/GPA}
- Commuting to class (driving, walking, etc.) ^{GPA}
- Interacting with on-line social networks (Facebook, Myspace, Twitter, etc.) ^R
- Relaxing and socializing (watching TV, partying, etc.) ^R
- Taking care of household responsibilities ^{R/GPA}
- Providing care for dependents living with you (parents, children, spouse, etc.) ^{GPA}

Plans and Expectations

- + Participate in student groups/clubs ^{R/GPA}
- + Participate in service learning or community service ^{R/GPA}
- + Get tutoring or peer mentoring help in specific courses ^{R/GPA}
- + Enroll in courses during the semester ^R
- + Experience feelings of homesickness ^{R/GPA}
- + Participate in an internship, co-op, field experience, practicum, student teaching, or clinical placement ^{R/GPA}
- + Participate in events or activities on campus ^{GPA}
- + Exercise on campus ^{GPA}

Reasons for Choosing Major (Students Who Have Chosen a Major)

- + Availability of jobs in the field ^{R/GPA}
- + Good grades in previous courses ^{R/GPA}
- + High school classes or college classes that spark my interest or awareness ^{R/GPA}
- + Starting salaries are high ^R
- + IUPUI specific communications that sparked my interest or awareness ^{R/GPA}
- + My parents/relatives recommendation ^{R/GPA}
- + Graduates get good jobs ^{GPA}
- + Major is aligned with my interests ^{GPA}
- + Major is aligned with my skills and abilities ^{GPA}
- + Major is aligned with my personality ^{GPA}
- + Major is aligned with the lifestyle I would like to have ^{GPA}

Factors Affecting Decision to Attend IUPUI

- + IUPUI's reputation ^R
- + My parents/relatives wanted me to attend ^{R/GPA}
- + Social opportunities associated with IUPUI located in city of Indianapolis ^{R/GPA}
- + Job, career, internship opportunities available in Indianapolis while attending classes ^{R/GPA}
- + Career and job opportunities available in Indianapolis after I complete my degree ^{R/GPA}
- + Social climate/activities at the college ^{R/GPA}
- + A visit to campus ^{R/GPA}
- + Availability of financial aid/scholarship ^{GPA}
- + Cost ^{GPA}
- + Type of housing available on campus ^{GPA}

Academic Future

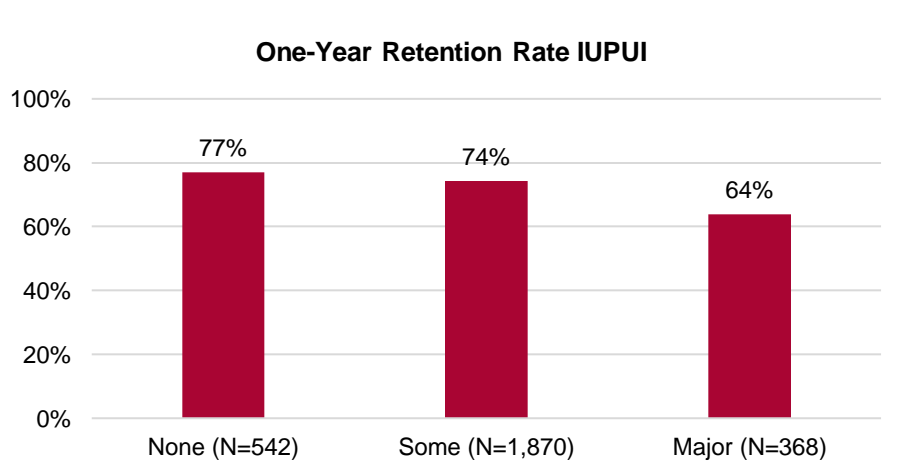
- What is the likelihood that you will transfer from IUPUI to another college? ^R

+ denotes positive relationship and - denotes negative relationship

^R=significantly predicts one-year retention, ^{GPA}= significantly predicts First-Term GPA.

^{R/GPA} =significantly predicts one-year retention and First-Term GPA

Figure 11. Concerns about Financing College Education and One-Year Retention



Question included: Do you have any concerns about your ability to finance your college education?