



2018

COLLEGE EQUITY REPORT



MEASURING GAPS IN EDUCATIONAL OPPORTUNITY

Full - Report



INDIANA COMMISSION *for*
HIGHER EDUCATION

WHAT ARE EQUITY AND ACHIEVEMENT GAPS?

In education fields, **equity is the idea that a student's social circumstances should not dictate the student's chance of succeeding**. Equity is often measured by observing areas where it does not exist: the gaps between students with different backgrounds, from different parts of the state, between males and females, different races or ethnicities, and the gaps between wealthy students and low-income students. **These differences in outcomes are known as achievement gaps.**

To measure equity, this report looks at achievement gaps on the five main indicators below. A gap is considered closed if a traditionally disadvantaged population succeeds on these indicators at least as often as their peers.

- Pre-College Success
 - What types of high school diplomas do Hoosier high school graduates earn? What percentage of students earn pre-college credit? In the main report, the focus of pre-college success is placed on examining early success in college by these indicators, such as high school diploma type earned. Statewide pre-college success statistics are provided in separate data-at-a-glance reference documents as a part of this report. Data are presented by race/ethnicity and socioeconomic status in these documents.
- College-Going Rates
 - What percentage of Indiana high school graduates enroll in college within one year of graduating high school? What types of colleges do Indiana high school graduates initially attend?
- Early Success in College
 - What percentage of Indiana high school graduates who enroll in Indiana public colleges within one year of high school graduation 1) do not need remediation; 2) complete all coursework they attempt or 3) persist to sophomore year? What percentage succeed on all three?
- On-Time College Graduation Rates
 - What percentage of first-time, full-time fall starters at Indiana public colleges graduate on time (same campus same degree level)? Please note, while the other indicators look only at Indiana residents, graduation rates in this report include some out-of-state students.
- Extended-Time College Graduation Rates
 - What percentage of first-time, full-time fall starters at Indiana public colleges graduate, even if it is not on-time? Please note, while the other indicators look only at Indiana residents, graduation rates in this report include some out-of-state students.

This report attempts to measure equity, with a focus on the following demographic groups:

- Gender: Female and Male
- Race/Ethnicity: Black, White, Hispanic, Asian, and Other
 - For the purposes of this report, these categories are mutually exclusive. The "Other" racial/ethnic group includes undeclared, Native American/Alaskan Native, Two or More Races, Native Hawaiian race/ethnic groups. Throughout most of this report, each race/ethnicity is shown separately. A few charts in this report, to help researchers compare to previous publications and to help measure progress against long-standing goals, also show a "Minority" category. Minority includes Black and Hispanic students.
- Socioeconomic Status: Scholar, Non-Scholar (Low Income), and Non-Scholar (Higher Income)



- Scholars and Non-Scholar (Low Income): Students from low-income families face disadvantages in completing their educations. For college-going and early success in college indicators, this report defines low-income in one of two ways: whether the student is an affirmed 21st Century Scholar, in which they had to have been Free-or-Reduced-Lunch (FRL) eligible in 7th or 8th grade, or whether the student is FRL-eligible during their senior year of high school. Often, students who are FRL-eligible in middle school are FRL-eligible in high school, but there are some students who experience life events that can move them above or below the FRL eligibility line over the course of their teenage years. For on-time graduation rate statistics, this report defines low-income also in two ways: whether the student received a 21st Century Scholarship in their year of entry or whether the student received a Pell grant in their year of entry. Low-income data for all metrics are broken into 21st Century Scholars and non-Scholars groups.
- Non-Scholar (Higher Income): While recognizing many middle class families can still struggle financially, this report does not separate out middle class students from wealthy students. This report refers to all non-low-income students as “higher income.” Please note, this does not mean that the students in this group are wealthy; only that they come from families with higher incomes than other students.
- Geography: Rural and Non-Rural
 - In some ways, these metrics can be difficult to define and data can be difficult to assemble. For instance, at what point is a place considered rural – should it be 10 miles or 50 miles from a city? And what qualifies as a city? A student’s geographic upbringing can be more difficult to track than, for example, their income. Still, the Indiana Commission for Higher Education is committed to equity for all rural, suburban, and urban students. Where possible, the Commission has provided information based on where students come from. Expanding data usage in this area will be a focus in future versions of this report. For this report, rural/non-rural status is based on whether a student's high school of graduation is located in a county that falls within a Metropolitan Area established by the Office of Management and Budget. Any county that is not part of a Metropolitan Area is considered rural.

ABOUT THE DATA

Some data in this report are also presented in ICHE's College Readiness and College Completion reports.

High school graduate counts represent a count of graduates reported on the Indiana Department of Education (DOE) GR reports. Graduate counts are not DOE cohort graduate counts and thus, may not match cohort counts reported in other places, such as DOE Compass. College going rates include students graduating from Indiana high schools who were reported as enrolled in postsecondary education, regardless of institution type, within the year following high school graduation. Early success in college performance measures are limited to students who enrolled in Indiana public colleges in the year following high school graduation. Completion rate data are

limited to students enrolling as first-time, full-time fall starters pursuing bachelor's degrees (4-year Indiana public institutions) or longer-term certificates and associate degrees (2-year Indiana public institutions).

Demographic disaggregations provided in this report were produced by gender, race/ethnicity, and socioeconomic status variables reported by the Indiana Department of Education (high school graduate counts, college-going rate, and early success in college rate statistics) or by Indiana public institutions to the Indiana Commission for Higher Education (on-time and extended-time college completion statistics). Data identifying 21st Century Scholar status were supplemented with data from Indiana's state financial aid system.

See report data notes for additional information.



WHAT ARE EQUITY AND ACHIEVEMENT GAPS?

The Indiana Commission for Higher Education (ICHE) has adopted goals and policy strategies focused on increasing college access, success, and completion for underrepresented students. In 2013, the Commission passed a resolution to eliminate achievement gaps among Indiana's underrepresented populations by 2025. For low-income students in particular, ICHE has strengthened financial aid by modifying program requirements to increase college readiness and success. The value Indiana places on closing achievement gaps is also reflected in the state's postsecondary performance funding formula, which allocates dollars for increased degree production and on-time degree completion among Pell Grant recipients.

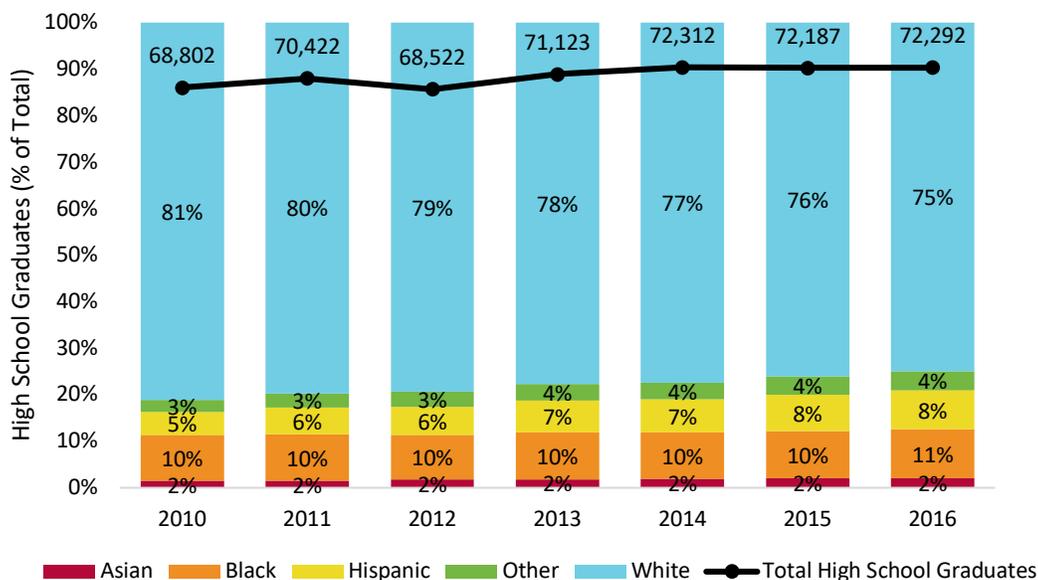
The Commission's 2018 College Readiness and College Completion Reports indicate increased levels of college preparation and completion among Hoosier students. This equity study provides a closer look at college access, readiness, and completion statistics by student demographic groups to inform statewide achievement gap initiatives. Using data from the Indiana Department of Education and the Indiana Commission for Higher Education, the study addresses the following questions:

- How can the changing demographics of Indiana's higher education pipeline inform the achievement gap conversation?
- What achievement gaps exist and what do they look like?
- Is Indiana on pace to close achievement gaps by 2025?
- What are promising practices for closing gaps?

Population projections indicate that Indiana is to become increasingly more racially diverse in upcoming years, and these demographic changes have already begun to be reflected in Indiana's high school graduate pipeline.

- Between 2010 and 2016, the share of high school graduates associated with non-White racial/ethnic groups grew by 6 percentage points.
- The fastest growing population included students identifying as Hispanic with roughly 2,700 more students in 2016 compared to 2010, an increase of 81% in total Hispanic students and 3 percentage points in population share.
- The number of students identifying as Black and Other racial/ethnic categories also made up an additional 1-2 percent of the Indiana high school pipeline in 2016 compared to 2010.

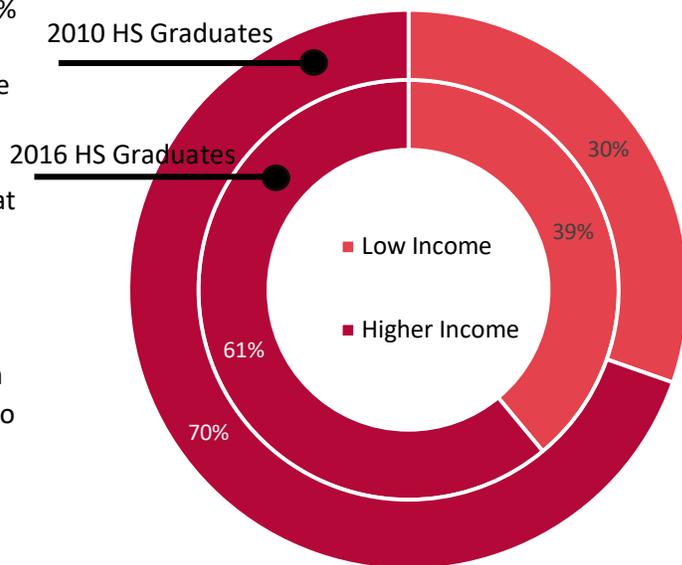




Low-income students have made up a larger portion of the high school graduate pipeline in recent years.

- Over one-third (39%) high school graduates in 2016 were identified as low income, up from roughly 30% in 2010.
- The majority of the growth in the low-income share was observed between 2010 and 2013, which may be the result of reductions in income as Hoosier families experienced the aftershocks from the Great Recession.

As the total number of high school graduates flattens and as traditionally at-risk populations make up a larger share of the talent pipeline for higher education and the workforce, Indiana must remain committed to closing achievement gaps in order to better serve Hoosiers overall.



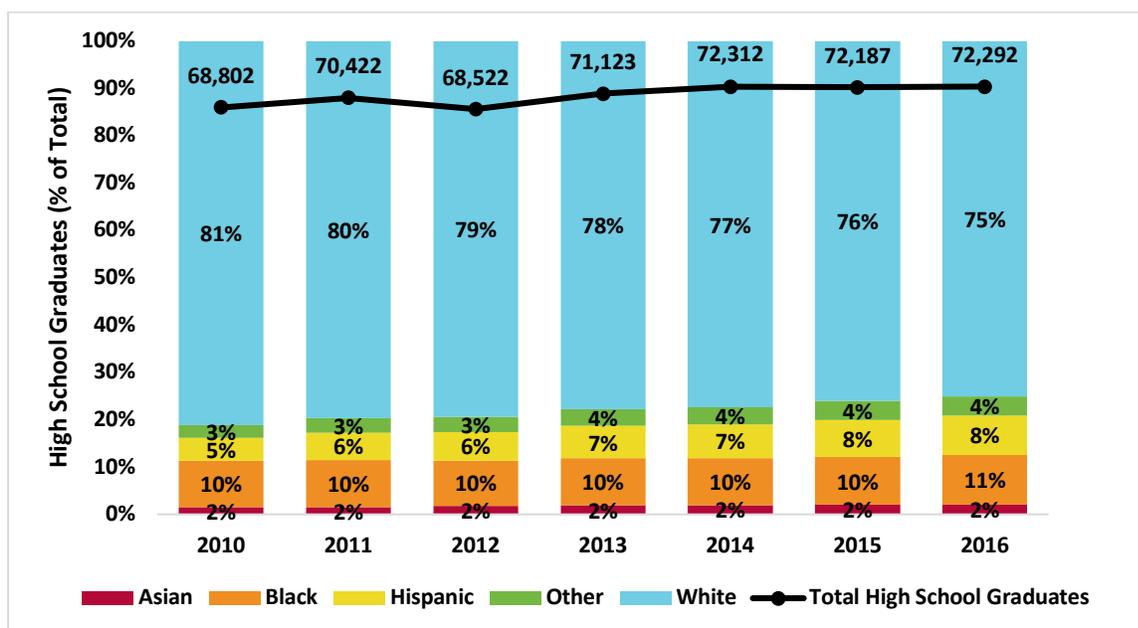
MAIN REPORT

DEMOGRAPHIC CONTEXT

As the total number of high school graduates flattens and traditionally at-risk populations make up a larger share of the talent pipeline for higher education and the workforce, Indiana must remain committed to closing achievement gaps in order to better serve Hoosiers overall.

Between 2010 and 2016, the share of high school graduates associated with non-White racial/ethnic groups grew by 6 percentage points. The fastest growing population included students identifying as Hispanic with roughly 2,700 more students in 2016 compared to 2010, an increase of 81% in total students and 3 percentage points in population share. The number of students identifying as Black and Other¹ racial/ethnic categories also increased with each group making up an additional 1-2 percent of the Indiana high school graduate pipeline in 2016 compared to 2010. See Figure 1.

Figure 1. Indiana high school graduate trends by race/ethnicity



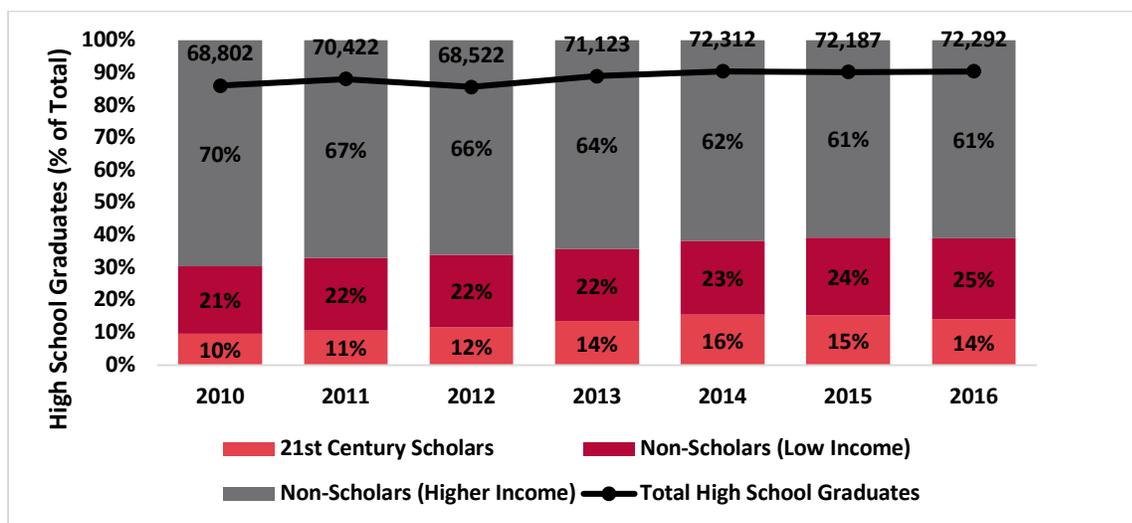
In 2016, over one third (39%) of high school graduates were identified as low-income either through enrollment and affirmation in the 21st Century Scholars program or through receiving free or reduced meals in their senior year. This compares to roughly 30% in 2010. The majority of the growth in the low-income share overall was observed between 2010 and 2013. This may be the result of reductions in income as Hoosier families experienced the aftershocks from the Great Recession. It may also be possible that some of this increase is due to efforts to reduce high school drop-out rates and help more low-income students graduate from high school.² See Figure 2.

¹ Other racial/ethnic group includes undeclared, Native American/Alaskan Native, Two or More Races, Native Hawaiian

² Indiana Department of Education data indicate roughly 87% of Indiana students receiving free/reduced lunch graduated from high school both in 2014 and 2016 (<https://www.doe.in.gov/accountability/find-school-and-corporation-data-reports>). Graduation rate data by free/reduced lunch status are not publically available by IDOE prior to 2014.

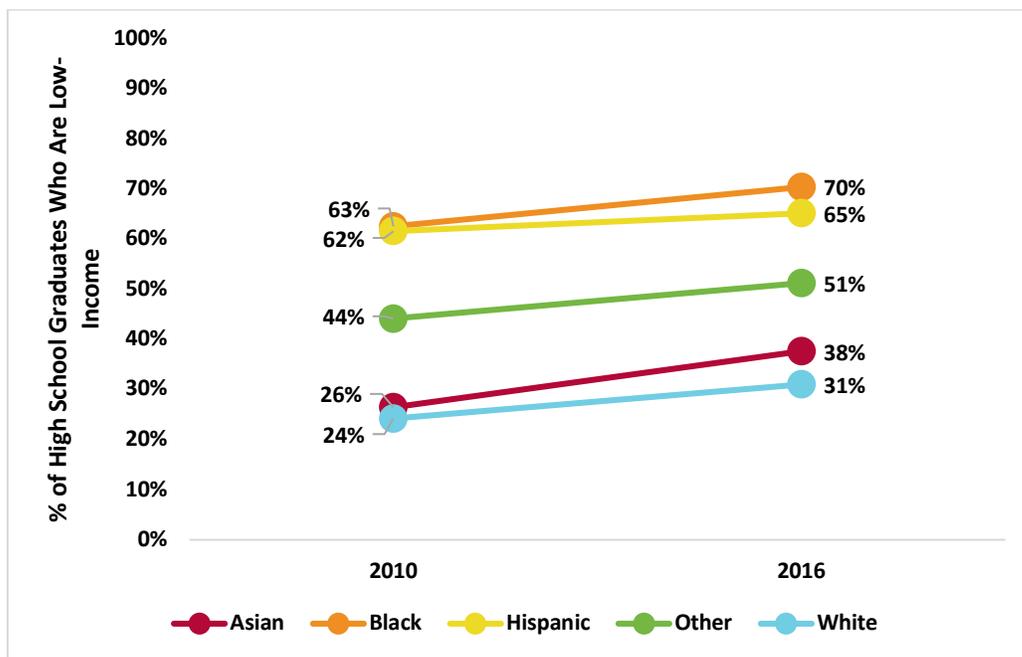


Figure 2. Indiana high school graduate trends by low-income status



The growth in the share of low-income³ high school graduates grew across all racial/ethnic categories. At least 30% of graduates from all racial/ethnic groups were from low-income households in 2016. Black and Hispanic students, two of the fastest growing racial/ethnic populations, were also the most likely to come from low-income households. See Figure 3.

Figure 3. Share of identified low-income students by race/ethnicity

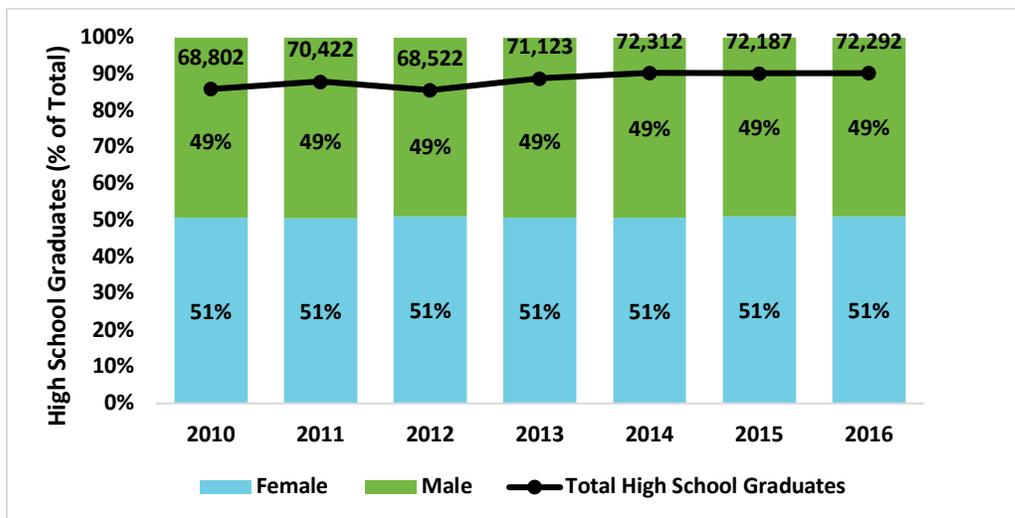


³ Low-income is measured through enrollment and affirmation in the 21st Century Scholars program or receiving free or reduced price meals in the senior year.



Females made up a slightly higher proportion of the high school graduate pipeline compared to males (51% versus 49%), which may partly be explained by higher high school graduation rates among females.⁴ Trends in the share of high school graduates by gender remained unchanged from 2010 to 2016. See Figure 4.

Figure 4. Indiana high school graduate trends by gender



POSTSECONDARY ACHIEVEMENT GAPS

COLLEGE ACCESS

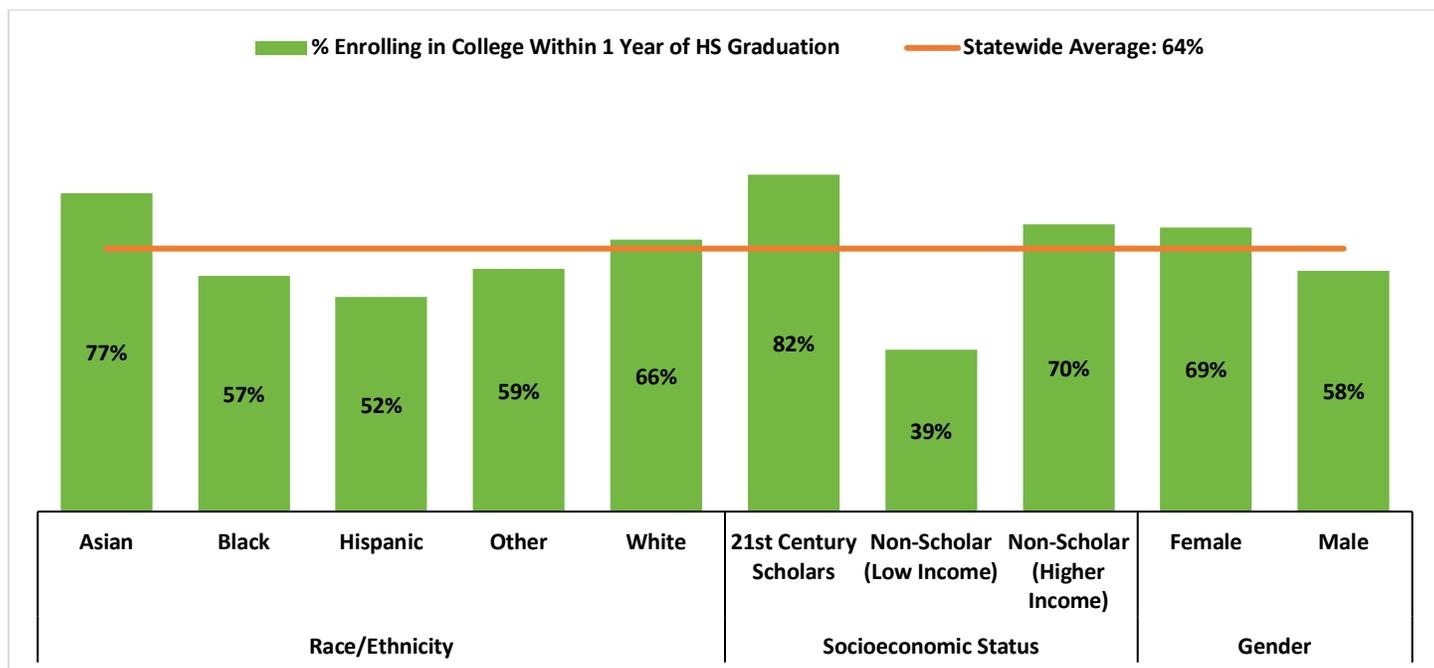
When examining the rate at which Hoosiers enroll in college within a year of graduating high school, there is wide variation among student characteristics. Data show an 11 percentage point gap between the college going rates of females and males with females being more likely than males to enroll in college (69% compared to 58%). While the majority of each racial and ethnic group directly enrolled in college, the groups did so at different rates. Over three-quarters (77%) of Asian students enrolled in college within one year of high school compared to 57% and 52% of Black and Hispanic students, respectively. See Figure 5.

College going rates differed significantly by socioeconomic status. 21st Century Scholars had the highest college going rate among all demographic groups at 82%. This is more than double the rate of their non-Scholar, low-income peers who received free or reduced lunch priced meals during their senior year (39%) and 12 percentage points higher than non-Scholars who, as high school seniors, had family incomes above the FRL rate (70%).

⁴ Data from the Indiana Department of Education indicate 2016 high school graduation rates of 91% and 87% for females and males, respectively (<https://www.doe.in.gov/accountability/find-school-and-corporation-data-reports>).

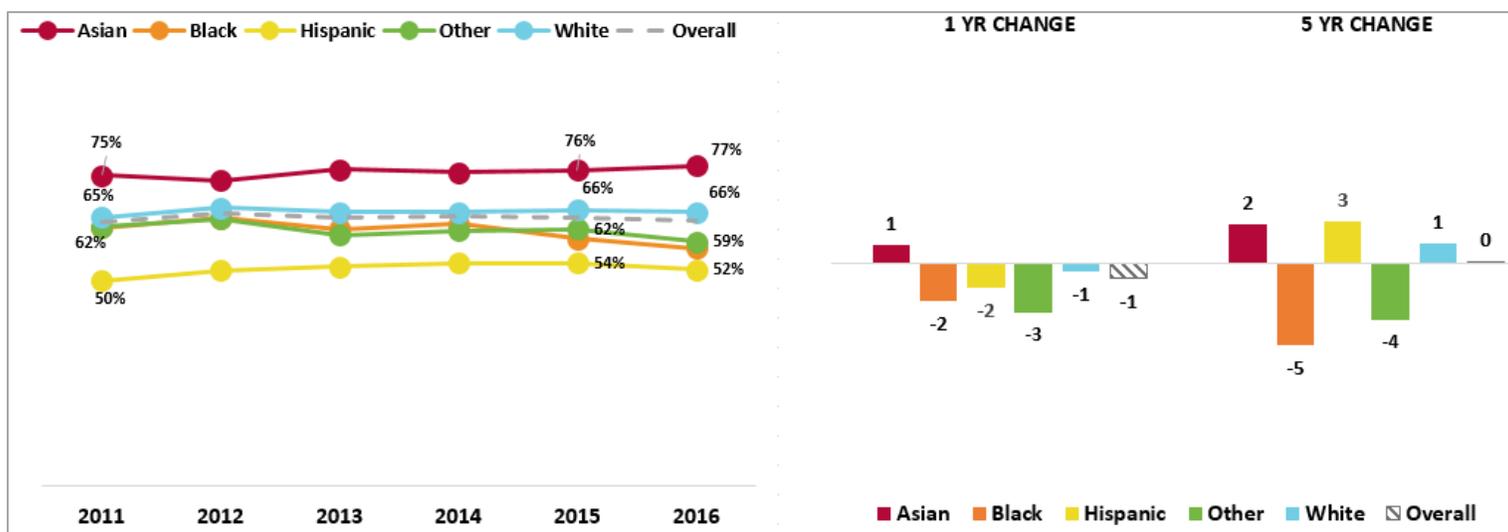


Figure 5. **College going** rates by student demographics (2016 High School Cohort)



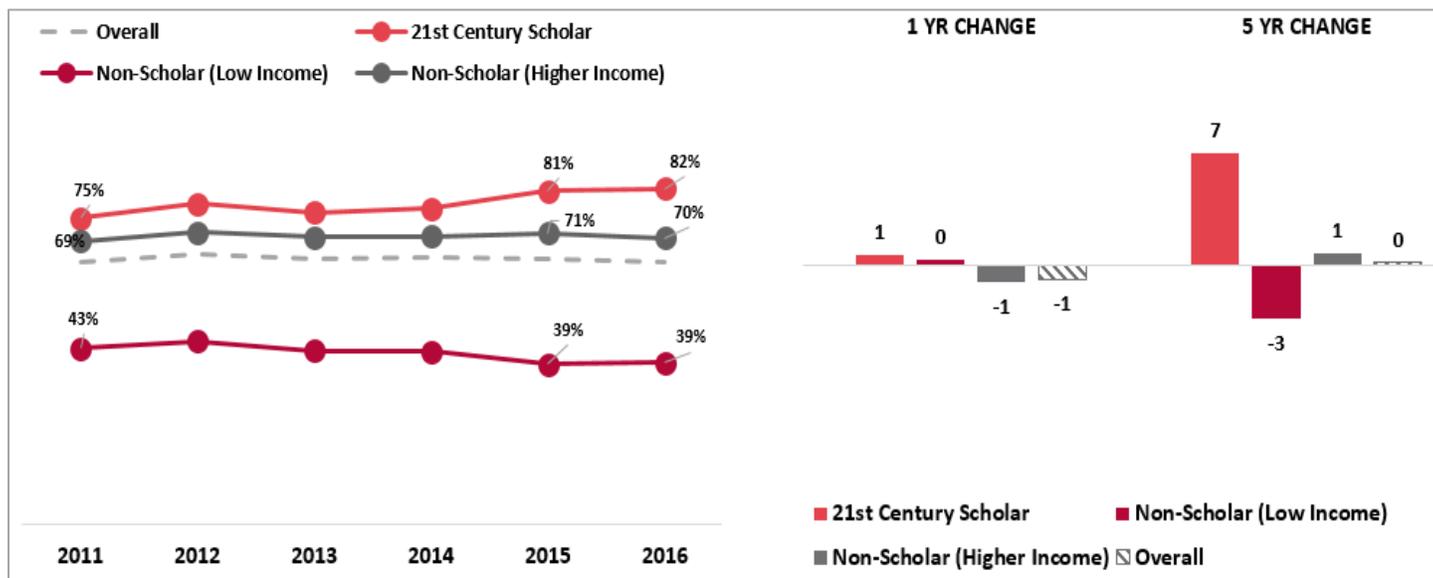
Trends in college going rates among student demographic groups show that while some gaps are closing, others are widening. For racial and ethnic groups, the gap in college going rates between Black and White students grew. Rates between these populations moved in opposite directions between 2011 and 2016 (college going rates down 5 points for Black students and up 1 point for White students). In contrast, the gap in college going rates between Hispanic and White students decreased. College going rates of Hispanic students increased by nearly triple the rate of White students between 2011 and 2016 (up roughly 3 percentage points for Hispanic students and up roughly 1 percentage point for White students). See Figure 6.

Figure 6. Trends in **college going** rates by race/ethnicity



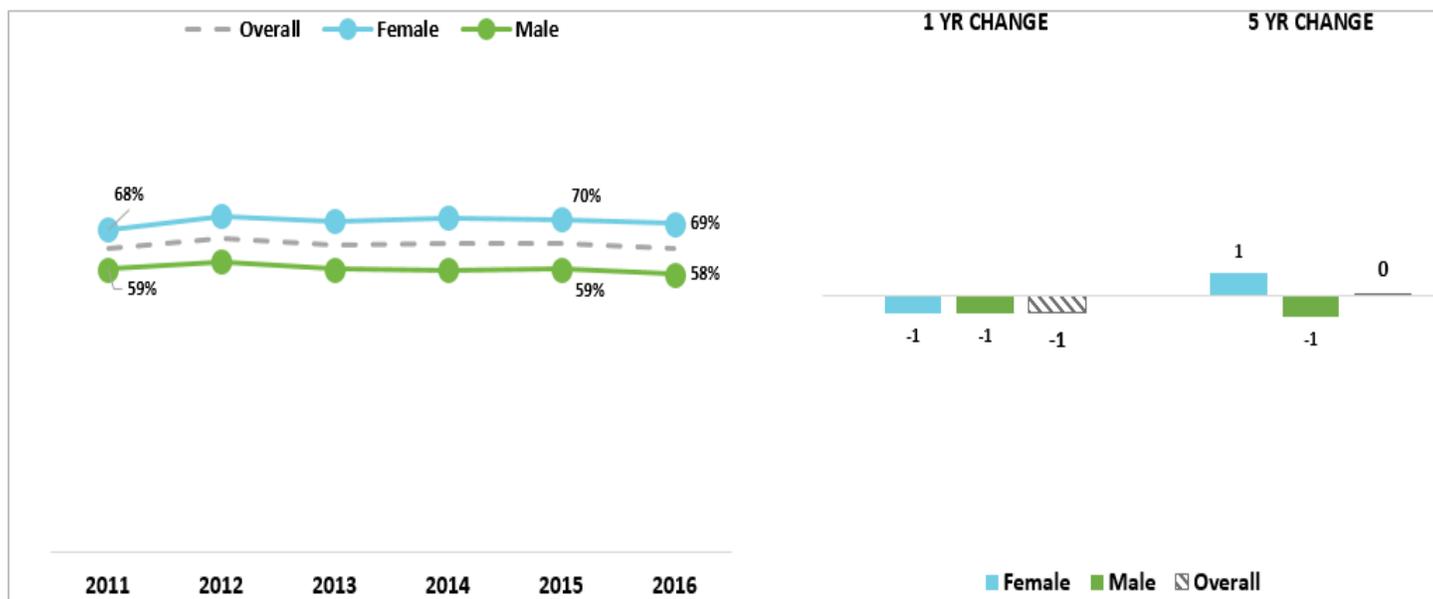
Inequities in college going rates substantially increased among low-income students who did not participate in the 21st Century Scholars program. Only 39% of such students enrolled in college within 1 year of high school graduation in 2016, down from 43% in 2011. During the same timeframe, the college going rates of 21st Century Scholars increased by seven percentage points and the college going rates of those not qualifying for free and reduced lunch and who were not 21st Century Scholars increased by 1 percentage point. The growth in college going rates for 21st Century Scholars spiked between 2014 and 2015 -- possibly coinciding new high school GPA requirements for Scholars. See Figure 7.

Figure 7. Trends in college going rates by socioeconomic status



Gaps in college going rates by gender remained similar from 2011 to 2016. The percentage of female high school graduates directly enrolling in college within 1 year of high school graduation increased by 1 percentage point between 2011 and 2016. Males saw a decrease of 1 percentage point over the same timeframe. Both males and females saw a one percentage point decline in college going rates from 2015 to 2016, mirroring the statewide trend. See Figure 8.

Figure 8. Trends in college going rates by gender



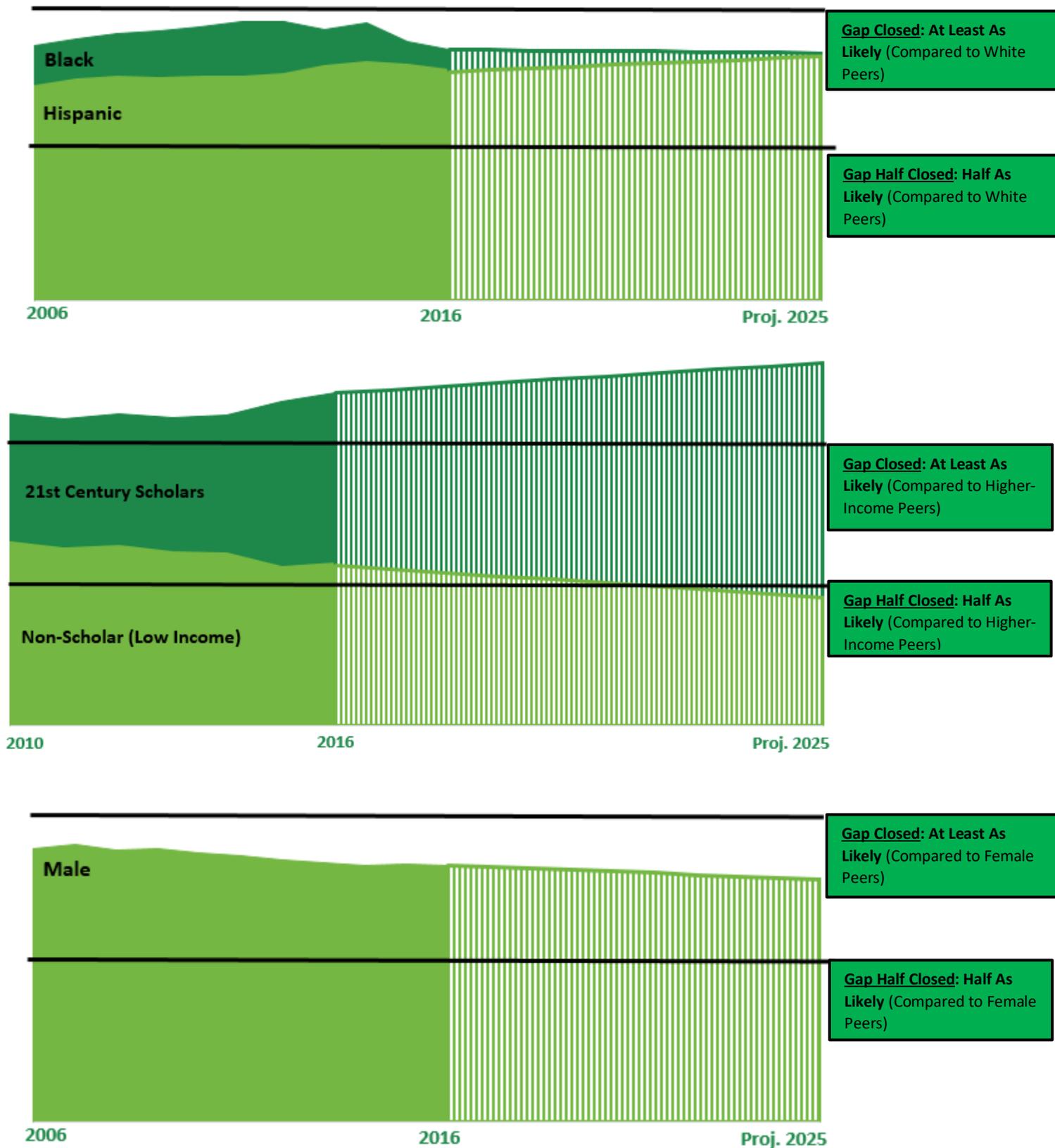
The college going rates for different student populations were compared to help gauge progress toward closing achievement gaps by 2025. The following figures show whether one group is as likely as another group to experience success. The box below describes the measure and gives examples. Figure 9 displays the trends in the achievement gap ratio values and also the estimated linear trajectory to 2025 based on average progress toward equity in college going rates among groups

Achievement Gap Statistic: *The measure is calculated as a ratio of the success rates between two groups (i.e. Black students compared to White students) as a way of comparing the success rates. When the achievement gap has been closed, the completion rates of the groups are identical and the ratio is 1 (i.e. 40% of Black students enroll in college compared to 40% of White students: $40\%/40\% = 1$). A data point half way on the scale, .5, indicates that the gap is half closed or that the success rates of one group are half that of the other group (ratio = .5). For example, 20% of Black students enroll in college compared to 40% of White students: $20\%/40\% = .5$ or the gap is half closed or Black students are half as likely to enroll in college.*

According to the estimates, if progress was to continue at its current rate, achievement gaps in college access would remain for many disadvantaged groups and may worsen significantly in some cases. Current 2025 estimates suggest that gaps in college access for low-income students could widen such that low-income, non-21st Century Scholars could be less than half as likely as their highest income peers to access college within 1 year of high school graduation. Average annual progress to 2025 also suggests that once noticeable differences in college going rates among Black and Hispanic students could converge to both groups being roughly .8 times as likely as their White peers to directly access college after high school graduation.



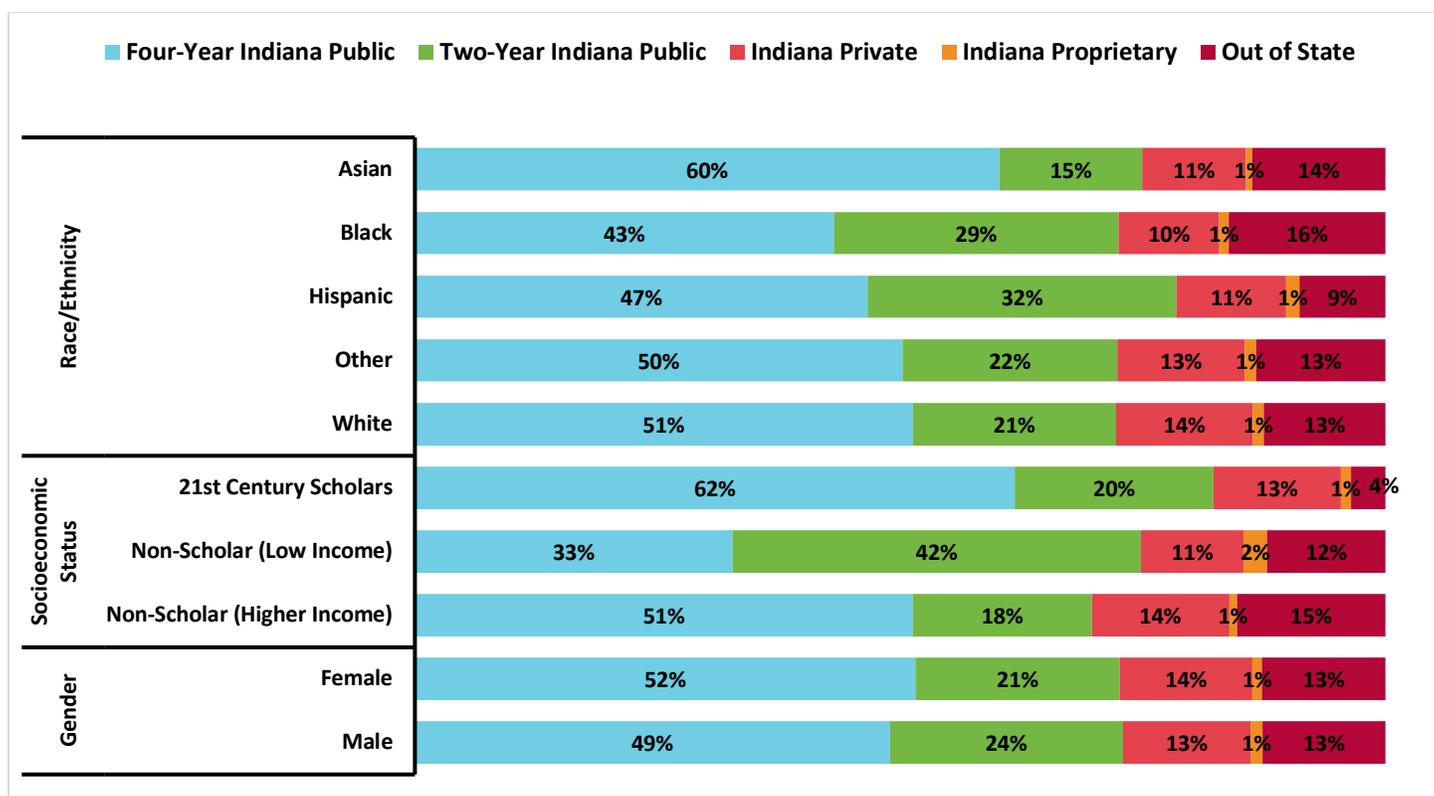
Figure 9. **College going** achievement gap trends and projections



Data suggest demographic differences in not only the rate at which students attend college but also the type of institution students initially attend. Compared to White students, Asian students in the 2016 high school cohort were more likely to enroll in four-year Indiana public and out of state institutions. This compares to Black and Hispanic students who were more likely to enroll in two-year public institutions. Black students also tended to have an above average rate of entry into out of state institutions. See Figure 10.

Students who were affirmed 21st Century Scholars were more likely than their peers to enroll in Indiana public institutions, particularly public four-year institutions. Public two-year institutions remained the top choice among low-income students not enrolled in the 21st Century Scholars program. The enrollment distribution by institution type was relatively similar by gender; females were just slightly more likely than their male peers to enroll in Indiana public four-year institutions and Indiana private institutions.

Figure 10. Institution type of enrollment among students enrolling in college within 1 year of high school graduation by student demographics (2016 High School Cohort)

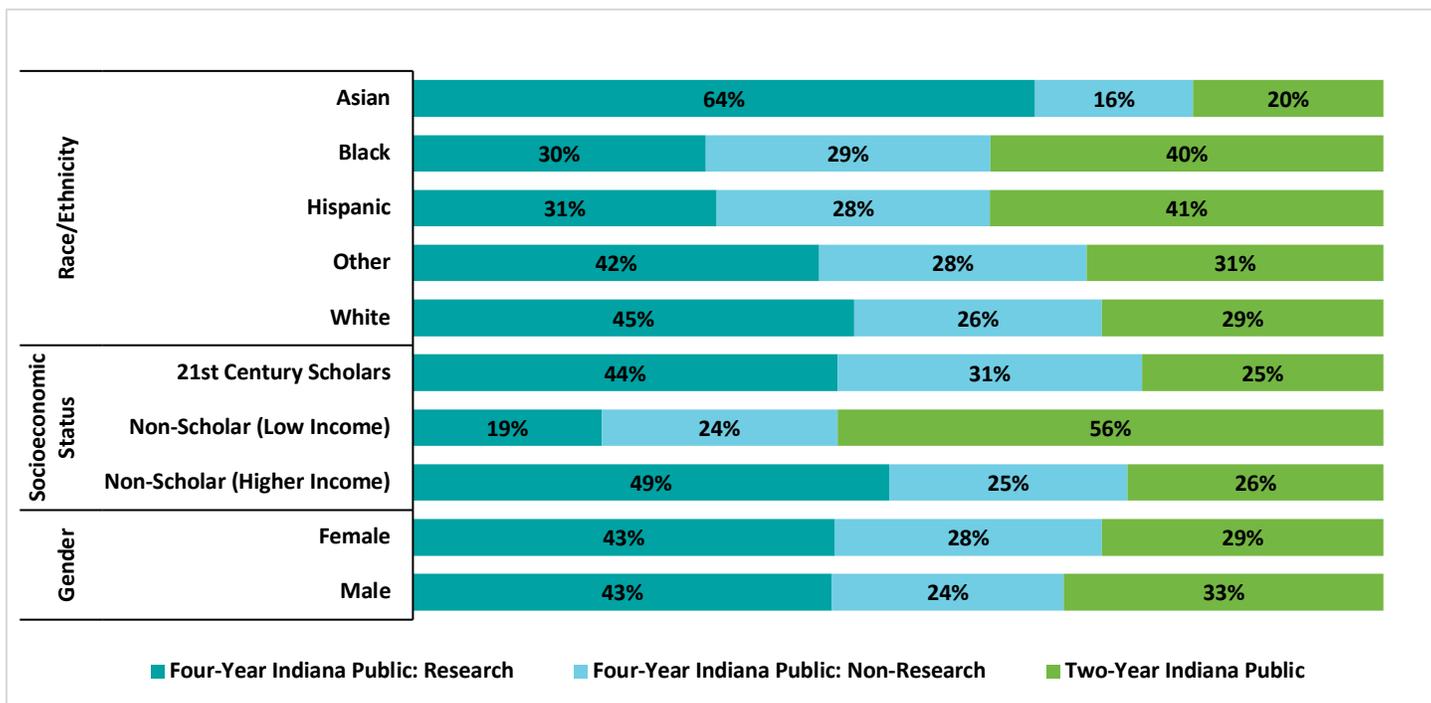


When zooming in on Indiana public college enrollees, further demographic enrollment patterns are apparent. Four-year non-research institutions tended to make up a larger share of enrollment among minority and low-income/non-scholar populations enrolling in public four-year institutions.⁵ See Figure 11.

⁵ Indiana public four-year research institutions include Ball State University, Indiana University-Purdue University-Indianapolis, Indiana University-Bloomington, and Purdue University-West Lafayette



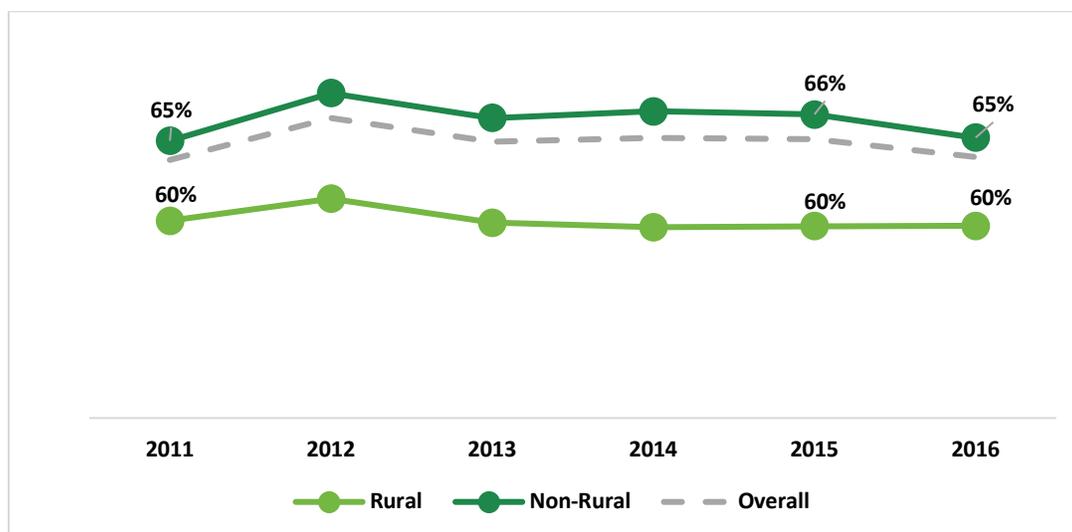
Figure 11. Institution type of enrollment among students enrolling in Indiana public colleges within 1 year of high school graduation by student demographics (2016 High School Cohort)



RURAL/NON-RURAL DYNAMIC OF COLLEGE GOING

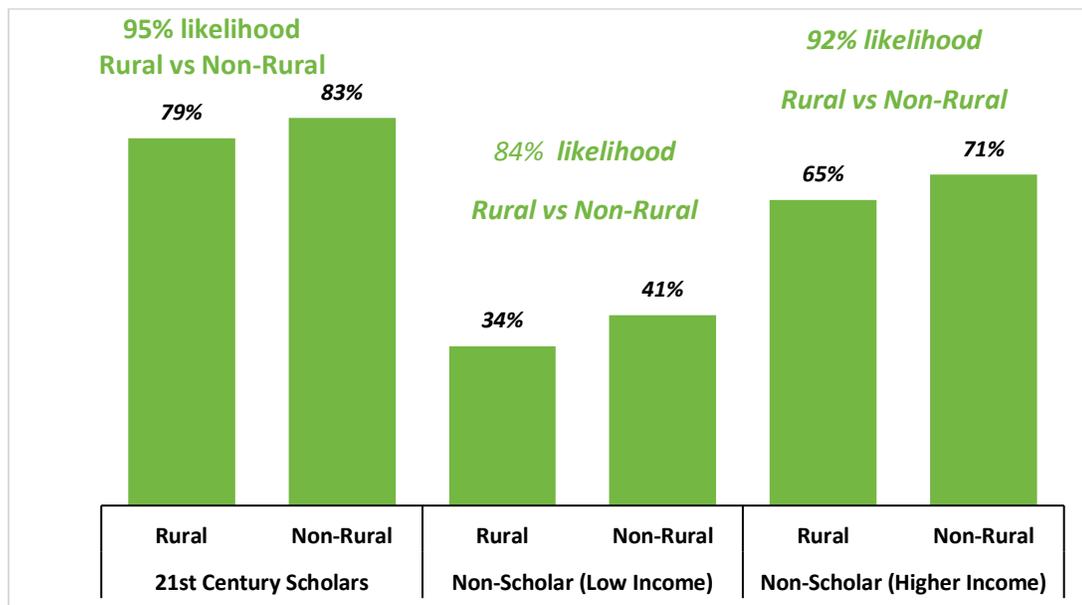
Overall, 60% of rural high school graduates enrolled in college within one year of high school graduation, a lower proportion than 65% of non-rural high school graduates. The gap in college going rates among rural and non-rural student populations remained roughly consistent over the last five years. See Figure 12. In 2016, 78% of Indiana's high school graduates graduated from a high school located in non-rural counties while 22% were estimated to have graduated from a high school located in rural counties.

Figure 12. College going rates by rural/non-rural locale of high school



The gap in college going rates by rural/non-rural status was more apparent for low-income, non-21st Century Scholars. Low-income students not participating in the 21st Century Scholars program located in rural areas were 16% less likely than their non-rural peers to enroll in college within one year of high school graduation. In contrast, 21st Century Scholars located in rural areas were only 5 percent less likely than their non-rural peers to directly enroll in college. See Figure 13.

Figure 13. College going rates by rural/non-rural locale and socioeconomic status & Likelihood of enrolling in college of rural high school student compared to non-rural high school student by socioeconomic status (2016 High School Cohort)

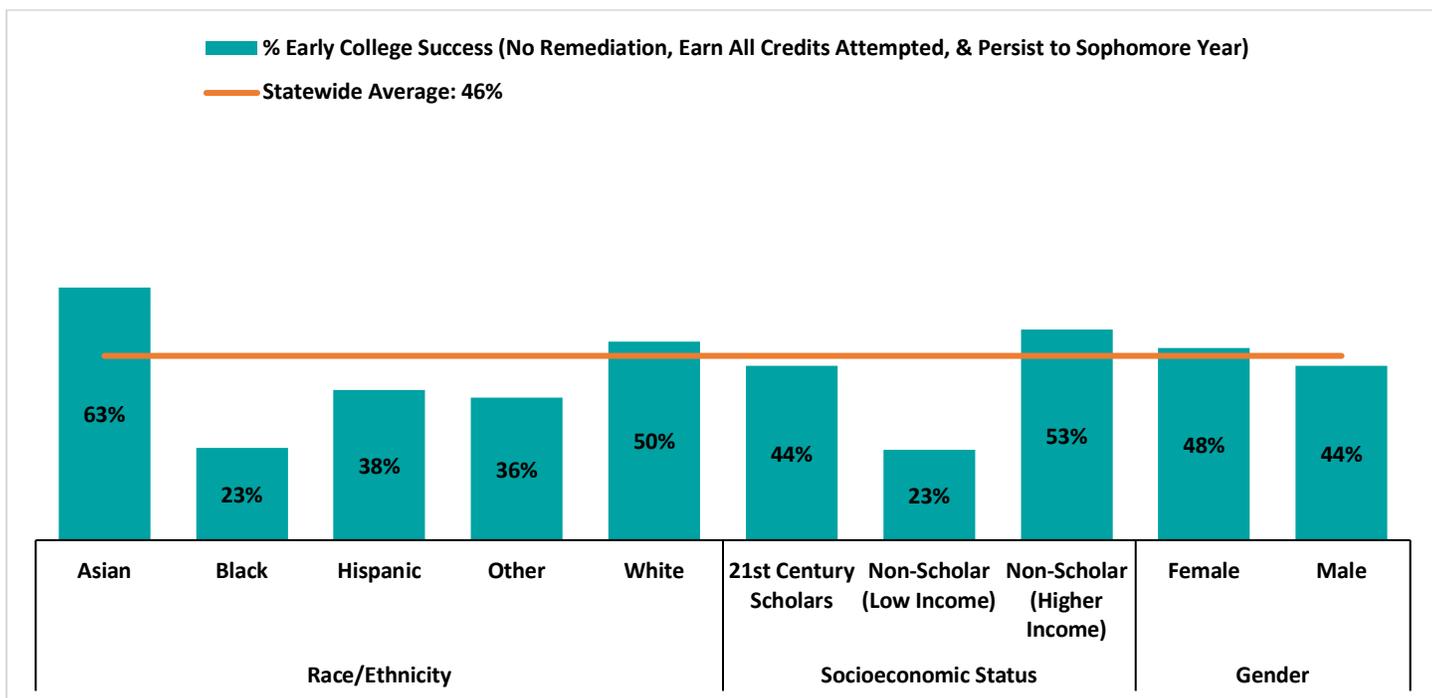


EARLY SUCCESS IN COLLEGE

Data for Indiana public college enrollees show that students are not all equally prepared for college coursework according to a composite measure of early success in college. The college readiness composite metric is made up of the following measures: students not needing remediation; students completing all coursework attempted; and students persisting to sophomore year.

Data show only Asian, White, and higher-income demographic groups having a majority of students hitting all three areas of early success in college in 2015. Success rates were particularly low for Black students and for low-income students not participating in the 21st Century Scholars program: only 23% of either demographic group was ready for college coursework according to the composite measure of early success in college. Students in the 21st Century Scholars program performed just under the state average at 44%. Scholars still trailed their higher-income peers by 9 percentage points (though that gap has been closing). Females outpaced males in the percentage of students meeting all three early success in college indicators, but not by a significant margin (48% compared to 44%). See Figure 14.

Figure 14. Early success in college (Composite) rates by student demographics (2015 High School Cohort)



Each of the three individual measures of early success in college are presented in detail in Figures 15, 16, and 17. The metric that posed the most challenge for all students was completing all coursework attempted, and it was also the metric associated with the largest achievement gaps. Students identifying as Black, Hispanic, or Other all had success rates at least 8 percentage points below the state average and 11 percentage points below the success rates of White students. Black students, as well as low-income students not participating in the 21st Century Scholars program, were roughly half as likely as the overall to complete all coursework attempted in their first year.



Figure 15. Early success in college (1. no remediation needed) by student demographics (2015 High School Cohort)

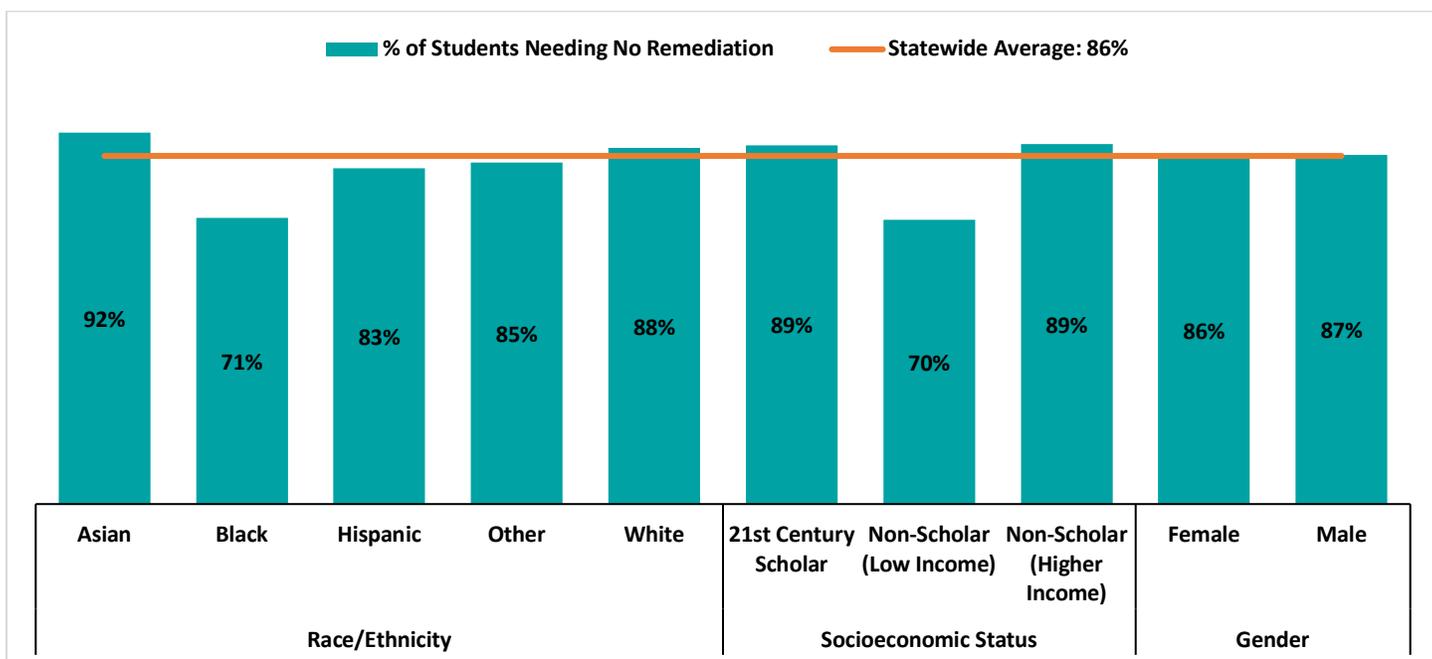


Figure 16. Early success in college (2. completing all coursework) by student demographics (2015 High School Cohort)

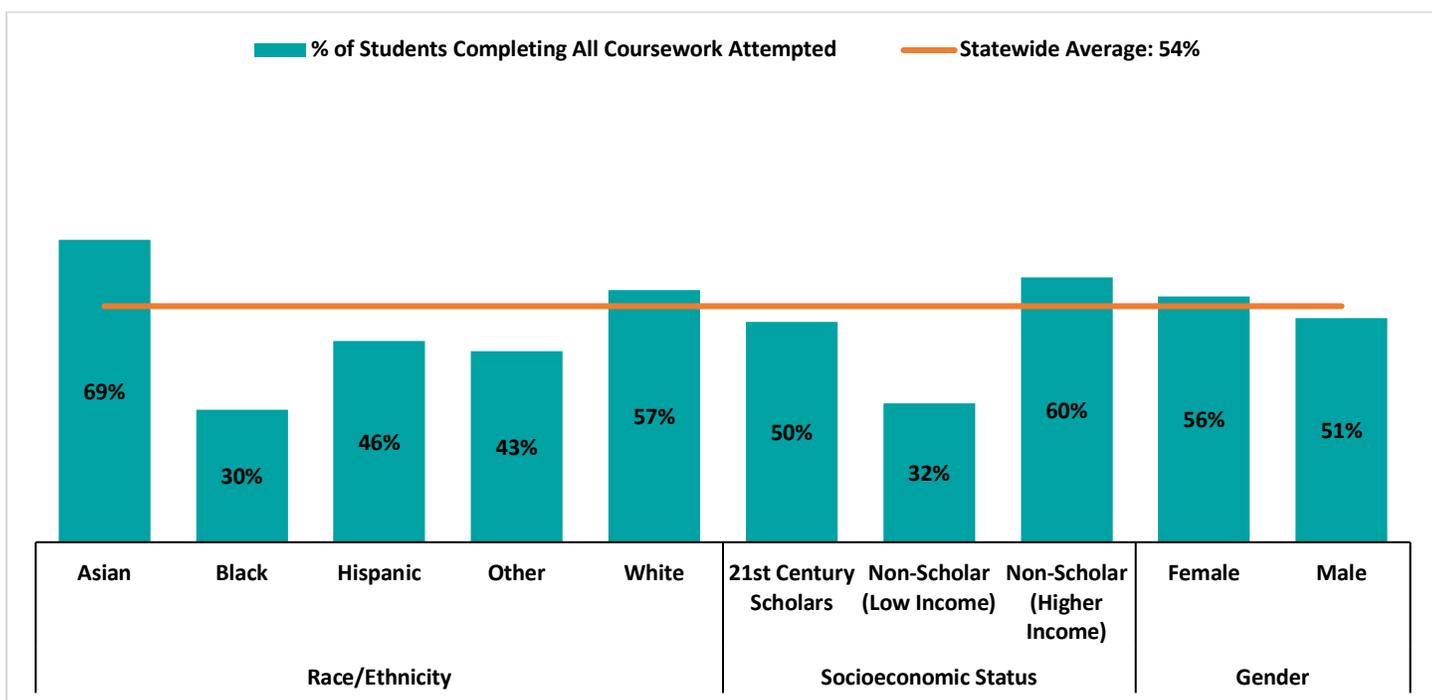
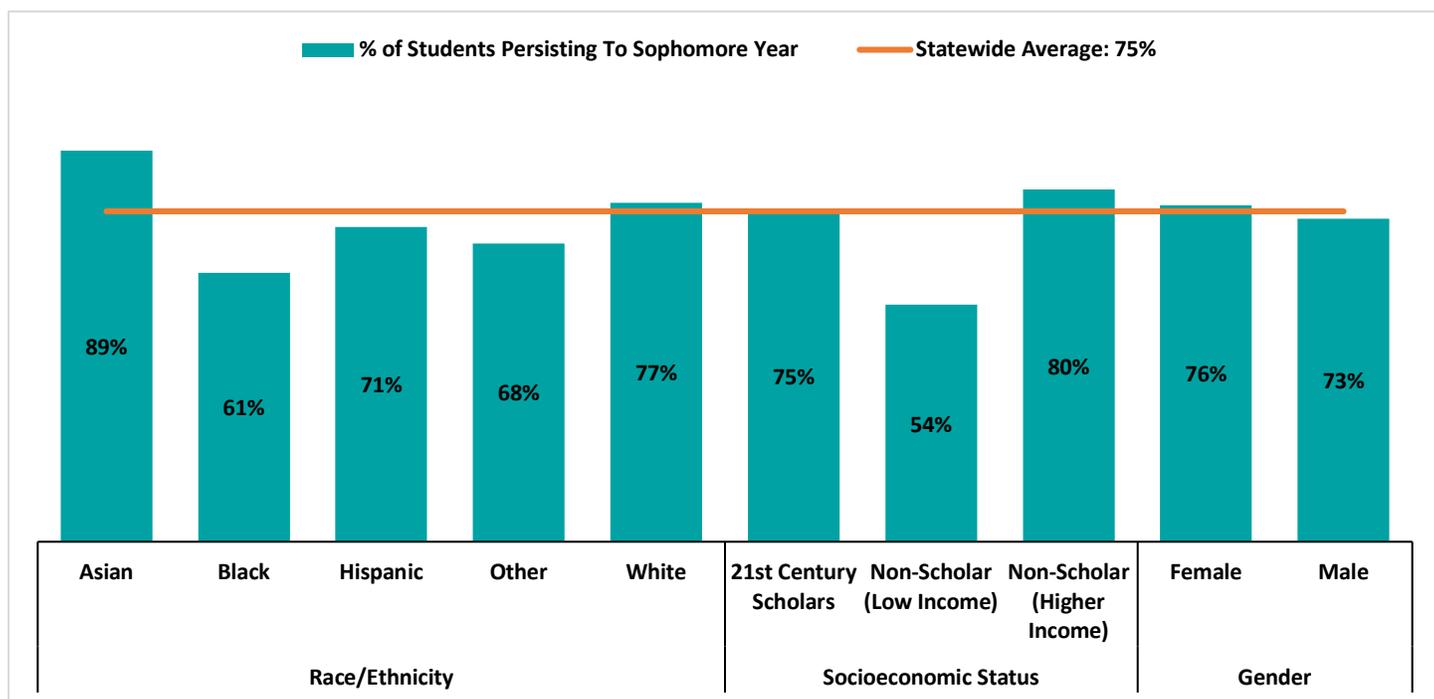
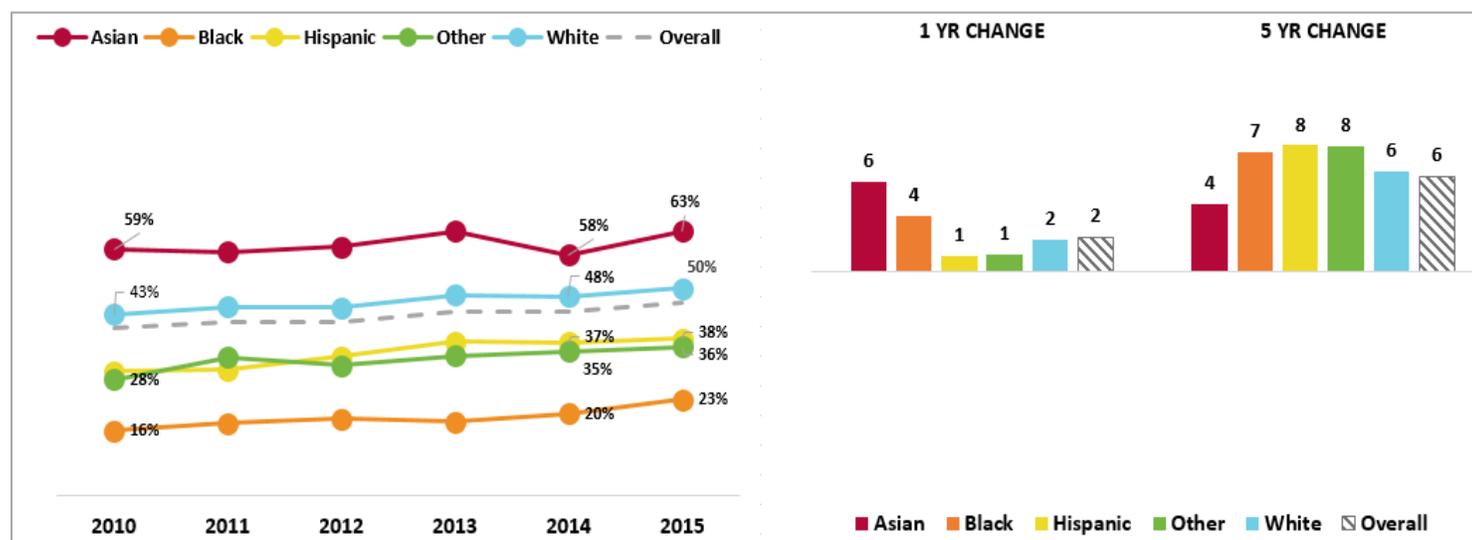


Figure 17. Early success in college (3. persisting to sophomore year) by student demographics (2015 High School Cohort)



Trends in college success rates as measured through the composite early success in college measure show gaps in college level success for minority students generally closing. Between 2010 and 2016, the percentage of Black and Hispanic students hitting all three areas of early success in college increased by 7 and 8 percentage points, respectively. During the same timeframe, early success in college rates increased by roughly 6 percentage students for White students and the state overall. See Figure 18.

Figure 18. Trends in early success in college (Composite) metric by race/ethnicity

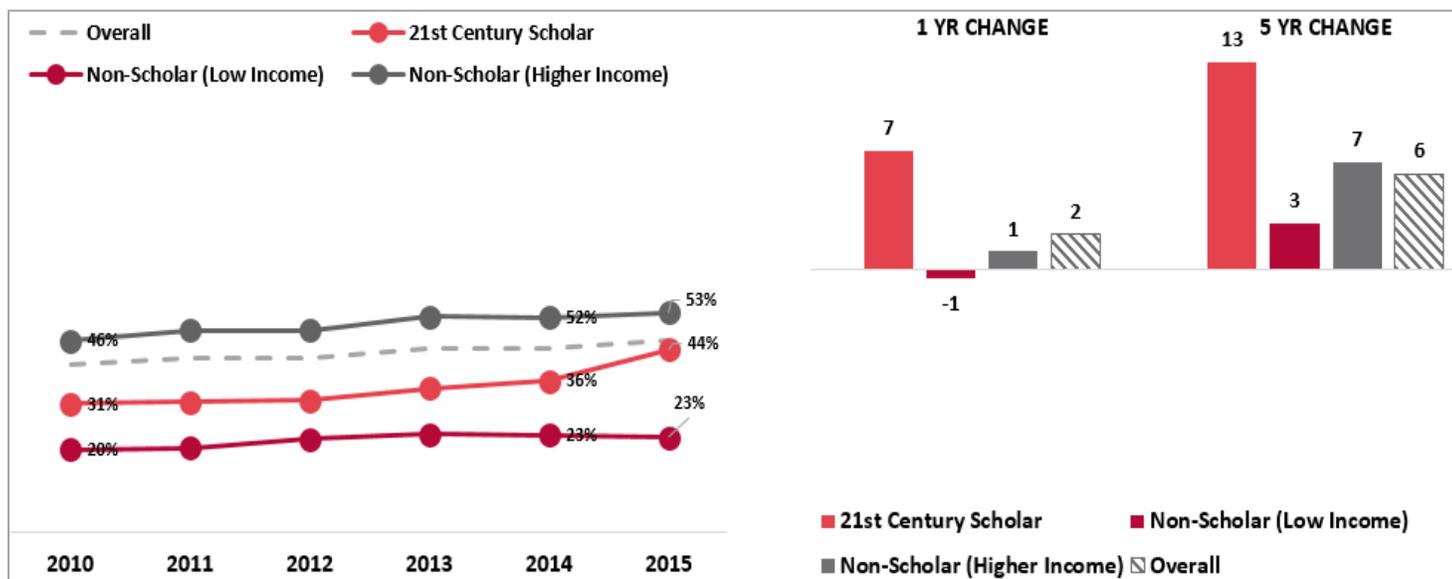


Inequities in early success in college have substantially closed for 21st Century Scholars but gaps remain for low-income students not participating in the 21st Century Scholars program. Between 2010 and 2016, the percentage of



21st Century Scholars meeting all three areas of college success increased by 13 percentage points, roughly double the rate of increase for their higher-income peers (+7 percentage points) and the statewide average (+6 percentage points). Between 2014 and 2015 alone, the gap in early success in college rates between 21st Century Scholars and the overall population was reduced to only 2 percentage points -- a trend that may coincide with new GPA requirements for 21st Century Scholars as well as outreach efforts at both the state and institutional levels to increase college success for the Scholars population. Low-income students who were not 21st Century Scholars also saw progress in the early success in college metric but only at increases half that of the statewide increase (3 percentage point increase for low-income/non-Scholars compared to 6 percentage point increase overall). See Figure 19.

Figure 19. Trends in [early success in college \(Composite\)](#) metric by socioeconomic status



Increases in early success in college rates by gender tended to parallel to the state average. Between 2010 and 2015, both females and males saw increases in the percentage of students meeting all three areas of college success at 6 and 5 percentage points, respectively. See Figure 20.

Figure 20. Trends in [early success in college \(Composite\)](#) metric by gender

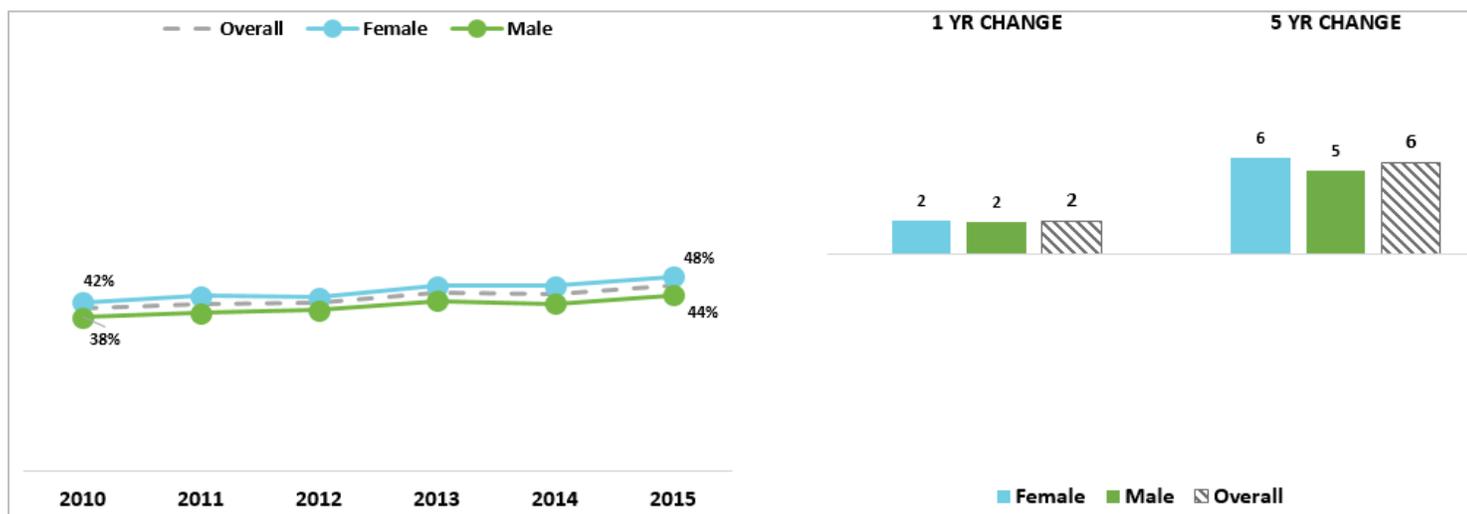
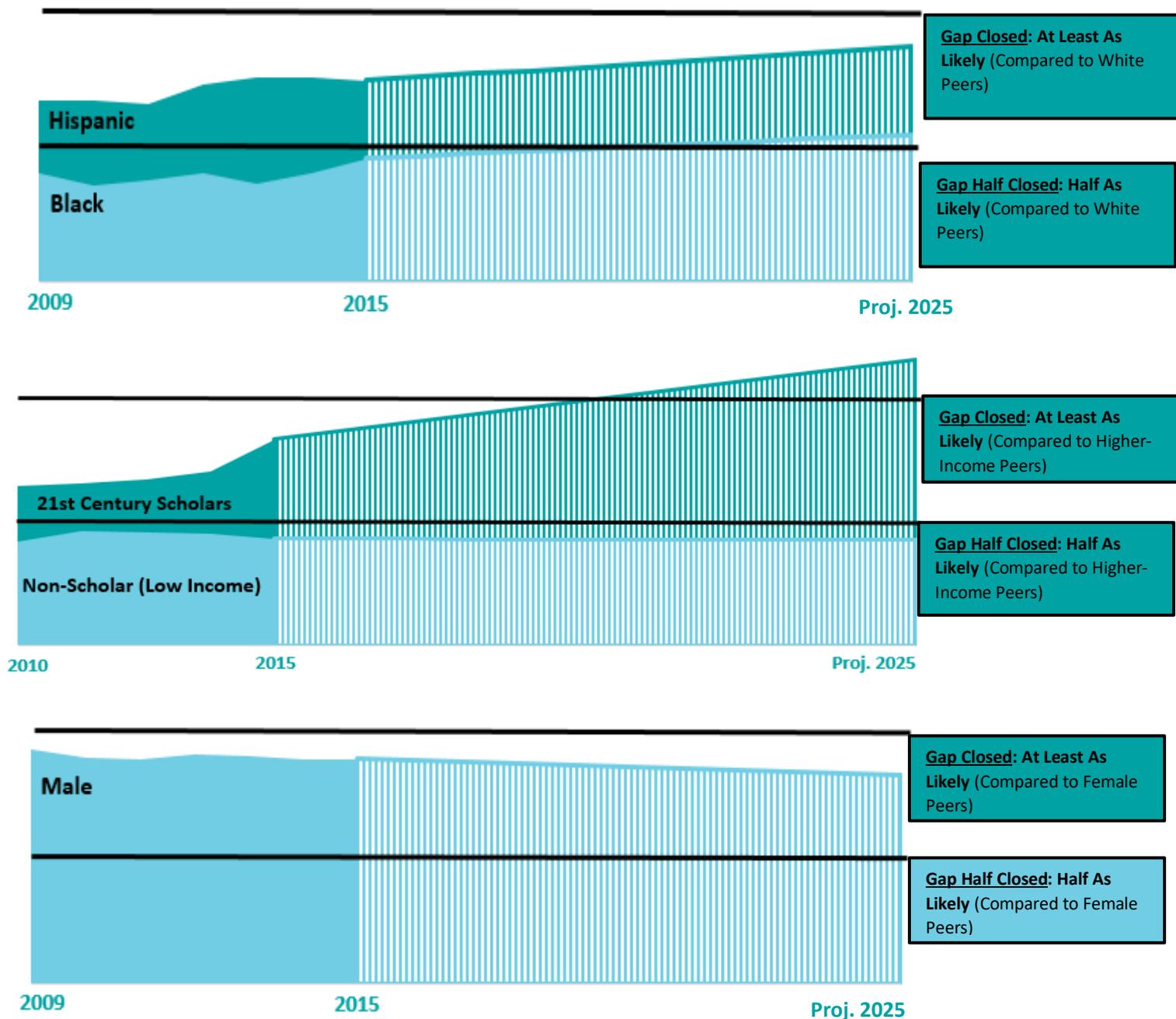


Figure 21 displays the trends in the achievement gap ratio values and also the estimated linear trajectory to 2025 based on average progress toward equity in early success in college rates among groups. For minority students, current average progress suggests that gaps will continue to close but not at a pace to fully close achievement gaps by 2025. Estimated progress toward closing low-income achievement gaps by 2025 differed by low-income student type. Average annual progress to 2025 suggests that the gap in early success in college performance between 21st Century Scholars and their highest income peers could be closed by 2025. However, gaps in success for low-income students not participating in the 21st Century Scholars program could remain stagnant as their progress is expected to be outpaced by other comparison groups.

Figure 21. [Early success in college \(Composite\)](#) achievement gap trends and projections



PRE-COLLEGE ACADEMIC SUCCESS & CLOSING ACHIEVEMENT GAPS

Data show achievement gaps for minority and low-income students may partly be explained by disparities in pre-college academic success prior to college entry. This speaks to joint efforts needed by both K-12 and higher education partners to close achievement gaps.

For example, in 2016, less than a quarter of minority students and low-income students not participating in the 21st Century Scholars Program earned an Academic Honors Diploma, the state's most rigorous diploma. Data show that gaps in early success in college among such populations compared to their peers are significantly reduced when earning an academic honors diploma. For example, Black students are 75% as likely as their White peers to meet all three areas of early success in college when earning an Honors diploma compared to only half as likely when earning a Core 40 diploma. See Figures 22 and 23.

Figure 22. Diploma type distribution by minority and low-income/non-Scholar population compared to the overall (2016 High School Cohort)

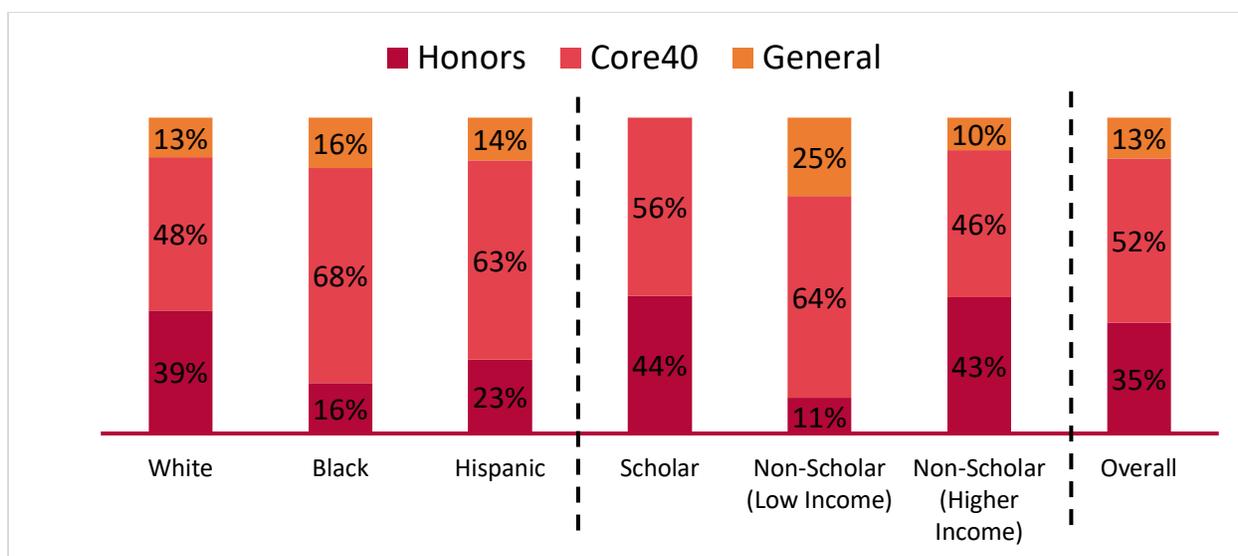
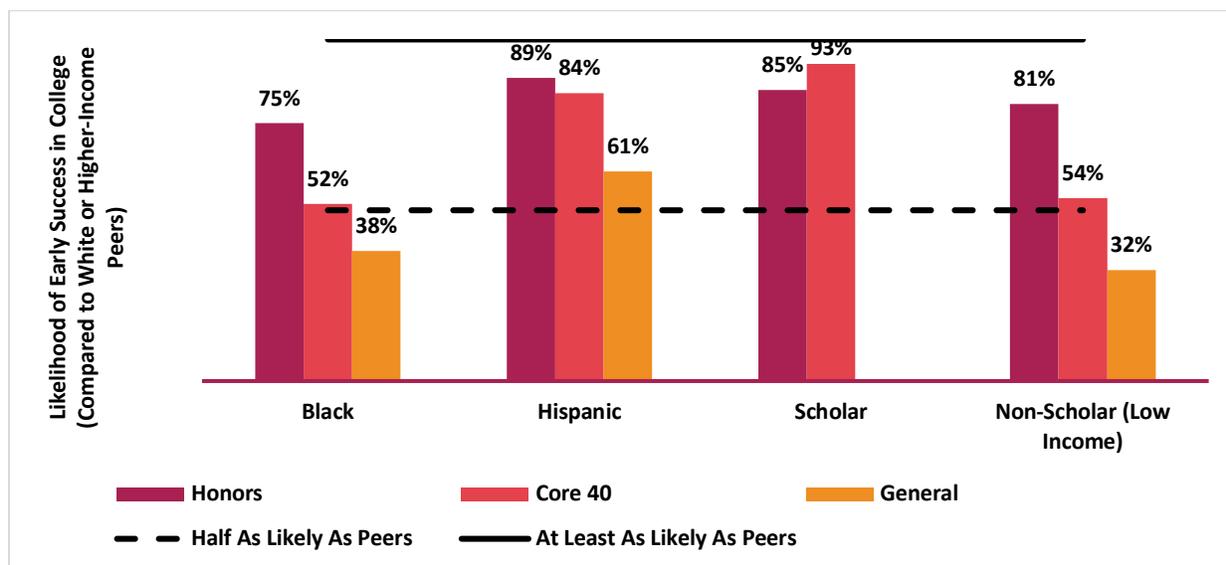


Figure 23. Estimated likelihood of early success in college compared to peers by diploma type (2015 High School Cohort)



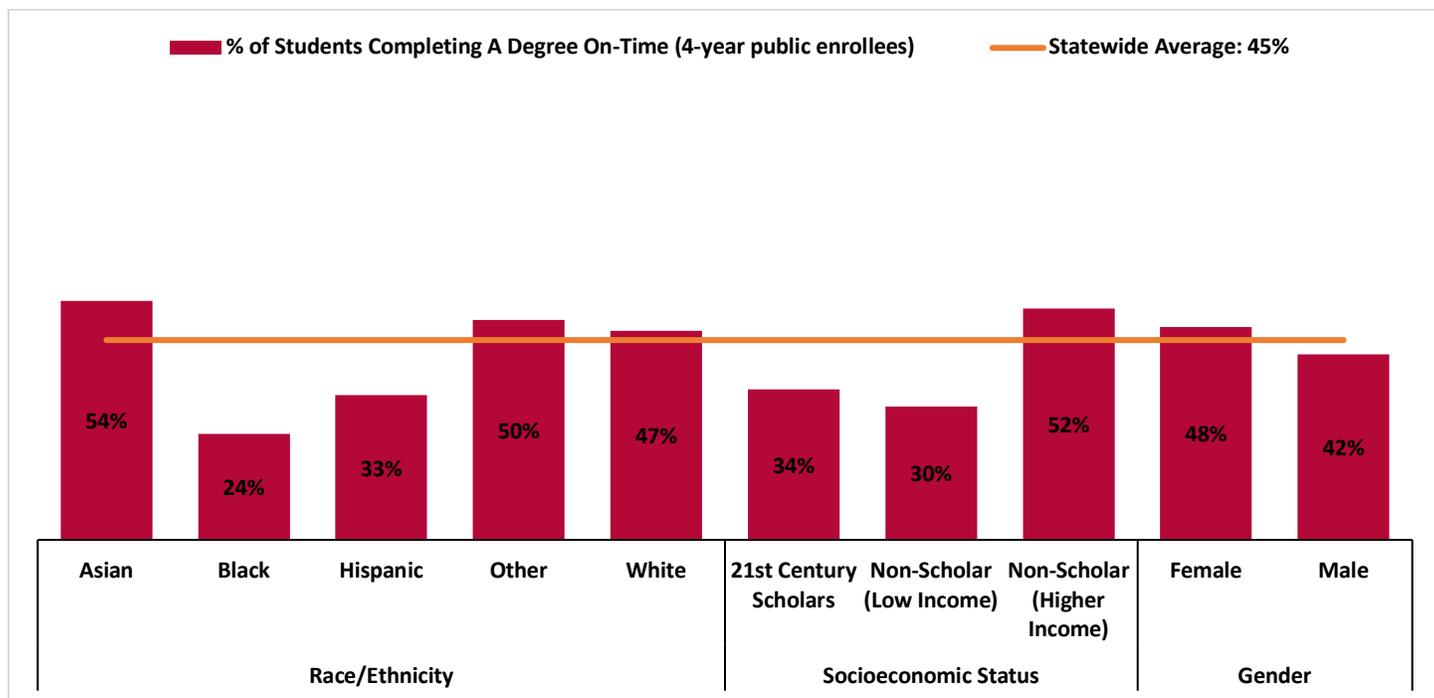
ON-TIME COLLEGE COMPLETION

Even when accounting for differences in pre-college and early success in college, gaps remain for certain disadvantaged populations (Figure 23). This shows that additional initiatives and supports are needed in the higher education space to close achievement gaps and to get all students across the degree completion finish line.

College completion rates for state higher education goals are tracked by ICHE through cohorts of fall, first-time, full-time students who are pursuing bachelor's degrees at four-year Indiana public colleges or pursuing associate degrees or longer-term certificates at Indiana public two-year colleges. Since on-time degree completion saves students time and money and is a core pillar of Indiana's strategic plan for higher education, trends in on-time degree completion (same campus, same degree level) gaps are examined. On-time (same campus, same degree level) rates include those students who complete a degree at the same level initially sought at the same Indiana public college/university system in which they originally enrolled.

Data show disparities in on-time completion rates among Indiana public four-year college enrollees by demographics. At least 47% of students classifying as Asian, Other, and White graduated on-time at 4-year public colleges compared to 33% of Hispanic students and 24% of Black students, respectively. Gaps in on-time college completion also differed by socioeconomic status. Over half (52%) of students not receiving 21st Century Scholarships or Pell grants completed a degree on-time. Roughly 34% of students receiving 21st Century Scholarships earn a bachelor's degree on time, while low-income, non-Scholars had the lowest on-time completion rate (30%). Similar to other metrics in this report, females performed slightly better than males. See figure 24.

Figure 24. **On-time completion rates: (4-year public enrollees)** by student demographics (Fall 2013 Cohort)



Over the past five years, on-time rates among four-year public college enrollees improved across all demographic groups, but the increases occurred at different rates. On-time completion gaps for 21st Century Scholars generally closed; on-time completion rates for 21st Century Scholars increased by 5 percentage points in just one year, the largest

1-year increase among all low-income groups. Between fall 2008 and fall 2013, on-time completion rates for Hispanic students at four-year institutions increased by 12 percentage points. The percentage of Black students graduating on-time increased by 7 percentage points over the same five year period. Female and male Hoosiers improved at the same rates over the past five years. See figures 25-27.

Figure 25. Trends in **on-time completion rates (4-year enrollees)** by race/ethnicity

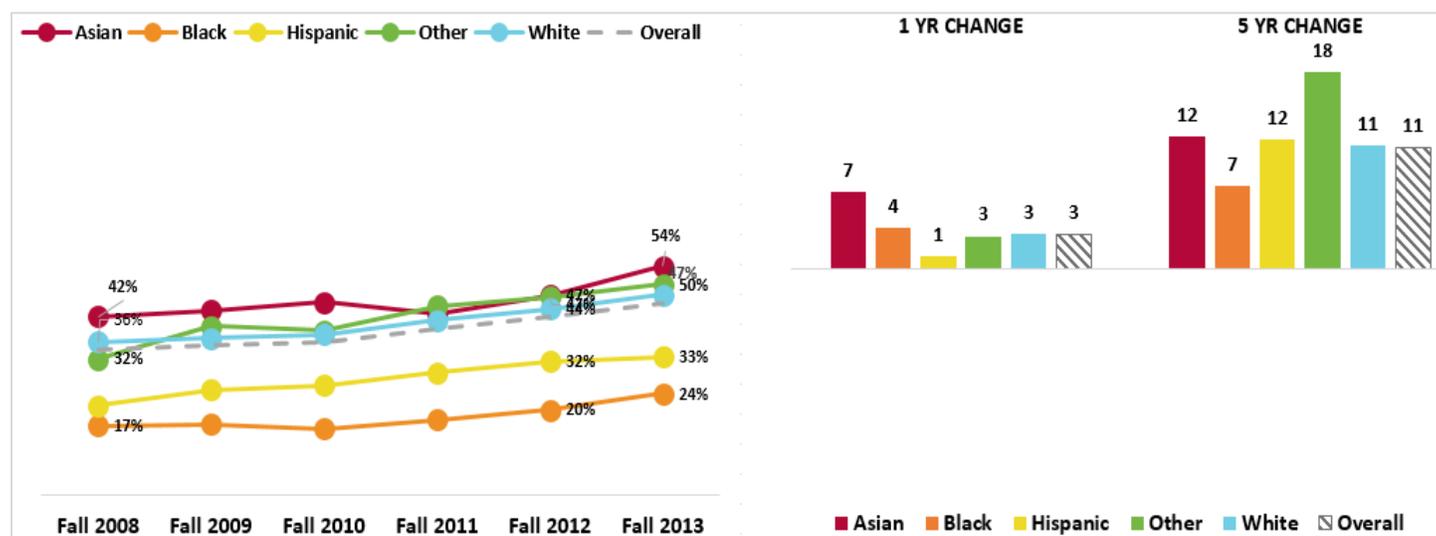


Figure 26. Trends in **on-time completion rates (4-year enrollees)** by socioeconomic status

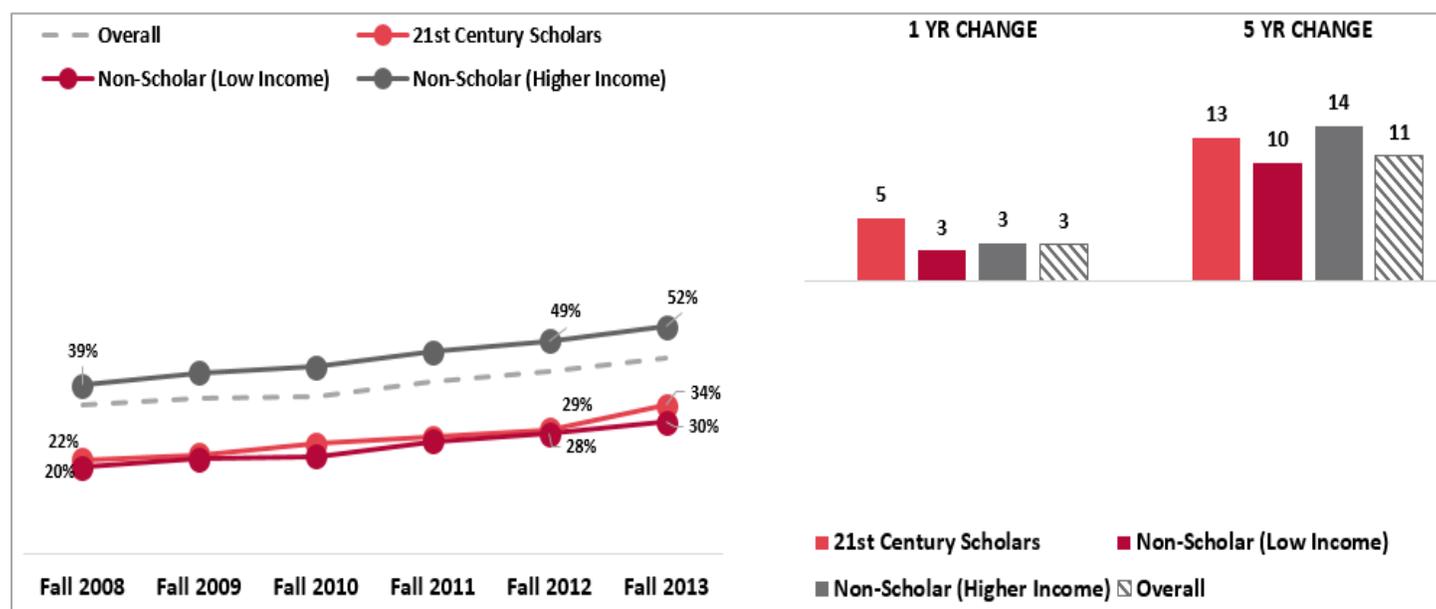
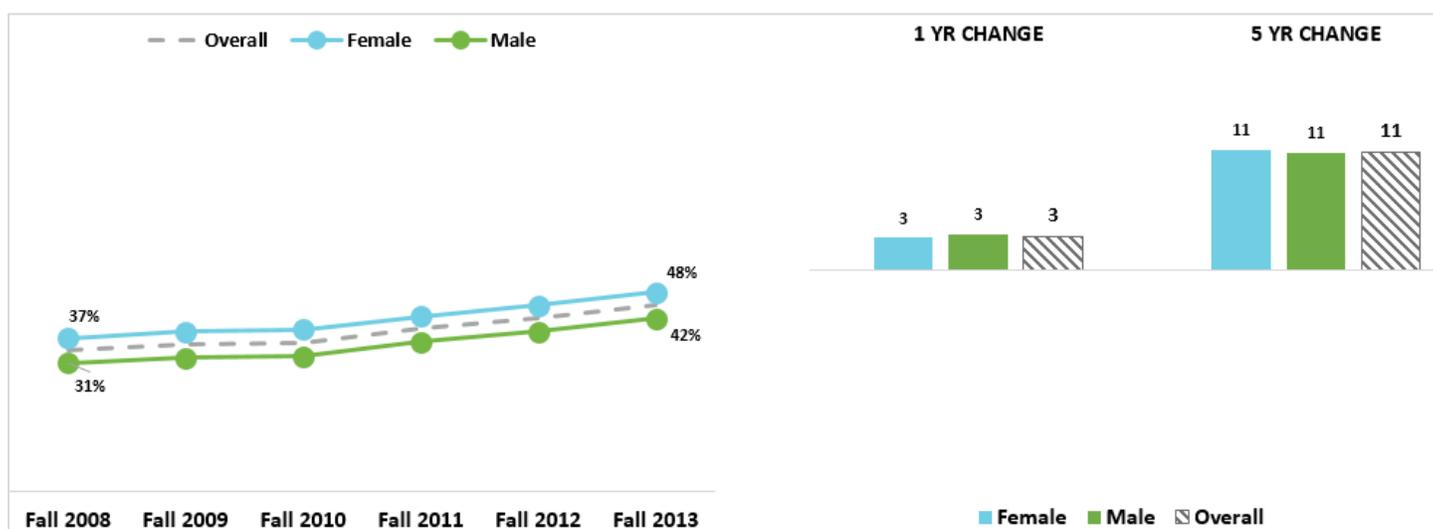
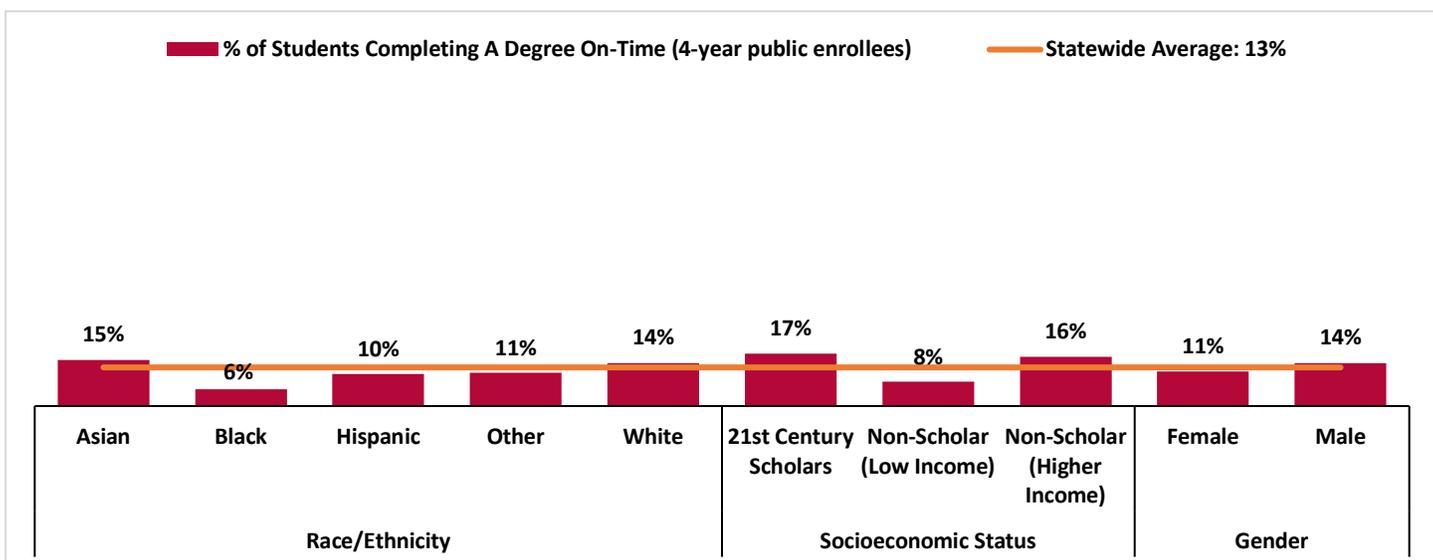


Figure 27. Trends in **on-time completion rates (4-year enrollees)** by gender



Similar disparities in on-time completion rates exist among Indiana public two-year college enrollees. At least 11% of students classifying as Asian, Other, and White race/ethnicity categories graduated on-time at 2-year public colleges compared only 6% of Black students. On-time gaps in college completion also differed by socioeconomic status. 21st Century Scholars had the highest 2-year college on-time completion rates among all demographic groups at 17%. This is more than double the rate of their low-income, non-Scholar peers (8%). Scholars even performed 1 percentage points higher than the highest income group (16%). In contrast to 4-year colleges where females tended to outperform males; at two-year colleges, males had college completion rates 3 percentage points higher than their female peers. See Figure 28.

Figure 28. **On-time completion rates: (2-year public enrollees)** by student demographics (Fall 2015 Cohort)



Trends in on-time completion rates at two-year public institutions show minority completion rates increasing but not at the rate of White students or the overall student population. Between 2010 and 2015, Black and Hispanic on-time completion rates increased by 5 and 8 percentage points, respectively. Despite these improvements, the gap in completion rates grew as White student improved by 10 percentage points. On-time completion rates of 21st Century



Scholars increased by substantial margins (up 15 percentage points since 2010). Scholars now outpace the rates of students overall as well as rates of their high-income peers. These increases could be attributable to changes to credit completion and high school GPA requirements for 21st Century Scholars. See Figures 29 through 30.

Figure 29. Trends in on-time completion rates (2-year enrollees) by race/ethnicity

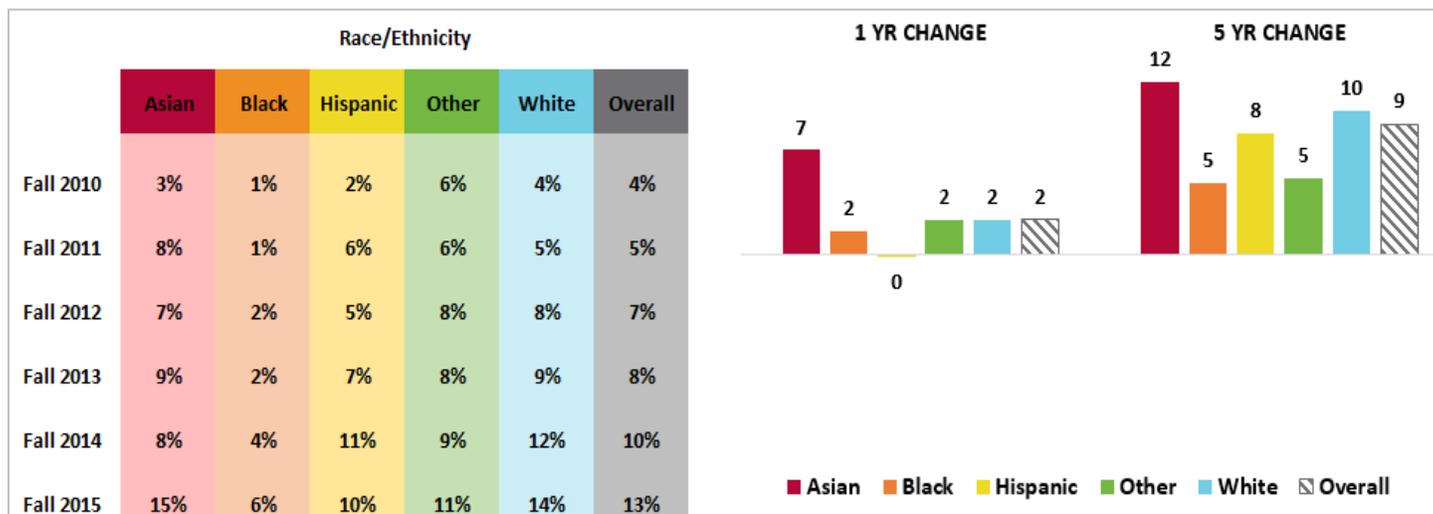


Figure 30. Trends in on-time completion rates (2-year enrollees) by socioeconomic status

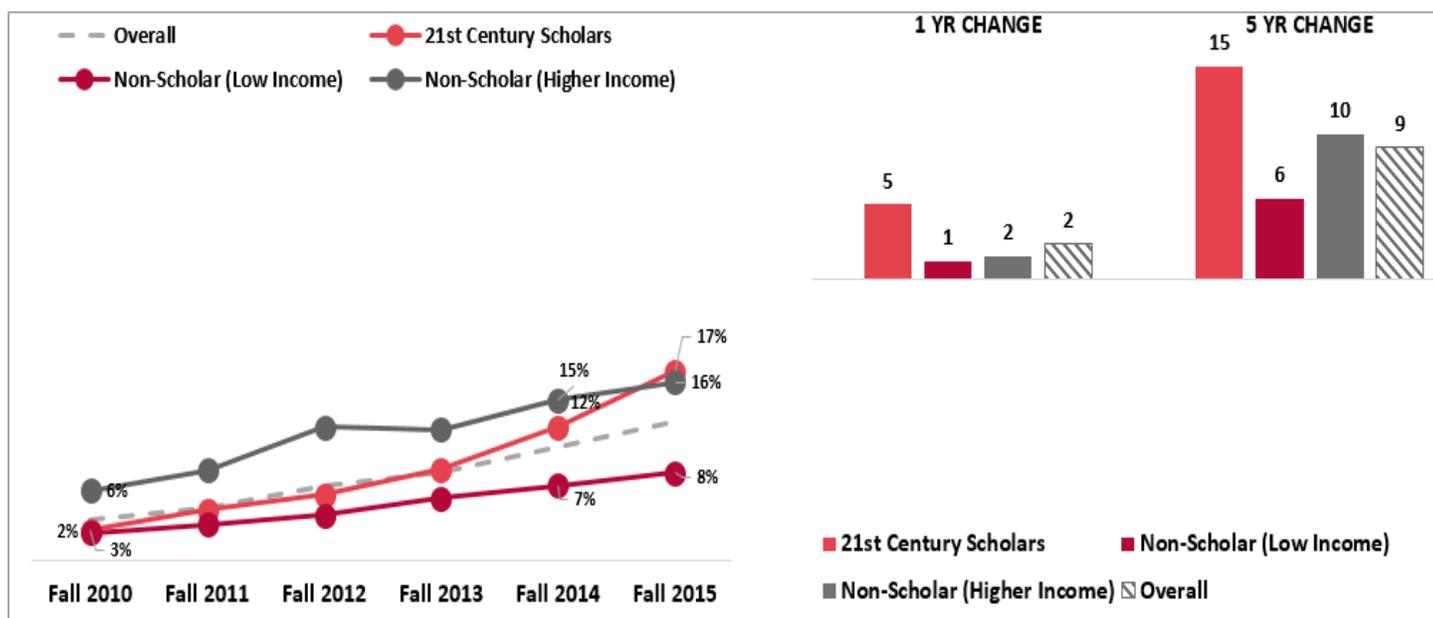


Figure 31. Trends in on-time completion rates (2-year enrollees) by gender

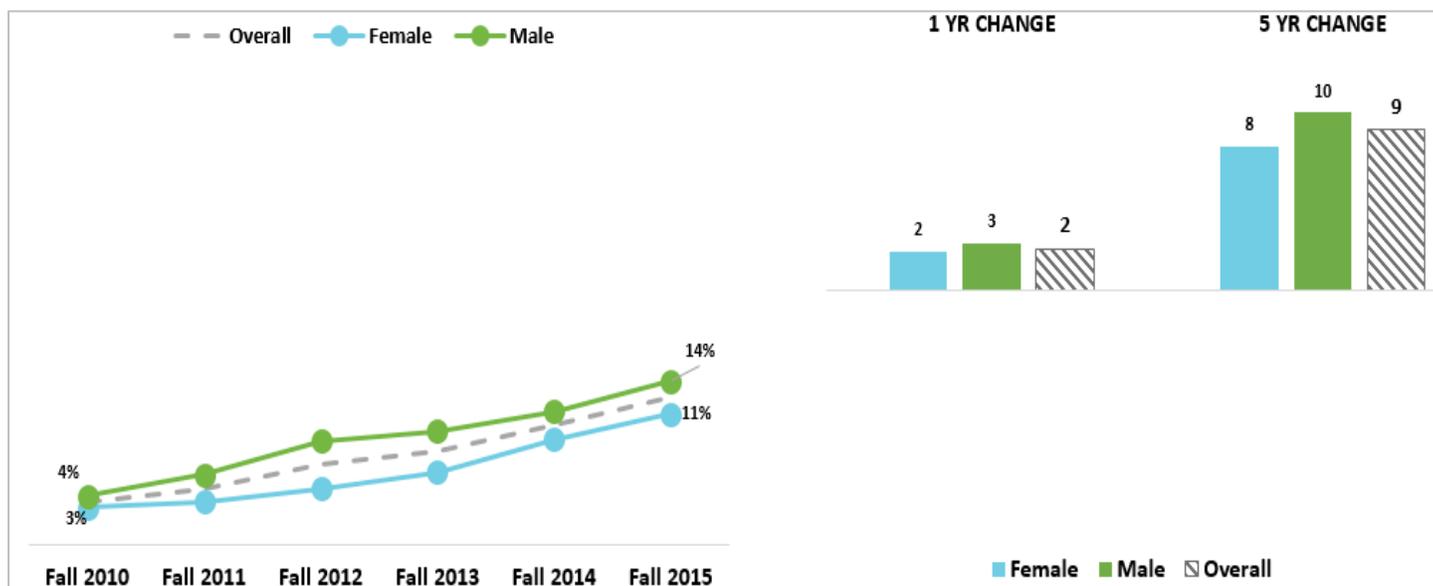
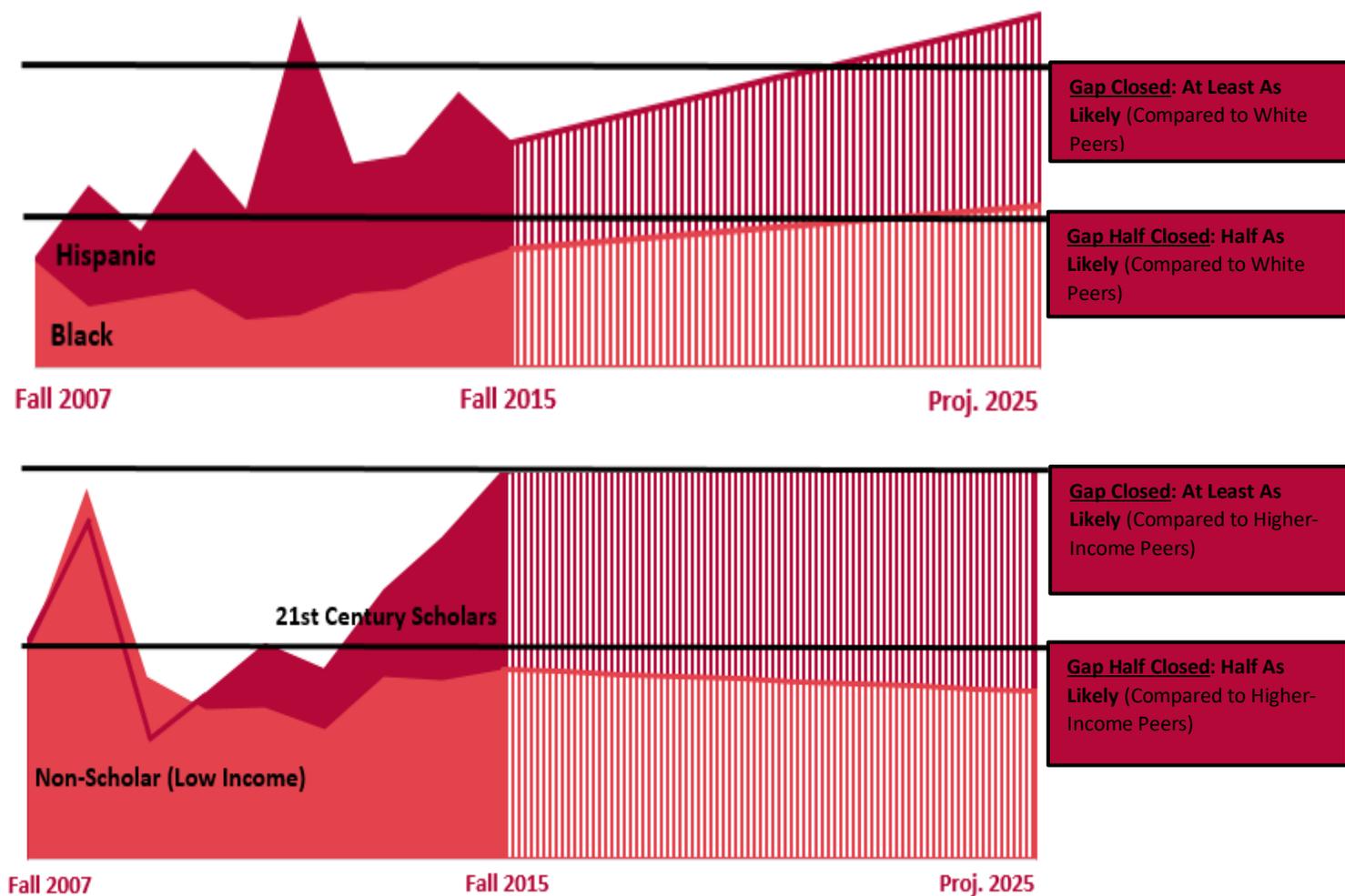


Figure 32 and 33 display trends in the achievement gap ratio values and also the estimated linear trajectory to 2025 based on average progress toward equity in on-time completion rates among groups. For both public 2-year and 4-year college enrollees, current average progress suggests that gaps will continue to close but not at a pace to fully close achievement gaps by 2025. Estimated progress toward closing low-income achievement gaps by 2025 differed by low-income student type. Average annual progress to 2025 suggests that the gap in early success in college performance between 21st Century Scholars and their highest income peers will be nearly closed by 2025 for 21st Century Scholars at public 4-year institutions. Gaps in success for low-income students not participating in the 21st Century Scholars program are expected to not be closed at the rate of their peers in the 21st Century Scholars program.

Figure 32. **On-time completion (public 4-year enrollees)** achievement gap trends and projections



Figure 33. **On-time completion (public 2-year enrollees)** achievement gap trends and projections



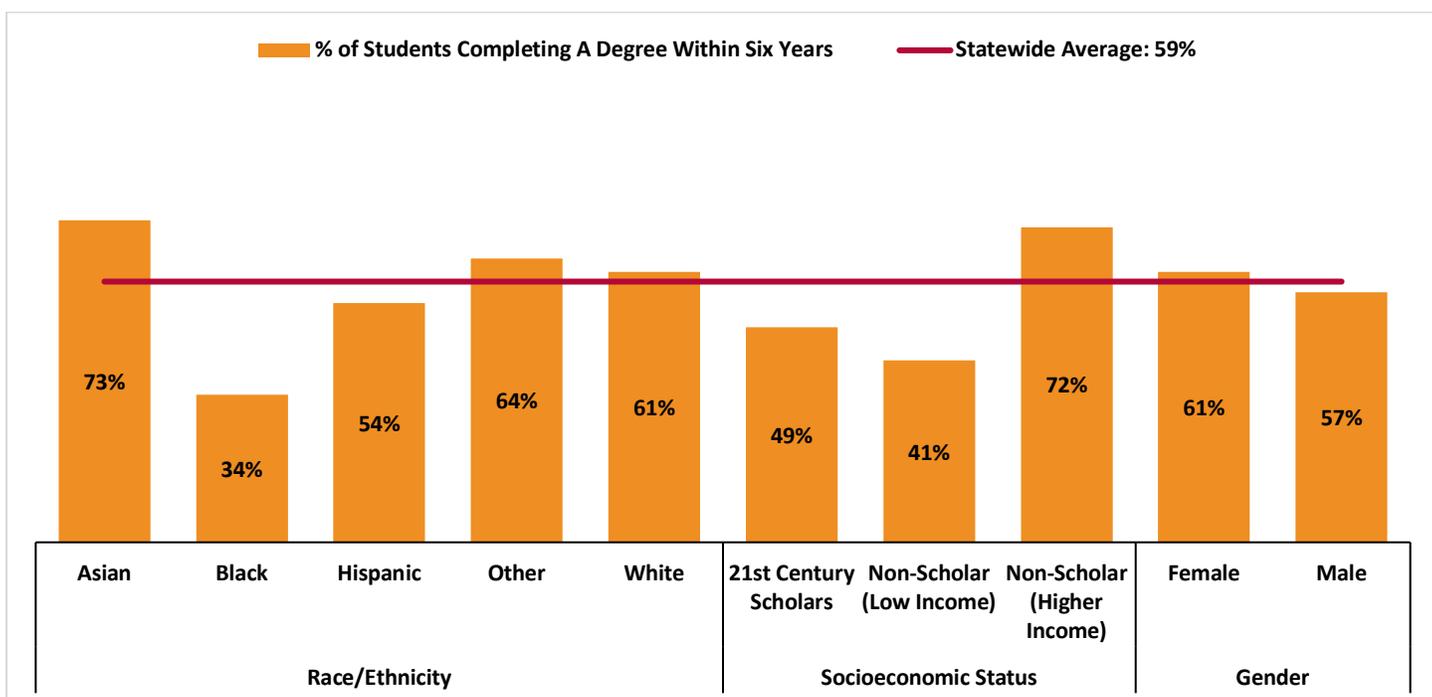
EXTENDED-TIME COLLEGE COMPLETION

Completing a college degree or certificate can have significant economic benefits, even if it was not completed “on-time.” For that reason, Indiana’s educational attainment rates look at the level of education of working-age Hoosiers, regardless of time to degree.

While the on-time completion rate examines a four-year window for bachelor’s degree completion and a two-year window for associate degree or longer-term certificate completion, the extended-time completion rate examines completion within a six-year period. Further, the on-time rate only measures students who earn a degree at the same institutional system and degree level initially sought. The extended-time completion rate includes students who transferred before completing or obtained a degree at a level lower than the initial degree pursued. For the purposes of this analysis, the completion rates of two-year institutions and four-year institutions are not disaggregated, though some additional information can be found in ICHE’s annual College Completion Report.

Data show disparities in extended-time completion rates among Indiana public college enrollees by student demographics. Seventy-three percent of Asian, 64% of Other, and 61% of White race/ethnicity categories completed a degree in extended time. Over half (54%) of Hispanic students and 34% of Black students graduated in extended time. Gaps in extended-time college completion also differed by socioeconomic status. Nearly three-quarters (72%) of students not receiving 21st Century Scholarships or Pell grants completed a degree in extended time. Half (49%) of students receiving 21st Century Scholarships earn a degree or certificate within six years, while low-income, non-Scholars had the lowest extended-time completion rate (41%). Females performed slightly better than males in terms of extended-time completion at the statewide level. See figure 34.

Figure 34. **Extended-time completion rates** by student demographics (Fall 2011 Cohort)



Over the past five years, extended-time rates among public college enrollees improved across all demographic groups, but the increases occurred at different rates. On this metric, 21st Century Scholars did not improve as rapidly as they



have on other metrics. This may be because recent reforms to the Scholars program have focused on pre-college preparation, early success in college, and on-time graduation. Scholars only have four years of eligibility for their financial aid, and so it may not be surprising that, while still improving on the six-year graduation rate, the gains have not been as rapid as on the on-time graduation metric. Further, many of the reforms to the 21st Century Scholars program occurred for the fall 2013 cohort and after; not enough time has elapsed to examine six year completion outcomes of these cohorts. Over the past five years, extended-time completion rates rose the most for the Other and Hispanic race/ethnicity categories. Female and male Hoosiers improved at the same rates over the past five years. See figures 35-37.

Figure 35. Trends in extended-time completion rates by race/ethnicity

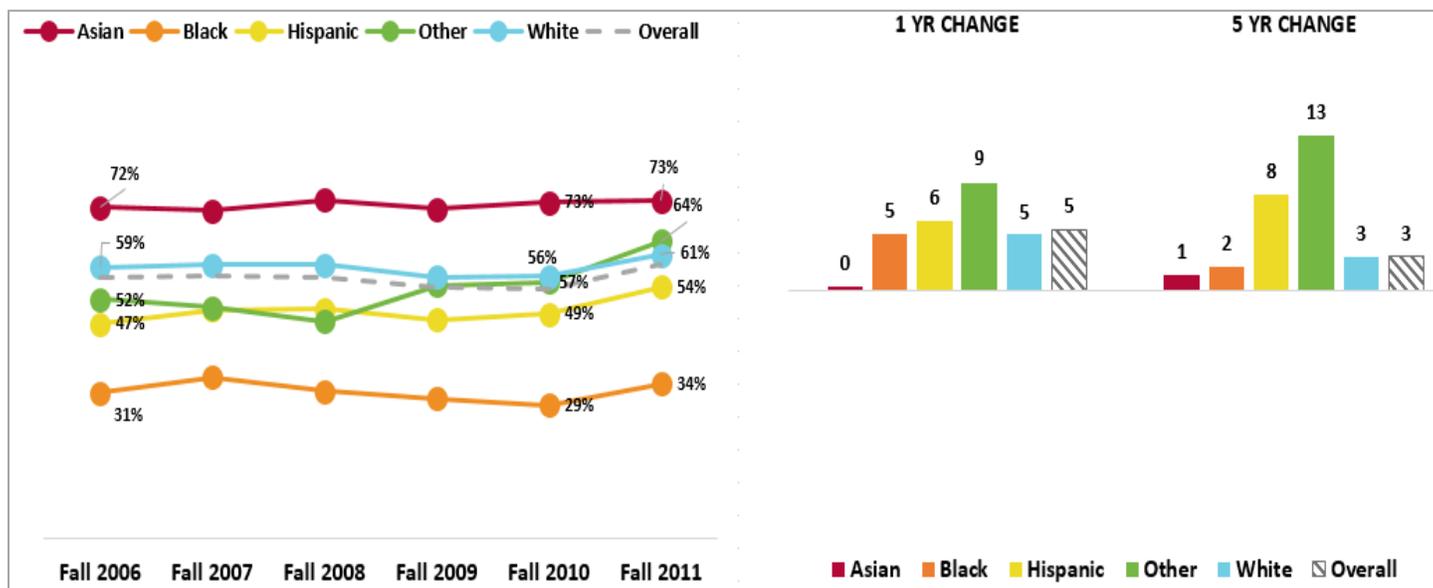


Figure 36. Trends in extended-time completion rates by socioeconomic status

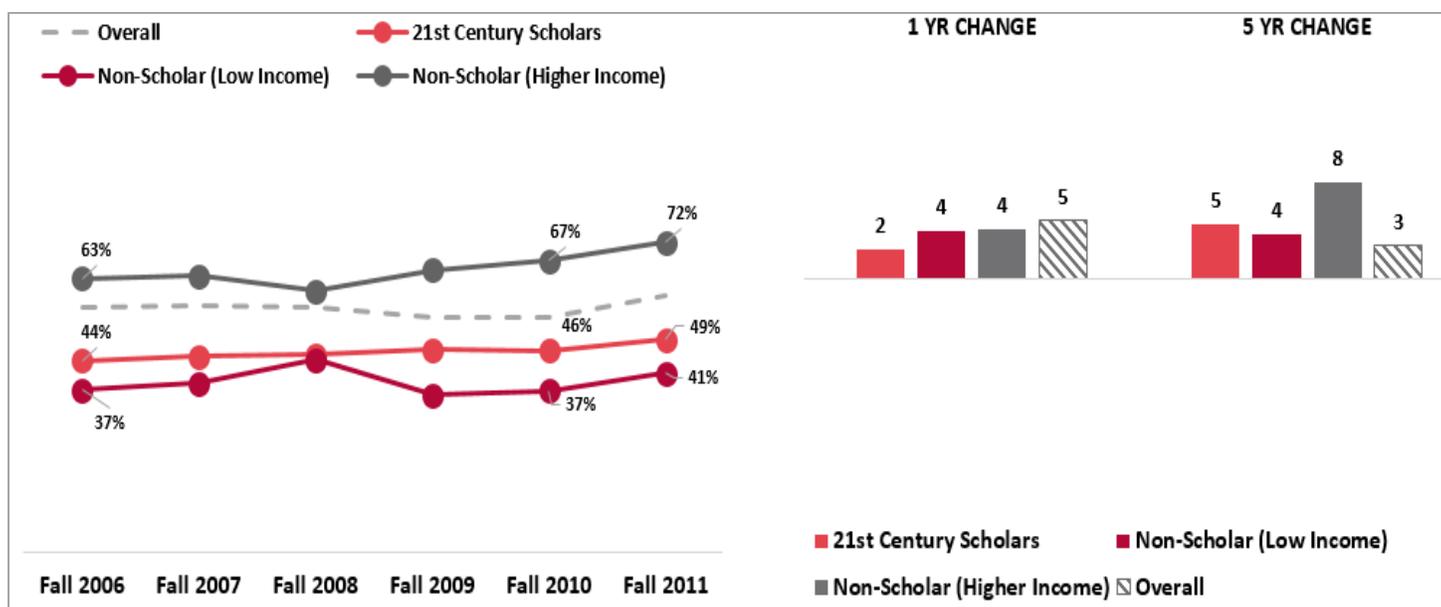


Figure 37. Trends in extended-time completion rates by gender

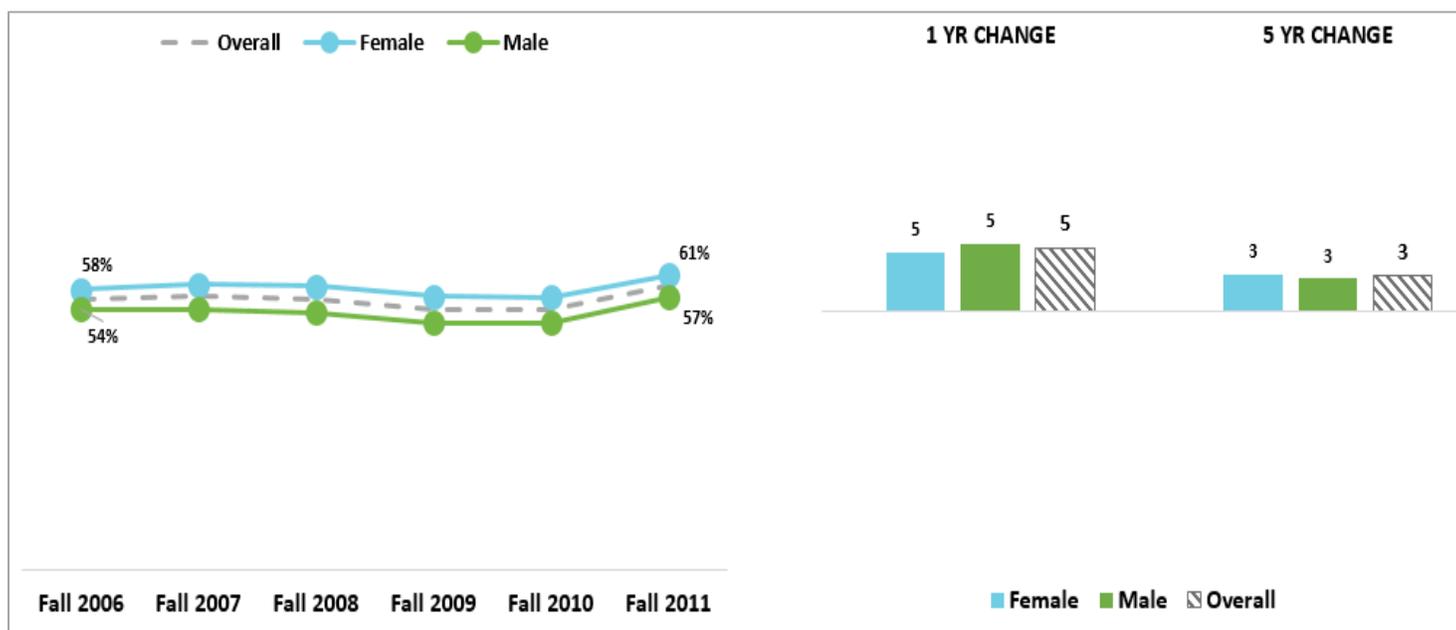
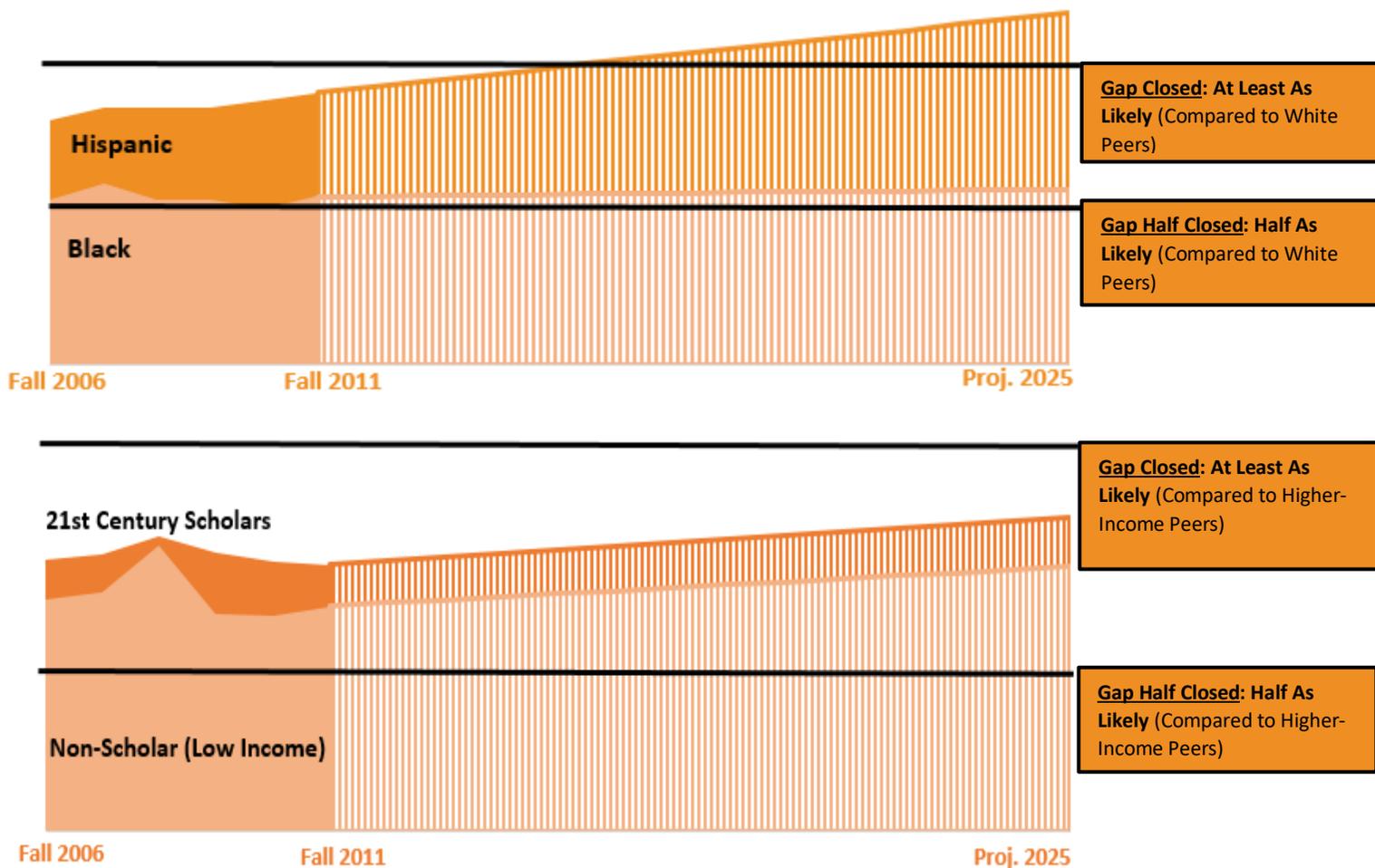


Figure 38 displays trends in the achievement gap ratio values and also the estimated linear trajectory to 2025 based on average progress toward equity in extended-time completion rates among groups. If current progress was to continue, gaps in extended-time completion rates are only expected to be closed for Hispanic students. Projections indicate that Black students could just be over half as likely as their White peers to complete a degree within six years. Average progress also indicates that gaps will continue to close for low-income students but not at a pace to close gaps by 2025. As new cohorts subject to new reforms begin to flow through the six year completion pipeline, it will be interesting to see if the gains in on-time completion will also be reflected in progress for extended-time completion.



Figure 38. **Extended-time completion** achievement gap trends and projections



CONCLUSION

Achievement gaps play a critical role in meeting the state's 60% attainment goal by 2025. On that front, Indiana has made significant progress over the past five years, though more improvement is needed. Reforms and other efforts appear to be working. More students are going to college, more are prepared for college, and more are graduating on time. Yet those improvements were not equally distributed across all groups. Despite improvements among Black and Hispanic students on nearly all metrics over the past 5 years, White students occasionally saw even faster improvements. As a result, in some areas, achievement gaps closed, while in others, they remained stagnant or grew slightly.

At least among low-income students, Indiana seems to have found a way to significantly and rapidly improve attainment and close gaps between low-income students and their wealthier peers. The 21st Century Scholars program has helped Hoosiers afford college for over 25 years. Only recently, however, did legislative reforms to the program, in conjunction with expanded wrap-around services and supports, begin to rapidly improve the outcomes for Scholars. The 21st Century Scholars program is focused not just on college access, but also on college success. On several metrics, Scholars are now outperforming the state average and are on pace to close the gaps on other metrics. While not every student is able to complete all requirements in high school to become a 21st Century Scholar, the data clearly show that students who participate in the program are much more likely to attend college, meet benchmarks for early success in college, and ultimately graduate on time. While the success rates of 21st Century Scholars have increased substantially, success rates of low-income students not participating in the 21st Century Scholars program have remained stagnant or have declined. Partnerships with external researchers have shown similar findings in that students receiving only Pell grants tend to not perform as well as their 21st Century Scholar peers when controlling for other factors.⁶ This further speaks to the importance of increasing 21st Century Scholar enrollment and program requirement completion. It also speaks to further work that needs to be done to improve college access and success rates among low-income students overall.

The Indiana Commission remains committed to closing achievement gaps among disadvantaged populations. In future updates to the equity report, the Commission plans to do a more in-depth study of inequities in college access by geography. In addition, the Commission hopes to create additional data tools for K-12 partners to further move the needle with closing achievement gaps and to promote collaboration among schools and corporations who serve similar at-risk populations.

⁶ Davis, Elizabeth; Guarino, Nicole; Lindsay, Jim. Predicting Early College Success for Indiana's High School Class of 2014. <https://eric.ed.gov/?id=ED580821>



General Notes and Sources:

Sources: Indiana Commission for Higher Education (ICHE); Independent Colleges of Indiana (ICI); Indiana Department of Education (IDOE), National Student Clearinghouse (NSC).

Indiana High School Graduates: Count of Indiana high school graduates are based on the total count of graduates reported on the IDOE-GR reports. Graduate counts are not IDOE cohort graduate counts and thus, may not match cohort graduate counts reported in other places, such as DOE compass. SOURCE: IDOE

College Completion Cohorts: Cohorts were created using data submitted by Indiana public institutions to the Indiana Commission for Higher Education (ICHE) through the CHE Data Submission System (CHEDSS). Student cohorts include students enrolling as first-time degree-seeking students in the fall of the year listed who were enrolled full-time (12 or more credit hours) as of institution census date. For the purposes of data consistency across multiple years, student enrollment status reported as end of term instead of census date was used for Vincennes University. Degree-seeking status represents students seeking a bachelor's degree (four-year institutions) and seeking a longer-term certificate or associate degree (two-year institutions). Cohorts were tracked longitudinally for on-time completion using subsequent data submitted by public institutions. SOURCE: ICHE

Pre-College Academic Success: (Indiana High School Graduates)

High School Diploma Type: High school diploma type received upon high school graduation. Honors represents students who received an Academic Honors Diploma, an Academic and Technical Honors Diploma, or an International Baccalaureate Diploma. Core 40 represents students who received a Core 40 Diploma or a Technical Honors Diploma. A small number of students were mis-categorized as being both Scholars and General Diploma earners. The Scholars program requires students to earn a Core 40 or Honors Diploma. When disaggregating data for Scholars by diploma type, these students were removed from the analysis. SOURCE: IDOE

Pre-College Credit: Identification of whether a student earned dual credit from an Indiana public institution prior to graduation or passed (received a score of 3 or higher) at least one Advanced Placement exam. SOURCE: IDOE

AP Participation/Passing Exam Status: Represents students who sat for and/or passed (received a score of 3 or higher) at least one Advanced Placement exam. SOURCE: IDOE

Dual Credit Status: Represents students who earned/did not earn credit hours awarded by Indiana public colleges that were recognized by both the high school and the postsecondary institutions. Dual credit calculations include credits awarded by Indiana public colleges. SOURCE: ICHE

College Entrance Exam Readiness Benchmark: Represents students who passed/did not pass at least one college readiness benchmark score established by the testing agencies. The SAT benchmarks are 500 for both the Critical Reading and Mathematics sections. The ACT benchmarks are 18, 22, 22, and 23 for the English, Mathematics, Reading, and Science sections, respectively. If no SAT or ACT score was on file for the student, s/he was reported as not taking a college entrance exam. Data are only available between 2012 and 2014. SAT and ACT scores and benchmarks are presented on the scale associated with the 2014 high school cohort as that is the latest year of data available. SOURCE: IDOE

College Going Data: (Indiana High School Graduates)

College Enrollment: Represents students reported as enrolled in postsecondary education, regardless of institution type, within the year following high school graduation (e.g., for 2016 high school graduates, postsecondary enrollment is counted for 2016-17 school year). A student was considered enrolled only if a)



s/he was enrolled as a degree or certificate seeking undergraduate student and b) s/he was enrolled for the equivalent of at least one semester during the school year. SOURCES: ICHE, ICI, NSC

Indiana Public College Enrollment: Represents students reported as enrolled in an Indiana public postsecondary institution. SOURCE: ICHE

Early Success in College Data: (Indiana High School Graduates)

Early Success in College Composite: Represents Indiana public college students who met all three indicators of 1) no remedial coursework, 2) earned all credits attempted, and 3) persisted to sophomore year. SOURCE: ICHE

No Remedial Coursework: Represents Indiana public college students NOT identified as deficient in the general competencies necessary for regular postsecondary curriculum in English/language arts and/or mathematics. Both credit and non-credit remedial coursework are accounted for in calculations. SOURCE: ICHE

Earned All Credits Attempted: Represents Indiana public college students who had earned credit hours equal to that of credit hours attempted as of end of term. SOURCE: ICHE

Persistence to Sophomore Year: Represents percentage of Indiana public college students who continued enrollment into the fall semester of the second year at any Indiana public college. SOURCE: ICHE

On-Time College Completion Data: (College Completion Cohorts)

On-Time (same campus, same degree level): Represents students in college completion cohorts (see above) who completed a degree on time at the same level initially sought at the same Indiana public college/university system in which they initially enrolled. SOURCE: ICHE

Extended-Time College Completion Data: (College Completion Cohorts)

Extended-Time (Any campus, any degree level within six years): Represents students in college completion cohorts (see above) who completed, within 6 years, any degree at any public institution in Indiana, or at a private or for-profit college/university in Indiana or elsewhere in the United States, provided the college or university participates in the National Student Clearinghouse. SOURCE: ICHE

Disaggregations:

Gender: represents gender, male or female, as reported by IDOE (college going, early success in college) or by Indiana public institutions to ICHE (on-time college completion).

Race/Ethnicity: represents race/ethnicity as reported by IDOE (college going, early success in college) or by Indiana public institutions to ICHE (on-time college completion). Groups include five mutually exclusive race/ethnicity categories: Asian, Black, Hispanic, Other, White. The "Other" race/ethnicity category includes undeclared, Native American/Alaskan Native, Two or More Races, Native Hawaiian groups. The "Minority" roll-up includes students who were reported as Black or Hispanic.

Socioeconomic Status: For college-going and early success in college indicators, the report defines low-income in one of two ways: whether the student is an enrolled and affirmed 21st Century Scholar (in which they had to have been Free or reduced lunch-eligible in 7th or 8th grade) or whether the student received Free or reduced lunch during their senior year of high school. For on-time college completion, the report defines low-income in one of two ways: whether the student received a 21st Century Scholarship in their year of entry or whether the student received a Pell grant in their year of entry. Low-income data for all metrics are broken into 21st Century Scholars and non-21st Century Scholars groups.



Rural/Non-Rural Classification: identifies whether a student's high school of graduation is located in a county that falls within a Metropolitan Area established by the Office of Management and Budget. Any county that is not a part of a Metropolitan Area is considered rural. The rural/non-rural classifications for Indiana counties are listed in section I of the following document: <ftp://ftp.hrsa.gov/ruralhealth/Eligibility2005.pdf>

Achievement Gap Ratio:

Calculation and Interpretation: The achievement gap (AG) measure is calculated as a ratio of metric success rates of the "underrepresented" population and the "majority" population:

$$\frac{\text{Success Rates of Underrepresented Population}}{\text{Success Rates of Majority Population}}$$

In statistical terms, the ratio measure is often called relative risk. The measure is used to compare the likelihood of a particular event occurring between two groups of interest. An achievement gap measure of less than 1 signifies that the success rate of the underrepresented population (Ex: minority students) is less than the success rate of the majority population (Ex: White students). In other words, the success event is less likely for a student from the underrepresented population compared to a student from the majority population. Conversely, an achievement gap measure greater than 1 means that the success rate of the underrepresented population (Ex: minority students) exceeds the completion rate of the majority population (Ex: White students), meaning that a student from the underrepresented population is more likely to experience the success event than a student from the majority population. The achievement gap is closed when the AG measure = 1 or the outcome of success is equally likely for both groups of interest.

As stated above, the achievement gap measure is used to compare the likelihood of success between the underrepresented population and the majority population. If the value of the AG measure is xAG, the AG measure value has the following interpretation: "The underrepresented student population is xAG% as likely as the majority student population to experience success." For example, the interpretation of a data point of AG = .5, would be the following: the underrepresented student population is .5 times (as likely) as the majority student population to experience success.

Motivation for Using a Ratio AG Measure:

There are other metrics that could be used to investigate the achievement gap. Another more common metric is the percentage point difference of success rates between two student groups. Generally, ratio statistics yield more accurate results when comparing rate difference across observational units whose rates differ vastly in scale. Metrics and groups with larger success rates in scale will naturally produce larger percentage point differences. Below are two examples:

Example 1: 4% vs 1% and 50% vs 47%

Group 1: 4% vs 1%: 3 percentage point difference; 4.0 ratio value

Group 2: 50% vs 47%: 3 percentage point difference; 1.1 ratio value

These groups of statistics yield the same percentage point difference but very different ratio values.



Example 2: 23% vs 9% (low scale) and 63% vs 46% (high scale)

Group 1: 23% vs 9%: 14 percentage point difference; 2.5 ratio value

Group 2: 63% vs 46%: 17 percentage point difference; 1.4 ratio value

The second group of statistics yield a larger percentage point difference, but these statistics are more similar yield a larger percentage point difference, but these statistics are actually more similar than the first group of statistics according to the ratio value.

Measuring Progress Toward 2025 Goal (2025 Projections):

To track progress in meeting the Commission's goal of eliminating achievement gaps by 2025, linear projections based on average progress toward closing gaps were projected out to 2025 from the latest year of data available for a particular metric. The average yearly progress statistic represents an average of all one year increases from the earliest year of data available.

